

PUBLIC COMMENTS

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MONDAY, FEBRUARY 22, 2010

7:00 p.m.

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

PUC Docket Numbers: IP-6828/WS-09-1197
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1 MS. BJORKLUND: So, with that, I'd like
2 to open this up for your comments and your
3 questions. So does anybody have any comments or
4 questions?

5 We have a big crowd here. You guys all
6 came out tonight, I'm sure somebody has something to
7 say.

8 UNIDENTIFIED: I've got a map that said
9 that they were coming down along Highway 56 from the
10 north.

11 MS. BJORKLUND: Uh-huh.

12 UNIDENTIFIED: Is that going to be that
13 way for sure or --

14 MS. BJORKLUND: Well, the project area
15 that -- they've defined as the project area, they
16 don't know exactly where the turbines are going to
17 be, but they have an estimate and that's why the
18 maps included in there for GE or Siemens of how
19 those will be laid out.

20 UNIDENTIFIED: Okay.

21 MS. BJORKLUND: Other questions or
22 comments?

23 Yes. We have a microphone here. Again,
24 please state your name.

25 MR. ALLEN: David Allen. The question

1 here, I know you're putting everything together for
2 the sites and stuff, but has anybody looked at an
3 agreement as far as maintaining and putting down
4 chloride and rerocking these roads and making sure
5 they're taken care of during the project?

6 MS. BJORKLUND: Yes. We will be
7 considering all these issues during the project,
8 too, on the roads. Also, the county roads, I
9 mean --

10 Larry, do you want to help answer that
11 one?

12 MR. HARTMAN: Yeah. Roads are -- I think
13 it's -- there's a lot of impact on the
14 infrastructure in terms how these projects do affect
15 the life of a road.

16 Can everybody hear me back there? I was
17 told this afternoon that I wasn't able to be heard
18 by everybody.

19 Typically, what's happening, a lot of the
20 towns in southwestern Minnesota, they've had wind
21 turbines for a number of years. As these turbines
22 have moved a little bit further east and counties
23 encounter these for the first time, there's kind of
24 a steep learning curve for a lot of your road
25 engineers, you know, other people who are involved

1 with that, whether it's township or county or state.

2 A lot of the counties got together and
3 they've developed kind of a working document they're
4 trying to get developers to use in terms of best
5 practices for use of local roads. And there are a
6 number of things the local engineers have to
7 consider. You know, one, weight restrictions, time
8 of year, bridge plans, the transportation logistics,
9 depending where the turbines come from.

10 As I mentioned this afternoon, we have a
11 project over in Freeborn County being built by
12 Wisconsin Power and Light. And in this instance --
13 and I -- perhaps in this county also, the townships
14 have delegated their road authority, the county
15 highway engineer, to act on their behalf.

16 And for that project, it's the first one
17 that I'm aware of that the -- these guidelines are
18 going to be used as a guidance document. And the
19 county road engineers, I don't know if they meet
20 quarterly, I've attended two of their meetings in
21 the last year or so and I think I'll be talking to
22 them again this spring. There'll be an update on
23 that.

24 And I think as more of these are put into
25 place and we're trying to put documents, I guess,

1 before the local officials so they know what to
2 expect and how to deal with those issue. So it's
3 perhaps -- you know, this is RES's first project in
4 Minnesota. They've done projects in a number of
5 other states and I'm sure all states are a little
6 bit different. To that degree, it's probably a
7 learning curve for them also.

8 For example, if you consider some of the
9 weights that are involved with these in terms of
10 life expectancy of a road, for example, you know, by
11 the time it's all said and done, your foundations
12 might weigh about a million pounds. Depending on
13 the size of the concrete trucks, from 8 to 12 cubic
14 yards, might have 30 to 35 trucks of concrete per
15 turbine, maybe 20, 30 tons of rebar per turbine.

16 The towers themselves, depending on which
17 one is used, probably weigh upwards of 200 tons.
18 The blades are probably 10- to 15,000 pounds apiece,
19 and the cell that holds the blades in place might
20 weigh another 40 to 60 and the generator itself
21 probably weighs 160- to 200,000 pounds. There's,
22 you know, a fair amount of truck traffic. The
23 township roads, for example, they might extend the
24 turning radius. Some of these trucks need a
25 150-foot turning radius to haul blades and tower

1 sections in, maybe 90 feet coming out.

2 So there are lots of little road issues
3 that need to be coordinated and worked out. And
4 again, I think this is what Mower County expects for
5 the wind project. So the portion of the project
6 that's in Mower County, I'm assuming the highway --
7 and I've met with the county engineers before on
8 other projects, I'm assuming they have more of
9 familiarity and they might be in a better position
10 to discuss if -- I don't know if you're representing
11 a township or not, to indicate what your concerns
12 are.

13 Typically, the roads -- or the access
14 roads go to the turbines. For example, counties
15 might have a number of restrictions on the number of
16 road cuts they allow, or driveway cuts, on a
17 per-mile basis. That might affect where the access
18 roads are.

19 You as a landowner have some input into
20 that, depending on the orientation of your field,
21 which way it's cropped, as to where the access road
22 is. Also, typically they're designed to class five
23 standard, so it's the same as township roads.

24 For example, when they build the roads,
25 the temporary road will be considerably wider than

1 the permanent roads. Depending on the type of
2 cranes used, if it's Manitowoc 16,000 or something
3 like that, your temporary roads might be 30, 35, 40
4 feet. The width of your permanent roads typically
5 are cut back to 16 to 18 feet in width.

6 I know the FBL project, which is High
7 Prairie I, did permanent roads, and they used the
8 Siemens 2.3 and shipped over a 600-ton crane from
9 Denmark for that. And they put in roads that are
10 about 40 feet wide, which were probably wider than
11 what they actually needed.

12 Now, again, I don't think the plans call
13 for the road to be that wide. In terms of what this
14 does to cropland, and you've got your safety areas
15 for the lay-down areas for the turbines, let's say
16 you might need five to ten acres of land per
17 turbine. But when it's all said and done, the land
18 is restored, the land displaced by the turbine, the
19 tower pad around the turbine, and the access road
20 itself would probably average about one and a half
21 acres per turbine.

22 Does that answer the question, sir?

23 MR. ALLEN: (Nods head.)

24 MR. HARTMAN: Any others regarding roads
25 or --

1 MR. ALLEN: (Shakes head.)

2 MS. BJORKLUND: So again, any comments
3 you would like to have become part of the record, if
4 you have any. Are there any questions on the
5 permitting process itself?

6 Yes, go ahead.

7 MR. MACHIN: My name is Todd Machin,
8 M-A-C-H-I-N. Does your environmental assessment
9 take into consideration the ground compaction issue
10 on field tile?

11 MS. BJORKLUND: On field --

12 MR. MACHIN: Tile.

13 MS. BJORKLUND: Tile.

14 MR. MACHIN: Tile where it gets
15 compacted.

16 MS. BJORKLUND: Yeah. If that's
17 something that you think we should consider, yeah,
18 definitely.

19 MR. MACHIN: But it's not part of your --

20 MS. BJORKLUND: No. What we're required
21 to look at is pretty general, and then we typically
22 do get into those issues.

23 Do we not, Larry?

24 MR. HARTMAN: The permits generally
25 issued by the Commission make a number of

1 conditions, some of them are pretty standard. For
2 example, they're required to repair all the drain
3 tile they damage during the life of the project.
4 And soil compaction, they're also required to
5 alleviate soil compaction.

6 Ray Tucker was here this afternoon.
7 Those of you who know Ray, he's in the tile
8 business. I think in the Grand Meadow wind farm --
9 I think they cut about eight or nine hundred tiles,
10 and to my knowledge they've all been replaced. If
11 there's an ongoing problem, the company's obligated
12 to fix and restore the tile to function in the way
13 that it should.

14 MS. BJORKLUND: Any other comments or
15 concerns?

16 Yes. Go ahead. There's a woman in back.

17 MS. GLASER: I guess my question is,
18 given the amount of towers that have been put up in
19 this area --

20 MS. BJORKLUND: Could we get your name?

21 MS. GLASER: I'm sorry. My name is
22 Heather Glaser. And I was just wondering, given the
23 number of towers that have been put up in this area
24 within the last couple years, why this project is
25 felt that it's needed?

1 MS. BJORKLUND: Well, that's a good
2 question. That's part of what one of the permitting
3 processes looked at is need, is this project needed.
4 And that's something that we'll be developing the
5 record, along with other people in the Office of
6 Energy Security, on whether this project is needed,
7 and that's something that is examined.

8 As you might be aware, there is a
9 renewable energy standard in Minnesota that requires
10 25 percent of our electricity generation be coming
11 from renewable energy by 2025. So that's part of
12 the reason why you're seeing a lot of wind farms go
13 up, this is a very good wind resource right in this
14 area.

15 MS. GLASER: Given the wind resources,
16 though, and the turbines that have been erected
17 already, a lot of times you see them motionless. Is
18 that because we're building these wind farms ahead
19 of the technology to transport the electricity?

20 MS. BJORKLUND: Well, again, that's a
21 really good question. Sometimes there are
22 transmission constraints, other times they might be
23 down for maintenance. There could be more than one
24 reason why at times they might not be spinning when
25 others are and there is wind.

1 MS. GLASER: Okay. Thank you.

2 MS. BJORKLUND: Thank you.

3 Yes. You, in the back.

4 MS. LANTOW: Carol Lantow.

5 MS. BJORKLUND: Yes.

6 MS. LANTOW: I'd like to know how this is
7 going to affect the counties as far as taxes are
8 concerned. Is there a set amount of money that's
9 going to go to the county --

10 MS. BJORKLUND: Yes.

11 MS. LANTOW: -- for these projects going
12 into their land area?

13 MS. BJORKLUND: Yes. There is, it's a
14 production tax that the project will have to pay.

15 And, Larry, didn't we talk about a figure
16 in the afternoon meeting for so many 50 megawatts,
17 it generates --

18 MR. HARTMAN: I think Minnesota is the
19 first state to do a production tax. A lot of other
20 states treat it as a property tax. Your energy
21 facilities, you know, basically the way the deals
22 are structured, they depreciate rather quickly.

23 So if you go back to Buffalo Ridge years
24 ago with the first wind project that was built, the
25 first project might have paid \$600,000 per year in

1 taxes, but by the year ten it might have been paying
2 50 to 60.

3 A number of us got together and worked on
4 what's called a production tax. So they aren't
5 assessed on the property value, they're based on the
6 energy they produce. So we're basically taxing the
7 air.

