PUBLIC COMMENTS

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In the Matter of the Pleasant Valley Wind, LLC, Applications for a Large Wind Energy Conversion System Site Permit and a Certificate of Need for the Pleasant Valley Wind Project in Dodge and Mower Counties

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MS. BJORKLUND: So, with that, I'd like to open this up to comments and questions, and Larry here has a microphone.

Yes.

MR. KLOCKE: Larry Klocke, K-L-O-C-K-E.

My question is -- one of my main concerns is the light flicker from the blades and the sunlight. I've got great concern about that as these towers start to pop up.

I've talked to some people that have experienced that from the towers that went up recently down here by Dexter. He said it's very irritating and he's not getting any compensation for them because it wasn't on his property, it's across the road from him. And with the low sunrises and sunsets and the sun -- the height of the sun all winter, he watches TV and constantly gets this flick, flick, flick, flick --

MS. BJORKLUND: Okay.

MR. KLOCKE: -- all day long, and I've great concern about that. And the other great concern I have is the loss of television reception. It is mentioned in your -- on that CD. When I was reading through it, there is some mentioning of that. But what about taking care of it after the

issue arises?

MS. BJORKLUND: Okay.

MR. KLOCKE: That's all I have.

MS. BJORKLUND: And we'll certainly take these comments when we're preparing our report.

MR. HARTMAN: If you'd like, I can give him a partial answer to that.

MS. BJORKLUND: Oh, go ahead.

MR. HARTMAN: Is this working (indicating)?

MR. KLOCKE: I turned it off.

MR. HARTMAN: Mute. The issue with shadow flicker we're hearing a little bit more about lately, and typically shadow flicker can extend up to about ten rotor diameters. On the GE turbine, that would be 70-meter blades, that would be 252 feet, I believe. I want to say the blades on the Siemens turbine are a little bit longer.

Most of the -- I guess the significant portion of the shadow flicker is probably within about 1,000 feet of the structure. And now if you look -- if you consider the prevailing winds typically being northwest to south, the turbines are typically more aligned east to west or northeast/southwest.

Shadow flicker is going to be worse early in the morning, late -- or I guess around sunset, and it's typically worse this time of year when the days are shorter. There aren't any standards of shadow flicker that I'm aware of in the United States.

I believe Wisconsin has imposed a limit of up to ten hours for shadow flicker, and Germany I think is perhaps the only place in the world that might have adopted standards. And they allow up to 30 hours per year, and that's contingent on five different things.

One, the sun is always shining, so they basically calculate it, it's sunny year 'round. If you live in Minnesota you know that's not true, it's not true in Germany either. They also assume you're awake, you're in your house, the curtains are open, and the turbines are running. So with that, they limit it to 30 hours per year over a residence.

Now, there are some components in some of the wind farm design packages that would allow you to calculate the shadow flicker. So if you know the latitude and longitude of the turbine and where the house is, you can run the calculations of what the shadow flicker exposure might be.

It's considered more of a nuisance, it's not a -- that's what it's been perceived as so far, is a nuisance. I mean, obviously if there are certain things that are done, landscaping for example, it can limit that. There are a few other factors that can be done, also.

But that's just maybe kind of a quick overview of the shadow flicker and that's something that's probably addressed in more detail in the site permitting process and can also be looked at in the environmental report, also.

MS. BJORKLUND: Do we have any more questions or comments? That's the purpose of the meeting today, is to incorporate any of your comments into the record. You can also mail in your comments, of course.

MR. ERICKSON: I have one.

MS. BJORKLUND: Sure.

MR. ERICKSON: And I'll just talk real loud. My name is John Erickson. I'm the city engineer in Austin. And we would just request that the scope of the environmental report include and identify any impacts on the Austin Municipal Airport.

MS. BJORKLUND: Okay.

MR. HARTMAN: Oh, excuse me, I forgot to address your concerns about radio and TV reception. Typically our permit is structured in such a way that the applicant or permittee is supposed to comply with all FCC standards, and there should not be any degradation of your TV reception.

A lot of times there might be microwave beam path setbacks. They'll also go out and do measurements regarding signal strength reception. And if they have a baseline as to what that is, they can tell what it is afterwards. And oftentimes if you use a high-gain directional antenna, that might solve the problem. Otherwise they can provide satellite dishes, is another option, and that's at their expense.

So there are ways of addressing that. It's easiest if the problem doesn't occur, but there are mitigation approaches to addressing that.

MS. BJORKLUND: Other comments and questions?

MR. BREZA: Yeah. Back here (indicating). I'd like to know what I benefit out of them. There's two that are proposed to go within a quarter mile of my property, but they're not on my property, what do I benefit out of this, what am I

getting?

MS. BJORKLUND: Can we get your name?

MR. BREZA: Steve Breza.

MS. BJORKLUND: Can you spell your last name?

MR. BREZA: B-R-E-Z-A, Junior.

MS. BJORKLUND: Okay. Well, the county -- there will be a -- taxes paid to the county from the production -- from the project. And those taxes paid into county do benefit everybody in that county. So that's one benefit that you will receive from having the wind farm near your area -- or in your county.

MR. BREZA: That's it, huh?

MS. BJORKLUND: Yes. If you could just say your name.

MS. PETERSON: I'm Christina Peterson, I'm his girlfriend. We just bought our house three years ago. If we had known then the towers were going to go up, we wouldn't have bought the place. We don't want the towers, you know. The taxes paid to the county doesn't mean anything to us, we don't want them in our visibility of our property, you know.

And I guess I wasn't certainly happy with

your response to the TV and the flickering, because it all sounds like it's more money that he has to spend to fix something that you --

MR. HARTMAN: No. It's not his responsibility to fix it.

MS. PETERSON: Well, not to fix it but -- so they're going to pay for a satellite if he needs to put up a satellite?

MR. HARTMAN: Some companies have done that, yes.

MS. PETERSON: And they're going to pay for the monthly bill?

MR. HARTMAN: Yes.

MS. BJORKLUND: We'll take your comments into consideration, definitely.

Yes, go ahead.

Larry, right behind you. Larry, right behind you.

MR. BONO: From the economic standpoints as you're going to build these, how about jobs, are we going to have any jobs? Right now that's a hot topic across the country, it is right here in southeast Minnesota. And we've seen jobs, there's been jobs with the other windmills that have gone by here and down in Iowa.

What do you -- I'm curious, from your standpoint of a project like this, how many people would you hire extra, or would you bring them in from Colorado or would you hire locally, are you looking for certain skills? These are all things that the people in our area would really be interested in.

You know, and beyond taxes, what are the economic impacts with jobs and how many jobs would there be?

MS. BJORKLUND: I'm going to -- yes, jobs will be created. I'm going to defer to Paul on specifically what their plans are.

UNIDENTIFIED: How about his name?

MR. HARTMAN: I can perhaps give a, maybe, generic answer, it may be more specific. Regarding jobs, on a project this size, I imagine there might be as many as three to four hundred workers, would be a guess.

