

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

[LB579 LB581]

The Committee on Natural Resources met at 1:30 p.m. on Thursday, February 1, 2007, in Room 1525 of the State Capitol, Lincoln, Nebraska, for the purpose of conducting a public hearing on LB579 and LB581. Senators present: LeRoy Louden, Chairperson; Carol Hudkins, Vice Chairperson; Tom Carlson; Mark Christensen, Annette Dubas; Deb Fischer; Gail Kopplin; and Norman Wallman. Senators absent: None. [LB579]

SENATOR LOUDEN: Okay, we'll start the hearing today in Natural Resources Committee. My name is Senator LeRoy Louden, I represent the 49th District and to my right is Senator Tom Carlson, from Holdrege; the next one is Senator Gail Kopplin, from Gretna; this is Jody Gittins who is our legal counsel. To my left is Senator Carol Hudkins, the vice chairman of the committee; and committee clerk Barb Koehlmoos. Joining us right now is Senator Deb Fischer, from Valentine; and Senator Norman Wallman, from Cortland. I'd ask that you turn off all cell phones so that they are noiseless or silence your pagers or whatever so that we have no disturbances in the hearing room. Those wishing to testify on a bill should come to the front of the room when that bill is to be heard. As someone finishes testifying the next person should move immediately into the chair at the table. If you do not wish to testify but would like your name entered into the official record as being present at the hearing, please raise your hand and the page will circulate a sheet for you to sign. This list will be part of the official record of the hearing. This year we are using a computerized transcription program and it is very important to complete the green sign-in sheets for testifiers prior to testifying. They are on the tables by the doors and need to be completed by all people wishing to testify, including senators and staff introducing bills and people being confirmed. If you are testifying on more than one bill you need to submit a form for each bill. When you come up to testify, place the form in the box by the committee clerk. Do not turn the form in before you actually testify. Please print and it is important to complete the form in its entirety. If our transcribers have questions about your testimony, they use this information to contact you. As you begin your testimony, state your name and spell it for the record even if it is an easy name. Please keep your testimony concise and try not to repeat what someone else has covered. If there are large numbers of people to testify, it may be necessary to place time limits on testimony. If you have handout material give it to the page and they will circulate it to the committee. If you do not choose to testify you may submit comments in writing and have them read into the official records. No displays of support or opposition to a bill, vocal or otherwise, will be tolerated. And if you need a drink of water, please ask the pages. Also I want to point out that Senator Mark Christensen, from Imperial, has joined us and I think we have a full house. And also the pages today are Erin Frank from Basset, and Steve Scharf from Lincoln. With that we will begin the hearing on LB579. [LB579]

JODY GITTINS: Good afternoon, Chairman Louden and members of the Natural Resources Committee. My name is Jody, J-o-d-y Gittins, G-i-t-t-i-n-s and I am committee

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

counsel for the Natural Resources Committee, introducing LB579 on behalf of the Chairman. Legislative Bill 579 provides a process for the interconnection of qualified renewable energy generation facilities by distribution utility customers, customer-generators. It allows for the recovery of unavoidable costs by the distribution utility, provides for fair compensation to customer-generators for excess energy produced, and ensures that safety and reliability features are in place. Local distribution systems may create a customer generation rate class or classes and may establish a facilities charge to collect the costs for the use of the distribution system that are not avoided by the distribution system. This charge is intended to prohibit a shift in distribution costs from customer-generators to other customers of the local distribution utility. The facilities charge shall be based on the cost of service study and shall be nondiscriminatory. Rate classes may be based on the size of the generation facility or other factors. Energy rates for the purchase or delivery of energy will not be less than the wholesale power supply rate. An exemption from the Power Review Board approval is given for the customer generation. John Hoke from the Niobrara Valley will address the issues immediately after me and Danny Kluthe, who several members of the committee visited his generation system during the interim and found it very interesting as a generator, will testify after Mr. Hoke. [LB579]

SENATOR LOUDEN: Okay. Any questions for Jody? Thank you, Jody. Could I have a show of hands on how many are going to testify as proponents? Okay, opponents? Okay, about six. Thank you. Come forward, John. [LB579]

JOHN HOKE: Good afternoon Senators, my name is John Hoke, that's J-o-h-n H-o-k-e. I'm here to speak in favor of LB579. I'm testifying today on my own behalf for the 35-member systems of the Nebraska Rural Electric Association and the Nebraska Power Association which includes all electric utilities in the state. I'm the manager of Niobrara Valley Electric Membership Corporation, an electric cooperative located in O'Neill, Nebraska. We are an average sized utility with about 2,800 miles of line about 5,800 meters. The number of meters is somewhat deceiving, as an average customer has about two meters and so really, we serve about 2,700 customers. Ours is a very capital intensive industry. To serve our customers we have invested about \$30 million dollars in utility plants or about \$11,400 per customer. I have been a member of the Nebraska Rural Electric Association Task Force and charged with developing a bill to meet the needs of our customers who own their own renewable energy source generation. We started this process in 2001 and introduced a bill in 2002 and again in 2003. Those bills did not advance from the committee. After a great deal of discussion and work, the Task Force concluded that what we had proposed before, while well reasoned, was too complicated and we went to work on the bill that's before you today. Not too long ago much of the discussion about the electric industry was centered on customer choice or retail wheeling. The concept there was to allow customers to choose their power supplier and those of us in the energy distribution business like our cooperative, would simply charge the customers for delivering the energy that was

Natural Resources Committee
February 01, 2007

purchased by our members. Much like you buy natural gas for your home today, gas is sold as a commodity and then you pay the gas distribution company for delivery. To date, as you've probably heard, this has not worked well largely because electricity is an instantaneous product. Well the concept didn't work. It did force us to think about delivery of energy in a different way than we had before. At Niobrara Valley for example, we unbundled our rates and developed a delivery rate that was separate from the energy commodity rate. This delivery rate covers the cost of operating paying for the distribution portion of the electric system. Electric rates vary from system to system but generally are close to one another; they're fairly comparable. For Niobrara Valley, the system I'm most familiar with, the average charge per kilowatt hour on our system is 7.4 cents. Of that, 4 cents is for the energy purchased from the wholesale generator and 3.4 cents is for delivery. The core concept of our bill is this. Those people that create a cost for using electric systems should pay the cost that they create. In other words, every customer on the electric distribution system that uses the lines and equipment of that system should pay for them. The customer-generator pays for the use of the delivery system through the distribution charge. A nongenerator has that charge included in the retail rate that they pay. Generally, net metering means running the electric meter backwards, which pays the generator 7.4 cents for the electricity that they generate. They are paid for both delivery and energy when in fact they should only be paid for energy. What this bill does is charge a customer-generator for the use of the delivery system the same as any other similar customer taking full energy and delivery service while exchanging the energy portion of the bill one a one-for-one basis. In other words, the customer-generator is paid 4 cents for their energy, the same 4 cents that would have been paid to say, Nebraska Public Power District, or any other large wholesale generator. That is a fair exchange and results in the customer-generator receiving a larger payment for their energy than they would have received under the guidelines set forth by the Public Utilities Regulatory Policy Act. This bill will provide, again using Niobrara Valley's figures, 4 cents per kilowatt hour compared to the 1.2 cents they would have received under PRPA. Purchasing power from the customer-generators in this fashion leaves the other nongenerating customers on the system no worse off than they would have been before. They would have paid 4 cents to the wholesale generator for power just like they paid to the local customer-generator, and since the local customer-generator is paying for the use of the distribution system through the distribution charge, the cost to the other users remains the same when the biomass and other sources of renewable energy reduce greenhouse gases and provide cleaner air to all citizens of Nebraska, not just those living in rural Nebraska. Additional incentives for customer generation should be transparent and come from the general tax revenues of the state since all citizens benefit equally from the clean production of energy. As I said, this is the core concept of the bill, an exchange of energy for energy. I guess you could call it wholesale net metering where one meter measures the energy sold to the customer-generator by the distribution company at 4 cents per kilowatt hour and the output from the customer-generator is measured by that same meter and bought by the distribution utility at 4 cents per kilowatt hour. It's been brought to our attention that the

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

bill language does not directly specify a single meter. That was our intent to have just a single meter. So if necessary, to clarify that intent we would welcome an amendment that would do that. The rest of the bill deals with safety and reliability. This is a key issue for us and the bill addresses that in several ways. The safety components are meant to ensure that safety and reliability concerns are adequately addressed. These features are not in place to make it difficult to interconnect but to ensure the successful operation of customer generation while protecting the customer-generator and local distribution utility personnel as well as ensuring the reliability of the electrical distribution system. Interconnection requirements will always be site-specific depending upon the type of generator and the existing service to the customer-generator. The interconnection requirements are going to vary. That's not meant to be a moving target, it just acknowledges that not everyone has the same distribution equipment or rated size of service at their interconnection point. There's a tremendous amount of variability. This makes sense when you take a look at the different kinds of customers we serve today. A grain elevator requires different equipment to serve it than say, a typical home. Serving customer generation units will require the same approach. One last thought, because sometimes it's misrepresented or perhaps misunderstood. Public power, like investor-owned utilities in other states, exists to serve the needs of the members; they're our owners. We have no stockholders whose profits can be reduced to pay incentives to public causes. Under public power any incentive that is provided is handed from one member customer to the other from one neighbor to the other. The bill before you today is the fairest way that we as an industry, know how to provide that support from neighbor to neighbor without one profiting or the other. That concludes my testimony and I'll be glad to answer any questions that you may have to the best of my ability. [LB579]

SENATOR LOUDEN: Questions for John? Yeah, I do John. If you are talking about--first you're talking about one meter and then they can offset their own usage, right? [LB579]

JOHN HOKE: That's correct. [LB579]

SENATOR LOUDEN: In this bill. All that--you'll just be buying what their excess generation? [LB579]

JOHN HOKE: That's correct, we'd buy the excess generation coming back into the system. [LB579]

SENATOR LOUDEN: And you're talking about--the type of generation you're talking about is on, I'd say, on the bottom side of the transformer. I don't know what you'd technically call that, but you're not on the high voltage side, you're on the lower voltage side of the transfer at 110 or 220. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

JOHN HOKE: Any generation on the customer's side of the meter. [LB579]

SENATOR LOUDEN: On the customer's side. Okay then it would be below the meter. [LB579]

JOHN HOKE: Yeah, in the way you are describing it, yes. [LB579]

SENATOR LOUDEN: Okay so it would go through the meter. Okay. Thank you. Senator Wallman? Oh, okay. Senator Fischer, ladies first. [LB579]

SENATOR FISCHER: Thank you, Senator Louden. Thank you, Mr. Hoke, for being here today. You spoke about that if individuals want to take advantage of the net metering that public power would then pay is it 4 cents for the energy? [LB579]

JOHN HOKE: For our system that's correct. That's what we pay--that's our average wholesale rate. [LB579]

SENATOR FISCHER: And then what was the cost on delivery? With the lines, etcetera? Did I miss that? [LB579]

JOHN HOKE: About 3.2 cents... [LB579]

SENATOR CHRISTENSEN: Two point four... [LB579]

JOHN HOKE: I believe, 3.4, thank you. I'm a little nervous. (Laughter) [LB579]

SENATOR CHRISTENSEN: That's fine. [LB579]

SENATOR FISCHER: You're doing a very nice job, thank you. You also said that they would pay more under PRPA; what was that? [LB579]

JOHN HOKE: Well the Public Utility Rate Regulatory Act... [LB579]

SENATOR FISCHER: Right, but what would--how much more would they pay under that? [LB579]

JOHN HOKE: Oh... [LB579]

SENATOR FISHER: I missed that when you were speaking. [LB579]

JOHN HOKE: What PRPA would pay would be the avoided cost. We would have paid 1.2 cents to that generator under PRPA on our system. That would be our avoided cost. Under this bill they would receive 4 cents. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR FISCHER: Okay. Could you tell me maybe some of the safety concerns you have when dealing with net metering, when you spoke of safety and reliability and the importance of I guess, maintaining that in our public power system. [LB579]

JOHN HOKE: The safety standpoint is the same concern we have on any electric generator that's hooked up to our system whether it be an emergency generator such as we've seen in the storms or net metering kinds of installations. There needs to be a positive disconnect, a means to know that that system is off when our line crews are out working. They go to work, they ground the system, and they assume at that point that it's dead. The biggest concern we have is that some time while they're working there's an installation out there that begins to generate back on the lines. What happens because this is coming in on the customer's side of the meter, it goes back up through a transformer and energizes those lines back 7,200 volts. So what could have been a de-energized line can become an energized line; that's the concern we have. Did I answer all of your question? [LB579]

SENATOR FISCHER: And thank you very much. Yes, thank you. [LB579]

JOHN HOKE: Okay. [LB579]

SENATOR LOUDEN: Senator Wallman? [LB579]

SENATOR WALLMAN: Yes. That sounds pretty fair to me but as far as when the wholesale rates go up which they are probably going to, wouldn't this go up too? [LB579]

JOHN HOKE: Yes, unfortunately and the wholesale rates look like they're going to be going up (laugh). [LB579]

SENATOR WALLMAN: So this would be tied with that. [LB579]

JOHN HOKE: Yes, it would be whatever our average wholesale energy cost is, so it would go up over time as well. [LB579]

SENATOR WALLMAN: As well. Thank you, Senator Louden. [LB579]

SENATOR LOUDEN: Senator Christensen? [LB579]

SENATOR CHRISTENSEN: Thank you, Chairman Louden. On your system when you put in new installations do you charge for the poles and wires? [LB579]

JOHN HOKE: We do require a contribution aid of construction and so the answer to that

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

is yes we do. [LB579]

SENATOR CHRISTENSEN: Okay. So the 3.4 cents is just general maintenance across all the lines, that's what would be the... [LB579]

JOHN HOKE: Included in that 3.4 cents would be depreciation of current existing distribution. It would include debt service payments, it would include maintenance, and any other items that you had mentioned, yes. Typically, though, on a contribution-aided construction at least on our system, that only covers a portion of the cost of that mile of line. Say it's 9,000. A contribution might require half of that and then the other half is recovered through the rates which would also be included in that distribution portion. [LB579]

SENATOR CHRISTENSEN: Is there any way--I hadn't even give thought on this of when a generator comes back on line it could jeopardize the people working on it. Is there any way of sending a signal down the line like you do with irrigation to shut them off and restart them, things this way, that would trigger a safety mechanism that you cannot put juice back on the line? [LB579]

JOHN HOKE: That should be built and inherent in the generation system themselves. What we are concerned about with this bill is that it is indeed the case. So as I understand it, and I'm not an expert on wind units, they have to be excited by electric current from our system generally and that's what we want to ensure with this bill is that safety is built into that unit and that it's required by law. [LB579]

SENATOR CHRISTENSEN: Okay. Thank you. [LB579]

SENATOR LOUDEN: Senator Fischer? [LB579]

SENATOR FISCHER: If I may, Senator Louden, I have a follow-up here Mr. Hoke. Currently all customers on the system are paying for the energy and for the delivery, is that correct? [LB579]

JOHN HOKE: Yes, it's all built into the retail rate. [LB579]

SENATOR FISCHER: And your point would be that this is public power and all consumers are currently paying for that and with this bill, basically whether you are into net metering or not, all consumers will continue to be paying those same costs, minus the energy that they produce.. [LB579]

JOHN HOKE: They would continue...minus the energy, yes. In other words they would, if, you know, pay for the use of the distribution system, yes. All customers would. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR FISCHER: Okay. Thank you. [LB579]

SENATOR LOUDEN: Yeah, I have another question, John. When you say your wholesale rate is 4 cents, you guys are getting away with like, Chinese Marines or something down here in this end of the state, because out at our end we're at 5.8 or something like that and rising. And they'd be better off to go out west and generate power wouldn't they? Then to, I mean they could get another pert near 2 cents per kilowatt more out west than they can with you guys. Does that have a bearing on whether or not people want to do customer generation, you know, the rates...you guys must be operating pretty good, operation, ice storms and all. [LB579]

JOHN HOKE: See an investor-owned utility would tell you we should raise rates on this end of the state 2 cents, but (laughter) we don't operate that way. It'll have an effect. I think generally rates are going to go up over time. And certainly since this bill was introduced I was looking at some old testimony and at that time it was I think, 3.2 cents so that's been four years ago now? So our rates are going to increase, it'll become more attractive over time. But the differential between the west end and the east end is going to exist for a while. I guess I don't have a good answer for that. [LB579]