8 That tax is passed on through the
9 ratepayers. So, for example, a 100-megawatt farm
10 might typically pay, assuming a wind resource
11 capacity factor in the range of 35 to 60 percent,
12 might pay on average 300- to 400,000 dollars per
13 year in production taxes.

14 Every year, February 1st, the wind
15 developers are required to report to the state of
16 Minnesota on a form called an M-25 their production.
17 And the state sends that out and the money is then
18 sent to the counties. The counties keep 80 percent
19 of that money and -- originally the law sent seven
20 percent to the school districts, 13 percent to the
21 townships. Obviously, there's a change in the law
22 that I know affected some people down here a couple
23 years in budgeting and now it's 80 percent to the
24 counties and 20 percent on the townships hosting the
25 turbines.

1 So when counties -- and we're a little
2 bit out of sync yet in terms of when counties
3 establish their budget versus the production
4 numbers. Now, that production number's going to
5 vary a little bit every year depending on the wind
6 resource.

7 Because of El Niño, this year wind
8 production is basically down across the state, as
9 well as the Upper Midwest. But in terms of the
10 revenue stream, it might fluctuate five, ten,
11 probably no more than 15 percent. That revenue
12 stream will come to the hosting community for the
13 life of the project, so the community is going to
14 get a lot more money over the long haul versus what
15 they would over the property tax.

16 Does that answer your question, ma'am?

17 MS. LANTOW: (Nods head.)

18 MS. BJORKLUND: Sir, can we get your name
19 for the record?

20 MR. MACHIN: It's Todd Machin. There're
21 production tax credits from the feds now.

22 MR. HARTMAN: There's a federal
23 production credit. Minnesota offers no tax credit.
24 This is the money they pay to the counties and the
25 townships hosting the facilities. That's paid for

1 by the developers out of their pocket.

2 However, because the PPAs, power purchase
3 agreements, are authorized by the Commission, the
4 tax base goes through the rate base of consumers, so
5 that's just factored in.

6 MS. BJORKLUND: Other comments and
7 issues, questions?

8 Yes, sir.

9 Oh, Larry, right there in the -- oh,
10 we'll get to you next.

11 MS. LANTOW: Who actually monitors how
12 much wind energy is produced when we're assessing
13 these taxes? Do we just take the word of the wind
14 company or do we have checks and balances in place?

15 MS. BJORKLUND: Could we get your name?

16 MS. LANTOW: Carol Lantow.

17 MS. BJORKLUND: Thank you.

18 MR. HARTMAN: Carol, the answer to your
19 question is they report -- they report -- the
20 utilities also meter what they pay for. So, for
21 example, when the company sells energy, there is
22 a -- I guess a metering station outside the hosting
23 utility's substation where they make that
24 interconnection. That's where all the energy's
25 metered. So the purchasing utility only pays for

1 the energy they receive. We can track the numbers
2 that probably -- what the utilities pay out in terms
3 of what -- they're supposed to report production
4 numbers to us, and they also report them to revenue.
5 So there are ways of perhaps providing a check and
6 balance.

7 And again, it's not clear to delineate at
8 this point in time, it's something we're -- some of
9 us are working on right now.

10 MS. BJORKLUND: And there was a gentleman
11 over here who has a question, Larry. Or -- sorry.

12 MR. HARTMAN: You were closer
13 (indicating).

14 MR. SCHLICHTER: Yeah. My name's
15 Norb Schlichter.

16 Wouldn't you be a bit concerned about the
17 county and maybe even the state being the ones
18 watching out for us when it appears that, with the
19 tax problems and the economy the way it is, are we
20 sure of the people that are watching it that they're
21 looking out for our best interest, or is it for the
22 money that's going to be reaped, county and state?

23 MS. BJORKLUND: By law, they cannot take
24 that money and use it for anything else. I mean,
25 this is a designated purpose, that money is going to

1 go where it's supposed to go.

2 MR. SCHLICHTER: Who is actually watching
3 for our best interests, would you classify it as the
4 county's looking out for us? I kind of doubt that.

5 MS. BJORKLUND: If you have any concerns
6 or complaints as this whole process moves forward,
7 you can contact our office. I mean, that's what
8 we're here for, so at any point if you have a
9 concern about anything.

10 MR. SCHLICHTER: One more time, where
11 does this application go to, is it a board of people
12 in the Cities?

13 MS. BJORKLUND: Yes. It's the Public
14 Utilities Commission, and it's five Commissioners
15 that are in the Twin Cities. I think one of them is
16 required to be outstate. And they govern the
17 regulatory process and they make the decisions.

18 We provide recommendations, our staff,
19 our Office of Energy Security, Energy Facilities
20 Permitting division provides recommendations to the
21 Public Utilities Commission. But they decide what
22 should be in a permit and whether a permit should be
23 issued and whether -- on the need and the site.

24 MR. HARTMAN: I might add, as a point of
25 clarification, we had a wind developer at one point

1 in time who was kind of cheating. He got caught,
2 and his mail comes from Sandstone now. So there's a
3 disincentive when you cheat the system.

4 MS. BJORKLUND: Well said.

5 Any other -- go ahead, sir.

6 MR. SWANSON: I'll grab the mic.
7 Randy Swanson. And I guess I'm pretty loud here. I
8 have a question, maybe it's going to answer
9 something that was asked previously, and that has to
10 do with the tile. It's been a problem before where
11 they have cut tile and are cutting thousands of tile
12 when they do this. They say they're going to come
13 back and fix it. Who determines when they're going
14 to fix it? Because this Commission that takes care
15 of this is also the power company, they are not
16 going to shut this down. And that's what usually
17 happens, they will not shut turbines down. It
18 cannot be fixed when it really needs to be fixed and
19 it might be a year down the line. It's a long -- it
20 might tip them at the wrong season or anything like
21 that, as far as the tile goes.

22 The other thing is, who determines when
23 one of these companies are negligent on payments,
24 first right of refusal, they have been for us. We
25 are getting nothing.

1 MS. BJORKLUND: Well, we're going to do a
2 couple things here. First, the Public Utilities
3 Commission is an appointed body by the governor.
4 They are not associated with a power company or a
5 utility. It's an independent board.

6 Second, on who is watching this, the
7 office at our department watches the progress and
8 keeps a close eye on the progress and we work with
9 the applicant and complaints come to us and we
10 really follow through on that.

11 And your last point was -- oh, what was
12 it, again?

13 MR. SWANSON: Who determines who's
14 negligent, what are you going to do about it?

15 MS. BJORKLUND: Oh, that's right. I know
16 you were specifically talking about the right of
17 first refusal and whatnot, those are contractual
18 issues between two private persons, you know, the
19 company and the landowners. And we don't engage in
20 policing easement agreements. I mean, that's
21 something, if you have a concern contact an attorney
22 on that.

23 MR. SWANSON: And they have first right
24 of refusal on even if you want to put a mortgage on
25 your land.

1 MS. BJORKLUND: I'm not familiar with
2 what is in the agreements, we've don't -- that's not
3 a part of what we do. Again, those are two -- those
4 are private contacts between private parties.

5 MR. SWANSON: Those are the things I
6 guess I'm concerned about, because there isn't
7 really anyone policing that. And on your
8 commissioning board you do have to have somebody
9 that knows the public utilities, and so they have
10 great influence.

11 MS. BJORKLUND: They do regulate the
12 public utilities. They do regulate them, that's
13 correct.

14 MR. SWANSON: The other thing is as far
15 as eminent domain, they're not claiming that as far
16 as on the windmills right now.

17 MS. BJORKLUND: They cannot.

18 MR. SWANSON: But as far as if this is
19 something where they say, well, we do need to have a
20 power line through your land, is that going to
21 happen in the future?

22 MS. BJORKLUND: No. They do not have
23 eminent domain authority.

24 MR. SWANSON: Will that change?

25 MS. BJORKLUND: That's up to the

1 legislature. I don't foresee that happening at this
2 point. As a matter of fact, it seems to be going
3 the other way. There was a big eminent domain
4 overhaul in 2006. I guess they're discussing
5 eminent domain legislation as it relates to
6 utilities. This legislative session, I don't know
7 how -- I have no idea what the outcome is going to
8 be. But no, they do not have that authority and I
9 don't foresee that in the future.

10 MR. SWANSON: I guess going back to the
11 question there as far as who's policing this if it
12 has to do with financial matters and things, and
13 we've already found some dishonesty within some of
14 the companies, then -- and you're saying you're not
15 policing that or doing anything that way, that's out
16 of your jurisdiction. How do we know -- we're
17 strictly up to them as far as when payments are
18 supposed to be made on the windmills as far as the
19 county goes, everything like that, who determines
20 that? Who's reading the meters, who's doing that?

21 MS. BJORKLUND: Well, I think those are
22 two different questions. I think the one -- the
23 question dealing with the easements, again, if you
24 have concerns that you're not being treated fairly
25 or they're not following the contract, contact an

1 attorney.

2 With respect to the reporting, that's
3 something they're required to do. And as I said,
4 someone was misreporting and they got caught and
5 they're in jail.

6 So -- but those are very -- that's a very
7 serious issue, if somebody wasn't reporting
8 correctly.

9 MR. HARTMAN: Perhaps if we could get Joe
10 to also answer your question about drain tiles. I
11 know we have a drain tiler here who could maybe talk
12 about his experience.

13 UNIDENTIFIED: Your mic is off.

14 MR. HARTMAN: Joe here from RES can talk
15 about their approach to handling drain tile.

16 Ray, I don't know if you want to address
17 drain tile as a professional tiler here?

18 MR. TUCKER: No. Go ahead.

19 MR. GRENNAN: Hello. My name is
20 Joe Grennan, I'm the permitting director with RES.
21 And I just heard that question about drain tiles and
22 it's come up now twice. And our plan is to have a
23 local contractor there on site as we're doing our
24 construction to fix the drain tiles when they're
25 broken.

1 So we'll have a team there if we do break
2 one and, you know, it might happen because there's a
3 lot out here. We have mapped all the drain tiles to
4 the best of our ability at this point so we're
5 trying to avoid them. But if we do -- if we do end
6 up breaking one, we're going to fix it right there
7 on the spot, it's not going to sit around for days
8 or weeks, we're going to take care of it right away.

9 MS. BJORKLUND: Thank you.

10 There's a few more hands in the back.

11 MR. HARTMAN: Before we move on, there's
12 another component of your question regarding lease
13 agreements. And I know that companies typically --
14 when you assign wind rights to them you do a number
15 of things.