Now, there are companies -- for example, the company that built Grand Meadow and Wapsipinicon was called Mortenson, they're based out of Minneapolis. They have about two to three hundred people in their wind energy staff right now. They can conduct -- or they build a lot of wind projects

1 across the U.S.
2 Typically, and I'm speaking of them only
3 and I can't speak for other general contractors,
4 they might have 15 percent of the people from their
5 staff on the job site and then about 85 percent of
6 the workers tend to be local, or wherever they can
7 get the workers from, assuming they meet the
8 qualifications necessary. And that would be -- and
9 there are obviously different jobs during different
10 phases of project construction.
11 Typically, and again, coming back with
12 the tax point as Ingrid had mentioned, there is a
13 tax in Minnesota, it's what's called the wind energy
14 production tax. And, for example, a 100 megawatt
15 project might pay about three to four hundred
16 thousand dollars per year in production taxes. That
17 money goes back to the county, and then the
18 townships hosting the wind turbines get 20 percent
19 of that the way it's set up currently.
20 Originally, it was 80 percent county;
21 school districts, seven percent; and townships, 13.
22 A few years ago, legislation was enacted that took
23 the money away from the school districts and that
24 seven percent now goes to the townships.
25 MS. BJORKLUND: Could you state your

name, sir?

MR. BONO: My name is Bruce Bono (phonetic). I work for a jobs program, and we have a lot of people on unemployment right now. And we're looking for things like this where people can come in and hopefully work.

I know also that at Riverland Technical College there's a new class there that I think maybe some of you have seen as far as wind turbine maintenance. After these things are built, I'm curious, are you going to hire people for maintenance or do you -- I know there's some outfits that come in and they basically come in for six months, leave and come back, are there going to be any long-term jobs for people in our area?

MS. BJORKLUND: Typically O and M is done in the -- from local people that are at the site.

But go ahead, Paul, what are your plans?

MR. JOHNSON: Well, usually O and M and warranty work is handled by the turbine supplier for the first two to five years. And then also during that period there are other staff that are hired either locally or from certified programs that are learning alongside of these people that are there because they are the source of the turbine. And so

after a two- to five-year period then they are the long term O and M staff that remain at the site. And that's -- for 50 megawatts, that can be -- on a 50 -- per 50 megawatt basis, that can be two to four people per 50 megawatts. So for 300, that would be six times that amount. So --

MS. BJORKLUND: Any other questions and comments? This is your opportunity to speak out, this is what the meeting is for, and we appreciate your comments.

MS. EADIE: My name is Debbie Eadie, E-A-D-I-E. I live in Australia, and I'm really unaccustomed to standing up in front of a room full of people like this. So if I seem like I'm stuttering a little bit or I'm a little awkward, please forgive me.

My parents live on the road between Elkton and Dexter here. And before I say anything, I'm a huge, huge fan of wind energy. I think it's really good for our future and I think it's really good for our children and our children's children to be able to harness something that's just -- God gave us already.

You know, but the thing that I would like to say is my parents were originally contacted about

it, and they don't have any turbines on their land, but they're right across the road. And they were told originally that they wouldn't be directly across the road from them. So when they saw the road going in, they didn't think that much about it because they thought it would be further down.

And the wind -- they've got multiple wind turbines right across from them, the closest one is at the minimum that can it be. And I have to say that everyone that I've spoke to, from the executives and the staff, have been very helpful and friendly.

I have to say that everybody that I've had contact with -- and I called people when I was in Australia because my parents were very upset about the look of it and the sound of it. They also have the flicker, and I do not believe that you should have to pull your curtains to stop the flicker. I don't think that that's right.

I'm a fan of wind turbines, but I think that -- what I would like to say to everybody here, if you're going to one have one that's going to go near you or across from you, then I don't think we should not have them, but I think we should. But I think you should talk to somebody before they go up

because it's very hard to take them down once they're up.

So I also think that what -- I myself can hear that it does sound like because I've spent a lot of time on airplanes coming from Australia and the sound that you can hear when they're going is like the sound you hear inside of a plane when it's going.

Okay. And I also believe that it does affect your property value. As somebody that's going to inherit my father's farm, it will make a difference because people have said when they've been there when they come to visit my parents, oh, that's a shame you have that right across the road and listen to it all the time.

So I actually never wanted to sell my father's farm. I'd love to live there, but I don't like the look of the one right across the road, and I actually would love them to take it down. The visual aspect, it is right directly across from their farm.

If you want to have a look when you're going through between Elkton and Dexter, it's the -- the, kind of, path goes this way (indicating), but there's several that are real close to the road and

also those are the ones by his house.

I don't want to seem like I'm against wind power because I'm not. I think that you should really, really look carefully when they're going to go near you to see how it's going to affect you.

Thanks.

MS. BJORKLUND: Thank you.

Other comments and questions?

Yes, go ahead.

MR. LAUMANN: My name is Jim Laumann. I live in Dodge County, the southern edge of it. L-A-U-M-A-N-N.

The concerns I have are property values. I own a small acreage, I'm surrounded by neighbors, some of which are here, which have signed up with RES for contracting purposes, more power to them. But my land, my ten acres, what are these windmill towers going to do to the property values?

Like most small -- like all property owners, that's your wealth. 20 years from now, I go to retire, that windmill's sitting a quater mile away, is another prospective buyer going to come by and say, oh, I don't want to buy this place, it's got that windmill there.

Second off, the study that was set out by

1 McGhie and Betts where they talk about wildlife, I
2 believe it's section 6.18.1, talks about the effect
3 to wildlife. They talk about deer, small game,
4 geese. What they don't talk about is the effect on
5 songbirds and birds of prey. This area is full of
6 them. Red-tailed hawks, great horned owls,
7 songbirds, you name it.
8 A lot of those birds are migratory. The
9 birds of prey, they stay here year 'round. But the
10 birds of prey, they're soaring. Are they going to
11 have to have who-knows-what sense developed in them
12 to stop them from getting struck by these blades?
13 They were here first. And no, I'm not an
14 environmentalist, but I do have these concerns.
15 Thank you.
16 MS. BJORKLUND: Well, thank you very
17 much. And, again, we'll take your consideration --
18 we'll take your comments under consideration as
19 we're going through this regulatory process.
20 They're important comments.
21 Other comments and questions?
22 Yes, go ahead. Please state your name.
23 MR. BUNGUM: Steve Bungum, B-U-N-G-U-M.
24 My concern is the township roads. Let's assume this
25 project goes through, we're close enough, we live on

a township road. It's a gravel road, and for it to be maintained, you know, on a regular basis, I know you're going to put it back better than it was, but how about during the project itself?

I mean, how much -- is it going to be impassable? I know some of the roads in the Dexter area, Grand Meadow area, half of them, four days at a time. People have to get down the roads. We want to know how it's going to be correlated, you know, and how we'll be notified and how that's going to take shape.

MR. HARTMAN: Thank you. I can perhaps respond to that. Well, this is probably the fourth or fifth wind project for Mower County. A lot of the road engineers have had lengthy discussions about this, and there's a group of road engineers that meet on a fairly regular basis and they developed kind of best practices.