SENATOR LOUDEN: Well, that's close enough. [LB579]

JOHN HOKE: Okay. [LB579]

SENATOR LOUDEN: Any other questions for John? Thank you, John, thanks for coming in and testifying today. [LB579]

JOHN HOKE: Thank you very much. [LB579]

SENATOR LOUDEN: Next testifier? Proponent? [LB579]

DANNY KLUTHE: Hi, Danny Kluthe, D-a-n-n-y K-l-u-t-h-e. Senator Louden, Senators, thank you for allowing us to be here. I guess my testimony--I'll start--I've got a renewable energy project, I've got a methane digester. It's on a hog operation and about a year after I started that project, I became a director for Cuming County Public Power. And about a year after that I became a director for the Nebraska Rural--NREA. So I've got the opportunity to be on the Net Metering Task Force that overlooked or helped draft this bill. And coming from where I came from, I think this bill is a very honest and probably a very, very good bill. What we wanted was a one-meter meter system and we wanted to be able to get paid what we pay for electricity and this bill will address that, so. I'm very, very excited or you know, believing strong that this is probably a pretty good bill. I had a whole lot to say but I kind of forgot about it, so... (laughter). [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR LOUDEN: Okay. Well, thank you. [LB579]

DANNY KLUTHE: Yeah. [LB579]

SENATOR LOUDEN: Thanks, Danny. [LB579]

DANNY KLUTHE: If you have any questions? [LB579]

SENATOR LOUDEN: Questions for Danny? Senator Wallman? [LB579]

SENATOR WALLMAN: Well, that's is very interesting, thank you, Senator Louden. You run some kind of a diesel generator? I mean a natural gas generator? [LB579]

DANNY KLUTHE: Actually what it is, it's a 3306 Cat engine and it runs off the methane. You know, every day I feed it hog manure down into the digester and the bacteria in the digester makes gas and it gets sucked up into this 3306 Cat engine that runs a generator that puts electricity back into the grid. [LB579]

SENATOR WALLMAN: You satisfied with that system? [LB579]

DANNY KLUTHE: It works very well. In fact it's even got more benefits. It gets rid of the methane gas which is the odor so actually the effluent that comes out of this digester is pretty much odorless. So now this system instead of having the bad odor that some livestock facilities have, all this facility has is the sweet smell of hogs (laughter). [LB579]

SENATOR LOUDEN: Thank you. Spoken like a true swine producer. (Laughter) Other questions? Senator Christensen. [LB579]

SENATOR CHRISTENSEN: If I don't forget my question here. You know, we look at a--through this ice storm, we've had a lot of generators run. It was extremely expensive, I've even let people use my own through the time frame. I take it this works on that 4 cents then on your end with the methane and... [LB579]

DANNY KLUTHE: It'll work a lot better than get--paying 1.5, 2 cents. [LB579]

SENATOR CHRISTENSEN: So you're actually making it work there then. Or is this just a project you're working on. [LB579]

DANNY KLUTHE: Well actually, you know, a part of Colfax County zoning. And if you ever want to see the courthouse fill up ask somebody, want to put in livestock facilities? You know, everybody knows you need livestock but their problem is the odor. See and this addresses that so there's more ways to, this thing is more exciting than just in electricity. But if electricity, at the rate we are going, probably by the time the facility is

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

retired it will probably be paid for. But with this bill, it would make it a lot more exciting. [LB579]

SENATOR LOUDEN: Senator Hudkins? [LB579]

SENATOR HUDKINS: Thank you. Mr. Kluthe, I was one of the ones that was able to visit your facility and found it very interesting. But can you tell me and I've forgotten, how much of your own needs can you generate for electricity? [LB579]

DANNY KLUTHE: Actually, this facility, the way it is right now, I'll probably meet all of my needs and probably have about half again as much to put back into the grid. [LB579]

SENATOR HUDKINS: Great. Thank you. [LB579]

SENATOR LOUDEN: Other questions for Danny? Senator Carlson? [LB579]

SENATOR CARLSON: Senator Louden. Just out of curiosity, what kind of investment did that take on your part to get set up to do this? [LB579]

DANNY KLUTHE: Actually I was very fortunate. I've got a USDA grant and I've got some cost share from the NRCS and I got an environmental grant so my cost was probably about one-third of what it would have been had I not been fortunate enough to get these grants and the cost share. Does that answer that or... [LB579]

SENATOR CARLSON: Well I'm--unless you don't want to answer, I don't have any idea what the total cost would be. [LB579]

DANNY KLUTHE: Oh, okay. Then it's \$60 to \$80 per head. [LB579]

SENATOR CARLSON: Okay. [LB579]

SENATOR LOUDEN: Other questions for Danny? You have two benefits here. One of them is you've gotten rid of a problem with raising swine and the other one, you're generating power. Which benefit do you feel you use the most beneficial with? [LB579]

DANNY KLUTHE: Actually being neighbor friendly? That's huge. Generating power, that's even more exciting. This is a worthy project, you know? Both of them are equally well. [LB579]

SENATOR LOUDEN: Do you think if this bill went into effect there would be, for instance with these hog operations as well call them, or confined animal feeding systems is a better way to put it, that they would be something that would perhaps environmental people would kind of ask be done with that type of an operation? Or

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

would you be more, you think they would be able to get more of those in closer to a metropolitan area or to towns with that type of a system? [LB579]

DANNY KLUTHE: Thank you for asking that. Yes, yes. I think that this bill will help this project become a lot more feasible and attractive. I think this was one of the things we were looking for, for quite a while and yes, I believe if this bill is able to become law it will definitely make this project more impressive. [LB579]

SENATOR LOUDEN: Do you have to have a lagoon system or anything to make this work or what do you do with your stuff before it's digested, I guess or that sort of thing. [LB579]

DANNY KLUTHE: Okay. What I have is deep pits underneath my barns and that's what I, where we collect it and then once a day we feed a quarter of a pit to the digester and the manure will be in the digester 21 days before it's clean and then it goes down to a lagoon that from there it can be applied to the fields. And it can, all of the goodies is in there except the odor. [LB579]

SENATOR LOUDEN: Hmm, okay. Senator Carlson? [LB579]

SENATOR CARLSON: Senator Louden, one more question Danny. If I heard you right, I think you said you then generate about twice as much as you use. [LB579]

DANNY KLUTHE: That is correct. [LB579]

SENATOR CHRISTENSEN: Okay. [LB579]

SENATOR LOUDEN: Any other questions for Danny? Well, thank you for coming today, Danny. Appreciate your testimony. [LB579]

DANNY KLUTHE: Thank you. You're welcome. [LB579]

SENATOR LOUDEN: Any other proponents? Any opponents? Okay, please come forward and begin your testimony. [LB579]

DEBORAH WARD: Hello everyone. My name is Deborah Ward. I am a resident of Burt County, Nebraska. And I am in the process for the last year of, we want to install a wind turbine on our rural property. As part of that I have been working with my local PPD on an interconnection agreement. I've been working somewhat with the DNT, we've been doing a lot of work on trying to get something in place. Before I give you my comments on why I oppose this bill, I have to say that I'm a little bit confused right now. In my world interconnection is one operation and net metering is another operation, they're two separate things. And LB579 is an interconnection bill. There's nothing in LB579 that

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

discusses a single meter and there's nothing in LB579 that gives you a one-to-one offset. Now I've heard from the previous two people that they're going to be rewriting this I guess, or putting this language in there. But I feel like in order for me to say whether I agree with that program or not, I would need to see it in writing to know whether it makes sense or not. If there is anybody here that can tell me where in the current version of LB579 there's anything at all about a single meter or that gives a one-to-one offset, please point that out to me right now because I've looked for it extensively. And yesterday when I contacted the NREA, they told me forgot to put that, or we took it out. So could somebody please tell me where that is? [LB579]

SENATOR LOUDEN: Are you done testifying? [LB579]

DEBORAH WARD: No, okay, I just wanted... [LB579]

SENATOR LOUDEN: Oh, well we ask the questions, you supply the testimony. [LB579]

DEBORAH WARD: All right. I'm sorry, I wasn't aware. I thought perhaps I was allowed to ask questions. I know better now. All right. So, I can only comment on LB579 as it exists right now? Okay? And my comments on this basically are three things. Well, I guess probably it's a little bit more than that. If we take a look at the bill as a whole and what it accomplishes, it gives us, LB579 as written, gives us the right to interconnect. It gives the utilities the right to create a rate for sale and it gives the utilities a right to create a rate for purchase. The utilities already have that right and I already have the right to interconnect under PRPA. All three things that this bill accomplishes are already done and have been in existence since 1978 when PRPA gave us those rights. In looking at this, and if that was all that it did was just sort of take what PRPA did and put it at a state level, I would say fine, no harm, no foul. But there are several things that this bill does that I believe are going to be disincentives to renewable energy production. I can say that because as somebody that's trying to put this in, I know what would attract me to do it and what wouldn't attract me to do it. But I don't want you to just take my word for it because there was recently a study in November of 2006 and I'm going to explain the background on the study is actually a net metering study which is not what this bill is about. So don't think that this is actually a net metering bill. The Network for New Energy Choices took a look at each of the net metering programs that existed and rated them based on how well they attracted consumers to install renewable energy systems. I understand from the intent on this bill that that's what the purpose of this bill is, to try and stimulate renewable energy production and to get people to install renewable energy systems. But I find it curious. Some of the things that are discussed in here are the exact same program parameters that failed in all of the other states where they were implemented and caused those states to receive grades of D and F because they don't incentivize people to put renewable energy in. A net metering program might but again, this is not a net metering program and I cannot comment on whatever this program is that's being proposed about a single meter and this one-to-one

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

offset because it doesn't say that in this bill. What the bill actually says is that they can set a customer generated rate class and it gives them some parameters of what they can include, for example, facility charges and cost of service studies. Well those are already the things that are factored into the rates that are being charged so my gut feeling and I may be off slightly on this, is that if they take a look at all of those things, what we're talking about is going to be a sales rate pretty close to full retail rate because that's what they would need to charge for the facility charges and for the cost of service studies and that sort of thing. So great, I have a bill in front of me that allows them to charge me full retail rate for any electricity that I buy, except I'm already doing that. Then the bill goes on and says they can develop a rate for purchases. And that such rate shall not be less than the wholesale power supply cost. Now we're talking wholesale power supply costs and that can mean several different things. For me as somebody that is in a public power district that does not generate any electricity, the wholesale power supply cost is the cost of the electricity that my PPD is buying from NPPD through their agreement with NEGNT. That is basically the same as avoided cost. So what this bill is doing is letting them sell me my electricity at retail rate and letting me sell them electricity at what would be close to avoided cost which is already what we're doing. There are already systems in place in Nebraska that are doing that. One of the things that I have some concerns about because when they start talking about things like the wholesale power supply cost, I have to make sure, and this is the only reason I bring this up, is because there is a thought out there that depending on how their program works, and again I don't know how their program is going to work because it's not set forth in this. But when you start having customer-generators selling energy at wholesale prices which is what they're calling this, wholesale, you have to be very careful about how that program is designed because you can inadvertently make that person subject to the Federal Power Act because the Federal Power Act has jurisdiction over any person who makes sales at wholesale in interstate commerce. That includes consumer-generators who sell for resale energy produced by generators interconnected at distribution voltage. That would be what I was doing. To sell their output those consumers have to meet numerous filing requirements at FERC. It's actually classified as an enormous burden for the average homeowner or small business. Alternatively, the entity that purchases the energy from those consumers, meaning my PPD, could make many of the filings on behalf of those consumers, but even so that could still be a burden on smaller co-ops. Just so you know, this is information that I obtained from the National Rural Electric Cooperative's manual on distributed generation. So I'm assuming that somebody in proposing this program that I haven't seen the details of, has gone through to make sure that the program they're designing is not going to inadvertently put me into a class where I am now subject to FERC guidelines. Because if not, we will have the dubious honor of being the first state where we were able to legislate a whole class of people that are now subject to the Federal Power Act jurisdiction with some enormous reporting requirements. Then there is the matter of liability insurance. Now this bill does not mandate liability insurance. It merely states that they could require proof of liability insurance. I think it's important to

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

remember that in some of the conversations I've had with some of the various entities everybody is quick to point out that our public power districts are dealing in a new area with renewable energy and I know we all are. We're all feeling our way through this. As such they rely, or they're hoping to receive guidance from other people. As a Legislature, when you put something like, may require proof of liability insurance, it's kind of promoting it. It's kind of calling their attention to hey, you guys can do this if you want to. And you're absolutely right. They're well within their rights to, however, I would like to point out that in the studies that have been done, the liability insurance requirement is not only unnecessary but in some instances it is an actual obstacle to installing renewable energy. For example, in my situation my current insurer is Farmers Mutual. Farmers Mutual will provide insurance for me for my wind turbine. If I interconnect to the grid they won't, but State Farm will. Okay that's fine so I'm just going to have to change insurance companies. Hopefully that won't be that large of a deal in my situation. But there are some statistics that show that some people have been charged premiums as high as \$6,200 a year for liability insurance. So then the question becomes if you want them to pay that, is it really necessary? The main concern, and I understand safety has to be paramount, there is no doubt about that. The main concern with the distributed generation facility like mine, which would be a 10 kilowatt wind turbine, is what if the anti-islanding provisions and protections failed? First of all, there has never been a case of that happening anywhere and this is not new technology. It may be newer to Nebraska but it's been in use for years. If something like that were to happen, some horrible accident did occur, the bottom line is that the people that are going to be looked to are the manufacturers of the equipment itself, not the PPD, and not the homeowner that had that on their property because that meant their equipment failed, or perhaps the consulting business that installed their equipment. So I just think it's something that needs to be considered whether at a legislative level you want to be promoting that. That's something that maybe should be left to each individual PPD to decide. In my work with Burt County we were able to have an interconnection agreement that we're still in the process of modifying. They removed that liability insurance requirement. If this goes through I'm wondering now if, well, that might be back in there. Fine. The next area that I want to touch on is this requirement for... [LB579]

SENATOR LOUDEN: Okay, two minutes. [LB579]

DEBORAH WARD: All right. ...is the requirement for a state electrical inspection. I talked with the state electrical inspector yesterday, the chief inspector, and asked him if he would be able or his inspectors would be able to recognize the difference between UL-compliant equipment and UL-certified equipment or IEE equipment also and he said, no. Not one of his 15 people would be able to recognize that difference. The reason that's important is this. There is a lot of equipment out there that complies with the regulations that you want them to comply to but the manufacturer didn't pay for the actual certification. Now we're in a position where we're asking the state to do these

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

inspections. I think that's kind of putting liability on the state to be able to determine whether this equipment meets those parameters or not. Other jurisdictions and even the NRECA's own guidelines for interconnection don't require a state inspection, FERC guidelines don't require state inspections and I'd be surprised if the state of Nebraska wanted to adopt the liability that could come with a situation where you're asking them to know more about the equipment than the manufacturer. Let's see...there's a lot of interconnection standards that's probably pretty much everything but the kitchen sink. I would highly recommend that at some point, like with Burt County, they actually went through on their interconnection agreement and chose those standards that were applicable, set them forth in our agreement. I guess in closing, the only thing I would really like to say is that I don't find this bill would incentivize renewable energy. It wouldn't cause me, in fact I have two systems designed. I have a grid connect system and I have an off-grid system. This bill makes me want to blow the dust off my off-grid system because frankly, I think there's some stumbling blocks here. Back on that state inspector deal, what happens when I've invested in an inverter that is UL-compliant but doesn't have that actual certification little ribbon on there. Does that mean that when they come out for my state inspection they're not going to be able to sign off? I mean, I just see some problems here and I don't know that this needs to be in the bill at this level. If you want to do a bill about interconnection, fine. But then let's stick to interconnection and I sincerely hope and I really respectfully request, that if we're going to be running around putting in provisions for a net metering program, a single meter and one-to-one offset, that we have the opportunity to come back here and address that program because I can't address that program right now since I've not seen it. and it's not part of this bill despite what has been said by the people prior to me. [LB579]

SENATOR LOUDEN: Okay. Thank you, Deborah. Are you going to take questions? [LB579]

DEBORAH WARD: Oh, yes. I'd be very happy to. [LB579]

SENATOR LOUDEN: Okay. Questions for Deborah? Senator Fischer. [LB579]

SENATOR FISCHER: Thank you, Senator Louden. Thank you for being here today. I appreciate you coming. I heard your testimony in Kearney this last fall and I appreciated that also. I do have a couple of questions for you. You mentioned that you have a 10 kilowatt wind turbine right now? [LB579]