16 One, they want to be sure you're not
17 planting trees to grow in front of the windmills or
18 build silos there. Now, my experience in that has
19 been that sometimes -- and this has been years now
20 since it's occurred -- there's a landowner who
21 wanted to do something on his land completely in
22 conformance with the terms of the lease agreement.
23 The company kind of dragged their feet on giving him
24 the release he needed, or getting him the paperwork
25 he needed to proceed with his permitting. The

1 on the request as far as how close the structure
2 would be and how good the information is, how long
3 it takes to get the information and evaluate it, I
4 would say a matter of probably a couple weeks would
5 be the worst case.

6 MS. BJORKLUND: I saw a couple of hands
7 here in the center. Who had a comment?

8 UNIDENTIFIED: Back here (indicating).

9 MR. SCHLICHTER: I don't know about the
10 rest of the people that have --

11 MS. BJORKLUND: Can you state your name?

12 MR. SCHLICHTER: Norb Schlichter, again.

13 MS. BJORKLUND: Thank you.

14 MR. SCHLICHTER: That now, as we're
15 getting our easements and so on, people came around
16 and, of course, you know, you ran through it and
17 looked through it. And of course, I don't know, I'm
18 just speaking on my behalf, but, you know, I had a
19 lot of questions about the other wind projects that
20 I just asked nonchalantly and they said, well, by
21 all means, of course, yes.

22 Tile was one of them, of course. Can we
23 use our own contractor who we choose to use? No
24 problem, by all means. The placing of the roads so
25 that they're working correctly, no problem.

1 Whatever works best for you within a certain means,
2 we'll work on that.

3 Now, here, tonight, you guys are saying
4 that you're abiding by what the people that actually
5 sold the easement to us, so to speak, had to say at
6 that time, right? You're agreeing that we can use
7 tile -- whoever we want for tile, fix it, you're --
8 no problem, right?

9 MS. BJORKLUND: Larry, do you want to
10 help me out with that one? I think some of it has
11 to do with a particular agreement that has been
12 entered into between the landowner and --

13 MR. HARTMAN: A quick one, which may not
14 be satisfactory. Our permit just specifies that the
15 tile be repaired --

16 MS. BJORKLUND: Yeah.

17 MR. HARTMAN: -- at any point in time
18 during the life of the project. Now, do I care who
19 does the tile replacement? Not really.

20 Although, Ray, do you want the business?

21 The fact is that I -- you know, I don't
22 know what they have in their easement agreement
23 regarding that. I don't know what you've been told
24 regarding that. It's been my experience that to
25 date I'm not aware of it as having been an issue.

1 That's not to say that it's not or it couldn't be
2 going forward. I'm just not -- I don't have any
3 experience where it has been a problem to date.

4 Now, again, that's not to say there's not
5 a problem and I don't know how many drain tilers
6 there are out there.

7 Ray, do you have a lot of competition?

8 MR. TUCKER: Just remember that you need
9 to be insured to be able to do that and also meet
10 the standards of the company.

11 UNIDENTIFIED: I think the question here
12 was addressed toward RES, not you.

13 MR. HARTMAN: Yeah. No, I understand. I
14 just wanted to answer it from my point, I was going
15 to turn it over to Joe or Paul to provide it from
16 their perspective.

17 MR. GRENNAN: Yeah. I mean, if there's a
18 specific drain tiler that you would like to use, you
19 know, we'll work with you on that. I think our
20 immediate concern was to get it fixed as quickly as
21 possible if we break it, so that's why we wanted to
22 have somebody there ready to fix it when it gets
23 broken. But if there's a, you know, specific person
24 that you'd want to use, we will work with you on
25 that. That's not an issue.

1 MS. BJORKLUND: There were -- there's a
2 couple more hands up. Again, please state your name
3 for the record.

4 MR. HARTMAN: She had a question earlier,
5 why don't we give her her turn.

6 MS. STENZEL: Diane Stenzel. This is for
7 the PUC and any applicants. How many follow-up
8 studies have you guys performed regarding the
9 residents who live under these wind turbines and
10 what's the data that you collected on all those
11 studies?

12 MS. BJORKLUND: We do -- excuse me. We
13 do ask the applicants if they do any studies that
14 are not required by us to submit them to us just so
15 we can review them and learn from them.

16 Sometimes -- Larry, I think sometimes
17 studies are required and sometimes not. Can you
18 elaborate on that?

19 MR. HARTMAN: As part of our permit,
20 there are a number of studies and reports that are
21 required in terms of follow-up. Have we sent out
22 surveys to landowners after the fact, no. That's
23 something we're looking at. We've had a lot of
24 concerns about wind farms in, oh, I guess newer
25 areas where they haven't had them to date.

1 Just by way of background, Minnesota, I
2 don't know how many wind farms we have, we have
3 about 1,800 megawatts of wind energy currently
4 installed in the state of Minnesota since 1995. So
5 we have a very good kind of working laboratory out
6 there for survey research, measurement studies, and
7 the PUC's beginning to look into some of those. And
8 I personally have a background in survey research
9 and I think it would be fascinating to go out and do
10 some follow-up studies and it's something we're
11 trying to work on.

12 Was there something you specifically had
13 in mind?

14 MS. STENZEL: No. I was just concerned
15 because I read in the Post-Bulletin there was only
16 three complaints. And there are -- do you guys know
17 that there are gag orders out there and
18 confidentiality clauses?

19 MR. HARTMAN: Well, you know, the thing
20 about gag, and I keep hearing it, for some reason.
21 Now, what they ask you to do is not discuss the
22 financial terms or conditions. I'm not aware of any
23 other restrictions above and beyond that.

24 I might add that every permit we've
25 issued to date, there is a permit complaint report

1 procedure in that permit. Every landowner gets a
2 copy of that permit. It's about 30 pages long, I
3 think it's written in fairly clear English.

4 There are four attachments on the back.
5 One would be a site map, one is a complaint
6 reporting procedure that the company has to
7 implement and all landowners receive a copy of that.
8 The permit will have our 800 number in there and
9 also filing complaints electronically.

10 If complaints are filed with the company,
11 they are required to forward them to us the 15th of
12 every month. And over the years, again, I think
13 I've had probably less than five complaints on wind
14 farms and I said this afternoon, most of those have
15 been about speeding concrete trucks.

16 MS. STENZEL: I know North Dakota has
17 changed the law where you have to have that be on
18 the first page of all the contracts because
19 otherwise, to dig through an 80-document report, you
20 know, it's hard to find.

21 Plus, I also called and I didn't get any
22 response. The person I talked to did not ask for my
23 name, did not ask my concerns, it was a total no
24 dialog on my part.

25 MR. HARTMAN: Who did you call?

1 MS. STENZEL: The PUC, about a year ago.

2 MR. HARTMAN: Generally, calls on wind
3 are forwarded to me and I don't remember receiving
4 any. I know we did have one complaint down here
5 last year, so I went out and did some noise
6 monitoring. I've been meaning to do some follow-up
7 work on that just to speak to the lady and I don't
8 know -- I don't recall the name at this point in
9 time. But again, if I get a complaint, I generally
10 follow up on it as soon as I can.

11 MS. BJORKLUND: Okay. Thank you.

12 Is there somebody else -- yeah.

13 MR. MAKI: Troy Maki. What's been the
14 average impact to the real estate values? And did I
15 understand you right, the project would begin
16 potentially December 2012?

17 MS. BJORKLUND: That's their target
18 commercial operation date.

19 So in terms of property values, I'm not
20 aware of any studies that have been done that have
21 drawn the conclusion that a wind farm lowered the
22 property values. That's not to say that they don't,
23 I really don't know.

24 It's an area that is difficult to
25 isolate, cause and effect on property values,

1 because there's so many other things that go into
2 the property values. I mean, obviously, right now
3 the economic crisis that we're in, the recession has
4 had a very dramatic impact on property values.

5 It's difficult to say what is the cause,
6 but we will take your concerns into consideration as
7 we move forward with this permitting process. I
8 heard that quite a bit in the afternoon meeting as
9 well, and it's part of the record and we'll try to
10 address it as best we can.

11 But I'm not aware of any studies out
12 there that have drawn that conclusion.

13 MR. MAKI: Well, might I suggest you do
14 one?

15 MR. HARTMAN: Can I respond? There
16 are -- last fall, the property value study came out.
17 It was performed by Lawrence Livermore Laboratories
18 of Los -- Berkeley, Los Alamos, I believe, and it
19 was kind of a nationwide look at wind farms.

20 The author on the study was Ryan Wiser,
21 and it might have been funded through a Renewable
22 Energy Laboratory grant. It's probably the first
23 comprehensive study. And, again, what I'd encourage
24 you to do -- I think the main conclusion was there
25 wasn't any indication that wind farms have affected

1 property values.

2 I've also seen a study in Wisconsin that
3 claims otherwise. And in looking at that study I
4 thought the methodology was flawed in some of the
5 assumptions they made. I encourage you to go to the
6 web and you can download it if you just type in
7 Lawrence -- Ryan Wiser, wind energy property values,
8 the study will probably pop up. And that's been the
9 most comprehensive study that I think looked at wind
10 turbines in, I want to say, 17 states or something
11 like that.

12 Now, again, a lot of the other states, in
13 California, a lot of those wind farms are built in
14 fairly isolated areas, Tehachapi and San Geronio,
15 which is outside of Palm Springs, the Altamont,
16 pretty low residential areas. Texas, basically no
17 people in west Texas. You get a permit from a judge
18 in a day, all he has to do is sign a piece of paper.

19 If you look at the wind farms in
20 Minnesota, Iowa, it's probably fairly typical of
21 what you find in rural -- excuse me -- rural areas,
22 typically maybe four homes per square mile or
23 something like that. A little bit further out east
24 you get more, you know, as you get parcels that are
25 a lot smaller. So the numbers are different

1 depending on where you're at.

2 And originally some of those studies
3 were -- I think there might have been an early study
4 in Minnesota, but there hadn't been enough farms
5 that had been sold or real estate transactions to
6 indicate anything one way or the other. But I
7 encourage you to just go online and look up some of
8 those studies and read it and draw your own
9 conclusion.

10 MS. BJORKLUND: Thank you, Larry, for
11 that addition.

12 MS. LANTOW: Carol Lantow. I'm speaking
13 as a Realtor. I don't think the property values per
14 se would be affected. However, I do think that the
15 setback is really important and I think any windmill
16 should not be any closer to any house unless the
17 property owner agrees. If they don't agree, I don't
18 think it should be any closer than one mile.