Now, one of the issues they're confronted with, for example, they'll have to authorize and the company will have to obtain permits to use roads also. So it will be a number of working agreements.

Now, in some cases, I know in Freeborn County, for example, the townships have delegated their authority to the county highway engineer for

the wind project that's going to be built over there by Wisconsin Power and Light called Bent Tree. The road engineers have developed kind of a -- maybe kind of a best-practices kind of a document they'll give to developers.

Now, I know they've adopted that one as a guidance document for the Bent Tree project. And I think as the road engineers have encountered more and more projects, they try to -- well, they keep adding things or trying to find ways -- find ways to make things work better regarding that.

Now, obviously, because we're working with a section of the township roads here, generally every road, every mile, there might be some inconvenience for a few days. Typically, I've worked with other developers and they try to make -- give landowners access to their property when they need to get in or out, either access or egress.

And, again, that's something that as the project moves forward they'll work with the road engineers on also. And the road engineers will also consider what the highway plans are for the county, bridges, timing of things, what to use, what not to use because of weight restrictions based on roads that are going to be scheduled to be rebuilt.

Again, a lot of the engineers are looking at, kind of, life expectancy of roads and what the projects do due to the life they take out. And some of the decisions -- I know, for example, they might consider if you beat the hell out of two or three roads and just rebuild them entirely, and disperse it around.

And that's the type of decisions that will be worked on, I guess, the company will -- or the applicant and the local permitting authority will work out as best they can. Our permit gives some guidance on it and we generally encourage the use of the highest quality roads just because they're designed to bear the weight limits.

MS. BJORKLUND: Thank you, Larry.

Other comments and questions?

MR. TUCKER: Yeah. I've got one.

MS. BJORKLUND: Yes, go ahead. State your name, please.

MR. TUCKER: Ray Tucker. You were talking about the O and M building and the employment.

MS. BJORKLUND: Yes.

MR. TUCKER: I noticed on the paperwork you sent out, you had a general location map of

that.

MS. BJORKLUND: Yes.

MR. TUCKER: And that it was out in the township.

MS. BJORKLUND: Um-hmm.

MR. TUCKER: That would require a permit by the county.

MS. BJORKLUND: Yes.

MR. TUCKER: Which you probably won't get because we'd rather have you in an industrial lot already in the county as far as fire, police protection, and so forth. I guess I'd always thought that you may build in Sargeant. I wonder, have you given that any thought?

MS. BJORKLUND: Well, the applicants -- I'm not sure if RES Americas has done a final determination of where the O and M building is going to be located.

Paul, do you have -- have you finalized the site for the O and M building?

MR. JOHNSON: No, we have not. Our whole layout is still somewhat fluid. We've been doing a lot of survey work out in the footprints, and we've also surveyed -- the whole surveying process to verify the property lines and so forth so we can be

assured that we are complying with all required setbacks and spacing of the turbines.

And along with that, also, the selection of a turbine, as opposed to maintaining --

MR. TUCKER: Well, out of the four wind farms you do have in the county, only one has an O and M building out in the township, and that was for very first one. Since then, they all have been either tagged onto one of the communities, which would give you the sewer/water, police and fire protection, and so forth. I'd just appreciate you looking at that.

MS. BJORKLUND: Well, we will definitely look at that.

MR. HARTMAN: Ray, as a county commissioner, could I ask you a couple questions?

MR. TUCKER: No.

MR. HARTMAN: One, could you maybe as a county commissioner speak about the -- I guess what the existing wind farms have done to the tax base of Mower County. And then the second part is just as a drain tiler, could you talk about maybe -- I know you repaired the drain tiles on some of these, just what to expect on that from your experience.

MR. TUCKER: Well, from the county

standpoint on the operation tax that they give the county, last year, that would not include this last wind farm, they paid the county and township and the school district at that point, it hadn't changed yet, $860,000.

So in that, that is a definite help to everybody in that county. It's roughly ten percent of our budget. If this continues on, we'll be way in excess of $1 million a year just out of the production tax.

As you mentioned, the drain tile, of course the farmers that are in this room are fully aware of how that works. And if you handle it the same way Mortenson did, I don't see where you'd have a problem.

MR. HARTMAN: Thank you, Ray.

MR. TUCKER: Yeah.

MS. BJORKLUND: Any other questions or comments? Also, if you have questions on the process, too, the regulatory process, now's your chance to --

Go ahead, sir. Please state your name.

MR. GROTH: I'll get the mic first.

MS. BJORKLUND: Yeah.

MR. GROTH: My name is Steve Groth

(phonetic). And I have a little bit of a concern. I mean, I'm concerned about this couple over here with their home values, I'm concerned about that man over here (indicating) with his property values.

And I also know in Wisconsin they have a system they're coming out now with a property value protection plan. And with that, they get protection. They get an assessed value on their property before these things come in and if they cannot stand living in this area or around that thing, they get to have them bought out, these wind companies get to pay them out.

And, you know, it's a fair thing because it's forced on them. That way they can have the right to leave and leave with dignity and with their finances behind them -- in their pockets instead of leaving it all behind.

The other thing I was going to mention about this is that when it comes to fighting that kind of thing, and there's a reason that they do it, it costs them money. But the other thing is if you look at the contracts that they brought to the farmers to have them sign, and I've studied it, I have a lot of it right here in front of me, anybody that would take that contract to an attorney and

have them break it down, you'd find out that contract is 500 percent in their favor and nothing in the farmer's favor. He's a slave.

With that contract, they can't do a thing on that place without their permission. They give away all their freedom. And with that same token, this windmill would fight back these couples here, but it's fairly spoken that's the way it should be to make it right for them. And anybody -- a good company, if they're a good heads-up company, they would ensure that right to these other people.

UNIDENTIFIED: I agree.

MS. BJORKLUND: Well, thank you for your comment. I can't speak to that, to buying out the property. We do have a provision in Minnesota that relates to transmission lines only, not wind farms, and that's called the Buy the Farm Act. I don't know how often that's been utilized, I think it's been pretty rare, if at all. But there is nothing like that in our statutes for wind at this time.

And as -- with respect to the easement agreements, those are private agreements between two private parties and the state does not involve itself in those contract negotiations.

So -- but we will definitely take your

concerns and it's part of the record now. So thank you very much.

Yes, ma'am.

MS. KIRSCHNER: So I just wanted --

MS. BJORKLUND: Your name, please.

MS. KIRSCHNER: My name is Margaret Kirschner.

MS. BJORKLUND: Thank you.

MS. KIRSCHNER: And I'm wondering, have you told the people that have signed up for these windmills, if they have a windmill put on their property what it's going to be zoned as?

MS. BJORKLUND: We do -- we will look at what counties have -- what their ordinances are, particularly if they've taken on --

MS. KIRSCHNER: Well, I can tell you right now Mower County will zone them as industrial, they will pay taxes as industrial. But you aren't telling the people that before they sign up for these windmills.

MS. BJORKLUND: Well, we definitely look at what counties are doing, and counties also have a lot of opportunity to participate in this public process as well to go on record and to give their thoughts.

