

In The Matter Of:
LIVINGSTON COUNTY ZONING BOARD OF APPEALS

November 17, 2014

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LIVINGSTON COUNTY ZONING BOARD OF APPEALS
CASE SU-7-14
PLEASANT RIDGE WIND ENERGY PROJECT

November 17, 2014
6:00 PM

Pontiac Township High School
Pontiac, Illinois

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Michael Cornale, Acting Chair
Howard Zimmerman
Rich Kiefer
John Vitzthum
Joan Huisman
Diana Iverson

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1 (Commencing at 6:15 p.m.)

2 MR. SCHOPP: We're going to go ahead and
3 begin tonight. The zoning case being reviewed this
4 evening is Livingston County Zoning Case SU-7-14,
5 the Pleasant Ridge Energy LLC/Pleasant Ridge Wind
6 Energy Project. This meeting is taking place at the
7 Pontiac Township High School, 1100 Indiana Avenue in
8 Pontiac, Illinois.

9 This is the beginning of the Livingston
10 County Zoning Board of Appeals public hearing or
11 hearings in regard to Livingston County Zoning Case
12 SU-7-14, which is a request for the approval of an
13 application for a special use permit under Chapter
14 56, Article VIII, Wind Energy, Code of Ordinances,
15 Livingston County, Illinois, for the construction
16 and operation of a wind energy conversion system
17 project consisting of approximately 136 wind
18 turbines, a substation/substations, a temporary
19 construction laydown yard area, below ground and
20 above ground electrical lines and other associated
21 facilities.

22 It is planned to continue these hearings
23 for the next two nights at this facility with
24 additional hearings beyond those also being

1 anticipated. At the conclusion of this meeting
2 tonight, we'll go ahead and discuss those future
3 meetings, the starting time, the tentative future
4 meeting dates.

5 For right now, for those interested in
6 speaking at this hearing, at the front as you came
7 in there was a table in the commons area which we
8 had forms if you would like that you were able to
9 sign or fill out that identify your interest in
10 participating in this hearing. These forms are
11 available tonight and will also be available at
12 future continued hearings. We plan on using these
13 forms to assist us to proceed in this hearing in an
14 orderly manner.

15 I will now take the roll call of those
16 present. Michael Cornale.

17 MR. CORNALE: Here.

18 MR. SCHOPP: John Vitzthum.

19 MR. VITZTHUM: Here.

20 MR. SCHOPP: Richard Kiefer.

21 MR. KIEFER: Here.

22 MR. SCHOPP: Diana Iverson.

23 MS. IVERSON: Here.

24 MR. SCHOPP: Howard Zimmerman.

1 MR. ZIMMERMAN: Here.

2 MR. SCHOPP: Joan Huisman.

3 MS. HUISMAN: Here.

4 MR. SCHOPP: And Gibs Nielsen? This
5 evening sitting at the front table are Mr. Blakeman
6 who is the attorney this evening, he's representing
7 the Zoning Board of Appeals, and to my right, Mr.
8 James Griffin who's an attorney representing
9 Livingston County. The chairman of the Livingston
10 County Zoning Board of Appeals is absent this
11 meeting as he is recusing himself from this hearing.

12 So at this time we're going to move
13 forward with a motion for the Zoning Board of
14 Appeals to nominate an acting chairman, so could we
15 have a motion for that please.

16 MS. HUISMAN: I motion to nominate Mike
17 Cornale as acting chairman.

18 MR. SCHOPP: Do we have any other
19 nominations this evening? Motion to close the
20 nominations?

21 MR. ZIMMERMAN: So move.

22 MS. HUISMAN: Second.

23 MR. SCHOPP: All those in favor of closing
24 nominations, say aye.

1 ALL MEMBERS: Aye.

2 MR. SCHOPP: All those opposed? All those
3 in favor of having Michael Cornale as acting
4 chairman, say aye.

5 ALL MEMBERS: Aye.

6 MR. SCHOPP: All those opposed? Okay. So
7 acting chairman this evening will be Mike Cornale.
8 Do you have any comments, Mike?