19 MS. BJORKLUND: Well, regardless of --
20 they have to abide by the noise standard, and that's
21 in the rules. And right now our setback is a
22 minimum of 500 feet and/or the noise standard.
23 Typically that requires the setback to be further
24 than 500 feet.

25 MS. LANTOW: I think that should be

1 changed.

2 MS. BJORKLUND: Well, they're looking at
3 those issues at this very moment, I'm sure. So the
4 PUC is looking at the issues and I think the
5 legislature is, too.

6 RES Americas has volunteered to abide by
7 a 1,500 setback where feasible. I don't think
8 they're promising it absolute, but they're
9 certainly -- that's their goal. And it sounds like
10 they're going to be meeting that with all or close
11 to all cases, the 1,500-foot setback, which is more
12 than your average other wind developer, that they're
13 committing to. So --

14 MR. HENDRICKS: Why has the state not
15 accepted the recommendation by the Minnesota
16 Department of Health that is .6 miles from a
17 residence?

18 MS. BJORKLUND: Can we get your name?

19 MR. HENDRICKS: Mark Hendricks
20 (phonetic).

21 MS. BJORKLUND: Thank you. Well, the
22 Commission does have an open docket on those issues.
23 Again, with the detail, I think that the half-mile
24 setback that people commonly refer to is not
25 something that the study universally is applying in

1 every situation.

2 And, Larry, do you want to help me out
3 with specifically where that half-mile --

4 MR. HARTMAN: If you carefully read that
5 study, it will indicate that, you know, at distances
6 up to a half a mile. It's not -- it didn't
7 recommend that as a -- what a setback should be.

8 If you also look at the study, a lot of
9 it goes to, you know, low frequency noise, health
10 effects, and if you carefully read the study you
11 will find that the word scant evidence was used. In
12 other words, there just isn't much foundation for
13 that yet at this point in time based on what we
14 know. Some other studies have come out, same
15 conclusion. And if you go to the web, you'll find a
16 whole range of studies telling you -- you can
17 probably find a study that conforms with your
18 belief, and I'll just let it go with that.

19 MS. BJORKLUND: Okay. Yeah. We have
20 another comment in the middle.

21 UNIDENTIFIED: Related to the -- excuse
22 me. Related to the public health impact on these
23 wind farms, you said that there is scant evidence.
24 Is that based on the fact that these wind farms are
25 relatively new and therefore the time since exposure

1 hasn't been able to actually be adequately measured
2 to do a proper study, or is it that the evidence is
3 not there? When were some of the earliest wind
4 farms developed, I guess is one question. So do we
5 have adequate follow-up to really assess some of the
6 long-term complications?

7 MR. HARTMAN: I'm going to answer. Well,
8 California had a lot of wind farms in the '80s, a
9 lot of them were built more as a -- because they
10 never produced any energy. If you look at the
11 conventional modern-day wind turbines, and let's go
12 back to, say, the mid-'90s. Now, Europe typically
13 has larger turbines than we have, and I think the
14 health department study, there's a study done in
15 England that looked at 194 different wind farms.
16 They found problems with I think it's an isolated
17 two or three wind farms and most of the complaints
18 were related to those wind farms.

19 There was another significant study done,
20 I forget the name of the author, it's a Dutch study,
21 about one particular turbine. And I believe that
22 turbine was on a 100-meter tower and there's
23 probably some miscalculation on the wind shear, so
24 it was leading to over-speeding which created some
25 noise issues.

1 The other problems, I'd say alleged
2 problems, have surfaced more recently. And again,
3 you can find studies out there taking any number of
4 points of view. You know, some of them, let's say,
5 are peer-reviewed. Others are not peer-reviewed,
6 might fall more under the area of what's considered
7 grey literature.

8 So you can find some legitimate, I guess,
9 disagreements out there. Again, we're -- on
10 probably some of the recent wind farms we've
11 permitted we are going to do more noise monitoring
12 and study. We did do some noise studies back in
13 '98, '99, a couple of the first wind farms in
14 Minnesota. And those studies were done by a firm
15 called Hersh Acoustical out of California. Those
16 studies are somewhat dated now, given the turbine
17 size then. We've had a number of advances in
18 turbine design, blade design. If you consider noise
19 as being wasted energy, the blade design is much
20 more efficient now so that noise is now converted to
21 energy.

22 So we're going to be doing some
23 additional studies on future wind projects, on
24 noise, looking at noise levels and different
25 frequencies and under different considerations.

1 MS. BJORKLUND: Other comments?

2 Yes.

3 MR. SCHLICHTER: Yeah. Norb Schlichter,
4 again. Does a 2.3 make more noise than a 1.5?

5 MS. BJORKLUND: You know, that's a good
6 question. Not necessarily, it depends on the
7 turbine manufacturer.

8 MR. SCHLICHTER: If that's the case, then
9 why wouldn't you just put in less turbines?

10 MS. BJORKLUND: You know, I think when it
11 comes to choosing turbines, I think there's a lot of
12 factors that goes into it. One is turbine
13 availability and pricing, so there's a lot of
14 factors to consider.

15 MR. HARTMAN: There are some Siemens 2.3
16 turbines down on the High Prairie I project owned by
17 Florida Power and Light, I think those have a
18 93-meter rotor diameter on them, if I remember
19 correctly. I have a GE 1.5, which are the
20 predominant turbine used in Minnesota.

21 I don't know the status of the new
22 Siemens turbines. One of the reasons that the GE
23 turbine is more commonly used is that they have a
24 cold weather package. I don't know that the Siemens
25 turbine has a cold weather package and it also

1 affects your energy production. Granted, it's a
2 smaller turbine so you need more to get to the
3 equivalent capacity.

4 MS. BJORKLUND: Yes.

5 MR. ALLEN: David Allen, again. I'm just
6 wondering how much of this contracting is going to
7 come out of state, or what it's going to do for
8 local people?

9 MS. BJORKLUND: I think RES Americas can
10 talk about that. But it does generate jobs and
11 there's, what, several hundred construction jobs at
12 the time and then the O and M positions.

13 MR. JOHNSON: Typically for construction
14 for this project you're going to see between three
15 and four hundred people during the construction
16 phase, and then during long-term operation that
17 starts out with the -- in most cases we do five
18 turbines, the turbine provider has a warranty
19 obligation as well as doing the operation and
20 maintenance services for the first two to five
21 years.

22 So they staff the site with two to three
23 people, and then alongside of them the owner of the
24 project also staffs it so they can pick up all of
25 the information they need. So that once the

1 warranty and operation period is done from the
2 turbine suppliers' responsibility, the long term O
3 and M of that facility is usually carried forward by
4 those technicians that have now been spending two to
5 five years with the turbine suppliers.

6 So depending upon the size of the
7 project, you'll see two to four people per
8 50 megawatts, so six times that for 300 megawatts.

9 MR. ALLEN: But how much of that is going
10 to be local?

11 MR. JOHNSON: Most of that's --

12 MR. ALLEN: There's got to be something
13 that says how many local -- is there something that
14 says they've got to keep local contractors as much
15 as possible?

16 MR. JOHNSON: Well, the technicians, that
17 really is a function in the industry right now of
18 what schools are providing wind technicians and how
19 close they are to those areas.

20 MR. ALLEN: Right. But who's building
21 these roads and stuff?

22 MS. BJORKLUND: I think when you --

23 MR. ALLEN: I know Ray Tucker and he can
24 fix the tiles, but you've got other local
25 contractors who could bring their dozers in and make

1 the roads and keep them busy instead of bringing
2 them from out of state.

3 MR. HARTMAN: That question was asked
4 this afternoon and I'll try to give a -- I'll try to
5 answer the question again. There are several large
6 firms that do perhaps the bulk of the wind farm
7 construction in the U.S. Two of those firms are
8 Minnesota-based, Blackner out of Avon, which would
9 be northwest of St. Cloud, and Mortinson, which is
10 based in Golden Valley.

11 Now, Mortinson I know has done most of
12 the work for enXco throughout the state. Typically,
13 I know that Mortinson now has 200 people full time
14 on their staff. When they come out and do a project
15 they might be the EPC contractor. So the total
16 staff might be comprised of ten to 15 percent of
17 Mortinson staff, and typically they try to hire the
18 other 80, 85 percent locally depending on
19 qualifications, which goes to, you know, roads,
20 hauling gravel, cement, electric -- well, you know,
21 workers. I know that when they built the Grand
22 Meadow I, I know that some of the electricians were
23 out of the Twin Cities and I talked to a few who
24 were local also. It depends on what's out there for
25 jobs, and for union jobs it depends on what area

1 they're assigned to.

2 So typically -- you know, I can't say my
3 experience has been the bulk of the work force tends
4 to be local rather than from other areas if there
5 are qualified people in the area.

6 MR. GRENNAN: Just to add on to that, RES
7 is also a constructor of wind farms, and our
8 approach is to try to use local contractors when we
9 can. So, yeah, there will be some opportunities for
10 local contractors.

11 I think what Paul was saying earlier,
12 there are some technical aspects, especially with
13 the turbines, where unless you have the training
14 it's not going to be a fit. But the roads, tiles,
15 just some of those type things, yeah, definitely we
16 will be looking for local contractors.

17 MR. HARTMAN: Can you operate a 600-ton
18 crane? Not qualified.

19 UNIDENTIFIED: Not yet.

20 MR. HARTMAN: Training starts tomorrow.

21 MS. BJORKLUND: Somebody wants to comment
22 here in the yellow plaid shirt.

23 MR. REINARTS: Yeah. My name's
24 Peter Reinarts, R-E-I-N-A-R-T-S. I work with a
25 large group of people from Olmsted County that are

1 concerned with the development that's going on with
2 wind. Our organization is called Olmsted Wind Truth
3 and our website is OlmstedWindTruth.com, for anyone
4 who's interested in looking at that.

5 I have a cold, excuse me.

6 I'd like to just comment on three things.

7 One would be the certificate of need, the --

8 UNIDENTIFIED: Can you speak up?

9 THE WITNESS: Pardon?

10 UNIDENTIFIED: Can you speak up?

11 MR. REINARTS: Okay. I would like to
12 comment on the certificate of need just briefly, the
13 environmental review, and then, thirdly, this docket
14 that you spoke of earlier that the MPC -- PUC
15 currently has open.

16 First on the certificate of need. As you
17 commented earlier, any company that wishes to build
18 a power plant greater than 50 megawatts needs to
19 demonstrate need. And the reason they have that, if
20 you recall back in the '70s when people were
21 building power plants like crazy, we overbuilt, and
22 of course who pays for that is the customer. So
23 there's a reason they have to show need. They also
24 have to show that it's cost-effective.