MS. KIRSCHNER: And I agree with that -- with those -- with the people with the taxes, I do think it helps the county. That's well and good, but how does that help the individual? And I think you better take a look at that, too.

Thank you.

MS. BJORKLUND: Thank you. Thank you very much.

Other comments and questions on the project or on the regulatory process? Come on, there's a lot of you here.

Go ahead.

MR. GRONSETH: I'm Jim Gronseth, G-R-O-N-S-E-T-H. And I live a mile and a quarter north of the Pleasant Valley station and now RES wants to put a 138 kV by our place. And we're in line from Byron to Pleasant Valley for another 161 kV, which brings it up to 299.

We've got Mower County and Freeborn going by and that will all be right across the house. And I've got the river on the back, so we can't move any further west. So we're stuck. What's going to happen?

MS. BJORKLUND: Well, for the transmission lines, they are -- the -- RES Americas

have decided to go through local review. So the counties will be permitting the transmission lines, the 138 kV lines. So you will have an opportunity to participate in the county process on that, on those transmission lines.

And I know that the -- where the transmission lines are going to go, the route, has not been determined either. That's something that remains in flux and that's something they explore, what the route would be, in the permitting process.

MR. GRONSETH: We've got Northern States Power a half a mile from there, and then when you go under that, it bothers the car radio and it bothers the TVs and radios in the house.

MS. BJORKLUND: Yeah. There are -- and I think Paul could speak to this, but I think there are some existing transmission lines in the area. The Pleasant Valley wind farm will need additional transmission in order to interconnect to the transmission grid, which is very typical of wind farms. They need to interconnect that energy to the grids. And usually, you know, a short line or two is involved in that and it's short enough where they're going to undertake the local review.

But, Paul, go ahead, if you'd like to say

1 something about your transmission line plans.
2 MR. JOHNSON: Yeah. I'm glad you brought
3 it up. In terms of the distribution lines
4 throughout the footprint and where we have planned
5 transmission lines, we have been in contact with
6 Freeborn/Mower Cooperative. And as some of you may
7 be aware, they have a five- or ten-year plan to
8 eventually put more and more of their distribution
9 lines underground.
10 And so when we talked to them they said,
11 well, tell us where your proposed routes are and we
12 can work something out to pretty much put the
13 distribution line that's currently there
14 underground. So that will be taken away and that
15 will also improve service in terms of those lines
16 that were formerly -- or currently aboveground will
17 now be underground so that the ice storms and winds
18 and stuff can't get to them.
19 That way, it opens up the existing
20 corridor along the roads to put a transmission line.
21 And for the portion of the line that you're talking
22 about, is it John Gronseth?
23 MR. GRONSETH: Yeah.
24 MR. JOHNSON: You're correct. Xcel does
25 have a route permit to go along north/south of 680th

1 Avenue there. And they have contacted us about that
2 and our -- we are getting consideration to doing a
3 couple of things. One is sharing that corridor, but
4 we'd do it in such a way that the spacing of the
5 poles would not be out -- we would do it to the best
6 we can so that we have no poles in front of any
7 house. It would be in the little -- I guess the
8 tree stands that are between the buffer areas, so
9 the poles would be hopefully almost invisible. They
10 wouldn't be in front of your house. And we have
11 flexibility to adjust the spans between the poles to
12 do that.
13 And then, secondly, we would make the
14 poles somewhat higher, about ten or 15 feet higher.
15 And then, thirdly, the amount of right-of-way that
16 would be needed is no more than what would be needed
17 if you put one line through there. Only 80 feet is
18 required by the National Electric Safety Code for
19 safe spacing, left and right, 40 feet on either side
20 of the pole. That's the electric code that's out
21 there nationally.
22 So if we did that, you'd have somewhat
23 higher poles, only one pole going through there.
24 Those poles would be spaced such that it will
25 eliminate the visual impact of that, and the fact

that it's somewhat higher will keep those conductors even further out of view. So that's something we're giving consideration to.

And plus, the distribution line in that area would be put underground, so that would go away entirely. So the distribution line, which is probably the closest to the ground and there's more poles to begin with because they space them much closer together, all of that would be gone.

Does that help address your question?

MR. GRONSETH: Somewhat.

MS. BJORKLUND: Okay. Sir.

MR. KNUTSON: Neil Knutson is my name. And are those transmission lines underground nothing, no problem whatsoever? I've heard differently.

MR. JOHNSON: Well, these are distribution lines. The current distribution lines that are out there right now that bring the power right to your home, those are the shorter towers that are right along the township roads and so forth. By putting those underground you eliminate the severe weather impacts such as ice storm outages, high wind outages, by putting those -- blowing over those structures and so forth.

1 And the way that they -- I mean, you can
2 talk to Freeborn/Mower, but undergrounding
3 distribution lines, they put them in pretty good
4 conduits and so forth underground, and it's probably
5 a much safer, more higher reliable way of
6 distributing power.
7 And it's actually a benefit when you look
8 at it that way, because your outage time is probably
9 going to go down, your outage risk of losing power
10 during extreme weather is going to go down.
11 MR. KNUTSON: Well, it's better for the
12 line, but is it better for whoever's dealing with
13 the ground nearby?
14 MR. JOHNSON: Well, as far as the --
15 MR. KNUTSON: Well, as far as electricity
16 is concerned.
17 MR. JOHNSON: Oh, it would be far better
18 insulated below ground than it would be aboveground.
19 The aboveground is -- you know, the -- well, the
20 attenuation from electromagnetics and all of this,
21 that -- there's information about that in our
22 permit. But many utilities have studied that and
23 the distance away from that, you get beyond the
24 right-of-way area of 40 feet, that influence is
25 basically nonexistent.

MS. KIRSCHNER: I have something more to say on that.

MS. BJORKLUND: Can you please say your name, again?

MS. KIRSCHNER: Margaret Kirschner. I've done research on that with those lines and there are very many health risks concerned with that, as far as heart and cancer both are caused from those wires and the electricity that's given out. And I have some copies of that.

MS. BJORKLUND: Well, again, on the transmission line aspect of it, they will be going through the local review for the two 138 kV lines and the very short one -- one 345 kV line, that's under 1,500 feet. But I think that doesn't even trigger a permit because it's so short and that's just to connect it to the substation.

We will definitely take your concerns into consideration.

Other comments and questions?

Yes. Go ahead, ma'am.

MS. TYLER: I'm VaLane Tyler. Capital V, A, capital L, A-N-E, T-Y-L-E-R. What I'm wondering is with the lines put underneath the ground, are the rodents going to chew on the lines and put

electricity out? Because I've heard that has happened before.

MS. BJORKLUND: Well, I don't really know a scientific answer for that, but I do have lines that go to my own home that are underground and I've never given it -- I've never heard of that issue.

But these are distribution lines that are going to be buried. And those are the -- the 34.5 kV lines?

MR. HARTMAN: Those are the 34.5 kV. For example, if you go over to Xcel's building and see a bunch of that cable outside, you know, it might have a steel core or a copper, and then there's sheathing and insulation around that. And I don't know what type of rodents you have, but the cable is maybe about that -- well, maybe the size of the microphone.