DEBORAH WARD: Designed. [LB579]

SENATOR FISCHER: Oh, designed. [LB579]

DEBORAH WARD: I have to make a choice about whether I'm on grid or off grid because the equipment is different for the two applications. One of the things I've been

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

holding out for before I make that decision is what's going to be happening with net metering. [LB579]

SENATOR FISCHER: It's my understanding that if you have 10 kilowatts or above, you already have to go before the Power Review Board, though... [LB579]

DEBORAH WARD: No. Nope. Power Review Board does not, under PRPA, in fact our Attorney General had to write an Opinion exactly on this. The Power Review Board, and I don't remember what the cutoff limit is now, I would ask, I'm sure somebody here knows except I guess I can't do that, but I think it's under 25 or 100 kilowatts. And it's actually set forth in the beginning of the PRPA regulations, and the Attorney General's Opinion indicates that the Power Review Board has no control and no authority to approve or disapprove any renewable energy installation that meets the PRPA criteria for a qualified facility. [LB579]

SENATOR FISCHER: Okay. You had also mentioned that you were worried about liability insurance. I guess my opinion on that would be you're going to be receiving money for producing energy. You're going to be receiving revenue from the power company... [LB579]

DEBORAH WARD: Probably not. [LB579]

SENATOR FISCHER: According to our first testifier for the energy produced you would be receiving four cents.. [LB579]

DEBORAH WARD: Four cents a kilowatt. Well on a 10 kilowatt system and I remind you it's a wind system so it's not operating all the time. There will be periods when I have wind and periods when I don't have any power at all. If I were able to produce an extra few hundred kilowatt hours to dump to the grid, I would be surprised if I would get even that type of production. My whole goal in installing the renewable energy system is not to sell electricity back to the utilities. It's to offset as much of my bill and hopefully maybe even have a chance of zeroing my bill out. [LB579]

SENATOR FISCHER: But you have to realize that public power, they are concerned, they have liability concerns. Anyone who has an enterprise, I'm a rancher. If we lease hunting rights we have to carry extra liability insurance. Any time you're receiving revenue you do have liability concerns there and you also, I would believe, have to comply with state inspections. You know, I can realize that you probably don't want to go through that... [LB579]

DEBORAH WARD: Okay, I have to comply... [LB579]

SENATOR FISCHER: ...you know I don't like to go through that either. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

DEBORAH WARD: Well it's not that I'm having the state inspection. I think, though, that you need to consider maybe tightening up the language on something like that so...they told me they can inspect the installation; they're not as clear on the equipment. However, going back to the liability insurance issue. As a small producer, somebody that just wants to produce my own power for my own use, okay, my homeowner's insurance covers that. I'm assuming our PPDs have insurance that would cover something should there be untoward event. There's possibilities that exist in this world all the time for anything to happen but what we have to look at is the foreseeability. And it's very unforeseeable that the number of redundancies that are built into the equipment these days that we're talking about a situation where one of these things can occur. It hasn't happened yet and I would be shocked if it did. Maybe it would help if you understood that the inverter equipment only operates when it's receiving a signal from the grid. It cannot operate when it doesn't have that signal. When the grid goes down, the inverter doesn't operate. If the inverter isn't operating there's no power that is being fed to the grid. As far as the... [LB579]

SENATOR FISCHER: Yeah, okay, that's fine, thank you. [LB579]

SENATOR LOUDEN: Senator Christensen. [LB579]

SENATOR CHRISTENSEN: Thank you, Chairman Louden. Deborah, when you're talking one-to-one offset, what you would like to see is the term net metering if you produce electricity, it offsets one-to-one with the electric company. So if you had low electric it just turns your meter backwards, you just pay for less? [LB579]

DEBORAH WARD: I would like to see language that uses the word offset and a one-to-one rate. Because the way this is worded right now, if you have excess generation--this doesn't address anything up to the point of excess, okay? Once you get to the point of excess this bill kicks in and it'll give you a monetary credit. That's not the same as an offset. The monetary credit is equal to the wholesale rate which in my case would be avoided cost. So what I would be getting on this for my excess generation is the equivalent of a monetary credit for avoided cost. It's like an avoided cost payment except now the utility is able to defer that payment to a later date because they can hold it to see if I need it for a subsequent month. [LB579]

SENATOR CHRISTENSEN: So if I understand you right, if you create a 100 kilowatts you want to offset 100 kilowatts, and then if you end up producing...you're only needing 100 but you produce 120 then you would only be paid the wholesale rate on the 20. [LB579]

DEBORAH WARD: Right. Except that that's not what this bill is about. It's about interconnection. I'll be talking with you about that on the net metering bill that's coming

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

up, but yes. Looking solely at the interconnection which is what this bill addresses, we don't even need to get into discussions about what the rate would or wouldn't be on this bill because all this bill is letting me do is interconnect and talking about they can establish rates. It's not telling me what that rate will be. It's telling me what the minimum will be but the minimum is established under PRPA anyway so...you know, be that as it may. [LB579]

SENATOR CHRISTENSEN: Okay, thank you. [LB579]

SENATOR LOUDEN: Any other questions for Deborah? I have one. Deborah. You mentioned that this isn't net metering and it probably doesn't have the word in here, net metering because I think anymore we call it customer-generation anyway. Anyway, on page 3 in subsection (d) down there under Section 5, "the unit is intended primarily to offset part of or all of the customer-generator's requirements for electric energy..." Now that, in other words whatever you generate, if you're paying 11 cents a kilowatt for your power and you generate your own power, then you're not going to pay nothing. [LB579]

DEBORAH WARD: That's not what that says. That's telling me what the intent behind my putting the unit in is. In other words, I'm not putting in a unit to make money. My intent in installing the unit to qualify under this is that I'm going to offset my electricity. But this bill doesn't give me an offset. [LB579]

SENATOR LOUDEN: What does that mean, then? [LB579]

DEBORAH WARD: That's asking for my intent. Why I am I putting this unit in on my house? The unit is intended to offset part of the electricity. I can--that's my reason for putting it in but that doesn't mean the utilities are going give it to me. In order for the utility to... [LB579]

SENATOR LOUDEN: Do you want something in there that says, well then... [LB579]

DEBORAH WARD: Well, I would feel more comfortable, yes, if there actually--since everybody's been saying--I've heard two people before me say there's a one-to-one offset. There is no one-to-one offset in here. How can we be discussing a one-to-one offset and knowing whether I'm for it or against it when I can't read it in there? [LB579]

SENATOR LOUDEN: Okay. Then that part there you would like to have refined so it's a one-to-one offset on the amount of power that you are...customers using themselves? [LB579]

DEBORAH WARD: What I would like it is to be rewarded to show that the utility will be giving me, not that my intention is to put in a unit for offset. I can have all the best intentions in the world of why I'm putting my renewable energy unit in but it doesn't

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

obligate the utility to pay me. [LB579]

SENATOR LOUDEN: Because then in other parts of there it talks about having to...it'll pay you the wholesale rate which... [LB579]

DEBORAH WARD: On excess. But what about, okay let's say that I pulled 100 in and have given 100 out, okay? Where is it that tells me what happens with that 100? There's no offset. Once I am at 101 under this bill, hey I know what's going to happen with the excess. I'm getting a monetary credit. I don't know what's happening with that first 100 because there's no offset in here. [LB579]

SENATOR LOUDEN: Well it went back into your own usage. [LB579]

DEBORAH WARD: Not under this it didn't because a lot of things could happen under this. This is what I'm saying is that this bill, if this is what the intent is, it needs to be completely rewritten. This is only and this is solely an interconnection bill. It does not address a method of metering. [LB579]

SENATOR LOUDEN: Okay. One last question on insurance. You don't think that insurance is necessary on any of these systems like whether it's this bill or the next bill or whatever, but whenever someone hooks something onto a power line you don't think that insurance is necessary... [LB579]

DEBORAH WARD: I think that insurance is necessary in certain applications. I think what I would like to see is a bill that breaks out the small scale renewable energy systems that I want installed that my neighbor may want to install, and that we would have different requirements than say, a commercial installation, an industrial installation, and those things, and... [LB579]

SENATOR LOUDEN: But it doesn't matter what size or who it is, as long as you're generating power and you shoot that and it goes out to that transformer, it's back up to 7,200. And if there isn't some insurance or liability or reasoning to keep your equipment in shape so that you don't kill somebody, somebody has to be responsible for that. [LB579]

DEBORAH WARD: My homeowners insurance would cover that. I guess I'm not clear. If somebody, if the unforeseeable were to happen, God forbid somebody ends up being killed because somehow or another, and I can't even conceive of how it would happen because the inverter technology is such that it's just not something that people need to worry about. But okay, fine, let's say that it does happen. What is going to happen? They're going to sue me. Well, I have my homeowner's insurance and I guess at that point I'll have to figure out, boy, I wish I would have had insurance. Maybe I'll have to sell my farm now. Maybe they're going to go after the PPD. But I already have

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

indemnification clauses in here so it wouldn't matter whether I had the insurance or not. [LB579]

SENATOR LOUDEN: Then you feel your homeowner's insurance is adequate then to cover anything that would come under something like this. [LB579]

DEBORAH WARD: Mine is. And after working I will have spent 22 years working for one of the most notorious personal injury attorneys in the United States. I can tell you that we never would have wasted our time going after the homeowner because number one, we're going to need them, number two, the PPD. What we want is the manufacturer, the person that made the equipment that failed. [LB579]

SENATOR LOUDEN: Yeah, you testified to that. Okay, any other questions for Deborah? [LB579]

SENATOR WALLMAN: Senator Louden, I have a question for your legal counsel. [LB579]

SENATOR LOUDEN: Not at the present time. [LB579]

SENATOR WALLMAN: Okay. [LB579]

SENATOR LOUDEN: Any other questions? Thank you, Deborah. Other opponents? [LB579]

ROBERT BYRNES: (Exhibit 1) Good afternoon Senator Louden, members of the Natural Resources Committee, my name is Robert Byrnes. R-o-b-e-r-t B-y-r-n-e-s. I am here to testify in opposition to LB579. I am a wind turbine owner here in the state of Nebraska, here for several years. I did opt at that time to do an off-grid system so I'm not here representing myself per se, but I am here representing others as a renewable energy systems designer and installer. I hear from Nebraskans every day about the opportunity for wind and biomass technology renewable electricity in the state of Nebraska and I have no good news to tell them. The very fact that we're having a discussion on net metering in the state of Nebraska I think is absolutely fantastic. This is a long-overdue discussion. We've had, there are a handful of applications in the state right now primarily being developed by people who have acted on principle, not economics. There is no economic advantage to selling electricity at 2 cents a kilowatt and gaining...and buying it at 7.4. Legislative Bill 579 is talking about selling it at 4 and still buying it at 7.4. This is a half-measure at best, in my opinion. I would urge you not to support LB579. One of the advantages of a net metering program is the simplicity and cost-effective nature of a very simple and concise program. We don't want to overcomplicate the simple. The LB579 program makes no effort to maintain program simplicity. Instead, customer service studies rate class development and other vague

Natural Resources Committee
February 01, 2007

suggestions for program development will result in higher program costs and inconsistencies among qualified applications. This is one of the major issues that it is our hope here out in the world that a net metering program will address is the inconsistencies that we're seeing in the applications that exist today. Legislative Bill 579 will not provide a framework that will result in a standardized program that can be applied across the state. Much has been said about the distribution costs of excess electricity returned to the grid. As Senator Loudon pointed out within the bill, net metering systems are not programs designed for people who want to generate power. I mean, if you want to put up a 100 kilowatt turbine and you use 2,000 kwh a month, you're not offsetting your bill, you're a power producer. Net metering programs are designed for people who want to offset and include renewable energy in their daily lives. So the excess electricity that we're paying 3.4 cents per kilowatt on to use this distribution system, I think we need to look at this a little bit. I think that is for the amount of electricity that is looking at being returned to the actual distribution system and the actual distribution that's occurring. What we're talking about here with net metering, and I give all the credit in the world to public power and all that they have for the state of Nebraska and in keeping rates down and all the other things that they do. And they've done that through centralized power. Centralized power has advantages of economies of scale and efficiencies that are inherent in centralized power, large facilities. One of the down sides of centralized power is the distribution losses and the maintenance and all the equipment that is entailed in taking electricity from here and using it over here. That is a downside, not only in the state of Nebraska, but in our nation. Ninety quads of energy go into the U.S. energy grid every year, that's quadrillion BTUs of energy. Only 35 quads come out as useful energy. The two biggest wasters in this nation, 25 quads, is electrical system losses and the other 23 quads is transportation. There is a penalty that is paid with centralized power production and that is distribution. When we talk about net metering we're talking about distributed generation. We are not talking--it's a completely different model. And I think it's unfair to assess the distribution costs of a centralized model on a decentralized model. If I had a grid intertie system which I opted not to do, one of the reasons was the hoops and hurdles that are involved, at least three years ago, if I did return a small amount of power to the grid, where's that power going? That power is getting sucked up within a mile radius of my home. This neighbor's using it, that neighbor's using it, it ain't having to go very far for the little bits that we're talking about. And I think the assessment of distribution costs on a centralized model and putting that shoe on the decentralized model foot is just not a good fit. And if 3.5 cents a kilowatt hour for distribution and other things, that is a sizable hunk of value that's given to this renewable energy. The small handful of wind applications that have risen in the state is clear testimony not only to the failure to create a positive environment for the development of renewable electricity over the last 25 years, but that a real net metering program is desperately needed as well as a complete change in outlook. Legislative Bill 579 will not result in needed change nor will it provide the needed incentive for development of real applications. The most basic, net metering is not new. Forty other states in this nation have net metering; some have been successful and some have not.

The previous testifier I think clearly brought that out, that not all net metering programs are created equal. However, having been in existence for some time, successful traits of sound net metering programs have been clearly identified. These components are not in LB579. The most basic hallmark of a net metering program beyond simplicity is that as a retail-to-retail exchange of power using a single bidirectional meter. Legislative Bill 579 does not provide this very basic foundation for a sound program. Instead, rate classes wholesale-to-wholesale, and other less than concise ideas are substituted for these basic qualifications for a fair net metering program. Just because there is a program on the books, this does not mean people will jump in line to sign up. A real net metering program that is simple and fair will quickly fill. Some states, like New Jersey, have filled their programs in a year or less and are highly competitive. These are hallmarks of a fair program. A half-measure like LB579 although a step in the right direction, is a half-step. This legislation will not result in a real incentive program for producers to undertake these activities. If adopted, it will be a net metering program in name only and little will actually change in terms of the current under development that we see today in Nebraska. States that have adopted poor programs like Utah see them languish on the books with no significant increase in development of renewable electricity. This is not what we need at this critical time in the state of Nebraska. Finally, the people of Nebraska have been pulled time and time again regarding these issues. They have overwhelmingly responded each time that the development of renewable resources must be increased even though it will cost them more and they are willing to accept that. Even if the neighbor-to-neighbor model of the cost shift does hold up which I do not believe does, it has not been demonstrated or shown to my knowledge in the state of Nebraska. Even if that is the case, Nebraskans have resoundingly said they are willing to pay that. People want a fair net metering program. Legislative Bill 579 not only does not meet this expectation, it risks further development of the existing perception that public power is the biggest hurdle to development of renewable electricity in the state. I strongly oppose LB579 for these reasons and encourage committee members to vote against this bill. [LB579]

SENATOR LOUDEN: Okay. Questions for Mr. Byrnes? Senator Carlson. [LB579]

SENATOR CARLSON: Senator Louden. Robert I can tell you've got strong feelings but I appreciate your attitude and your report. I'm trying to understand here, if 3.4 cents isn't a fair price for distribution, what would be? [LB579]

ROBERT BYRNES: There the, LR that went off in Kearney this fall was...attempted to address what those costs are. I don't know that anybody knows what those costs are. Certainly there are averages, there is data out there that support that 3.4 cents using the centralized model of distribution. However, if you took the average miles that that electricity has to travel for the average customer in Nebraska, say it's 100 miles, and the distributor-generator excess is absorbed by his neighbors within a two-mile circle, well we can just use the established numbers and call that one-fiftieth. So there is a way, I

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

think--I'm not saying renewable energy producers are not looking for a free ride on a distribution system, what I would maintain is that the true cost of distribution of renewable energy that's produced in a distributed manner is not 3.4 cents per kilowatt. [LB579]