25 Now, I've read the RES certificate of

1 need and they definitely do not show need. There's
2 a question if GRE does purchase the energy, maybe.
3 But if GRE does not purchase the energy there's no
4 need.

5 Now, I -- the reasons are too complicated
6 to discuss here, but I will follow up with some
7 writing that will explain --

8 MS. BJORKLUND: Please do.

9 MR. REINARTS: -- our position. And also
10 they failed to show the cost-effectiveness, so they
11 failed on both parts of that. And we'll follow
12 through with our cost estimates as well as our
13 reasons why they don't show the need.

14 On the environmental review, one thing
15 people may not be -- excuse me -- aware of is that
16 all the environmental reviews used to be performed
17 by the Minnesota Pollution Control Agency. They
18 have a lot experts there, a lot of bright, bright
19 people who do this all day and all night long. This
20 is their life's ambition, being environmentalists.

21 Well, some time ago, some politician in
22 St. Paul thought it was a wise idea to take that
23 responsibility away from the MPCA, Minnesota
24 Pollution Control Agency, and give it to the Public
25 Utilities Commission instead. I think that was a

1 big mistake, because the Public Utilities
2 Commission, although they are very bright people as
3 well, their forte is not environmental review.

4 As a result, the study, the ER that was
5 done for the Bent Tree project had a lot, lot of
6 holes in it and did not answer the concerns of
7 several people. So what I would like to do is I
8 will also provide you recommendations for the
9 environmental review to help satisfy some of these
10 questions that were raised in the Bent Tree project.

11 My goal is, I want to be able to --
12 excuse me just a second.

13 I want to be able to go to my neighbors,
14 the people in our group, and when they come to me
15 and say, you know, Pete, I'm concerned about this
16 wind turbine being 1,500 feet from my house, I can
17 look them in the eye and I can tell them I worked
18 with the Department of Commerce, I got -- I looked
19 at the environmental review, and you're going to be
20 okay, don't worry about it. I cannot say that about
21 Bent Tree.

22 MS. BJORKLUND: If I could just add
23 something on the -- clarify on the -- who's doing
24 the environmental review. It was the Environmental
25 Quality Board that did the environmental review.

1 And in 2005 the legislature, as part of streamlining
2 the process, moved it to the Office of Energy
3 Security. And that's our staff and it's essentially
4 the same staff, they literally just picked up the
5 department and moved them.

6 MR. REINARTS: Well, actually the MPCA
7 personnel do the environmental review and the EAW
8 and the EIS. The Environmental Quality Board just
9 approves it and reviews it. So they're not actually
10 doing the work, the work is being done by the people
11 down in the trenches.

12 Thirdly, the docket that's already open,
13 you guys are well aware of that.

14 MS. BJORKLUND: Yes.

15 MR. REINARTS: People here may not know
16 about it, but because of the Bent Tree project and
17 the problems with that the PUC has asked to open a
18 docket to address some of these issues. They had
19 Minnesota Department of Health perform this study,
20 and there was a meeting on February 1 when the PUC
21 agreed with the public that there are a lot of
22 unanswered questions yet that have to be dealt with.
23 So they have kept this docket open, they're going to
24 address this.

25 What I would like to do is ask that you

1 hold off on doing your environmental review for this
2 project until the results of that study are done,
3 because the last thing we need is another bad
4 project. You know, people don't remember the good
5 ones, they remember the bad ones. And it's in
6 everyone's best interest, whoever supports wind but
7 agrees that they need to have a good project, so I
8 would encourage you to hold off on your
9 environmental review until that activity is done.

10 Finally, to clear up a couple
11 misstatements, earlier someone had asked about
12 eminent domain. And although the RES does not have
13 eminent domain, there's additional transmission that
14 needs to be built for this. That is being built by
15 Southern Minnesota Municipal Power Agency, Xcel
16 Energy, and Dairyland Power. They do have eminent
17 domain, so that stuff can be put through your farms
18 without you having to say anything about it.

19 MS. BJORKLUND: That's a separate
20 project, though.

21 MR. REINARTS: No, that's part of this
22 project as well.

23 MS. BJORKLUND: But it has its own
24 regulatory process.

25 MR. REINARTS: That's right, it has its

1 own regulatory process, but they do have eminent
2 domain. And the only reason they're putting that in
3 is for this wind project. That's the only reason
4 that power line needs to go in there. If it wasn't
5 for wind, they wouldn't need it.

6 There was also some comments about gag
7 orders. And, Larry, you know as well as I do, you
8 were involved with the Bent Tree project, there was
9 plenty of information filed there by Carol Overland
10 that shows that there were gag orders with some of
11 the people there.

12 Also, there was a comment on Minnesota
13 Department of Health's study, Larry, I think you
14 said it was up to a half a mile. That's a little
15 misleading because they did say under certain
16 circumstances that can travel over a half a mile.

17 Finally, anybody who is interested in
18 joining our organization, I encourage you to contact
19 us, again, on OlmstedWindTruth.com. And I think
20 that is it. Thank you.

21 MS. BJORKLUND: Thank you.

22 MR. HARTMAN: Thank you. With respect to
23 being accurate, I'd like to point out a couple
24 things. First of all, the MPCA does not have
25 permitting authority for a power plant. They do the

1 air emissions work, they do not do the site location
2 work. They're two different things.

3 The PCA does the air monitoring. The
4 EQB, which was created in 1973, was vested with the
5 authority to site all power plants above
6 50 megawatts, it might have been 80 megawatts then
7 and lowered to 50. And they have the authority for
8 all transmission lines over 200 kV, since then
9 that's been lowered to 100 kV.

10 The PCA still has permitting authority
11 for thermal facilities, gas plants, coal plants,
12 things like that. They've never had it for energy
13 facilities, per se, in terms of siting.

14 MR. REINARTS: What's your definition of
15 an energy facility?

16 MR. HARTMAN: Power plant.

17 MR. REINARTS: You just said that they do
18 have thermal facilities.

19 MR. HARTMAN: Air quality permits, air
20 quality only.

21 MR. REINARTS: They also do EAWs,
22 correct, and EISs?

23 MR. HARTMAN: They participate in the
24 environmental review process or EISs on power plants
25 also. But again, that permitting authority now

1 resides with the PUC, it's never been with the
2 Minnesota Pollution Control Agency.

3 I've been at the state since 1975 and I
4 know where I work, so I'm pretty sure of what I'm
5 saying.

6 MR. REINARTS: Well, you're contradicting
7 yourself.

8 MR. HARTMAN: No, I'm not contradicting
9 myself.

10 MR. REINARTS: The EIS and EAWs are done
11 by the MPCA; is that not correct?

12 MR. HARTMAN: No. What I said --

13 MR. REINARTS: Who does the EAWs, then?

14 MR. HARTMAN: EAWs are -- have --
15 typically for energy facilities have been the
16 responsibility of the EQB. Now, again, we don't do
17 EAWs on energy facilities anymore because most of
18 them are above 50 megawatts. If it's above 50
19 megawatts it takes a site permit from the Minnesota
20 Public Utilities Commission.

21 Prior to it be being transferred to the
22 EQB and since the siting legislation was established
23 in 1973, the permitting authority to determine where
24 power plants are built, whether it's a gas plant
25 like Pleasant Valley, Lakefield Junction, some of

1 the others, that authority has been with the EQB,
2 now with the PUC.

3 Again, PCA participates and they do the
4 air quality monitoring as to limits or emissions on
5 pollutants, you know, SOX, NOX, and all the other
6 stuff that goes with thermal facilities.

7 MR. REINARTS: I don't mean -- we'll,
8 let -- I don't mean to get into a debate with you
9 here.

10 MR. HARTMAN: No. I just want you to be
11 sure when you go back and you talk to people, you
12 can tell them an accurate story.

13 UNIDENTIFIED: The PCA sure killed that
14 plant down to Preston.

15 MR. HARTMAN: Pardon?

16 UNIDENTIFIED: The PCA, in spite of
17 having PUC approval, killed that tire burner down in
18 Preston.

19 MR. HARTMAN: They're a different
20 permitting agency, so they have a role in the review
21 process, and that's their entry.

22 MS. BJORKLUND: Other comments,
23 questions?

24 MR. HARTMAN: Excuse me, Paul.

25 MR. JOHNSON: Again, thank you for your

1 interest and your questions and comments. Just a
2 couple of clarifications as far as RES Americas is
3 concerned.

4 The two transmission projects that you
5 have mentioned are not a part of the Pleasant Valley
6 project. We do have a route permit that we're
7 intending to file here in the next couple of weeks
8 that is associated with the substations and
9 transmission lines for this project. And neither
10 one of those have anything to do with a new line
11 with GRE or Xcel. They are standalone requests for
12 this project, so that is not a correct statement.

13 MR. REINARTS: Well, without those lines,
14 actually you cannot build your wind plant.

15 MR. JOHNSON: You're right. There are
16 very large projects that the CapX program throughout
17 the entire state and the Upper Midwest that are
18 meant --

19 MR. REINARTS: In order to --

20 MR. JOHNSON: Excuse me for a second, let
21 me finish. That are meant to address reliability
22 issues of the overall transmission system. And
23 that's where the utilities involved -- I used to
24 work with a utility until about a year ago, and I
25 can tell you that reliability and safety is very key

1 to the overall transmission system. So that's the
2 primary driver for a lot of this transmission.

3 And in terms of a specific project like
4 we're here talking about tonight, it's the
5 transmission that's needed just to connect that
6 project to the grid at large, is what we're talking
7 about.

8 MR. REINARTS: That's correct. But your
9 interconnection agreement with MISO requires these
10 additional lines to be built in order for you to
11 deliver your energy to Great River Energy.

12 MR. JOHNSON: That is yet to be
13 determined. Some of those upgrades are very minimal
14 and they do not require transmission lines. They
15 require cap banks or other very low-cost kinds of
16 improvements. And there are other projects that
17 require very substantial upgrades, you're correct.

18 But that has not been defined yet for
19 this project. There is a wide range of solutions
20 that MISO can require for any project to be
21 interconnected, that is true.

22 Another comment I wanted to make in terms
23 of gag orders is that RES Americas does not have gag
24 orders in its agreements nor does it promote such.
25 I just wanted to be clear on that, that is not how

1 we do business.

2 MS. BJORKLUND: Thank you, Paul.

3 There is a gentleman over here who's had
4 a question for a while.

5 MR. HORBEI: My name's Tim Horbei,
6 H-O-R-B-E-I, and I have a question with that
7 transmission project. It runs on top of the
8 proposed western route of the Xcel Energy project,
9 so you're saying that you're going to send the power
10 down one direction to the substation and then back
11 up on totally separate lines, separate poles, so
12 everyone along that route will have two sets of high
13 transmission power lines?