9 CHAIRMAN CORNALE: All right. I'd
10 certainly like to welcome everybody here this
11 evening. Appreciate your patience as we were
12 working through this Power Point. Our role as the
13 Zoning Board of Appeals, what we do is we'll take
14 the applicant's testimony, we want to hear from
15 interested parties. Throughout that process, we'll
16 hear both sides. We try to remain very transparent
17 and open throughout this process. From that, we'll
18 -- our final action will be a recommendation to the
19 county board. So we are not the final decision on
20 this. The county board is. I want to put that out
21 there. Certainly thanks to the high school here.
22 Cell phones, if you guys have your cell phones, work
23 on silencing them, try to keep them down this
24 evening.

1 My understood time line, we're looking at
2 tonight we're going to go until about nine o'clock.
3 We're going to take some breaks in between. We can
4 only sit here so long. These chairs aren't as
5 comfortable as your chairs. The applicant would
6 like to speak this evening all evening and tomorrow
7 night about half the night. Then we'll open it up
8 to interested parties for questions of the
9 applicant. This is our fourth time through this
10 process and every time we learn a little bit more.
11 So we may fumble through a few things, but we will
12 do our best to get through everything and we will
13 try to hear everyone, and certainly fill out the
14 forms if you're interested in speaking.

15 With that, I'm going to let our counsel
16 speak or Chuck.

17 MR. BLAKEMAN: My name is Tom Blakeman.
18 I've been assigned to --

19 AUDIENCE VOICE: It's not on.

20 MR. BLAKEMAN: Can you hear me? My name
21 is Tom Blakeman. Can you hear me now? Okay, third
22 time is the charm. My name is Tom Blakeman. I've
23 been assigned to provide counsel to the Zoning Board
24 of Appeals, often referred to as the ZBA. I wish to

1 review the Livingston County Zoning Board of Appeals
2 guidelines and procedures for the siting of wind
3 energy conversion systems. These guidelines and
4 procedures are available for review on the county
5 website or a copy can be made available. I have
6 several with me tonight if anybody wants a copy.

7 As far as the guidelines go, a court
8 reporter will be present at every hearing and voting
9 meeting in order to provide a transcript. The
10 initial hearing shall occur on the date and time set
11 forth in the published notice, which is tonight.
12 All subsequent hearings shall be scheduled at the
13 conclusion of a meeting by the ZBA and announced at
14 the end of each meeting.

15 The chairman or, in this case, the acting
16 chairman of the ZBA shall preside at the hearings
17 and shall have authority to control the hearing
18 proceedings and may set time limits on the testimony
19 of witnesses or the statements of interested
20 parties. He shall also schedule the appearance of
21 witnesses and require their appearance on particular
22 dates and may restrict witnesses' testimony for
23 failure to appear at the scheduled time. He may
24 also adopt reasonable time limits on the questioning

1 of witnesses by the applicant and the interested
2 parties and take such other actions deemed necessary
3 by the chairman in order to conduct the hearings in
4 an orderly, efficient and professional manner.

5 The hearing before the ZBA is not bound by
6 the technical rules of evidence. The ZBA may
7 exclude relevant material and unduly repetitious
8 testimony and any other testimony or evidence that
9 is, in the discretion of the chairman and the ZBA,
10 not pertinent or relevant to the proceedings. ZBA
11 members shall be permitted to question a witness at
12 any time during the hearings, and ZBA members may
13 request additional information or evidence be
14 presented to them during the hearing. The hearing
15 may be held by less than a quorum of the ZBA.

16 The following hearing procedure shall be
17 followed. All witnesses, including anyone who
18 wishes to address the ZBA and any interested
19 parties, shall be sworn. This includes those
20 persons who wish only to make a statement. All the
21 witnesses shall testify under oath. The applicant
22 shall present testimony and evidence first. All
23 applicant's witnesses shall testify and then remain
24 present for questioning by the ZBA and other

1 interested parties until such time as the witnesses
2 are excused by the chairman.