SENATOR LOUDEN: Any other questions for Mr. Byrnes? Senator Christensen. [LB579]

SENATOR CHRISTENSEN: Thank you, Chairman Louden. Robert on...you bring up net metering again but if you got only one meter, you have net metering. The difference you're looking at is the cost of what you're being paid for if you have surplus because as I see it, if you're running one meter, what you consume yourself is true net metering. And if you have an extra 10 kilowatts to sell you'll be paid 4 cents in the example we've been using, and if you use an extra 10 you'll pay the 7.4. Is that your understanding? [LB579]

ROBERT BYRNES: Legislative Bill 579 does not clearly state that...when you're talking about putting two different values on power in the same location, you have the opportunity that, you know, one's of higher value than the other and that's what's going on now in the state of Nebraska, where producers like Dave Tobias, he would have to produce four times more than what he consumes to break even. We're trying to get--a net metering program gets us out of that and this is, I mean, now we're talking 4 cents over 2 cents. I think it's a move in the right direction but I, you know, in my opinion, let's just get it right, let's use the model that have been established. We don't need to reinvent the wheel here. There are successful foundational pieces of net metering legislation that we need to include and learn from others' experiences. [LB579]

SENATOR CHRISTENSEN: I guess I'm going off of the statement they said earlier that they would be willing to throw single meter in there so I see it being net metered for on your own usage. Our disagreement right now or what I'm asking you about and not necessarily disagreeing, but what I'm asking you about is, we're disagreeing on whether it should all be at 7.5 both ways or 7.5 versus 4 or something in between. [LB579]

ROBERT BYRNES: Well whether it's 7.5 or 7 or 4, the in needs to be the same as the out. And I think that in the spirit of keeping the program simple and keeping the administration costs minimized, we know what the retail rate is. Call it the retail rate and we're done. When we start talking about creating rate classes and doing studies and surveys, there's a lot of cost that gets put into something that should be pretty straightforward. [LB579]

SENATOR CHRISTENSEN: I guess the part I'm struggling with or trying to bring out here is if you went at the retail rate of 7.5 cents or 7.4, then you're saying we want public power to absorb any distribution charge. Because they have to provide enough

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

energy for you to be able to run if you aren't generating and they have that line buildup, they have all the expense there and you want nothing figured on your side for that. [LB579]

ROBERT BYRNES: Not in the retail, not in the offset. There's other ways that can be done. I think the excess, and this is done in a lot of states as well and in my view I would not be opposed to, the forfeiture of excess generation payments. This is not about making money. This is about offsetting your electrical consumption with a renewable resource. So make...getting the cash payment really isn't interesting. What's interesting is that we get a one-to-one offset at the meter, that there's one price for power on that site whether it's going in or coming out. And that could be recaptured through forfeiture of excess credits, that could be captured through the service charge or fee associated with the interconnection. But again, we need to keep this in perspective. If net metering is 2 percent of the grid, and excess is one-twentieth of production, we're talking about one-twentieth of 2 percent. So, you know, when you put that--we have a big system out there. Whether we're going to cause ripples upstream with a kilowatt here and a kilowatt there, I'm not so sure. [LB579]

SENATOR LOUDEN: Okay, any other questions for Mr. Byrnes? Seeing none, thank you. [LB579]

ROBERT BYRNES: Thank you. [LB579]

SENATOR LOUDEN: Okay, next opponent? Now I was giving 15 minutes and we'll start cutting down to ten minutes. You are first on the ten-minute line, Ken. (Laughter) [LB579]

KEN WINSTON: (Exhibit 2) Well that's fine. I hope I don't need ten minutes. I'll feel good if I'm out of here in five. My name is Ken Winston, last name is spelled W-i-n-s-t-o-n. I'm appearing here on behalf of the Nebraska Chapter of the Sierra Club in opposition to LB579. And actually I need to start out by saying I appreciate the fact that the committee has an interest in this issue and the fact that the committee has chosen to introduce this legislation. And as I've indicted before, I spent a long time working in the Legislature for a guy named Stan Schellpeper and one of the things he always tried to do was if people had differing opinions on things, he always tried to get people together and tried to work things out. And I guess that's the offer that I would want to make is to try to work things out with folks. Oh, do I not have enough copies? I have one more and I think I've got one more that I can look at here. So I guess I want to make that offer up front, is that if there is interest in working out some of the issues that people have raised here today I would certainly be glad to work with the committee and introducers and any other interested parties on this issue to the extent possible. I guess the main thing that I wanted to state here today is that what the Sierra Club is interested in is legislation that will promote renewable energy development and that's the main focus that we want to

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

work on. And we're concerned and I guess, the handout that I've given you, the first part is from a document that was generated by the Panhandle Area Development District. And then the second part beginning about four pages in, it starts out with, Executive Summary and this was done by an organization of...all of a sudden I'm blanking on the name of it but their initials are NNEC and it describes...it was an extensive study that was done on net metering programs. And one of the things that they point out is that some programs, as was previously indicated, there are 40 states that have some sort of net metering program and that some of them effectively discourage net metering activities and that there's practically no one making use of net metering in the states that have those kinds of programs. And on page three of that there's a description of the kinds of things that are done through legislation or other policy enactments that discourage small-scale renewable energy programs. And I won't read that because obviously, all of your folks can read that information. But the main thing is that if there are additional fees, if there's additional requirements that are unnecessary, what ends up happening is that people don't take advantage of it and you don't have a program that's used. There isn't more renewable energy generated and we want to see more renewable energy generated. And then on the next page there is a description of programs that are effective and it talks about various things that can be done to make it renewable, a net metering program effective. And so I guess I just invite you to read through the handout that I've given you. And I guess the one, as I invite questions, the one thing that I need to say is that I'm not an engineer, I'm not necessarily a policy wonk but I will attempt to answer questions to the extent that I am able. [LB579]

SENATOR LOUDEN: Questions for Ken? Senator Hudkins. [LB579]

SENATOR HUDKINS: Ken, when someone says net metering to you, what do you think of? [LB579]

KEN WINSTON: Well, my understanding is the description that was given earlier was of the single meter and things where there's an offset and if there's additional electricity there may be a program for compensation at varying levels or not, depending upon how the program is set up. [LB579]

SENATOR HUDKINS: Okay. So to just make sure I understand that. If power is being generated by a wind turbine and they generate more than they need, then they can put the extra onto the grid... [LB579]

KEN WINSTON: That would be, yes. [LB579]

SENATOR HUDKINS: And so their bill should be zero. [LB579]

KEN WINSTON: Right. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR HUDKINS: Other than the distribution costs. [LB579]

KEN WINSTON: Well, if they're producing more than what they're taking off. [LB579]

SENATOR HUDKINS: Then if they produce more then they would be getting paid for that excess. [LB579]

KEN WINSTON: Right. [LB579]

SENATOR HUDKINS: And the last gentleman that testified and I didn't think of this question in time, if you are paying 7.2 for electricity and you're generating your own so you're not using any from your local power company, terrific. Then that would be considered the one-to-one offset? [LB579]

KEN WINSTON: I'm not sure I'm following you. [LB579]

SENATOR HUDKINS: Well I don't understand it either. [LB579]

KEN WINSTON: That's one of the problems of this kind of legislation is that sometimes we're talking about the same things and we're hopefully not disagreeing because we don't understand each other. [LB579]

SENATOR HUDKINS: Yeah, well, I guess my question is I fail to understand why the people who are generating power think that they should be compensated the same for selling their power as they are when they pay to buy it. Because the utility company would be paying NPPD 4 cents, let's say. So why should the utility company have to pay more than 4 cents to the generator for any excess? [LB579]

KEN WINSTON: Well, first of all, I don't want to attempt to speak for Mr. Byrnes or Ms. Ward or any of the other people who spoke. So I guess I'm, and so I don't, and I'm not in business of generating. I don't have a turbine or anything like that so I don't want to attempt to speak for anybody who is in that position. But as I understand it, basically somebody's saying, okay, if I'm set up in a situation where I pay 8 cents or 7 cents and when I generate electricity back and I get paid 2 cents or 3 cents, then it's not worth it for me to connect to the grid. And that... [LB579]

SENATOR HUDKINS: But that's what they're paying everybody else when they buy power. [LB579]

KEN WINSTON: And I understand that. What my understanding of the argument is to say that, well, if that's all I'm going to get then I'm must going to just disconnect completely and not be involved with that. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR HUDKINS: But they would still be generating their own power and therefore not paying the utility other than the distribution costs. Because the poles are there, the transformers are there, everything is there whether they use it or not. And if they're generating they're not using it but, if they're not generating, then they have to use it. And the power companies are saying, we have to supply all of that equipment for everybody whether you use it or not. [LB579]

KEN WINSTON: Right. And I guess I'm saying if that person disconnects from the grid entirely, then they are not going to be selling any electricity and they're not going to be getting any electricity back, there will be a loss of revenue both ways. So I guess I think that it's more beneficial to have someone connected to the grid and receiving the extra few cents a kilowatt or however it's paid out, than it is to have them disconnect. And I guess from where I'm sitting and I understand the arguments about incentives and what have you or benefits in built-in costs, but there are additional costs that go into to certain kinds of customers in any event. For example, it's much more cost-effective to service a thousand urban customers than it is one customer five miles down the road. So are all those urban customers subsidizing that one customer who's five miles out in the country? So I guess there's lots of subsidies that are built into the system. And so what we're saying is that if we're going to have a subsidy of this kind, it should be to benefit the environment. And there are all the benefits that arise from that and the utility also benefits from having additional electricity provided by its customers. [LB579]

SENATOR HUDKINS: Yeah. And the people that want to generate their electricity, good for them. Because that is allowing less dependence upon what you have to pay for for generation and it is a clean system. But I am just having a little trouble explaining, and yes, we want to incent them but neither should they get out of paying for their fair share of the distribution costs. [LB579]

KEN WINSTON: Well, I guess I would just, and I said I'm not sitting in the shoes of the people that testified earlier. But as I understand it, if I spend \$50,000 or \$60,000 for a generator and I'm generating electricity, there's a major cost that's gone into generating that and then the electricity provides a benefit for the other people who are on the line. So it's not like they're getting a free ride. So I guess I just think this is a way of providing some incentive for individuals to do that and that's what I'm advocating is for that kind of incentive. [LB579]

SENATOR HUDKINS: And thank you for being here today and I think that's what we're all working for is a compromise that everybody can live with. Thank you. [LB579]

KEN WINSTON: Thank you. [LB579]

SENATOR LOUDEN: Senator Christensen. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR CHRISTENSEN: Ken, wouldn't it be better to bring the incentive in off of environmental grants and things this way? To help them just like on the methane producer. You know, getting grants that way to help them get them set up than to have all the public subsidize the electricity rate? I'm just asking a question. [LB579]

KEN WINSTON: Well, I'm certainly interested in whatever kinds of incentives we can provide for renewable energy and this appears to be one of those pieces. And certainly I will be appearing on other legislation here. I've been on legislation over in the Revenue Committee regarding tax incentives. And there's even a bill I think in the Judiciary Committee on a related issue. So there's a number of different issues involving renewable energy and energy conservation and we think that all of those things need to be looked at. It's not just one, I mean, net metering by itself will not solve our energy problems. It may help and I guess we'd like to provide some incentives for small individual producers. [LB579]

SENATOR CHRISTENSEN: Thank you. [LB579]

SENATOR LOUDEN: Any other questions for Ken? [LB579]

KEN WINSTON: Thank you. [LB579]

JAREL VINDUSKA: Good afternoon Senator Louden, members of the committee, my name is Jarel Vinduska, J-a-r-e-l, last name V-i-n-d-u-s-k-a. I am here to speak in opposition of LB579 simply because it isn't a net metering bill as I look at it and what I think it should be trying to accomplish. To me, net metering, its main purpose is to provide an incentive for people to produce renewable energy. And the simplest and best way to do that is to one-to-one ratio at the...paying the same price. And the -I've heard a lot of talk today about producers of power getting a free ride if they were to be paid the same price. But the reason, I don't think we should lose track of the reason we're trying to promote renewable energy is we're in a heck of a fix in this country, whether some people don't want to admit to it or not. But we have to do something about our energy problems and we have to be producing renewable power. And so when we talk about a subsidy to a producer, the reason we have any environmental problem like this is we never pay, as a society, at least up until this point, pay the true cost of things. There's a lot of hidden costs that we don't factor into the equation. When it comes to power generation we're starting to see those costs more and more. We don't...we've got fish advisories on a lot of our streams and lakes and for mercury contamination and we know that most of that mercury comes from power plants. We've got asthma epidemics in this country. You go next to any power plant on a cold day like we are going to have this weekend and you see an inversion, just that haze of all those microparticles hanging there from particulates. Just last night on the evening news they said that now even in the latest study that a lot of heart disease can be caused by these fine particulates getting into our lungs. They never thought of this before that it can actually

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

pass through our capillary walls, get in our bloodstream and contribute to plaque production in our arteries and cause strokes and heart disease. Global climate change, I mean, people are finally starting to come around that we're facing a very severe problem there and power plants contribute, coal-fired power plants contribute the lion's share of the CO₂ that goes into our atmosphere, so. So far those costs haven't been factored into power production and if we did, the people that are paying these rates would know that their rates would be a lot higher if we had to pay for all these problems. So therefore, seeing as how the coal industry gets huge subsidies, I mean, you know, you sit on that main line coming out of Wyoming, a 100-car train every ten minutes...just immense quantities of coal, that CO₂ is going into the atmosphere. So if we have this major problem and we're giving these incentives, we're giving the free ride to the power companies for all this other stuff, what is wrong with giving a little incentive to a local producer to eliminate some of those costs? Sure you might say, well if he gets the same price per kilowatt hour as what he would be charged, the rest of the people on the utility are getting charged extra to maintain those lines and the other costs for the power company. But they're also getting a benefit for that. Everybody is getting a benefit and it isn't only that, but the power that is bought, it is used more locally so there's a lot less line loss so that power is more, because it's used closer, it's...more of it is efficiently used. And so if a power company buys power from 500 miles away, sure, he might be paying this much but if he loses half of it he's actually paying twice as much as for that amount of power. So I just hope you think about these things. This isn't a bill that goes close enough to accomplish what we want to accomplish and I think we can do a lot better than that. Thank you. [LB579]

SENATOR LOUDEN: Any questions? Senator Carlson. [LB579]

SENATOR CARLSON: Senator Louden. Jarel, as I'm sitting here listening to testimony I think I'm beginning to see a little bit of a picture and maybe you can help clear it up for me. I think I'm seeing that if you generate your own power and you generate 100 units and you use 50 so you sell 50 back into the line and you pay 7.4 for the 50 that you use, and you get 7.4 for the 50 that you sell, you've broken even and that's an incentive for you? [LB579]

JAREL VINDUSKA: Well, the 50 that I sold I'd like to get the 7.4... [LB579]

SENATOR CARLSON: Okay. [LB579]

JAREL VINDUSKA: ...back too. Because next month the wind might not be blowing or the sun might not be shining. [LB579]

SENATOR CARLSON: Well that's what I said, if you generated 100, used 50 and sold 50, now you've got a net cost of 0. That's an incentive for you. Now I want...explain to me what's the incentive for the power companies for you to generate power? [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

JAREL VINDUSKA: Well it isn't so much the power company, it's the local citizens. It's the incentive to have a cleaner and environmentally more stable fuel supply...energy supply. [LB579]

SENATOR CARLSON: And I believe you, I understand that. But who is supposed to pay for that? [LB579]

JAREL VINDUSKA: Well it will be the rest of the customers, all customers. They'd use the power but they're getting a benefit from it too. They are getting the security of a more stable energy supply and a cleaner environment--less disease. So they're getting something for their money. They're getting a lot. [LB579]

SENATOR CARLSON: Okay and you're saying if the power company paid you back 7.4, really it's the other customers that are paying you 7.4 and they're getting the advantage of clean energy so that's okay? [LB579]

JAREL VINDUSKA: That's okay and then they might not have to pay as much subsidy to the coal companies either and their federal taxes and...so they'd save money there. It's just who you pay the subsidy to. I say it's better to just pay it to the local person and have a cleaner environment. [LB579]

SENATOR CARLSON: Okay, thank you. [LB579]

SENATOR LOUDEN: Other questions for Jarel? Seeing none, thank you. [LB579]

JAREL VINDUSKA: Thank you. [LB579]