14 MS. BJORKLUND: Okay. I'm going to
15 attempt to answer this.

16 MR. HARTMAN: I think I can give you a
17 partial answer, I'll have RES answer it also.
18 They've had some discussion with Xcel about putting
19 their line on some of the same structures that Xcel
20 would put their line on. Again, I don't know the
21 details of it.

22 Paul or Joe?

23 MR. HORBEI: So first you say it's a
24 totally separate project and then now you're saying
25 you're working with Xcel.

1 MS. BJORKLUND: No. No.

2 MR. HARTMAN: No. I'm not saying that.
3 What I'm saying is that there two different
4 transmission lines. The companies, recognizing
5 that, are trying to work with one another to see if
6 they can build both transmission lines on the same
7 structures through a sharing agreement, so there
8 will only be one set of poles rather than two
9 separate poles. For what distance that is, I don't
10 know, but I'll let RES answer that.

11 MR. JOHNSON: At this point, we are
12 giving consideration to a very short segment of our
13 north route, it's about a mile and a half long along
14 680th Avenue. And because of the preexisting
15 request that went in early last fall by Xcel for a
16 161 kV line that had various routes proposed in that
17 permit, their preferred route goes along 680th
18 Avenue straight south because they want to get to
19 the Pleasant Valley substation where Great River
20 Energy has its gas-fired power plant. So for one
21 very short section of one and a half miles, that
22 parallels the route that we're proposing for the
23 north route.

24 A couple things about that -- actually,
25 several things. One, if you were to do that, we

1 could put higher poles, fewer poles in that area so
2 we'll actually end up with less poles than if we ran
3 two separate lines or even individual lines down
4 that route.

5 Another one is that because it's higher
6 poles we can span in such a way as to avoid any
7 visibility or very limited visibility of those poles
8 in front of the homesteads along that route. So it
9 gives us more flexibility for placing the poles in a
10 location that is not right in front of someone's
11 house, but gets it out of view. Plus, being higher
12 structures, probably another ten to 15 feet higher,
13 those conductors will be further out of view and
14 higher as well. So that's something we are giving
15 consideration to.

16 Plus, the right-of-way required is no
17 different than what we initially proposed for our
18 line, 80 feet wide, and that's plus or minus 40 feet
19 on either side. And that's dictated by the National
20 Electric Safety Code. So by putting a circuit on
21 one side that's ours, the proposed 138 kV line, and
22 Xcel for that one short section of one and a half
23 miles, putting their circuit on the other side, you
24 don't need any more than what we initially proposed
25 for one line, which is 80-foot-wide right-of-way.

1 And a lot of that is going to be right along the
2 side or whatever the safest distance is we can get
3 to within the right-of-way of that township road,
4 680th Avenue.

5 So it minimizes -- as opposed to having
6 to go an alternate route and put two separate lines
7 in that are going to take a lot more area and
8 probably add, I would think, if my recollection is
9 correct, about eight to ten miles of additional
10 line, we can now solve that by sharing this one and
11 a half miles of corridor. So that's something we're
12 thinking about.

13 MS. BJORKLUND: Thank you.

14 Other comments or issues you think should
15 be included as part of the record as we move forward
16 in the regulatory project?

17 Way in the back -- oh, and right over
18 here.

19 MS. WEBER: My name is Deja Weber, that's
20 D-E-J-A, and I live on 670th Avenue. My worry here
21 is not about some of the issues that have been
22 raised, but I live out here, you don't, he doesn't.
23 I have to live with these turbines.

24 I stepped out on my deck the other night
25 and all I could hear was a loud hum. I moved from

1 St. Paul to the middle of the country so that I
2 wouldn't have to deal with the interstate in my back
3 yard, so that I could raise my children here where I
4 think it has a higher quality of life and where I
5 didn't have to worry about the electrical power
6 lines going through my back yard.

7 Now, I moved here before the wind
8 turbines came and now you're telling me they're
9 going to follow me here, and say I have to suck it
10 up and that I just need to go with the flow because
11 they're catching up with me here.

12 So my issue is this: They're ugly, they
13 make noise, they blink at night, and there are power
14 lines that we need to be worried about. I am a
15 small landowner. I only have 20 acres, so the
16 farmers who own the thousands of acres around me are
17 the ones making the decisions about if the turbines
18 go here. What about us? It affects my property
19 value as well as my quality of life.

20 MS. BJORKLUND: Yes. Thank you so much
21 for your comments. This is exactly the -- these are
22 exactly the type of issues we're going to look at.
23 And this is not a predetermined process, this is an
24 open process. You have a lot of opportunity to
25 comment, this is one of them.

1 We take all your comments into
2 consideration and we don't know what the outcome is
3 going to be.

4 MS. WEBER: Well, you said there were
5 only three complaints before, but I didn't know
6 where to send my complaints. So where do I send it
7 and how do I find people who care and want to send
8 them with me?

9 MS. BJORKLUND: Yes. There is 1-800 --
10 am I on the mic? Okay. Now I am. There is a 1-800
11 number.

12 Larry, do you even know that number?

13 MR. HARTMAN: It's on my business card,
14 which I ran out of. If I can't find a card with it
15 on, I will find a way of getting it to you, if you
16 give me your phone number or e-mail address.

17 MS. WEBER: (Nods head.)

18 MS. BJORKLUND: I think there was
19 somebody else in the back who had a comment, too.
20 Actually, there's one in the front -- two in the
21 front, two in the back.

22 MR. CHRISTIAN: I'm Jim Christian. And I
23 was wondering, are these manufactured in the United
24 States or overseas?

25 MS. BJORKLUND: The GE turbine is

1 manufactured in the United States. The Siemens does
2 have a plant in Iowa that's pretty new. I don't
3 know specifically where these turbines are going to
4 be coming from. I don't know if RES Americas have
5 nailed it down, but there are -- both turbines under
6 consideration have plants in the United States.

7 MR. CHRISTIAN: Good Morning America had
8 an article on it a while back and they say like 80
9 percent of this stuff has come from China, and that
10 doesn't really help us a lot.

11 MS. BJORKLUND: Yeah. Some of it is,
12 and -- but a lot of it is manufactured here in the
13 United States as well.

14 MR. CHRISTIAN: Thank you.

15 UNIDENTIFIED: Siemens is German.

16 MS. BJORKLUND: They are German, but they
17 do have plants -- it's not unlike a car manufacturer
18 where, you know, the car might be based in a
19 different country but they have plants here where
20 they're manufacturing the cars in the United States
21 or they have parts coming in from a different area.

22 Yeah. So they have -- different
23 components perhaps might be coming in from different
24 parts of the world. It's, in my opinion, similar to
25 cars. But there are plants in the United States,

1 there are -- I don't think it's working, is this on?
2 It's not.

3 MR. HENDRICKS: My name is
4 Mark Hendricks.

5 Who keeps the developer accountable for
6 the location of these turbines to the homes? Who's
7 making sure these are located the specified distance
8 that they're supposed to be?

9 MS. BJORKLUND: That would be our staff.

10 MR. HENDRICKS: You're coming down here
11 at every placement of every turbine to check the
12 footage, you're pulling the tape on these?

13 MS. BJORKLUND: Larry, do you want to
14 take that one?

15 MR. HENDRICKS: And can someone dispute
16 the location of the turbine once it is sited? If it
17 is too close, how would they do that?

18 MR. HARTMAN: A multi-part question;
19 multi-part answer. Typically, if a permit is
20 issued -- once a permit is issued, before they
21 build, we have a preconstruction meeting and we get
22 all the proposed plans for the project.

23 Just recently, a while ago, I had plans
24 that showed the noise profiling, it showed the
25 setback from all the homes on aerial photos with

1 noise contour lines, elevation lines, and the
2 three-by-five wind access buffer on it, also.

3 So we asked the companies to demonstrate
4 compliance with the setbacks from the permit at the
5 preconstruction meeting or before. Typically, and I
6 can't speak for RES, it's been my experience that
7 the developers will generally work with the
8 landowners on final turbine location.

9 If there is an issue, again, it's not to
10 say it's going to be moved 500 feet, maybe 30, 40
11 depending. But, again, I think I'll let RES respond
12 to that as to how they handle that themselves.

13 And before I finish, I'd like to say over
14 the years, and if you do this long enough you try to
15 get a little wiser. We've had a number of wind
16 farms that have been sold. A lot of times when I
17 maybe work with a developer I work with a group of
18 people in the permitting phase. Construction, a
19 different group of people. Sometimes A doesn't tell
20 B and then the operational people are also
21 different.

22 What we've done is we now have a
23 preconstruction meeting. We also have a
24 preoperation meeting so that the compliance
25 guidelines are established so there's an

1 institutional memory. So if the project's sold, the
2 next person knows what the requirements are.

3 So we are trying to kind of close what
4 might be perceived as loopholes to provide for
5 additional accountability.

6 MR. HENDRICKS: Is that in the contract
7 or the --

8 MR. HARTMAN: It's in our permit.

9 MR. HENDRICKS: Yeah.

10 MR. HARTMAN: I don't care about the
11 contract, they go by the conditions in our site
12 permit.

13 Now, the question about the easement,
14 I'll let somebody from RES address that. We
15 don't -- we aren't involved with the review of the
16 easement agreements.

17 MR. JOHNSON: In terms of the location,
18 complying with setbacks and so forth, we are engaged
19 in doing what they call an ALTA survey, which is to
20 go out and verify by survey the actual property
21 lines, and then to do an exact survey distance for
22 setback purposes as well as from occupied dwellings.

23 So it's not an estimate, it's an actual
24 survey measurement that we do. And we do that as a
25 company because we need to do that to confirm for

1 our construction planning, which RES -- as Joe
2 mentioned earlier, we will be constructing and
3 overseeing the construction of this project.

4 So based on survey information that is
5 exact and checked, and we invested in a local
6 consultant here out of Rochester is doing that for
7 us and they know the site quite closely. And then
8 our construction crew will use that to determine the
9 planning to make sure we are in compliance with what
10 we say we're going to do in terms of the setback
11 requirements for permit as well as the requirements
12 of our easement agreements with landowners.

13 MR. HARTMAN: I might add that our permit
14 requires that all those documents be filed with the
15 eDocketing system, so they'll all be available
16 online if that time comes. One of the problems with
17 the survey, the files tend to be so large they're
18 difficult to download, but we require that file size
19 be less than ten megabytes on eDockets.