So, you know, if you have, maybe, big rodents, possibly. But, you know -- well, they're going to chew on anything they can, but typically those cables will be buried three feet below ground or a little bit deeper.

MS. BJORKLUND: Yeah.

MR. HARTMAN: So if the worst happens, if they chew and it goes out, they replace it.

MS. TYLER: How would they find the location where it's out?

MR. HARTMAN: There's equipment out there called fault detectors. You can go along and find faults in the line. Just like you can find gas leaks on a gas lines, you've got sniffers. It's a different sort of detector and it's set to pick something like that up.

MS. TYLER: I'd like to see it placed underground.

MR. HARTMAN: It would be kind of dark down there, huh?

MS. BJORKLUND: Other questions and comments? Other questions and comments on the project and the process that we're going -- again, just to remind you, we're taking issues to be considered in developing the draft site permit, which we will be developing here shortly.

The other comments we're taking right now are developing the scope of the -- what is to go into the environmental report. So then we'll be issuing an environmental report and that will be going before the Public Utilities Commission.

But this is your opportunity to comment on the environmental report within the certificate

of need permit. And then, again, when we are looking at other alternatives compared to a wind farm, it could be the Pleasant Valley wind farm, it could be another 300 megawatt wind farm, it could be a biomass plant that produces the same power, it could be a fossil fuel plant, or a no-build, we're not going to build anything at all. And we'll compare the environmental impacts of all these different options and that will be going into the environmental report.

So anything else you'd like us to consider in developing the scope of that environmental report?

Yes, go ahead.

MR. PAULSON: My name is Jim Paulson.

MR. HARTMAN: Do you want to wait a second --

MR. PAULSON: Sure.

MR. HARTMAN: -- so the people in the back can get your wisdom?

MR. PAULSON: There's nothing there.

MR. HARTMAN: Thank you for being honest.

MR. PAULSON: The only question I have is on this real estate tax on the property, on the towers --

UNIDENTIFIED: Maybe turn around and face the other way.

MR. PAULSON: My wife says that all the time.

My question was -- I have a couple comments on the real estate tax and it's going to be like an industrial-zoned, where the tower is itself. Well, I thought -- I assume that that is taken care of by RES, not the landowner around it. So any real estate taxes would be paid by RES for the tower and not the individual property around it. Is that correct, or am I wrong?

MS. BJORKLUND: I don't know if RES wants to answer that one, but I believe that that is within the -- it's typically handled within the easement agreement.

MR. HARTMAN: I can perhaps take a shot at it. Going back years ago when these wind farms first started back in, oh, '95, typically they would have been treated -- taxed on a property for whatever they're valued at.

Well, because of the accelerated depreciation, for example, a project that might have paid $600,000 year one, year ten might be paying $50,000. So I guess our approach was in -- I guess,

in perhaps being a partial architect of what's gone on over the past years, the idea of a production tax made more sense.

Now, again, that might be a lesser rate than the property tax might be, but let's say if a community's getting $300,000 per year from a 100 megawatt wind farm, getting $300,000 a year for 30 years, you don't have to worry about depreciation.

So we're not taxing the towers, we're not taxing the roads, we're taxing the air. So -- and basically, the way the tax is set up, that's done as a passthrough. So it goes into the rate base so people that use wind energy, in essence, are paying that tax. And that's how the tax in Minnesota works.

So it's not treated as a property tax. I know, for example, some other states now are looking at the production tax model that we have in Minnesota. They're free to do what they choose to do. I think the counties that have -- maybe have been, I guess, getting some benefits from that, I think they might see the advantage of that over the long haul.

Mr. Tucker can address that on, perhaps, Mower County's part. Maybe he has more information

from the county perspective than I do. But basically that's how they're taxed in Minnesota.

Now, whether Mower County changes the zoning, that I don't know. Typically, the wind turbines are located in agricultural land, so it might be zoned as agricultural land. Whether the presence of those turbines changes the zoning, I don't know why it would at this point, but then again, I'm not familiar with how counties do different things.

MS. KIRSCHNER: Sir, I talked to the assessor's office --

MS. BJORKLUND: And can you state your name again, ma'am. Thank you. Sorry.

MS. KIRSCHNER: Margaret Kirschner. I think by now you know my name. And I said I did check with the assessor's office and they will be zoned industrial where the wind turbines are.

UNIDENTIFIED: How much difference does that make?

MS. KIRSCHNER: Well, I don't know. I suppose your property tax affects the value of it.

MS. BJORKLUND: Go ahead, sir.

MR. KLOCKE: I've got a question. My name is Larry Klocke, K-L-O-C-K-E. One more issue

that I have -- that I'd like you look into is the fact of the light pollution from all those red blinking lights all night long.

Right now, I enjoy my dark skies with my white stars, and from where I stand now, the Dexter windmills create a red zone. And if these keep creeping up closer to all our residences, when you go out at night and want to enjoy it like the old days when you could look up and see the stars, all you're going to see is red blinking lights.

Is there -- is any compensation being paid to all the residents in the area for taking this away from us?

MS. BJORKLUND: Well, thank you for your comment.

MR. KLOCKE: I think the term they use is it's called light pollution.

MS. BJORKLUND: Yes. Well, and visual/environmental impacts is something that's going to be considered in the certificate of need process and the site permit process, it's something we'll be looking at. And we'll definitely take your concerns into consideration, particularly in developing that site permit -- draft site permit on the visual impacts of these red blinking lights.

MR. GRENNAN: Ingrid, if I could address that real quickly about what we will be doing with the lights. My name's Joe Grennan, I'm the permitting director for RES. And the amount of lights that we have to put up will be dictated by the FAA. So that's just something that we send in an application for that and they will then tell us how many lights we have to put up.

As far as how the lights will work, I think this is a potential issue, but they will be synchronized. So it's not going to be random blinking lights all over the place, they will all blink at the same time.

So that's just a little more information about how it works. And I don't know if there's any questions that then brings up, but there is a difference between synchronized blinking and random blinking between all of them, so I wanted to point that out.

MS. BJORKLUND: Thank you.

MS. JEWELL: Hi. My name is Jane Jewell. I'm a recent owner, like a year, and we bought our land. We've only got seven acres.

We moved -- we've had to live in town, we're now in the country. I agree with that man.

We came out in the country so that we could see our stars and see the animals.

I agree with the wind farms, but my concern is, don't leave us little guys out. We need to be compensated, also. That is one of the big concerns I've got. And please look into all of these issues, just don't turn a deaf ear.

Thank you.

MS. BJORKLUND: Thank you.

Other questions and -- yes.

MR. GROTH: My name is Steve Groth. A big concern is the decommissioning.

MS. BJORKLUND: Okay.

MR. GROTH: I've done a lot of homework on that. I've got a friend of mine that takes those bases out. It's not cheap. They talked about salvaging the metal from the towers and all the copper in the turbines and all that kind of thing.