JON DIXON: Good afternoon, Senator Louden and the rest of the people on the board, my name is Jon Dixon, J-o-n D-i-x-o-n. I own Dixon Power Systems. My wife and I do and we install, sell, and design renewable energy systems here in Lincoln and the surrounding area. The information...I am opposed to LB579 and my information that I am going to share with you comes from my experiences working with the customer and the utility companies and the local code officials. Two points I'd like to talk about and one is the safety issue. There are some safety issues. This bill is looking for potentially extra insurance that the customer-generator would have to purchase. It also lists in there if I understand correctly that they would like the customer-generator's system to be designed to the commercial and industrial standard of the state electrical code. It also talks about that there may be additional safety and reliability expenses that the utility company would want to put on the system to make sure it that works correctly. When the earlier REA representative mentioned I believe you asked what the safety issues were, he stated that the equipment needs to disconnect from the utility line when their system is nonoperational, whether they're doing maintenance or if there's an

outages, whatever it may be. The equipment is not new, this has been used for 30 years and of course it's gone through upgrades as codes and electrical issues have changed. But there's the...IEEE is the International Electronics Electrical and Electronics Engineers and the American National Standard are the people that came up with the requirements on what this equipment needs to do; in other words how does it interact with the utility. So they created the standard, so when a wind...we'll use a small wind company like Bergey Wind Generators out of Norman, Oklahoma, decides that they're going to make a utility-interactive wind system for small residential, their inverter which is the electronic component that physically plugs into your house wiring, has to meet these earlier standards of the IEEE. Once they have designed the equipment it is then sent to the underwriter's laboratory and they are the people that take that inverter and take the requirements and then they test that inverter. And they test it and test it and test it to make sure it does do exactly as it's supposed to do. Once it has passed that, then it is stamped so it says when you get your inverter it'll say right in there that it meets the IEEE, the American Standards, UL listed. So now you know this component is designed to interact with the utility. So much of the safety and reliability issues have been removed. The next safety-possible area would be, and in that standard is the information that this inverter is to disconnect from the utility grid in case there is an outage. In fact, these inverters when they are plugged into the utility they are looking at the voltage so if the voltage falls below 105 or above 132 volts that inverter disconnects. It's a frequency which is this 60 cycles that we hear about that we have here in the U.S. If those oscillations are supposed to be right at 60; if those oscillations drop to 59.3 or go up to 60.5 the inverter immediately disconnects from the utility. So those are some just quick pieces about that. The next part is and now you're going to hook this to your home. Well we already have a whole system in place for that and that's your local electrical code official. So when you go to put in a system, just like when you go to build your home or do an addition, you call a licensed electrician. Those people come out, they look at what you want to do, they go down and apply for a permit at the local code official, they say...the code department reviews what you want to do and they say, fine. The electrician comes out and wires this inverter into your household wiring. When they do that the electrician has a code he has to follow and that's the NEC, or the National Electrical Code. And in following that they have a standard for residential, commercial and industrial. So these different categories of people have to have different standards. So when the electrician wires into your residential home, he follows the residential procedure. The NEC Code also defines how you are allowed to physically wire this inverter into your household business or commercial system, so that's all spelled out as well. When the electrician is done, he files his paperwork, the inspector comes out from the local code official whoever that is, whether it's state or the city of Lincoln, or Omaha, whatever, he inspects the system, reviews what the electrician did, takes the covers off the boxes, inspects the wire sizes, are there overcurrent protections available, and away he goes. If it's correct he stamps it, it's approved, and the system is ready to be turned on. If the code official decides that he doesn't like something, he tells the electrician what it is, they change it, it gets stamped. So to add additional safety

Natural Resources Committee
February 01, 2007

measures does sound very good and is important to keep that in mind, but these things have already been addressed, we already have a checks and balances available on the local level. On the national level it's already been dealt with, with the IEEE, it's already been dealt with, the ULs inspected it, so we may be adding some additional cost that's not going to be favorable to the renewable energy or customer-owned generator. Insurance was mentioned. Well yes, insurance sounds good and you say, fine, let's insure it now. Let's check against...do we need it? Well the equipment was designed by the IEEE, it was tested by the UL, it was installed and inspected by the local code official. Have we done due diligence? Have we done enough? If so, then adding an extra insurance issue just may not be relevant; it would just be an additional burden but we need to address it, so we can kind of check these things back and forth. The second issue I'd like to talk about a little bit...really briefly, is this whole last discussion of 4 cents, 5 cents, 10 cents, why does a renewable energy person want to get a one-to-one? Why do they deserve it? Do we need to incentivize them? (Laugh) Whatever that word is. And here's my simple analogy on this. You have two homes, one home over here, we'll call this home A and home B. They live next door to each other. Both homes use 1,000 kilowatt hours of electricity per month, all right? So when you go to pay your bill somewhere it'll say on there kilowatt hours used this period and that's what you pay, that's your quote energy charge, which we've also learned today also includes the fixed costs for maintaining the utility grid and then there's like a meter charge of maybe \$7, \$10, \$12, \$20 whatever your company is and the sales tax and away you go. This home over here is 1,000 kilowatts, this one's 1,000 kilowatts. Now this person over here decides he's going to put in a new heating and air conditioning system and he's going to go with a geothermal heat pump because it's the most efficient, uses the least amount of electricity available for heating and cooling. So he goes down and gets that put into his house and lo-and-behold his energy bill goes down. So now this person's energy bill went down, he puts in the geothermal heat pump and it's saving him 200 kilowatt hours a month off of his bill. Okay? We'll draw a line under there. A thousand is what he started out with, he did an energy-efficiency upgrade to his home, he's saving 200 a month and so now he's currently only purchasing 800 a month from the utility company. This person on this side, they have their home. It uses 1,000 kilowatt hours a month. They decide to put in a small wind system or solar electric system. And guess what? It saves...it produces 200 kilowatt hours a month. So we draw a line. Currently now if you had a one-to-one meter situation, for instance, where he gets full credit for every drop of power they could produce, lo-and-behold he's now only buying 800 kilowatt hours a month from the utility company. So now both homes, this one did an energy-efficiency improvement, this one chose to reduce their bill by some small generation...a generator, okay? Both of them buying the same amount of power from the utility company. Now the house over here that did the energy-efficiency improvement, they can go to the State Energy Office and they can get a low-interest loan to help them make that improvement. This person on this side over here that did the energy-efficiency improvement, their utility company will help them explain the benefits to that. Utility companies spend money in their budget for

Natural Resources Committee
February 01, 2007

advertising. You all maybe have seen these, you get these things in the mail. You've heard the commercials on the TV, telling you from your utility company how to save energy. Turn your thermostat down, geothermal heat pumps save you the same thing, put in compact fluorescent bulbs, they promote energy efficiency which means they are promoting the fact that they want you to reduce your energy load; they want you to buy less power. So this person is supported by the utility. This person over here that chose to reduce their energy bill by putting in a renewable energy system is not eligible for a loan from the Nebraska Energy Office because renewable energy systems are not prequalified and they will not return...simple return of investment does not meet their criteria. So this person is unable to get any financial assistance in the form of a loan so they would have to go to a bank or have the money on hand. And of course then this system over here, the utility does not have a uniform interconnection agreement and in some instances they may want to turn around and charge them back for these fixed costs or demand charges which then now of course, they have to pay some more money. So you look at this and you say, well, boy it kind of sounds like they're not in favor of renewable energy. Well okay, we'll just take this house over here again, okay? Let's say they put a solar system on. This solar system instead of generating electricity, it generates hot water. And maybe you've seen these systems, a lot of them were put in 20 years ago, there's 80 or so in Lincoln still. So when the sun shines on these panels they make hot water. They can use that hot water to offset just their domestic hot water heater, so now their hot water heater instead of paying electricity to make that hot water, they can do it with the sun, okay? And the other thing is this person does that and they can also use that same hot water heat or cool the house. So this person does that and now they just saved another 50 kilowatt hours a month. So now they are only buying 750 but the utility company does not come over to them and ask them, you haven't, you know you are not doing your part, you've reduced your energy, now we need to charge you back some more money. It's promoted over here but it's not promoted over here. So do we need to incentivize? Well in a way we are but in a way it's already being, it's acceptable to reduce your energy load and the power companies are helping you do it. They used to give you some rebates, some of them did. I think they've taken them away now. But I don't see a difference between the two homes. Both of them are buying less power from the utility company. That is the end result, there is no difference at the end of the day. The electric company sold less power. It's just that this person chose to do it by generating power; this person chose to do it by more, it appears, acceptable means of an energy-efficiency improvement in that form. [LB579]

SENATOR LOUDEN: Are you done? [LB579]

JON DIXON: Yes, I could go on for hours but I'm done. [LB579]

SENATOR LOUDEN: I know, that's the reason I asked (laughter). Is there questions for Jon? I have one, Jon. When you talk about that, here you get back to this thing that's primarily to offset part or all of the customer-generators' requirements. If you are

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

offsetting it then he's getting paid back for whatever he pays in. Now I don't know who you buy your power from but where I buy, we have a meter charge. If I don't use any power I still pay about \$25 a month or whatever it is, if it's zero because...and we have different rate classes for different meters out there, whether it's stock wells or what because we have stock wells and you pay them whether that meter turns or not. So that part is where the 3.4 cents or something, I mean that's...when they talk about to me, the 3.4 cents for operation--that's where our meter charge comes in and pays that. Because after that then we pay I think 6 cents a kilowatt or something like that. And they're already paying 5.8, the ones I buy the power from, they're paying 5.8 for it. So I, when you mentioned about using heat pumps and we have them out in our area and that sort of thing and there were solar panels. You don't see many of them anymore because they weren't as good as people thought they might be. So I mean, I think there...you're right. There's the same amount of power sold all the time. But what I don't know is if that's the best comparison in the world for the amount of time it took to explain it. [LB579]

JON DIXON: Well... [LB579]

SENATOR LOUDEN: Thank you. Any other questions? Senator Hudkins. [LB579]

SENATOR HUDKINS: Thank you. As for me, Mr. Dixon, I appreciated your explanation because it put it on terms that those of us who are not electrical engineers can understand. Going back to the safety issue that you mentioned in the very beginning. I understand and tell me if I'm wrong, if there's...the overhead lines or the buried lines, whichever, if there is a power outage, there's no energy in those lines. Okay. And for the home generator the wind turbines, they won't operate unless there is energy in the lines? [LB579]

JON DIXON: Correct. [LB579]

SENATOR HUDKINS: Correct. Okay, so there is no way that they can accidentally feed electricity onto the lines and potentially electrocute a lineman? [LB579]

JON DIXON: No. That house will be sitting in the dark just like everybody else. [LB579]

SENATOR HUDKINS: Okay. Now if we have a gasoline generator it can happen. [LB579]

JON DIXON: Correct. And that's addressed, once again we say let's look at this okay? Is there a potential here, let's see what's in place. The NEC code has a whole section on standby generators interconnected into your home and how that needs to happen. So they have the same means except usually on a standby generator it could be a manual disconnecting of your home from the utility grid. Or if it's a larger permanent

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

mount standby generator then they have fully automatic transfer switches where the generator sees its utility failed, starts itself up, flips a switch and disconnects the home or business from the utility and in which case, then, it starts to generate power to maintain that building or business. [LB579]

SENATOR HUDKINS: Okay. And going back to the offset, I don't have any trouble at all with if you are generating your own needs then you have avoided the cost of buying power so 7.2, 7.2, not a problem. But I think my problem lies with whatever excess you sell. Now you want to be incentivized and I don't blame you at all. Because we put in a new heat pump system and we did get a small grant from our power company and of course, our bill went down too. But any excess power that you generate, my opinion is that if your utility company is buying it from NPPD at 4 cents, then that's what they should be paying you rather than the full retail price. [LB579]

JON DIXON: I'll speak really quickly to this excess generation because it sounds really good and it sounds like it might be a really big number? But the reason there is in any typically in a residential system, first off, somebody is going to put a solar wind system at their home. You are going to have to spend \$20,000 to \$50,000 so this is a huge investment. This isn't just something you can go buy at Radio Shack and plug it in and life goes on and it's really quick and easy and we're going to make like tons of power, okay? Twenty thousand dollars is what it takes to offset about 200 kilowatt hours of electricity a month. Fifty thousand dollars will generate 1,000 kilowatt hours a month, okay? And if you all go home and look at your electric bills today, it'll probably be like, oh, geez, that wasn't very much, you know? You'd be lucky, most homes especially if they are all electric are using probably in the 2,000 to 3,000 kilowatt hours a month. And I have people call me all the time that are using 7,000 kilowatt hours a month. So it tends to follow... [LB579]

SENATOR LOUDEN: Okay. Any other questions? [LB579]

SENATOR HUDKINS: I forgot..never mind, my mind's just like a fifth grader. []

JON DIXON: Well, this generation thing, can I have one moment? The excess generation, what I was getting at, is here's your house, it's using electricity, all right. Boom, boom, boom, you get...the toaster is going, all that stuff. The wind starts to blow, your wind generator starts to produce electricity. As long as you are home at that exact moment, is using more energy than your wind generator is producing, then when you walk outside you'll see your meter slow down by however much energy that wind system is making. So at that moment you are buying less power, offsetting retail. Now when you get into quote excess generation that's when all of a sudden you run around and turn everything off in your house and now your wind system is blowing and it is making more energy than your home is currently using at that exact moment in time. At that moment in time you would have what is being talked about here, is excess

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

generation. Now that energy has to go somewhere. So where does it go? It goes out the thing down through the transformer and to the neighbor's house. At that moment is when they typically will meter that and pay you their nonavoided cost I guess you, know just the fuel charge for, whatever. So that's how you get excess generation. It's not that you're putting in this wind system and by the 20th of the month you've made more power, all the power that you normally use in that month and now you got ten more days and you are just going to really give it to her. [LB579]

SENATOR LOUDEN: Okay, we got one more bill, so any other questions? I have an idea we're going to hear the same testimony over again. Any other questions for Jon? If not, thank you. [LB579]

JON DIXON: Thank you. [LB579]

SENATOR LOUDEN: Any other opponents to LB579? Okay. Anybody in the neutral testimony? One? Thank you. [LB579]

TIM TEXEL: Senator Louden, members of the Natural Resources Committee, my name is Tim Texel, T-i-m T-e-x-e-l and I'm the executive director and general counsel for the Nebraska Power Review Board and that is the state agency with primary authority over Nebraska's electric power suppliers. Just want to testify very briefly today, a couple of points on LB579. First of all, I think we were mentioned earlier in some testimony and PRPA law was mentioned and I wanted to mention that I'm not aware of any, well first of all with the PRB there is not a minimum threshold for Power Review Board approval of generation facilities. If it's a PRPA facility then we are preempted, as the Attorney General's office opinion that we requested determined. And my board asked for that opinion as a result of Mr. Tobias and Mr. Kluthe, they came before us and they were the first two and it's always difficult to be the first ones. And we asked for that opinion because of uncertainty whether we did have authority under the PRPA law and the AGs opinion said no. So I am not aware of a threshold on PRPA on the minimum side. There is on the maximum side of 80 megawatts. But for our Power Review Board approval there is not a minimum threshold level. If you generate power for sale at wholesale or retail then you have to get it approved through the Power Review Board is the current state of the statute. And I, does that address the question that Senator Fischer had or anybody else on that issue? I wanted to mention under the current provisions of Section 70-1012, any generation unit of any size has to be approve as I mentioned. I've been told by members of the public interested in installing net metering that our formal notices and the hearing process and we sometime operate as a quasi-judicial body and sometimes as a more evidentiary body for approval purposes. And that's fairly intimidating to the public so I think by exempting out the Power Review Board I think at least in the regulatory scheme, it does help promote these type of generation facilities, renewable facilities. Whether, the cost is another issue but at least as far as our regulatory approvals, I think by exempting us it makes sense to, and it does help

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

promote those facilities, at least like I said, on the regulatory side. One suggestion I wanted to bring to the committee's attention, in Section 2, subsection (5) and sub (c), it's on page 3 of the bill, it provides a definition for the term, qualified generation unit and it states that a unit is one that "...operates parallel with the local distribution system;..." and the term, parallel, or the phrase operating parallel is not defined and in my opinion, I think it might be helpful to add a definition to that term or phrase. Being an attorney, I think it's always easier in the legislation especially where you don't have regulatory body with regulatory authority to set a definition, to put it in the legislation so that there wouldn't be disagreement or lawsuits over what constitutes that term. And to be honest, I am an attorney, I deal with this area. But I'm not an electrician and I'm not an engineer and I had to ask what that term would mean. I think it's fairly clear to everybody in the industry but it probably wouldn't be to the general public that was interesting in net metering. And so I think that might add a little bit of clarity and remove one potential uncertainty for someone. So and if there is unanimity in the definition it should be fairly easy I would think for the industry to provide that definition to the committee. So that was the extent of my testimony and I said I would be brief and hopefully that's all I have. [LB579]