20 So, you know, we'll work on that. And
21 eDocket, I guess, gets better as we go forward, but
22 all that documentation is eFiled on line and
23 available for anybody that wants to look at it.

24 MS. BJORKLUND: Yes. And the information
25 on how to use eDockets is in the notice that went

1 out as well. So there's instructions on how to use
2 that and to get that information.

3 You also, once again, can be put on our
4 mailing list and will be notified of such things.

5 MR. PETERSON: Yeah. Wayne Peterson
6 here. I have a question and a little point I'd like
7 to make here. Some of us currently live right in
8 the vicinity of the wind turbines that -- in a
9 current farm here going already.

10 UNIDENTIFIED: It's hard to hear you.

11 MR. PETERSON: I'm sorry. Yeah. Some of
12 us currently live in an operating wind turbine farm
13 here, and we are experiencing noises, shadow
14 flicker, and some other health issues periodically.
15 What assurances do you have to prevent similar
16 issues in your current project?

17 And a comment I would like to make here
18 also, I hope that those of you who may be
19 considering voluntarily participating in this
20 project will please think long and think hard,
21 taking into all consideration, including your
22 neighbors, before signing any long-term contracts.

23 EnXco's John Zimmerman, he's the manager
24 of Deerfield Wind Project in Vermont, he probably
25 summed it up best during a meeting in Lowell,

1 Vermont, that wind turbines do not make good
2 neighbors.

3 MS. BJORKLUND: Well, thank you so much
4 for your comments. Those comments are -- you know,
5 it's something we consider as we move forward in
6 this regulatory process. You know, we want to site
7 these responsibly, and that's what we're tasked
8 with, so.

9 Others comments?

10 We have one in the middle and one over on
11 the side there (indicating).

12 MR. MACHIN: Todd Machin, again. If I
13 read their certificate of need correctly, they're
14 asking for exemption from some items normally
15 required by a regular utility.

16 MS. BJORKLUND: Yes.

17 MR. MACHIN: And one of those exemptions,
18 they state quite frequently because of the Minnesota
19 renewable energy standard that it will allow
20 Minnesota utilities to meet that standard. But they
21 don't have a PPA yet.

22 MS. BJORKLUND: Yes.

23 MR. MACHIN: And they are negotiating
24 with GRE, maybe, but they can sell this to wherever
25 they want, in whatever part of the country.

1 MS. BJORKLUND: Yes.

2 MR. MACHIN: They're going to get the
3 certificate of need potentially before they have a
4 PPA that they just asked for exemptions for.

5 MS. BJORKLUND: Well, the exemptions that
6 are typically given to wind developers in the
7 certificate of need process are things they cannot
8 answer because they are not a utility. There is
9 information that only utilities possess, wind
10 developers don't possess, they simply cannot answer.

11 The statute and the rules were developed
12 in the '70s before wind farms ever came into place,
13 and so they were developed for utilities. And they
14 don't quite fit with this process, and that's why
15 typically wind developers seek those exemptions.

16 And in regards to your point about the
17 renewable energy standard and need, and there is
18 something in statute where if they do have a PPA
19 with a Minnesota utility, then they can be exempt
20 from certificate of need if they get a determination
21 from the Public Utilities Commission that, yes, this
22 does meet renewable energy, they don't have to go
23 through the certificate of need process.

24 That is not the case here, that is why
25 they're going through the certificate of need. So

1 have big wind developers putting in big projects
2 that are non-CBED and CBED, and to that end, too,
3 there is not a size threshold to be CBED, it's all
4 about community benefits in CBED.

5 But the two -- I think the legislature
6 and vision can coexist. Certainly with the
7 renewable energy standard there's a need for a lot
8 of wind in Minnesota.

9 I hope that answers your questions, but
10 we will definitely have your comment as part of the
11 record and consider those as we move forward with
12 this process.

13 Yes.

14 MR. GOSSMAN: Joe Gossman. I'm just kind
15 of curious as far as with the distance of the
16 setback, where does the 1,500 come in and why is
17 that a magic number? Does that mean that we're not
18 going to get any shadow flicker, we won't hear any
19 noise or any of that?

20 MS. BJORKLUND: Well, they do have to
21 meet the noise standard.

22 MR. GOSSMAN: What is the noise standard
23 as far as -- is it measured in feet?

24 MS. BJORKLUND: It can be measured per
25 feet depending on the turbine manufacturer. I

1 believe in this case 1,500 feet would likely cover
2 the noise standard.

3 MR. GOSSMAN: So at 1,500 feet from my
4 house, I will not be able to hear it?

5 MS. BJORKLUND: Well, you would not -- I
6 can't say you would not be able to hear it, I can
7 say it would not be violating the noise standard set
8 by the state.

9 MR. GOSSMAN: Okay. And then as far
10 as -- does that 1,500 feet, like the setting of the
11 turbines, do they set those in a certain situation
12 or whatever to minimize shadow flicker on a person's
13 place, or do they simulate a program that would show
14 the shadow flicker that you're going to get across
15 your place?

16 MS. BJORKLUND: Well, that's a really
17 good comment and question because, again, as part of
18 this public record they will be looking at this and
19 if a lot people are concerned with flicker, we might
20 go ahead and ask the applicant to provide more
21 information on their flicker analysis so we can
22 determine these things.

23 MR. GOSSMAN: And then as far as the
24 shadow flicker on the roads -- because I know I
25 drive through it every day coming in and out,

1 depends on the time of the day. The shadow flicker
2 on the road makes me sort of nauseous at the angle
3 it crosses the road in front of my car, personally.

4 And then also as far as the distance to
5 the road as far as the ice sheen or the ice
6 discharge from the blade, they've got to get ice on
7 them; do they not?

8 MS. BJORKLUND: They can ice up.

9 MR. GOSSMAN: And then when they do start
10 at a certain speed, how far can that ice go?

11 MS. BJORKLUND: Well, that's why we have
12 the 250-foot required setback from all roads, to
13 address that issue. And at this point, that's felt
14 that that's an adequate distance to prevent ice
15 throw on the roads.

16 MR. GOSSMAN: And then as far as property
17 reclassification, like now everybody's property is
18 like zoned on ag base, will that property be
19 reclassified as commercial?

20 MS. BJORKLUND: That's something that we
21 can't answer. I mean, that's something that the
22 counties would have to discuss with you -- can
23 discuss with you and you can bring it up with the
24 counties. And the counties are more than -- they're
25 more than welcome and we encourage them to

1 participate in this process as well.

2 MR. GOSSMAN: And then the distance of
3 right-of-way road on your property, I mean, if the
4 turbine's 1,500 feet, what's the distance the
5 right-of-way road has to be from our property line?

6 MS. BJORKLUND: The right-of-way road
7 from your property line?

8 MR. GOSSMAN: To access the wind turbine.

9 MS. BJORKLUND: Can you repeat that?

10 MR. GOSSMAN: The distance -- the
11 right-of-way road that they put in -- the access
12 road -- I guess, sorry, the access road that they
13 have to get to your turbine, what is the distance
14 that has to be from your property?

15 MS. BJORKLUND: That -- I think that
16 that's worked out in the siting process and worked
17 out with the applicant.

18 Larry, do you have anything to add on
19 that?

20 MR. HARTMAN: Again, I'm trying to
21 envision your situation. If you're an adjacent
22 landowner, the question is how close can the road be
23 to your property?

24 MR. GOSSMAN: Yeah.

25 MR. HARTMAN: I'm assuming we don't have

1 any setbacks on access roads. Typically, you know,
2 again, as I mentioned earlier, sometimes the
3 counties might prohibit or limit the number of
4 driveway cuts on a given mile of road, which might
5 determine where it is.

6 I know some county engineers have
7 determined they'd like the access road at a
8 different point in case they have plans to widen the
9 roads, haul pigs on it or something else. So, you
10 know, again, I don't know that there's a good
11 answer, there's not a set number in feet that I'm
12 aware of.

13 Typically, I don't think you're going to
14 find, unless landowners agree that -- participating
15 landowners, maybe you want to split where the road
16 is, but I'm thinking developers might prefer to have
17 it on one side versus the other side versus, you
18 know, encumbering two landowners with encumbrances
19 on their abstract or title.

20 MR. GOSSMAN: So they could potentially
21 run it right by my -- right on my property line,
22 that's all I'm asking.

23 MR. HARTMAN: Well, it depends on where
24 the turbine is and where they're going to -- how
25 they're going to access the turbine. It depends if

1 there are other turbines either upwind or downwind
2 as to where that road comes in. If you've got
3 isolated turbines, you might have, you know,
4 isolated access roads. If you have strings of
5 turbines, you'd probably have one ingress and one
6 egress along that string of turbines. And the
7 turbines will typically be offset or off-pitch from
8 the roads just for efficiency's sake and moving
9 equipment.

10 Did you have an answer regarding roads?
11 And, again, I think that's the first time I've ever
12 had that question. So I don't have a better answer
13 and again, it's never been raised as an issue.

14 Paul or Joe, do you have a way you deal
15 with that as a company?

16 MR. JOHNSON: Well, I think Larry kind of
17 alluded to a couple of things. When we drove the
18 site last August, we found where the actual field
19 access points were and we tried to capitalize on
20 that as well as recognizable roads that were on
21 section lines or fence lines. And so we try to
22 identify areas that would be more suitable or more
23 likely to actually access the locations where the
24 proposed turbine sites were.

25 In the course of doing that, we

1 eliminated probably a couple dozen access points
2 that would be new access points and replaced those
3 with existing field access locations. And we
4 reduced the amount of roads by about ten to 12 miles
5 because we looked at better ways to optimize access.
6 And consistent with what people were saying here, is
7 that if you have a broken string that's going east
8 or west, we have six or seven turbines of the lank
9 (phonetic) area and going all the way across, you
10 can actually go all the across a section or two and
11 just have basically an east or westerly road as
12 opposed to just going in and then coming back out.
13 That's more efficient.

14 We try to limit the amount of onesies and
15 twosies, that's how we refer to it, because it's
16 very expensive to put roads in for just one or two
17 turbines in one area and it creates a lot more
18 disruption, so we tried to eliminate that as much as
19 we could, which, again, as I think with some people
20 you talked to here today from RES, we're looking at
21 ways to further optimize and improve the efficiency
22 of our layout. And once we center on a given
23 turbine, that will help us even further, if that
24 helps you.