Taking those towers down isn't cheap and isn't easy. To take that concrete out of the ground is definitely a different category in itself. Sixty to seventy thousand dollars to take five feet off the top of that concrete base on that thing, that's at today's cost.

So don't overlook it. And in the

contracts, you know, depending how they're written, you know, these guys aren't going to be around at that time. Who's going to be responsible for taking them out?

It is sitting on the landowner's land, so it could be a county thing, it could be a property owner thing. So don't ever overlook the expense on that, at the county level or the owner level. And that's something that people kind of walked around.

The other thing I'm concerned with is this is highly productive farmland out here, probably the most productive farmland in the world. And you're going to put the highly unproductive production on this thing, 25 percent, maybe, production off that? 25 percent efficiency? That's a joke. If you had 25 percent efficiency on your business, you wouldn't be in business. 25 percent efficiency on the car you're driving, you wouldn't drive it. And yet you're sticking all this money into something like this.

I'm not an advocate of wind energy because I think it's a gold rush thing. And when the federal money is out of it, it will be gone. That's my opinion.

Thanks.

MS. BJORKLUND: Well, thank you so much.

In regards to the decommissioning, that is something that will be addressed in the draft site permit, and we'll definitely take your concerns when developing that draft site permit.

MR. GRENNAN: If I could address the decommissioning real quickly, we will be setting some money aside upfront in escrow to address those. So the money for decommissioning will be there and we're planning for it.

With regards to the amount of land that would be taken out of production, generally the permanent impact, meaning the amount of land that would be permanently taken out of its current use and being used for the land farm -- or wind farm would be approximately three to five percent of the total acreage of the site.

So I wasn't sure if you were saying 25 percent, but it's not that amount of impact on agricultural production.

MR. GROTH: I was saying your turbines are 25 percent efficient, that's what I'm saying.

MR. GRENNAN: If you're referring to the capacity factor, I mean, Paul could address that better than myself. So why don't I just go ahead

1 and do that.
2 MR. JOHNSON: The Pleasant Valley area
3 down here has got excellent wind. We have
4 characterized it to be similar to what you would
5 find in North Dakota, and I can't divulge the
6 specific capacity factor, but it's 40-plus percent.
7 And in terms of efficiency, fossil
8 generation, the cycle there is 33 percent to
9 35 percent efficiency in energy output. So it
10 actually is more -- a higher efficiency than a coal
11 plant or a gas plant without the heat recovery.
12 So it is -- they're getting better and
13 better because the blades are getting longer, and
14 that's just a technical fact. So I'll offer that to
15 you.
16 MS. BJORKLUND: Thank you, Paul.
17 Other questions and comments from the
18 audience?
19 Yes, go ahead.
20 MR. THOE: Hello, I'm Jeffrey Thoe.
21 We've dealt a lot with the economic -- we talked a
22 lot about the economics of the wind farms, the giant
23 wind turbines. We haven't talked a whole lot about
24 the human -- the effects on the human -- our health
25 issues, our quality of life.

1 There's three major -- three studies done
2 by -- one by Dr. Michael Nissenbaum, one by
3 Dr. Amanda Harry, Dr. Amanda Pierpont. And there's
4 a group of symptoms experienced by many people
5 living near industrial wind turbines. They've been
6 called the wind turbine syndrome by Dr. Pierpont.
7 And these symptoms include sleep
8 disturbance, headache, ringing in the ears, ear
9 pressure, dizziness, vertigo, nausea, visual
10 blurring, rapid heart rate, irritability, problems
11 with concentration and memory, panic episodes.
12 The research appears to be quite
13 legitimate to me. Their recommendations are one
14 mile, and the other two are one and a quarter miles
15 away from the nearest turbine. They don't say that
16 they understand why all these symptoms are showing
17 up, the -- they are trying to understand it better.
18 There needs to be more research done.
19 Part of it is because of the low
20 frequency noise which, to my knowledge, wasn't
21 studied in the earlier studies when they set the
22 original setbacks. And just as a side note, low
23 frequency noise has been used as a form of torture
24 in war to keep criminals from sleeping well. It's
25 been outlawed by -- it's something you can't use in

war anymore.

In Lincoln Township, Wisconsin, 212 people were surveyed. 73 percent said they would never consider living within one mile of an industrial turbine. These are people who live in an area with industrial turbines. These are huge numbers.

Michael Nissenbaum's got 81 percent of the people he surveyed had sought medical help for their health after living in an industrial -- in an area with industrial wind turbines. These are huge numbers, they can't be ignored. They shouldn't be ignored by us.

Our ancestors, they all worked hard to make this place a place -- a better place to live -- a better place to live. If we fill our counties with wind turbines, are we making this a better place to live? We may make more money, but will it be a better place to live?

I don't know for sure that this research is correct. But I think before we start spending millions and millions of dollars in this township for those turbines, we better know the answer. Once we put them up, they aren't coming down very fast, we all know that.

But we have to take action, too. We can't just sit here and ask them questions. And they keeping telling us we will talk about -- we will bring concerns up at the -- to the board or whoever they're going to talk to. We're going to have to work through this, people. We're going to have to talk to some people, people that will listen, people that can affect the outcome.

This is -- these wind farms, I feel like it's a locomotive that we can't stop. They're coming, there's government incentives to build them. We're trying to reduce greenhouse gases, and I think most of us agree that's a good thing. But I also know that there's more than one way to solve the problem. I don't know that this is the way to solve the problem. I'm guessing that if we think about it and work at it, we'll find better solutions, solutions that will fit into the fabric of our community much better than hundreds and hundreds of gigantic wind turbines that are close to our homes.

MS. BJORKLUND: If I might say something, the public process we have at the Office of Environmental Security (sic) is a very strong process where the public has a lot of opportunity to participate. And when you referenced the board that

it has to go through, it's the Public Utilities Commission that will be making the ultimate permitting decisions for the applicants.

And this is one of several opportunities. There will be another public hearing in relation to the certificate of need, there'll be a public meeting again on the draft site permit. Also, people have -- we have comment periods that are going to be open throughout this process.

In addition, people can come to the Public Utilities Commission. If they're -- you know, they're certainly welcome to do that, it's an open and public process. And that's what this process is for, is to get all of your input in in developing and looking at these permits.

MR. THOE: Then why can't you be more specific? What can we do -- let's say there -- I don't know what the people in this county feel as a whole, I haven't surveyed a lot of people. I've talked to some, I know there's some strong feelings both ways. What would we need to do specifically to stop it, to stop this project from being built?

MS. BJORKLUND: Well, I don't know if I can answer what specifically that people can do, but we will evaluate all of the environmental issues

that everybody's raised here tonight, and then some, what other people raise, we're required to look by law at a number of issues and we'll be weighing whether the applicant is able to address those issues.

MR. THOE: So let me be clear. Did you just tell me now that you can't give me a specific answer for that? I want to be clear on that. That this county, that the people in this county can't -- we want to know -- I want to know specifically what we would have to do to stop the project. I'm not saying we can, I'm not saying there's an option to do it.

MS. BJORKLUND: Participate in the public process.