SENATOR LOUDEN: Okay, questions for Tim? I have one, Tim. When you were looking on that page there where we have "...the unit is intended primarily to offset part of or all of the customer-generator's requirements..." do you have a problem with the meaning of that? [LB579]

TIM TEXEL: Is that on page 3, with (d)? [LB579]

SENATOR LOUDEN: Yeah, (d). [LB579]

TIM TEXEL: "The unit is intended primarily to offset part of..." [LB579]

SENATOR LOUDEN: I mean does that do...that says exactly what it'll do? [LB579]

TIM TEXEL: I think it's, I mean, the customer's intent is normally I would think with net metering going to be to offset their use and then to sell the excess and that provision makes sense to me, yeah, I haven't though about it much until today. But I think on its face that usually is for net metering what most people want is to offset their own and then subsidize that with excess generation. Whether that's at 7.4, the 3.2 or 4, helps them I guess to a different degree and it's a different incentive level but I would think normally that that statement would be true. [LB579]

SENATOR LOUDEN: Okay. Any other questions for Tim? Thank you for coming to testify today. [LB579]

TIM TEXEL: Thank you. [LB579]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR LOUDEN: Any other persons testifying in the neutral? Seeing none, I will close the hearing on LB579 and we'll take a seven-minute break. That'll put us back here at 3:35 p.m. and we'll be back in for the next bill. [LB579]

BREAK [LB579]

SENATOR LOUDEN: This will be the Natural Resources hearing on LB581. Senator Preister, welcome, and proceed. [LB581]

SENATOR PREISTER: (Exhibits 3, 4) Thank you Chairman Louden, members of the Natural Resources Committee, it's nice to be with you again. My name is Don Preister, P-r-e-i-s-t-e-r, I'm here as the primary introducer of the "metamorphed" LB581. Thanks to committee counsel. You, I believe, were informed that there is an amendment to the original bill. I apologize. We were working on several different versions. The wrong one, or the one that was actually introduced went up and it wasn't the one that is the preferred one, the simpler one, and so the amendment that you have before you is actually what I'll be talking about. I would mention to you that we did print it in the journal, we did give everybody advance notice, and we also contacted all of the utilities and apologized to them and gave them copies. I hope that we reached everyone. I think we reached most people, but my apologies, my thanks to committee counsel, and to all of you for your indulgence. The purpose of LB581 as amended is to establish standards for Nebraska utilities and net metering programs with customer-generators. Net metering is a system of metering electricity generated by a customer-generator from an installed wind, solar, biomass, or hydropower qualified facility to meet the customer-generator's own electrical energy needs. Any excess energy not used by the customer-generator is sent into the grid to be used by the utility. If the customer-generator does not generate enough energy to meet his or her needs the customer-generator takes power back off the grid. A single bidirectional meter which runs backwards and forwards, depending on energy direction, is used to measure the energy generated, energy used, and any excess energy. Legislative Bill 591 with the amendment requires excess kilowatt hours generated to be carried over from month to month and credited by the electric supplier at a rate of one-to-one against the customer-generator's retail kilowatt hour consumption in subsequent months. A customer-generator may be charged a minimum monthly fee that is the same fee charged to noncustomer-generators in the same rate class so there is no disparity. A customer-generator may not be charged any fee or charged for additional standby capacity demand or interconnection. Each qualified facility installed by a customer-generator is required to meet interconnection safety and performance standards as established in LB581. A customer-generator whose qualified facility meets these standards cannot be required to comply with additional safety or performance standards, pay additional charges for equipment or perform or pay for additional tests or purchase additional liability insurance. Essentially, if they've met all the standards that

Natural Resources Committee
February 01, 2007

are required, that's enough, no sense to further burden them. Legislative Bill 581 also specifically provides that customer-generators own the green tags from the electricity they generate and may assign them to the electric supplier but may not be required to assign them to the supplier in order to interconnect under net metering. No Power Review Board approval is necessary to construct a qualified facility that meets the requirements under this act. Thus, the original fiscal note that you got would not apply because the amended version wouldn't go through the Power Review Board. The Network for New Energy Choices, NNEC, published a study in November of '06 entitled, Freeing the Grid, How Effective State Net Metering Laws Can Revolutionize U.S. Energy Policy. They looked in detail at decades of experience in dozens of states that have had net metering programs in place. They found that in many states net metering programs have proven a poor mechanism for promoting small scale on-site renewable energy because common barriers have been enacted as part of those net metering programs. Some of these common barriers include: charging discriminatory fees and standby charges, demanding unreasonable and redundant safety requirements, requiring unnecessary additional insurance, preventing customers from receiving adequate credit for excess electricity. In states with these barriers, NNEC's research found that three states have net metering standards and no participating customers at all, six states registered five or less participating customers. In some states the number of participating customers actually has decreased as many customers deterred by burdensome paperwork requirements and hidden utility fees simply drop out of the program. Legislative Bill 581 does not contain any of these barriers. In fact it specifically prevents these kinds of barriers from being imposed. In the past I've labeled such bills and those barriers as net-burdening because you burden the supplier to the extent that they just can't afford it when they put such a great outlay of investment into the system; they could never recoup their money. So the whole concept of net metering is to encourage the development of renewable energy by the independent producer. So those factors are very important. The primary argument from the utilities is that they support net metering as long as other rate payers in the distribution system do not have to subsidize the customer-generator. Subsidies within utility and distribution systems already exist. For example, a recent cost of service study was conducted on a rural electric system. It found that there needed to be a double-digit rate increase on one class of rate payers. However, the REA determined that they would phase in the rate increase over several years so the sticker shock would not hit this rate class all at once. In making this decision which favors one class over another class of rate payers, they decided that customers in other rate classes will subsidize the cost of that service. So in that instance it was okay. Another example is that it costs much more to transmit electricity to some areas than to other areas. The farther away you are from the generator the more it costs. Customers who consume electricity close to where it's generated subsidize the transmission of electricity to customers who reside far from power plants. Also there are no costs or system benefits or credits granted to net metering systems that are generally located at the end of the distribution systems. Energy is lost as it travels long distances over transmission systems. A net metering

Natural Resources Committee
February 01, 2007

system contributes energy into a distribution system but this contribution benefit is never factored into the rate paid to the customer-generator for energy placed onto the grid. Finally, even if there is cross-subsidization that occurs with net metering, how much is this subsidy? We hear about it all the time. What is it in a dollar amount? The REA introduced a handout prepared by one of their REA managers at our November interim study renewable energy hearing. The calculations in the REA handout were based on average number of customers on a rural electric system, average revenue per customer, calculation that 57 percent of customer rates are used to purchase power to resell to the customer and the remaining 43 percent is used to pay for the maintenance and operation of the delivery system. And I don't know if you have that handout that was given to use before; I did keep it and I will tell you what it says and you can have copies for your own. Based on REA's own numbers, their calculations conclude that subsidizing one customer-generator will cost each rate payer on the distribution system other than that generator, about 15 cents per year. Fifteen cents per year is the subsidy that we're talking about and that we have been arguing about for years, according to the REA's own figures. Now in the event that we end up with ten people on one system, that will amount to \$1.50 a year per customer. Very minimal investment considering the gain that we get. While I can understand a philosophical argument against cross-subsidization between rate payers, I think the philosophical argument loses credibility when subsidies already exist within the system and the subsidy burden imposed on each rate payer per year is equal to less than half the cost of a single postage stamp. Net metering encourages private investment in renewable energy, enhances the diversification of energy resources, and allows participating customers to control their energy costs. Net metering legislation has been adopted in 40 states, and Mr. Chairman, I would give to the page a comparison between the two net metering bills or maybe you have that already? Everybody has that, okay, never mind. Thank you. Just for ease of comparison for you, the committee will be wrestling with these. I would underscore that the REA has been willing to look at the retail price rather than the avoided cost, and I really appreciate that movement because that's been a stumbling block over the years. I think we're getting closer. I would be more than willing to work with the committee to resolve differences between the bills and certainly hope we could advance one of the bills and get something passed that truly is net metering, not net burdening, and to that end I welcome working with you. I would make one final comment. In my bill we do the one-to-one ratio and the customer-generator is paid the actual retail costs for their electricity and that's carried over from month to month. But at the end of the year when there's a reconciliation of any overage, then the utility only pays the avoided costs for that. So there's a savings and a benefit to the electric utility. So at that point it's no longer retail but during the year it's carried over month to month and then at the end of the year when it's fully resolved, if somebody does have overages or "underages" then the utility is able to use their rate structure of avoided cost. With that I'll entertain any questions. [LB581]

SENATOR LOUDEN: Thank you, Don. Is there any questions for Senator Preister?

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

Senator Christensen. [LB581]

SENATOR CHRISTENSEN: Thank you, Chairman Loudon. Senator, how many generator systems are there now? [LB581]

SENATOR PREISTER: I don't have a good answer on that. There are some people who are doing it on their own and negotiating. I only know of two systems that have actually been put up and contracts have been negotiated. I believe both with NPPD but Danny Kluthe is one of those two. Both of those contracts I believe are for a ten-year period of time. Both of them only pay the avoided cost and both of those producers are locked into that. I don't think it was a very good deal and that would have been prevented if this had been in place. But I don't know how many are out there to answer your question. [LB581]

SENATOR CHRISTENSEN: Do you know how many projections there is for people wanting to put in some? [LB581]

SENATOR PREISTER: At the cost of maybe \$15,000, \$20,000, \$25,000 and with the payback rate that this takes, there aren't a whole lot of folks willing to do that. They've got to be very serious. Well I don't think very many. [LB581]

SENATOR CHRISTENSEN: Well the projection if you used your bill here, how many do you think would come in at this price? [LB581]

SENATOR PREISTER: In my bill I think it would be an incentive which it intends to be. I could only speculate. I would think statewide we might have ten to fifteen in the whole state. [LB581]

SENATOR CHRISTENSEN: So you're not looking at near as many as I guess I would but... [LB581]

SENATOR PREISTER: I'd like to see more but this is a pretty heavy capital outlay to invest to be able to do this in the first place and all the risk is on the customer-generator. [LB581]

SENATOR CHRISTENSEN: And did you say it's 15 cents per year it would cost the customer? [LB581]

SENATOR PREISTER: Per year. That would be each of the customers in that REA, that particular one. But according to the REA's own handout that they gave to us it, and the actual wording is: subsidizing this one generator will cost everyone, other than the customer-owner, about 15 cents per year. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR CHRISTENSEN: So that's everyone in their district. [LB581]

SENATOR PREISTER: Right. Which is a very small subsidy. [LB581]

SENATOR CHRISTENSEN: No further questions, thank you. [LB581]

SENATOR LOUDEN: Senator Hudkins. [LB581]

SENATOR HUDKINS: Thank you. Senator Preister, in your opening you referred to customer-generators owning the green tags. What are green tags? [LB581]

SENATOR PREISTER: Senator, there are some federal credits and if you are required to generate some of your electricity from renewable sources but you aren't able to generate it, then you can essentially buy the green tags and say, okay, we don't actually generate it but here's somebody who's generating it and we will pay them to say that we are doing that so it's kind of like air emissions... [LB581]

SENATOR HUDKINS: Yeah... [LB581]

SENATOR PREISTER: ...somebody pollutes, somebody doesn't and the one who doesn't can sell some credits to a polluter so that they balance out their requirements. [LB581]

SENATOR HUDKINS: Thank you. [LB581]

SENATOR PREISTER: You're welcome. [LB581]

SENATOR LOUDEN: Senator Fischer. [LB581]

SENATOR FISCHER: Thank you, Senator Louden. Nice to see you, Senator Preister. Can you tell me if your bill would allow for private companies to come in and put up, say, 30, 36 wind turbines like we have near Ainsworth? [LB581]

SENATOR PREISTER: Thank you, Senator Fischer and it's nice to be here and to be welcomed too, thank you. This bill doesn't deal with the large-scale generators and we're not attempting to compete with our Nebraska Public Power with those. This just deals with a customer, a farmer, a rancher who lives in the area and who wants to put up a small-scale generator, like a Danny Kluthe or an independent person. This doesn't cover the co-ops, this does not cover the large developments, this does not affect public power. This is just the small unit that would operate on a farm or a ranch or supply the electricity for that operation and only the excess go back. It would not include those types of big developments. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR FISCHER: And you feel that's spelled out in this bill? [LB581]

SENATOR PREISTER: I think it's pretty clear, yes. [LB581]

SENATOR FISCHER: Thank you. [LB581]

SENATOR PREISTER: Thank you for the question. [LB581]

SENATOR LOUDEN: Any other questions for Senator Preister? Seeing none, Don, do you wish to close? [LB581]

SENATOR PREISTER: I need to get back to Revenue so I will waive closing but I will certainly work with the committee and I think we're close enough that we can resolve the remaining differences and keep some of those excess burdenings off of the bill and move forward this year. [LB581]

SENATOR LOUDEN: Okay. Thank you. [LB581]

SENATOR PREISTER: Thank you for all your time and your interest in this issue. [LB581]

SENATOR LOUDEN: (Exhibit 5) Okay. First proponent for LB581? Let's see, just a minute, Ken, I have an e-mail in support of LB581 and it's from Clark Haberman from Hastings, Nebraska. Okay, go ahead, proceed, Ken. [LB581]

KEN WINSTON: (Exhibit 2) Good afternoon. Once again, my name is Ken Winston, W-i-n-s-t-o-n is my last name. And I'm appearing on behalf of the Nebraska Chapter of the Sierra Club, and I testified earlier on LB579 and gave a handout. I guess I'd like to ask that that handout also be considered as information on this bill, as well. Senator Preister gave such good testimony on LB581 that I don't think I have much to add to what he said already. I guess there's just a couple of things that I just wanted to talk about that are on my handout. One is the idea of what Nebraska's renewable energy potential is and where we're actually matching up in terms of our potential. And I guess what we're suggesting is that this is one of the pieces to help us start to meet that potential. We're consistently ranked as about sixth best in terms of wind energy generation, and that's not just around the State Capitol. A little joke there, but...sorry, I couldn't help myself. I apologize. So, actually the best wind is probably up in Senator's Fischer's district, and Senator,...and out in the western part of the state. And I'm not indicting that you're a... [LB581]

SENATOR FISCHER: Just stop. (Laughter) [LB581]

KEN WINSTON: All right, okay. I think Senator Hudkins once told me I should...you

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

know, if you're digging a hole, you should get out of it. [LB581]

SENATOR HUDKINS: Quit digging. (Laughter) [LB581]

KEN WINSTON: All right, okay. All right. Moving right along... [LB581]

SENATOR LOUDEN: You're better with prairie dogs, Ken. (Laughter) [LB581]

SENATOR HUDKINS: Good point. Goodbye. [LB581]

KEN WINSTON: Anyway...well I'm sorry, I didn't mean to drive you away. Anyway, but I guess, as I indicated--well hopefully I livened up the hearing a little bit this afternoon--but the whole idea is that Nebraska has excellent potential for wind generation and we're not talking advantage of that and we believe this is one of the areas where we can do that. And I guess there's just a couple of things that I wanted to indicate that we're ranked sixth in potential, eighteenth among the twenty-nine states that are currently generating electricity through wind. And if all the wind generation projects go on line that are currently planned, we'd fall to twenty-nine because we don't have anything planned at the present time. There isn't anything in the queue to be developed and net metering is one piece of that. And I guess one of the other things that I just wanted to reiterate that I've also indicated on my handout is that the Sierra Club is a strong supporter of public power and we wanted to indicate that in my statement here as well. And as I previously indicated, I'd be glad to work with the committee and the introducer of the bill and any other interested parties on this legislation. As I was saying to somebody earlier, I think I probably talked to every utility lobbyist at some point several times saying we're really interested in renewable energy, can we sit down and talk about and I've had some good conversations with them and we want to continue that. So I'd be glad to answer any questions if I can. [LB581]

SENATOR LOUDEN: Any questions for Ken? Senator Christensen. [LB581]

SENATOR CHRISTENSEN: Senator Louden. Ken, to stay sixth ranked, how many additional units would we need? You mentioned that we're likely to drop to twenty-ninth? [LB581]