25 MR. HARTMAN: Paul mentioned a point I

1 want to raise, too, and this is a note of caution
2 for everybody here. I hear the term fence line.
3 And a lot of times people, depending on how long
4 that fence has been there, a lot of people think the
5 fence line might be on the property line. That's
6 not always the case. And oftentimes when you do a
7 survey you find out that maybe the fence line is on
8 your property, your neighbor's property, and they've
9 been farming your land or their land or vice versa.

10 So that could be an issue. If you aren't
11 sure where your property line is versus the fence
12 line, again, that's the type of thing that could
13 show up in a survey, and then it's kind of late for
14 it to come to light. So, just as a caution, you
15 folks be aware of the distinction between fence line
16 versus property line because they're not synonymous
17 in all cases.

18 You raised a question about icing, also.
19 Typically, icing hasn't been a major problem in
20 Minnesota. It tends to be more a glaze icing or a
21 light icing. Modern turbines aren't designed to
22 operate or function when they're loaded down with
23 ice so they typically shut down.

24 For example, I was at a presentation a
25 couple of weeks ago, and for the Grand Meadow wind

1 farm I think they had 11 days of icing, it was
2 either this year or last year, which is kind of a
3 higher number in places like Ontario or down in
4 Iowa, they get more icing than we typically get here
5 and, again, it would be a lighter, glaze icing.

6 So when the turbines stop and they start
7 up they tend to pitch and yaw a little bit, so that
8 tends to drop the ice. Years ago, I know some of
9 the turbines didn't function that way. I remember
10 one day I was on Buffalo Ridge and the workers had
11 parked their pickup truck underneath, and when they
12 came out of the turbine the cab was crushed because
13 a large chunk of ice had fallen onto it.

14 So, again, when there's icy conditions,
15 typically workers don't go into the area, and
16 typically they're far enough way from where people
17 are that icing shouldn't be a problem. Most of your
18 glaze icing, your light icing might go a couple
19 hundred feet and it's going kind of fracture into
20 small, little, tiny, tiny, tiny pieces.

21 We just haven't had much experience with
22 new turbines as to where icing has been a major
23 problem. But if it is, they don't function or
24 operate because of the load restrictions, or at
25 least on the blades in terms of loads.

1 Yes.

2 MR. NORD: My name is Nathan Nord.

3 MS. BJORKLUND: What was your name?

4 MR. NORD: Nathan Nord. Just to say, I'm
5 for wind energy. I live out here and I'm worried
6 about the impact, too. I've been in the electrical
7 field for a long time, 18 years. 15 years ago we
8 were being told by our inspectors that we're going
9 to have an electricity shortage in the state, we
10 need new sources of electricity.

11 With that being said, may I suggest to
12 RES that a lot of these promises, like time frames
13 for the tiles to be fixed, time frame for the
14 paperwork to be back if a landowner wants to make
15 improvements, time frame for roads to be repaired,
16 setbacks, all that kind of stuff, be put into maybe
17 one customer satisfaction type deal, in writing.
18 Because I'm sure you guys are all good guys, but I
19 know these people down here. I grew up in southeast
20 Minnesota. Words, promises, you know, they want to
21 see it in writing. That maybe relieves some of the
22 anxiety people have with this project.

23 And the one thing I want to say, I've
24 heard all the nightmare stories about the other wind
25 projects. Like I said, I grew up in southeast

1 Minnesota. Please, please, please, don't try to
2 work around these people because these people will
3 catch everything, and just work with us. Work with
4 the people and don't try nothing slippery and
5 everything will go good and you'll get a good
6 project.

7 Good luck.

8 MS. BJORKLUND: Thank you for your
9 comments.

10 Any other questions or comments? Going
11 once -- oh, one in the first row here (indicating).

12 MR. HARTMAN: Where?

13 MS. BJORKLUND: The first row, in the
14 blue shirt.

15 MR. HORNING: Glen Horning. What, if
16 any, are the setbacks for livestock?

17 MS. BJORKLUND: I don't believe that was
18 addressed in the site permit -- I mean the site
19 application, excuse me. And that's something that
20 we can consider in developing the draft site permit,
21 that's exactly the type of feedback we're looking
22 for and issues to consider.

23 I don't know if RES Americas wants to
24 comment on that. Otherwise, that's something we
25 could look at. I don't know what type of evidence

1 is out there.

2 MR. HORNING: So there is no setback for
3 livestock, that's not taken into consideration?

4 MS. BJORKLUND: I do not believe it was
5 part of the application.

6 Correct, Paul?

7 MR. JOHNSON: No setback that I know of.

8 MS. BJORKLUND: No. No. And I don't
9 know if it's ever happened before. Larry probably
10 has the institutional history of that.

11 MR. HARTMAN: I do. I'm not aware of any
12 setbacks that we've had. Now, when you say
13 livestock, it depends on what part of the state
14 you're in. I know out in Buffalo Ridge livestock
15 for a lot of people was grazing cattle. Obviously,
16 the cattle could graze around the wind turbines with
17 no deleterious effects to my knowledge, nor have I
18 heard complaints from landowners about that.

19 If you're talking about confined
20 livestock, whether it be poultry, pigs, you know,
21 something else, we haven't had setbacks. In fact, I
22 think that's the first time I've ever heard that
23 question, so congratulations.

24 Was there a certain livestock you're
25 concerned about?

1 MR. HORNING: Just curious.

2 MR. NASHLE: What happens if somebody
3 builds a barn and you guys put up all these wind
4 turbines and then somebody wants to build a barn or
5 expand, what kind of hoops do you have to jump
6 through to be able to build?

7 MS. BJORKLUND: Could you state your name
8 for the record?

9 MR. NASHLE: Shane Nashle (phonetic).

10 MS. BJORKLUND: Okay. Typically if you
11 want to construct something after the wind turbines
12 are put up, it's part of the -- it's dealt with in
13 the -- in the agreement of what steps you need to
14 take and what you need to do.

15 MR. NASHLE: So, I mean, as a young
16 person or whoever is on their own, who do they have
17 to contact in order to -- I mean, we're obviously --
18 each person is an individual trying to get ahold of
19 some big company to get an answer to build
20 something.

21 MS. BJORKLUND: Yes. Well, I think this
22 was addressed earlier, too, and they said if you
23 needed to make an alteration to your property and
24 you have a turbine on your property and have an
25 easement on your property, they would do their best

1 to respond in a couple weeks, within a couple weeks
2 at the latest.

3 MR. HARTMAN: Coming back to the question
4 on livestock, we've had this as a standard condition
5 in our permit for years and it's primarily because
6 of grazing cattle. Whereby some companies provide
7 gates, other companies don't. Where you do have
8 cattle and you need a gate, you're provided access
9 to that gate with your own key in case it needs to
10 be locked. It doesn't have to be locked. We also
11 provide for continuity in electric fence if there's
12 a gate there, so that there wouldn't be any
13 disruption to an electrical fence if you're keeping
14 cattle in.

15 MS. BJORKLUND: I think there was a
16 question --

17 MR. BAMLET: I'm Bill Bamlet. I heard
18 some talk of setbacks for roads and setbacks for
19 structures and potentially planning a structure on
20 your property that you have an easement. What I
21 didn't think I heard what the setback was for an
22 adjacent property, though.

23 MS. BJORKLUND: The adjacent property,
24 they have to do a three-by-five rotor diameter
25 setback. So typically it's usually five rotor

1 diameters from the property line.

2 MR. GOSSMAN: So that could be less than
3 the potential 500 feet to a building?

4 MS. BJORKLUND: No. No, no, no. Oh, no.
5 It can't be that.

6 MR. GOSSMAN: I don't know what the rotor
7 diameter is.

8 MS. BJORKLUND: Yeah. The rotor diameter
9 is for the GE -- can you help me out on the stats
10 and what the rotor diameter is for the GE and the
11 Siemens, Paul?

12 MR. JOHNSON: It's about 270 and 310.

13 MS. BJORKLUND: 270 and 310, and
14 multiply that by five. So there are definitely
15 setbacks to nonparticipating property owners. It's
16 certainly something we address in the rules and it's
17 certainly something we address in the permit, most
18 definitely.

19 Any other questions?

20 Do you have a question, sir?

21 MR. GOSSMAN: Yeah, Joe Gossman. What
22 the gentleman was talking about machine sheds, I
23 kind of had talked earlier about the whole planting
24 trees --

25 UNIDENTIFIED: I can't hear you.

1 MR. GOSSMAN: Could we get denied a
2 permit to build a machine shed because of a wind
3 turbine in the area?

4 MS. BJORKLUND: That would be the county
5 that would be issuing that permit for you, so that's
6 something -- a process we're not involved with.

7 MR. GOSSMAN: So --

8 MR. HARTMAN: I think the question is
9 would RES deny him the opportunity to build a
10 machine shed.

11 MS. BJORKLUND: Oh.

12 MR. JOHNSON: In the process of securing
13 an option easement agreement, in that agreement it's
14 defined what the setback of the turbine site needs
15 to be. And so you'll know that very early on in the
16 process when you're planning where to put
17 structures, barns, sheds, whatever you want to do,
18 so you'll know that upfront before you sign the
19 agreement.

20 MR. GOSSMAN: So that wouldn't have any
21 effect on somebody that -- a landowner that doesn't
22 have a turbine going on their property. All right.

23 MS. BJORKLUND: Okay. Thank you.

24 Other questions?

25 UNIDENTIFIED: How close are you going to

1 be putting the towers if you get, I don't know, the
2 wind rights, I guess, if you get a nice ridge line,
3 how close would you be putting tower to tower?

4 MS. BJORKLUND: Tower by tower is a
5 three-by-five rotor diameter spacing, and depending
6 on the prevailing winds and nonprevailing winds.

7 UNIDENTIFIED: And tower manufacturer?

8 MS. BJORKLUND: Yeah.

9 UNIDENTIFIED: If you put in a smaller
10 tower, they can --

11 MS. BJORKLUND: They can be closer
12 together, obviously, because the rotor diameter is
13 smaller.

14 Other questions, comments about the
15 process, anything?

16 Well, I want to thank you all for your
17 time. This was very important. Again, there will
18 be another -- you have time to comment until the
19 15th on this particular phase here of the permitting
20 process. You will have additional time to comment
21 on the site permit, once we actually -- if the draft
22 site permit is issued by the PUC then you'll have
23 ample time to comment on that.

24 There will be another public meeting on
25 the site permit and a public hearing on the

1 certificate of need. Chances are those will be the
2 same meetings at the same time, just to save time.
3 But there is plenty of opportunity to talk, we're
4 just at the beginning of the process right now.

5 So, thank you very much.

6 (Public comment concluded.)
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