MR. THOE: Pardon me?

MS. BJORKLUND: Participate in the public process.

MR. THOE: How much participation would we need? I want some numbers, I want something specific. We keep getting answers and they sound great to me. I don't feel like we're getting any hard-fact answers.

MS. BJORKLUND: Well, we're at the very first step of the permitting process. We have, I

1 don't know, roughly five more months to go in the
2 process.
3 MR. THOE: I understand that, but I want
4 a specific answer, can you give me one?
5 MS. BJORKLUND: I can't think of anything
6 specific that somebody can do that would stop the
7 process at this point. We have other opportunities
8 to speak and everybody's concerns are going to be
9 heard and we'll take that under consideration as
10 we're developing our recommendation on the permit.
11 UNIDENTIFIED: Don't you need a counter
12 group instead of dealing through the same outfit?
13 MR. THOE: I don't know, that's what I'm
14 asking, what would we need to do to stop the
15 project?
16 MS. BJORKLUND: Well, the Office of
17 Energy Security, we're a state office. We don't
18 have an opinion one way or the other, we're here to
19 gather information for the record and build the
20 record. And the Public Utilities Commissioners
21 would be the ultimate deciders of whether a permit
22 gets issued.
23 MR. THOE: Can we get an answer from the
24 Public Utilities Commission? Before it's too late,
25 can we get an answer as to what would we -- what

would this community need to do to stop the project from going forward?

Because these turbines will affect everybody, there's no doubt about that. They're way too big to think that they aren't going to reach into everybody's home. They will, we all know that. But like I say, I'm looking for a specific answer and I haven't gotten one yet. And I expect that there must be one, there must be a way to do it. But I don't know what it is.

MS. BJORKLUND: Again, there has been other wind farms that the permit was not issued. It just recently happened in New Ulm. Everything is case-specific. But, again, we're just starting to develop the record. There's a lot of opportunity to participate in developing this record.

Again, the state -- we have a very strong permitting system in the state of Minnesota and we look at things objectively and the Commissioners will be deciding.

MR. THOE: One more question, then. In the case in New Ulm, what did they do, what stopped that project?

MS. BJORKLUND: Well, Larry, do you want to speak to New Ulm?

MR. HARTMAN: The city of New Ulm applied for a site permit and I believe it was for eight megawatts. And I don't know remember the wording of the Commission order, but one of the issues that was of significance there was the fact that the New Ulm Public Utilities Commission had procured some wind rights, not the wind rights they needed to comply for setback requirements.

And typically, if you look at all the wind farms built in Minnesota, and we've got 1,800-plus turbines in the state, if you look at all the other wind projects that have been built and not one has ever been built with the use of eminent domain. Landowners -- they have wind rights from a few landowners, additional landowners refused to give them the wind rights.

So I guess at issue was the question of eminent domain, the fact that they're going to use -- potentially use eminent domain. They hadn't committed. The Commission gave them a chance to go back and reconsider and tell us what -- or I guess, tell the Commission what their plans were. That was not done, so the Commission denied the permit.

All of the wind farms that have been built to date in Minnesota as well as the U.S. have

been built by cooperating agreements or easement agreements between developers and landowners. Land (sic) turbines have not been placed on any landowner's property who does not want them.

Now, with regard to your point, and I encourage you here as landowners, participants, observers, if you have questions about wind farms, go knock on the doors of your neighbors. You've got High Prairie I down here which uses the Siemens 2.3 megawatt turbine, you've got High Prairie II that uses the Vestas 1.65 megawatt turbine. And you've got turbines -- and Xcel's Grand Meadow wind farm, as well as the Wapsipinicon, which totals about 201 megawatts, 134 turbines. Go talk to those people, find out what they think.

I've been permitting wind farms for a number of years, as I mentioned to you earlier, I think I've had less than five complaints in 15 years. And most of those complaints have been directed toward speeding concrete trucks, that's a safety issue.

We have not had issues, contrary to what people have said in other states. And as I indicated earlier, if you as a landowner are a participant in the project, if the Commission issues

a permit, all affected or participating landowners get a copy of our permit.

We have an 800 number in there and you can call us if you have a problem. If it's, you know, major, you know, please call us. If it's anything major the company's supposed to notify us within 24 hours. The complaints come to their office, they're supposed to forward them to us on a monthly basis, the 15th of every month.

The draft permit -- and I don't have one with me because we don't have one for this project -- we have a complaint report procedure in there and we have a process for dealing with complaints when they're submitted. We just haven't received any.

Now, again, you don't have to believe me. Again, I'd go talk to your neighbors who live with wind turbines and find out what their thoughts and opinions are, and people have any number of reasons for doing different things.

You know, if you're a participant, maybe you're satisfied that your concerns have been addressed. Maybe some things you haven't thought about. This is also an opportunity to kind of get everything out there in the open that's on the table

for discussion.

Again, as Ingrid mentioned, at some point in time if the draft site permit is authorized by the board, we'll be back here for another meeting. You'll have a chance to comment on that. You know, as with anyone else, state agencies, local units of government, townships, counties, whoever, so the process is what I regard as pretty open, pretty transparent.

MS. BJORKLUND: Thank you.

MR. THOE: Well, thanks for the chance to speak here. But once again, I don't think I feel like we've got an answer to what -- say this project doesn't go through or not, and I will leave it at that. And I thank you, again.

MS. BJORKLUND: Thank you.

And there's also one in the back, Larry, too.

MS. EADIE: It's Debbie Eadie. I would just like to -- there's going to be an article in the Rochester Post-Bulletin tomorrow that the Minnesota legislature is looking at setback regulations, setback meaning how far away from the nearest farmhouse that you have to put them. And somebody was asking me how far the turbine was from

my mom and dad's. I don't know exactly, but I've measured it and it's the least amount that it can be.

And I'm not sure where that man went to, but I was at home this last summer for two months and so -- and I grew up on that farm and so I spent a lot of time outside. And if you -- I myself experienced -- if you're -- when I was outside for hours and hours at a time, I don't know whether it was low voltage electricity, I'm not sure. But I personally thought it was a constant whomp, whomp, whomp (phonetic) when I was outside for hours and hours at a time, and this is on more than one occasion that it made me feel sick, nauseated.

Sometimes they don't turn, you know, and I don't feel anything. But I just -- I'm not against wind turbines, but I really think that you should look close at how you position them to the people that are living around them.

Thanks.

MS. BJORKLUND: The comment -- somebody wants to comment in the back, and then we have another person on the side, to my left, Larry, when you're done there.

UNIDENTIFIED: One of the things I'd like

to say when you talked about the synchronized lights --

MS. BJORKLUND: Can we get your name?

UNIDENTIFIED: I hope that they get better at it because the synchronized lights that we have now, it's like they go on and then it's buh, buh, buh (phonetic), a whole bunch more. And then they go on and it's this one, this one, this one. So they're not exactly synchronized, that needs to be perfected.