KEN WINSTON: Let's see, I've got...I think I left my chart at home but...I don't have, I didn't... [LB581]

SENATOR CHRISTENSEN: If you don't have that chart that's fine... [LB581]

KEN WINSTON: ...that chart's in another file but I'll get you that information. [LB581]

SENATOR CHRISTENSEN: ...the chart, thank you. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR LOUDEN: Any other questions for Ken? Seeing none, thank you, Ken. [LB581]

KEN WINSTON: And thank you. [LB581]

SENATOR LOUDEN: And how many people are going to testify in favor of this bill? Six. Okay about seven minutes, John, will that work for six of you, that'll put you in there about a half hour. How many are going to testify against the bill? Two. Okay anybody in neutral? One? Okay, ahead John. [LB581]

JOHN HANSEN: Chairman Louden, members of the committee, for the record my name is John K. Hansen, H-a-n-s-e-n and I'm the president of the Nebraska Farmers Union here before you today and also as our paid lobbyist. First, in answer to Senator Christensen's question, we are sixth in capacity. That doesn't change with development. We are eighteenth in development right now. We are far behind our neighbors in the neighborhood in development with the exception of South Dakota. They are the only neighbor that has less wind developed than we do. The issue that we are working on today is one that we have been working on I believe, since 1991. So the conversation that you have had this afternoon in this committee is not unlike the conversation that goes on within our general farm organization between our own REA member-directors who are a part of the conversation along with a good half of all the folks that I know of in the state who have a renewable wind development on their own properties. And so this conversation has been moving forward and I compliment the REAs for moving as far forward as they did on their bill, LB579. That represents substantial progress but in my view, for the amount of money that we're talking about and the number of projects that we're looking at, it is not a good use of political capital to continue this increasing conflict between where we're at on net metering in this state. This issue needs to get solved. And we're close and I would, you know, in our view LB581 is looking at all of the different net metering around the country, looking at what's working and what's not, this is the better, simpler, more appropriate approach. If folks who are generating their own electricity, are getting the full retail value credit for that which they generate and they're getting paid right at half whatever wholesale is for any excess generation and we don't burden them with a whole bunch of additional unnecessary costs and requirements, in my opinion, the issue goes away, the issue is solved. What we have now and we need to be clear, that the status quo right now is awful. The examples that we have of net metering in Nebraska with Danny Kluthe, Dave Tobias and others, when you look at those contracts, they are, I win the argument. When you go to national forums and you talk about who has the worst net metering policy in their state, I win, hands down. Every single time when you explain how our system works, they just go, nope, ours is not anywhere near that bad. And so we have a long ways to move and so I think that it's appropriate the Legislature set a fair and reasonable policy. I would pick through the different parts of LB581 and LB579, put the two together, work with all the parties, try to

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

get it buttoned up and let's try to work on something that's even more important and more rewarding than haggling over this particular issue. But we need to get past the business of just trying to squelch those kinds of folks who are trying to build these kinds of projects. Because I think that Jon Dixon was exactly right, we do need to look at those folks who are building renewable energy systems, whatever kind of renewable energy systems they are, in a more consistent way. And whether you're doing energy efficiency or whether you're doing your own small wind generator, the net impact on the system is virtually the same but we treat those two different kinds of folks very, very differently. Also, when the local system is buying whatever excess generation there is, and it's not going to be much, we also ought to maybe think about them as a, treat them the same way we would any other primary source of electricity. When the REAs buy electricity from NPPD they do not ask them to help subsidize or pay for the costs of the infrastructure or the delivery system; that's not part of the negotiations. They just buy the juice and they absorb the full cost through rates. And so when they're picking up a little extra wholesale here and there from a small project here and there, in my view we ought to just call it a day and I think if we can put together those components I think the issue is done. Thank you for your patience; good luck (laughter). [LB581]

SENATOR LOUDEN: Thank you, John, that's the best news we've heard all day. Any questions for John? Senator Christensen [LB581]

SENATOR CHRISTENSEN: I'm sorry, it's really hard for me to be quiet but you know...I guess...I do some penciling over here, you know, on our 15 cent rate and if there's ten of them or if there's a hundred of them or a thousand of them go in and how it would affect my bill and I look at all these things. I know you say there's not going to be much over usage. Is it possible in negotiations to say not over 10 percent can be at retail or 20 or 30, you know? Because it's easy for somebody to say it's not going to be much over but if it becomes a reality, it becomes costly; to somebody else, it's paying the difference, even if it starts out at fifteen, if it went to a thousand of them that's \$150 a year. A year's not bad; if that's on a year, it's not bad. But \$10 a month...but I'm just throwing out numbers. [LB581]

JOHN HANSEN: Legislative Bill 581 has a cap of the total amount of electricity that could come under the system... [LB581]

SENATOR CHRISTENSEN: Right, the 2 to 3 percent over... [LB581]

JOHN HANSEN: The 2 percent... [LB581]

SENATOR CHRISTENSEN: Okay. [LB581]

JOHN HANSEN: ...and I think that's a trade-off and you can set it wherever you need. It seems to me that we're spending a fair amount of money to promote energy efficiency

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

and we should do that. And we're doing all kinds of things to help incent all different kinds of other energy saving devices and that's where we need to move. And I just think that we ought to be, you know, from my viewpoint that the small amount of renewable energy electricity we're looking at here ought to be viewed as a part of, ought to be treated almost virtually the same as energy efficiency. [LB581]

SENATOR CHRISTENSEN: So that 2 or 3 percent is a safety to the power plant [LB581]

JOHN HANSEN: Yes, yes. [LB581]

SENATOR CHRISTENSEN: All right, I remember reading that now. [LB581]

SENATOR LOUDEN: Other questions for John? Seeing none, thank you, John. [LB581]

JOHN HANSEN: Thank you, Mr. Chairman, members of the committee. [LB581]

ROBERT BYRNES: (Exhibit 6) I'm back. I'm still Robert Byrnes, R-o-b-e-r-t B-y-r-n-e-s, of Oakland, Nebraska. I'm representing myself, Nebraska Renewable Energy Systems and concerned citizens in the state of Nebraska with whom I've had many discussions with. I'm here at this time to voice my strong support. My enclosure is basically my handout and then some background information on NRES and the projects that we're involved with. I am here to voice my strong support for LB581. I think LB581 clearly outlines a fair net metering program that will encourage people to install systems that produce renewable electricity and return their excess with a grid-intertie arrangement. This legislation is very clear and simple as it should be. Such a program is badly needed in Nebraska. The lack of a fair net metering program is clearly the number one reason why only a handful of applications exists in a state so richly blessed with the wind, sun, and biomass resources needed to supply such systems. Nebraska, just on the side, is blessed with the four major categories of renewable energy resources: wind, sun, solar, and geothermal. We are rich in these resources. Only a fair net metering program like LB581 will be one that will result in a change of this glaring underdevelopment. The primary goal of Nebraska Renewable Energy Systems is to assist Nebraskans in development of farm- and home-scale renewable energy systems. To this end we visit with citizens every day regarding the potential for these applications. To date there are no incentives which in turn have resulted in only a handful which we have already discussed. It is very frustrating to see people's interest die off time and time again because of both lack of incentives and the very real presence of many hurdles with little out there to encourage them. It is a sad state of affairs and in my opinion, can only be rectified by such a fair net metering program. A fair net metering program like LB581 will result in a dramatic growth in wind and solar energy applications in our state. But I think an equal opportunity certainly tops a greater opportunity lies with anaerobic digestion of animal wastes for electrical energy

Natural Resources Committee
February 01, 2007

production. These systems will not only produce renewable power for state electrical grid badly in need of increased renewable composition, it will also serve to address very real problems faced by livestock producers regarding odor and waste disposal. We need these systems in Nebraska and LB581 is clearly the best way to support such development. There's been a lot of attention to the anaerobic...Danny's anaerobic digester in Dodge, Nebraska. But there is a very real and important reason why it remains the only system of its type in the state. Without LB581 this digester will remain an oddity and such systems will never see the widespread application that is desperately needed for a livestock industry. This coming at a time where it's going to be raining DDG. We need these livestock to balance on the corn ethanol side. And like Danny alluded to, when you want to get people's attention say you are going to put up livestock confinement and you've got it. And the anaerobic digester really is going to be the only way Nebraska livestock is going to be able to increase in numbers ahead. In my opinion, with the demonstration project clearly showing the technical success that it has, we should be more concerned about why we don't have hundreds of such facilities and utilize a more long-term vision toward our future. Most current wind turbines like Dave Tobias' who I have worked closely with for a long time, are getting very bad deals with regard to their grid-intertie agreements. Legislative Bill 581 would not only give the current distributed generators a fair shake, it would result in a boom across the state. I am negotiating with a wind turbine tower manufacturer in the state of Nebraska, in Valley, Nebraska. They make the wind turbine towers. If we start putting up wind turbines that are...and particularly towers, we don't have a wind turbine manufacturer here in the state, but we do have a wind turbine tower manufacturer. This is economic development. This is keeping the money at home by putting up these small systems. There is an economic development benefit here. Economic development resulting from these activities in the state would certainly outweigh any of the perceived costs of such a program in an indirect manner. It is also critical that the distributed generators of renewable power are treated uniformly across the state. Because of its simplicity and clarity, only LB581 will result in a standardized fair system that can be implemented equally across the state. The energy research facility that NRES has constructed uses no outside power from the grid; this is almost three years next month. The lack of a fair net metering program in the state will result in an increase of such applications with the resulting loss of grid electric service to those customers completely. Reducing opportunities for partnership between renewable energy producers and public power will further increase the very real existence of the us versus them mentality. Legislative Bill 581 is the best way to ensure that these partnerships develop and I know for a fact that there are a number of folks sitting the fence, some of which we've heard from today, waiting for the outcome of this legislation. Only LB581 will result in these citizens taking the next step toward the development of these systems. Nebraskans have been polled many times in this regard and we all know how they have responded. I thank you again for the opportunity to testify in support of LB581. I feel this is a very important day for renewable energy in the state of Nebraska. I would also like to thank Senator Don Preister for his vigilance, ensuring the program we get on the books we get is fair and

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

results in a real program that will spur very real development in this important area. Without his vision and principled leadership, we would not be here today. History will clearly show that Senator Preister has acted in the best interests of the citizens of the state of Nebraska in this matter and we wish to thank him in that regard. [LB581]

SENATOR LOUDEN: Thank you, and is there questions for Robert? Seeing none, thank you, Robert. [LB581]

ROBERT BYRNES: Thank you. [LB581]

DEBORAH WARD: Hello again. I'm Deborah Ward. I have very little to say because I think that John Hansen and Robert Byrnes said it very succinctly but I would like to...the only thing I would like to add to that is as a person who is one of the people on the fence about putting in a renewable energy system, a bill such as LB581 going through gives me the incentive I need to do what I want to do. And I think it provides a benefit to my community. I know there's been a lot of concerns about subsidies. I was kind of surprised when I heard this 15 cents figure because it's...almost doesn't seem really worth it to be arguing over that amount. Although I understand that if you start multiplying that out you may have some concerns and I think that's why this bill as drafted trying to put control in. Because as I've testified at the resolution hearing, you can do a controlled net metering program that doesn't result in uncontrolled cost shifts. And if nobody's rates are really increasing I don't think anybody is going to really care whether they are subsidizing or not subsidizing, it just depends on how you package to them. I don't think there's anything about the bill that I would change. I might say that I might want to consider putting in a limit on the size of the service. And I say that only because my goal in supporting net metering is to make sure that the individual home owners are the people that have the opportunities to install renewable systems and take advantage of net metering programs. I know that the bill as drafted has some requirements in order to be part of it and partake in net metering, one of which is that the unit is intended primarily to offset and I think that's what they're relying on to make sure that a wind farm isn't using net metering. But I think it might be better to spell it out a little bit more to clearly on what the size limit might be. For example, there are federal standards and there are programs that have looked at sizes like 100 kilowatts, 50 kilowatts but just something in there just to make it clear that this is something that is for the individual as opposed to some investor group that can probably pay to get whatever they need down the road anyway. That's all I have to say. Thank you. [LB581]

SENATOR LOUDEN: Thank you. Any questions for Deborah? Seeing none, thank you, Deborah. [LB581]

JAREL VINDUSKA: Jarel Vinduska. J-a-r-e-l V-i-n-d-u-s-k-a. Good afternoon again. I'll try to keep it short because it probably has been covered before. Once again, I've listen to the testifiers and it appears one of the major hang-ups is the cost ratio of what is paid

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

back, the so-called subsidy. And I'd like to reiterate it again, this subsidy is pretty insignificant compared to other subsidies we've accepted as society. And one by one, as our population is increased we have recognized problems and did something about it; whether it would be the Clean Water Act. We used to dump raw sewage into the streams and then we started charging people to clean our rivers, the Clean Air Act, the--we're an agricultural state, we used to run our soil down the rivers and we realized we can't keep doing that and so we put government paid for us conservation practices in place that everybody pays for. But the trick of all these problems is you have to recognize them ahead of time so that you don't cost future generations way more than it would take to fix it at the time. And energy is one that's been really tricky to recognize because we've gotten used to for so long, subsidizing the coal industry or getting used to shipping nuclear waste to Oklahoma and letting future generations baby-sit it for the next 10,000 years and that type of thing. And so the latest one is, like, storm water control in the Papio Basin in Omaha. We, for years let subdivisions build one after another without putting controls, now we have a federal mandate. We have these phase two storm water controls where we are forcing the issue to be done. And now it's going to take millions and millions of dollars to condemn people's farms to build reservoirs when we should have been doing it right along at each project. Well this subsidy is so insignificant and the need is so great and it would set such a great example to people that we're trying to do something. It would encourage more to keep going and so all I can say is I'd like to commend Senator Preister for putting this bill forward. He's tried a lot of years and we haven't gone anywhere and I think it's high time we did something and stopped talking and start acting. Thank you. [LB581]

SENATOR LOUDEN: Okay, any questions for Jarel? Thank you, Jarel. [LB581]

JON DIXON: My name is Jon Dixon, D-i-x-o-n. I am in favor of LB581, the amended version. I believe it offers a simple and well-defined procedure on how to move forward on this. I did want to clarify a couple of things. A renewable energy system for a residential customer--they are a \$20,000 to \$50,000 investment, that's what these people are making. When they come to me and they ask, hey, I want to do something with wind or solar Jon, tell me all about it. They're not looking for handouts, they're doing it for environmental reasons, they're doing it because they are looking to the future. They are telling me they are trying to set examples. They're not looking for handouts but they are looking for some support. And currently when they go to the local agencies and people, they are always running into opposition. Whoa, what do you want to do that for? It doesn't pay; it's not worth it, our energy is cheap. And those are all true. A small wind system at \$50,000 is still a 25-year return on their investment. They're not doing this, that's with net metering. They are not doing this to make money; that's not their motive, that's not what they're trying to accomplish. So I would like to say that we can maybe look at it from that standpoint that they are just trying to set an example, to show that there are other options and availability of things. The other thing is that these current renewable energy systems, there's a wind generator on LES's grid that is

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

grid-tied; it's been there 25 years. There is seven solar and wind systems that I am currently available, or aware of. Some of them I installed. Some of the procedures with the utility companies went very smoothly; some of them were long and drawn out as in Dave Tobias' case that was mentioned earlier. But the utility companies have not stepped forward and just laid it out so that's why we need LB581. The technology we have plugs directly into the current utility system and household wiring that we have. There is no modifications needed, the testing has been done, the systems have been designed, they are safe and reliable. I would ask that you pass LB581 and help to show that Nebraska supports renewable energy. Thank you. [LB581]

SENATOR LOUDEN: Any questions for Jon? Seeing none, thank you. Any more testifiers in favor of LB581? Okay, those testifying against LB581? [LB581]

KRISTEN GOTTSCHALK: Senator Louden, members of the Natural Resources Committee, it's been a long day. 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 paid lobbyist for the Nebraska Rural Electric System. NREA has 35 member-systems operating rural electric distribution utilities serving rural customers over about 80,000 miles of distribution line and there's a good chunk of that that's just been or is currently under construction as a result of the ice storm. I'm going to be testifying on behalf of NREA, Nebraska Rural Electric Association, as well as on behalf of the Nebraska Power Association. The NPA is a voluntary organization representing all segments of the power industry. That includes municipalities, public power districts, public power and irrigation districts and cooperatives that are all engaged in generation, transmission, and distribution of electric energy in the state. My testimony today obviously is in opposition to LB581 and as John Hoke's testimony pointed out, the very first testifier a long time ago, we are actually in agreement on many, many issues related to customer-generation. One of the first things is that in order for small-scale renewable energy generation to be feasible, some form of incentive or subsidy needs to be in place and we don't discount that. I think the big area of disagreement between the two sides is who is going to pay for that. And I'll get into that a little bit more. And really what we seem to be arguing about are semantics. There seem to be components of the other bill that they think maybe are misleading or inappropriately addressed and we have indicated both to the renewable energy folks and to the committee that in order to clarify those we will work with the committee. Both bills look at a one-to-one ratio and both bills look at an energy meter, although the language is different and if we need to clarify that, we'll be more than happy to do it. Getting back to the point of who pays for it. Legislative Bill 581, we're in opposition to it because it is a local subsidy. But in contrast to that, NREA, NPA, and other utilities do support LB444 which is a renewable energy tax credit legislation bill that was in front of the Revenue Committee. And when LB581 was originally drafted that was a component of that bill because we too, like the renewable energy advocates who testified on LB581, do believe that there needs to be some form of incentive. Legislative Bill 581 depends on a local incentive, a local subsidy, to encourage renewable energy

Natural Resources Committee
February 01, 2007

development. This bill calls for that one-to-one exchange of kilowatt hours the same as LB579 but the exchange is at the retail rate and this is a significant difference. John explained that a retail rate includes the costs for the use of the distribution system and when the meter runs forward the cost is part of each kilowatt hour used. Now when the meter spins backwards as we are doing in a net metering in either bill, you begin to erase, when there's a retail rate there, you begin to erase the cost of the energy and the cost for the use of the distribution system. Now when you look at the energy costs that makes sense, you know they're offsetting their energy use. The energy costs should roll back in that situation: no disagreement there. But you are also rolling back the use of the distribution system which they have already used. Now it becomes a different issue when you hit that zero point. And when you begin to spend energy back into the system and that meter continues to run backwards. Now if we paid a retail rate we're paying them for the energy but we are also paying them to use the distribution system. Let's see where I'm at. I have notes and then I always leave them because I get a little passionate about this. For every kilowatt hour of excess energy it now means the distribution utility is not only paying for that energy that they generated but we're paying them to use the distribution system as well. But actually I should clarify. It's not the distribution utility paying that, it's actually the other customers on the system and I think that's been clear in previous testimony. And I think it's important once again to recognize that most renewable energy development is going to occur in rural areas. They're going to occur in my rural distribution utilities, probably not in OPPD's or LES's. Many of our distribution systems only have about one meter per mile or two meters per mile when you balance out the number of meters with the number of consumers per mile. And you also need to remember that the same customer may be paying for more than one of those meters...maybe irrigation, shop, etcetera. And when you compare that to Lincoln and Omaha that may have 30-plus meters per mile, the share of the burden of renewable energy development would be disproportionately placed on rural consumers rather than if we used a statewide subsidy system where we balance the cost of providing a subsidy, providing an incentive, to these renewable generators using some form of state monies. Now there are some additional concerns and I'll point those out specifically with the bill. The bill as I read it has an expectation that any additional costs for the interconnection including new build-outs, are borne by the distribution utility. Again, those are costs borne by other distribution utility customers. Now if we have somebody come to us that wants a new irrigation system put in but there's not adequate facilities to reach them, then we have that aid in construction formula and there will be a share of the cost for that. And we believe that for renewable energy customers if there is a need for additional facility build-out then they should bear that cost because it is for their system. An example is Danny Kluthe's facility. His hog barns ran on single-phase lines going into his farm. His generation unit generates significantly more energy and when it's at capacity, it would require a higher distribution system to accommodate that. And so he's actually feeding into a three-phase system with that. Now under the way he's doing it, he's doing a different situation, a simultaneous by-cell with the NPPD and not something under either LB579 or LB581. But there was a need

for additional distribution and that cost should be borne by the person who needs that distribution. And there's another difference. We're looking at a kilowatt hour credit versus a monetary credit. Well the kilowatt hour credit says that you're given...if you're generating excess and you're given a kilowatt hour credit. Well, different months of the year that kilowatt hour is worth different amounts of money. If you are generating excess kilowatt hours in August those kilowatt hours have greater value, then, when you transfer that to a monetary credit than excess kilowatt hours that were generated in say, December or in a month when the load is less and the energy rates are reduced. So we do believe that a monetary credit for excess energy time is the better way to deal with that. You are not overlooking any component of what has been put into the distribution system, you just assigned a monetary value to it at the time it was put onto the system. We do have a concern, we're not real clear with the term, when we get to the end of the year and there's that payout if you still have excess generation, we're not really sure what the term hourly incremental costs of electricity supplied over the most recent calendar year means. But under LB579 it's clear it's the same as it was throughout the year. There is no specific provision to provide or require the use of safety lockout equipment. I've heard some arguments that these generation facilities are equipped with safety features that would prevent the flow of electricity into a line that is not currently energized but as we all know, equipment can fail and that's a concern for us. And when we begin to talk about insurance and we looked at, well if all the equipment meets the UL, if it meets the National Electrical Safety Code and it meets all of the others then why is there a need for insurance? Even Senator Preister's bill makes a comment that no additional liability insurance would be required. But it still implies that liability insurance may be part of that component. But we also need to remember that liability insurance isn't just based on equipment; it's also based on operation. And there oftentimes when there are operator failures or there are modification to a system that are made that may cause a failure of the system or may increase the likelihood of safety failures. And so keep that I mind. And I should mention LB579 does not require additional liability insurance. It only says that, and in the case with Ms. Ward said, she has a homeowner's insurance, liability insurance is included in that, simply asking for proof that that exists. There's other things in this bill that are interesting, that requires a report to be filed that indicated how many customers are interconnected, what the kilowatt hour usage is, and these types of things. If you are going to do that then we also need to provide some kind of documentation as to what the subsidy level was provided by the other consumers on that line to those same customers. I think you heard so much today and I probably should stop and just answer questions if you have any. [LB581]

SENATOR LOUDEN: Questions for Kristin? Senator Wallman. [LB581]

SENATOR WALLMAN: Thank you, Senator Louden. LES, they charge, what is it, 1 cent more for wind energy you put on your bill? [LB581]

KRISTEN GOTTSCHALK: I couldn't tell you what the exact amount is; I'm not an LES

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

customer. [LB581]

SENATOR WALLMAN: Does that cost more than you think, wind energy? [LB581]

KRISTEN GOTTSCHALK: But they do...you have an option to pay more for renewable energy and I'm not sure what that is. [LB581]

SENATOR WALLMAN: You don't think it costs more or less? You don't know? [LB581]

KRISTEN GOTTSCHALK: Does the energy cost more to produce? [LB581]

SENATOR WALLMAN: Yeah. [LB581]

KRISTEN GOTTSCHALK: My understanding is yes, it does cost more to produce. [LB581]

SENATOR WALLMAN: Well I used to be a member of the school board. You have a demand charge, that's NPPD. And then we paid a certain amount, the highest use per day that we paid the rest of the month. And so how do you figure your rate costs then for everybody because you're subsidizing somebody, don't you think? [LB581]

KRISTEN GOTTSCHALK: As part of LB579? [LB581]

SENATOR WALLMAN: What...the rates are now. [LB581]

KRISTIN GOTTSCHALK: Oh, rates are now. The comments that were made earlier, you know, aren't invalid. There are subsidies built into the system. In fact when you look at the rural electric systems, equity and available energy resources for all was part of that process. [LB581]

SENATOR WALLMAN: But would you be comfortable with a lower rate than one-for-one, or, no? [LB581]

KRISTEN GOTTSCHALK: A lower rate than one-for-one? [LB581]

SENATOR WALLMAN: You know what I mean, one-for-one net metering. [LB581]

KRISTEN GOTTSCHALK: Well, and in fact LB579, the bill that we do support, is a one-for-one but it's based at the wholesale rate. It would be a fair exchange for the energy. [LB581]

SENATOR WALLMAN: Okay, thank you. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR LOUDEN: Okay, Senator Christensen. [LB581]

KRISTEN GOTTSCHALK: I hope I didn't misunderstand? [LB581]

SENATOR CHRISTENSEN: Thank you, Chairman Louden. Kristen on I believe your bill was talking about a one-to-one ratio monthly and they're talking of a one-to-one ratio yearly. Is that going to be an issue with you guys? Is that an area of common ground or not common ground? [LB581]

KRISTEN GOTTSCHALK: Actually I'm not sure that there is that much of a difference. The difference between the one-to-one ratio because we are talking one-to-one ratio; they're talking a kilowatt hour of credit that carries over from month-to-month... [LB581]

SENATOR CHRISTENSEN: Month-to-month... [LB581]

KRISTEN GOTTSCHALK: And we're talking a monetary credit that could carry over and offset costs. Then at the end of the year that monetary credit in LB579 would be paid out to the customer. And in LB581 then they changed the rate because during the course of the year the month-to-month, one-to-one exchange is at a retail rate and then if there are excess credits at the end of the year then those credits would be paid out. If I understood them correctly, although I'm not sure that the language in the bill says that, it would be the avoided cost or a lower rate for that at the end of the year. [LB581]

SENATOR CHRISTENSEN: Thank you. [LB581]

SENATOR LOUDEN: Other questions for Kristen? I have one, Kristen. On that Section 3 they have there, allow the consumption be offset and that sort of thing and then it would be from the end of the year and that sort of thing, should that be...would that look better in this one if it was credited like, quarterly? Because you know, as we do our irrigation you have the first three months. And then about the first of April then you start your irrigation projects and your power is worth a little bit more. And then on through the summer your power...then there's six months in the middle of the year your power is worth more. And then the last three months of the year the power is worth less. Would that be a deal-breaker? Would that make any difference or would that be anything that would be easy to do, would that be too much bookkeeping? [LB581]

KRISTEN GOTTSCHALK: I think that you know, even quarterly you end up with some disparity over what the value of those kilowatt hours are. Our preference would be that the kilowatt hours, the monetary credit be monthly. Some would actually argue that you need to have time of use and be able to rate every kilowatt hour based on a time of use meter. I think equitably, a month-to-month monetary credit is the most appropriate way to handle that. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

SENATOR LOUDEN: Then you'd want to pay the wholesale rate every month or figure what the wholesale rate is each month? [LB581]

KRISTEN GOTTSCHALK: Yes. [LB581]

SENATOR LOUDEN: Okay. [LB581]

KRISTEN GOTTSCHALK: You know, and say in August that...using John's example, say they're using an average rate of 4 cents and maybe over the course of a year that's what that would be. In August that rate for using that energy because of using such high demand and their costs for energy, those rates may be about 7 cents which would mean then that that exchange of kilowatt hour for kilowatt hour in a monetary credit would be based on that higher rate. When energy rates are lower then it would be based on that lower rate. I imagine over the course of a year it does balance out but this gives them the opportunity to derive the most benefit during the times when rates are the highest. [LB581]

SENATOR LOUDEN: Then in other words, through the summer months when they were having to pay demand charges and that sort of thing, the power company and their costs of electricity is higher, then the customer-generator can could be receiving more for the power they would generate during those months? [LB581]

KRISTEN GOTTSCHALK: Yes. [LB581]

SENATOR LOUDEN: Okay. Any other questions for Kristen? Thank you, Kristen. [LB581]

KRISTEN GOTTSCHALK: (Exhibit 7) And I do have a handout that I can give you that Cuming County put together regarding what would have happened in Danny Kluthe's situation if it had been under LB579 rather than the contract he has, just as an illustration and I'll make sure that the committee clerk has that. [LB581]

SENATOR LOUDEN: Okay. The next testifier in opposition to LB581? Testifying in neutral? [LB581]

TIM TEXEL: Senator Louden and members of the Natural Resources Committee, my name is Tim Texel, T-i-m T-e-x-e-l. I'm the executive director and general counsel for the Nebraska Power Review Board and as I said on the previous bill, the Power Review Board is a state agency with primary authority over Nebraska's electric power suppliers. Again I will be brief in my testimony. I really wanted to deal with one particular provision of LB581 and in particular it's on AM53 on the amendment I'm talking about. I believe that's the current version. And in AM53 in Section 2 subsection (2) on page 1, it provides a definition of the term, "...Electric supplier..." and that is, electric power

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

supplier means any public power district, electric cooperative or municipal electric utility that is engaged in the business of supplying electric energy to the ultimate consumer thereof. The concern I have about that definition is that there is already a definition of the specific term electric supplier in Chapter 70, Article 10 in the Power Review Board's primary statutes and that's in Section 70-1001.01(2) and that states that, "Electric suppliers or suppliers of electricity means any legal entity supplying, producing or distributing within the state for sale at wholesale or retail;..." To have two different definitions of the same term as an attorney, raises concerns for me when you're dealing with the same subject matter. I think it would be not difficult to change that, use a different term or somehow rectify the two, justify the two, but in my opinion, having those two would be problematic, especially since the existing definition is what the board has always used, always referenced in our orders. And that states in it that it is for the purposes of Chapter 70, Article 10. A new definition in AM53 to LB581 simply makes the blanket definition, so anything outside of Chapter 70, Article 10 would now use this definition in my opinion for electric supplier where the board has always operated under the definition in our statutes. So it's a technical point I realize but I wanted to bring it up because of, at least to the board, it's...and myself, it's a considerable concern to avoid any problems on that. I wanted to just very briefly touch on a couple of questions that earlier were asked. I believe Senator Christensen, you asked how many customer-generators are there now? I believe there's only two in the sense that this bill would look at it--Mr. Tobias and Mr. Kluthe. Both of them came before the Power Review Board and in the middle of the process for Mr. Kluthe, we dismissed it because of the Attorney General's opinion saying we were preemptive. Mr. Tobias unfortunately had to go through the whole process and we asked for the opinion during that process but under our statutes we have to render an opinion within 90 days, and so we approved him essentially because he said he was subsidizing himself. So the other rate payers weren't subsidizing it and under our current statutes one of our criteria is that you keep the lowest rates, don't duplicate existing facilities, etcetera. So he wasn't doing that because he was essentially saying I'm subsidizing this myself even though it was a slightly losing proposition for him. So we were able to approve his facility to sell into the grid. Most current generators are backup generators like hospitals and such. They don't feed into the grid. They just provide power for themselves. They're not set up to supply energy at wholesale or retail to the local utility. So they are beyond our jurisdiction. We only deal with and approve facilities that will feed into the grid and sell it. So that's one reason why there is really not any right now. Net metering is a different type of animal from what we currently have. So I wanted to just address that. On the LES issue, Senator Wallman, you asked about, I think it was quite a while ago we had the hearings on the LES turbines. But I think they asked for a voluntary customer contribution of \$3 or \$4 a month from their customers. And that's one reason we were able to approve that because there wasn't any subsidy from the general customers of LES. Those voluntary contributions, LES waited until they got to a high enough level that they had a dollar amount that basically paid for the turbines and there wasn't any general subsidy to the customers. And of course that's keeping the lowest

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

rate as my board's concern is, under the statute, was met because there wasn't any subsidy, so the rates wouldn't go up. So I just wanted to mention that to you. And that's all I had for my testimony. I'd be glad to answer any other questions. [LB581]

SENATOR LOUDEN: Any questions for Tim? I do, Tim. On page 2, it would be Section 5, I guess, line 17, we got the same wording in there as what there was in the other bill, and you questioned the wording in the other bill. Is this different...meaning in here? [LB581]

TIM TEXEL: Uhm, on line 19? It's intended to... [LB581]

SENATOR LOUDEN: "...Connects with and operates in parallel with the local distribution..." [LB581]

TIM TEXEL: Oh, yes. I would have the same issue with that one, yes, on the operating in parallel that I think it should be defined in this bill also. Either one it that applies I think it would be a good idea and I thank you for mentioning that because I had missed it in this bill and I wanted to mention on the previous one. But yes, the same thing would...certainly be my opinion that we should provide a definition for it. [LB581]

SENATOR LOUDEN: Okay, thank you, Tim. Any questions for Tim? If none, thank you. [LB581]

TIM TEXEL: Thank you. [LB581]

SENATOR LOUDEN: Anyone else wishing to testify in the neutral? If not, then I guess we will close the hearing on LB581. [LB581]

Transcript Prepared By the Clerk of the Legislature
Transcriber's Office

Natural Resources Committee
February 01, 2007

Disposition of Bills:

LB579 - Held in committee.

LB581 - Held in committee.

Chairperson

Committee Clerk