There's also alternative styles of wind turbines, there's wind turbines that have a wider base and the wind turbine goes this way as opposed to this way (indicating), if you know what I'm saying. That gets rid of a lot of the noise flicker (sic), they don't have to be as high so you don't have to these irritating, annoying red flashing lights. I strongly encourage you -- into looking at that type of wind turbine as opposed to these.

You yourself said that -- you called it a nuisance to people who have headaches, nausea, what else did you talk -- due to the wind flicker (sic). You know, what might be a nuisance to you is turning out to be a severe health problem to a lot of the people living near it.

As far as property values go, if you look at Texas, if you look at a report done in Texas, you look at Wisconsin, they are saying that property values are going down an average of 25 to 30 percent of those people who are near the wind turbines. So, you know, it probably is going to impact your property value, that's something you might want to get looked into.

My concern, too, is the siting of the wind turbines. You don't want them to be too close to livestock, homes, roads. Even the Minnesota Department of Health recently did a study on our own state and they said that the problems associated with having turbines close lessen after one half of a mile.

So the PUC, the state PUC has not set their setback standard yet, but they are in discussion about it. And if our own Minnesota Department of Health recommends one half mile or are saying that they are lessened at one half mile, I really think we should strongly consider that, setbacks of one half mile from homes, from farms.

There's farmers in Wisconsin who talk about the problem with their cattle laying on the ground. I mean, wildlife was brought up before.

There's been studies about bats and birds, but it's a hard thing to prove. Bats are running into them, but we have lots of bats to replace them. And then when they fall on the ground, you know, some other wildlife consumes them. So the wildlife research is a tough one to do unless you're sitting there 24/7 watching them.

But I guess, again, I would really encourage you to look into a different style of a turbine. When we know there's information out there of a different style that avoids a lot of these issues.

MS. BJORKLUND: Can we get your name for the record?

UNIDENTIFIED: Can I get your name for the record?

MS. BJORKLUND: Mine?

UNIDENTIFIED: Yes.

MS. BJORKLUND: Ingrid Bjorklund.

UNIDENTIFIED: Ingrid what?

MS. BJORKLUND: Ingrid Bjorklund.

UNIDENTIFIED: Can you spell that, please?

MS. BJORKLUND: I can. It's B-J-O-R-K-L-U-N-D.

UNIDENTIFIED: And your name?

MR. HARTMAN: Larry Hartman.

UNIDENTIFIED: Larry. And when you speak it's a little bit tough to hear you, could you just talk a little louder, that would help.

MS. BJORKLUND: Okay. Our names and how to contact us, it's on the blue sheet that was at the front door.

MR. HARTMAN: Perhaps I could respond to some of your points. You know, you're talking about the different types of wind turbines. The one you found that was in -- centered around bats in Altamont, those basically don't function anymore. The only commercial wind turbines on the market are the horizontal -- excuse me, the vertical axis turbine. So typically three blades, you don't find the egg-beater type turbines. There's some other kind of turbines on the market. I don't know who markets them or if you'd say this side of shady, I think, in terms of what they can actually do.

Your point on avian impacts, we did a four-year study out in Buffalo Ridge before and after wind turbines went in. We had a control site in South Dakota. On average, we found that the turbine killed about two birds per year, on average.

Bats were a little bit higher in the first couple of years. Typically, that bat number is between maybe two and three. There are some types of bats that are common in Minnesota, a lot of them are migrating bats. Bats typically migrate between August and September.

If you look at the top of the Iowa project down here, there's a large DNR wildlife area, Iowa DNR. And for the most part the fatality there was less than one bird per year, or one and a half birds per megawatt per turbine per year.

It's something we're doing continued research on and are trying to identify some new research avenues. But we have been in discussion with the DNR maybe about certain types of studies to be undertaken.

If you go back to the health department report, it said problems up to a half a mile if not properly sited. That's why we expect companies to come in and demonstrate before they actually build the project what the anticipated noise levels are. They have to indicate that to demonstrate that they are meeting the state PCA noise standards.

And if you look at the health department report, it says the evidence on low frequency noise

is scant. A lot people misread that or overlook that. So there's -- could perhaps be some clarification on that, but for the most part -- and they did a fairly, I guess, worldwide, I guess, literature review.

A lot of the problems that have been documented have primarily been limited to two or three wind farms in England out of 134 operational wind farms that were examined in that study. And I think the low frequency noise -- for example, traffic also generates low frequency noise.

So, you know, there are a number of things that you have to kind of, you know, look at, and a lot of those factors are considered in the design and layout of a wind turbine farm.

MS. BJORKLUND: Thank you, Larry.

There's someone over here on my left who would like to speak.

And please state your name for the record. Thank you.

MS. NELSON: My name is Jean Nelson. Very Scandinavian, I don't think I have to spell it.

I'm wondering what is the probability if when these wind farms get up and running that they would be sold to a foreign entity? I understand

that has happened and this country owns it -- owes its soul to whoever already. We don't need any more of that.

And in addition, I am a real estate broker and there's no doubt in my mind that the value of the properties will go way down. I live in a fourth-generation farm and I think it's probably worth half -- it would be worth half of what it's worth right now.

MS. BJORKLUND: Thank you.

Other comments and/or comments?

MS. KIRSCHNER: I have one.

MS. BJORKLUND: Yes. Please, I know you've stated your name before, but if you could state it again because we're capturing it each time we speak.

MS. KIRSCHNER: Okay. Margaret Kirschner. Okay.

As a member -- I have been a member of the Mower County planning and zoning, so I can tell you some.

Like on that decommissioning, they will have to sign a CUP, a conditional use permit, so that that will -- they will have to pay for that and they will have to be taken down when they

1 decommission it.
2 But this is as a landowner myself now, I
3 am talking this way. When the windmills -- when the
4 turbines aren't running, they're using electricity
5 and that goes into the peaking plant. And so
6 they're using electricity, which affects all of our
7 rates.
8 Then I'd like you to know, too, that each
9 turbine, and this is an average so these are going
10 to go up, they will be approximately -- with each
11 turbine foundation consists of 52 foot by 52 foot
12 octagon that is seven foot deep, 28 loads of
13 concrete and 57,000 pounds of reinforcing steel to
14 fill that hole.
15 Each base weighs more than one million
16 pounds, or 563 tons. And if they do commission
17 (sic) them, all they do it take out three feet of
18 that, that's all the further down they go. The rest
19 will stay in your land.
20 MS. BJORKLUND: Thank you for your
21 comments.
22 MR. HARTMAN: Typically the permits we've
23 issued, we have a decommissioning -- foundations are
24 taken out down to a depth of 48 inches.
25 MS. KIRSCHNER: What?

MR. HARTMAN: 48 inches is what our permit requires.

MS. BJORKLUND: Thank you.

Other questions or comments?

Well, again, I want to thank you so much for your time. You're going to have additional opportunities to comment on the project. If you would like to send me comments on where we're at in the process right now, on the environmental report or issues to be considered in developing the site permit, please fill out this yellow sheet (indicating). You can e-mail your comments to me, you can also fold this up, put a stamp on it, and mail them in to me.

So I really appreciate your time. We had a great turnout, and thank you so much for coming.

(Public comment concluded.)