3 After the ZBA members have questioned
4 applicant's witnesses, other interested parties
5 shall be able to question the applicant's witnesses
6 and evidence. Interested persons shall identify
7 themselves by name and address and shall ask
8 questions in the following order. First,
9 representatives of units of local government,
10 including school districts, interested parties
11 represented by attorneys, the attorneys shall
12 identify themselves and who he or she is
13 representing in their address, other interested
14 parties, Livingston County staff and consultants.

15 After the applicant has made its
16 presentation and all parties have completed their
17 questioning of the witnesses, then interested
18 parties who have filled out a form with Jane, Mr.
19 Schopp's assistant who's out in the commons area,
20 will be allowed to present evidence and testimony to
21 the ZBA in the following order. First, units of
22 local government, including school districts;
23 second, interested parties represented by licensed
24 attorneys; third, other interested parties; and

1 finally, Livingston County staff and consultants.
2 As each party presents its testimony and evidence,
3 they shall be subject to questions from the parties
4 in the following order: the ZBA, applicant, units
5 of local government, other interested parties
6 represented by licensed attorneys, other interested
7 parties, and Livingston County staff and
8 consultants.

9 If you have exhibits to produce, if
10 possible, please have at least 15 hard copies so
11 that the ZBA staff and attorneys and other
12 interested parties can have a copy. If it is not
13 possible to have hard copies, we'll do the best we
14 can to make sure that each exhibit is properly
15 identified for purposes of the record.

16 After every party, including applicant,
17 has presented their witnesses and been
18 cross-examined or questioned, there will be rebuttal
19 by the applicant, followed by surrebuttal by all
20 interested parties. And after everybody has
21 presented everything, there will be a presentation
22 by -- of county staff reports and comments followed
23 by closing statements by the applicant.

24 During closing statements, no new

1 information will be introduced when the closing
2 statement is made. After that, there will be
3 closing statements of interested parties in the same
4 order as presented for purposes of evidence and
5 exhibits, in other words, units of local government,
6 interested parties, by attorneys, et cetera.

7 All right. In order for a party to
8 participate in a closing statement, they must have
9 testified under oath during the proceedings. There
10 will be a rebuttal closing statement by applicant
11 and then the ZBA will close the hearing. Now, let
12 me just say this. These guidelines and procedures
13 are not locked in stone. The chairman of the ZBA in
14 the interest of fairness has the discretion to
15 deviate from these standards.

16 The ZBA will debate and vote on the
17 application. The ZBA may in its discretion set up a
18 future meeting date for those deliberations and
19 voting. The vote of the ZBA is not a final decision
20 but a recommendation to the Livingston County board.
21 The ZBA shall report a finding of facts and a
22 recommendation as to whether the county board should
23 deny the application, grant the application, or
24 grant the application subject to special use

1 conditions. The county board may deny the
2 application, grant it or grant it subject to special
3 conditions. The county board has another option and
4 could refer the matter back to the ZBA for further
5 considerations.

6 Does anybody have any questions?

7 MR. LUETKEHANS: Phil Luetkehans on behalf
8 of United Citizens for Livingston County. One of
9 the things you mentioned, Mr. Blakeman, was closing
10 statements, interested parties must have testified
11 previously to be able to make a closing statement.
12 I assume that's not true for attorneys.

13 MR. BLAKEMAN: That's true.

14 MR. LUETKEHANS: Thank you.

15 AUDIENCE VOICE: Mr. Blakeman, can you
16 repeat the question please?

17 MR. LUETKEHANS: Just give a ruling.

18 AUDIENCE VOICE: We can't hear a single
19 word he said.

20 MR. BLAKEMAN: Okay, he asked a question
21 whether the attorney had to be sworn to testify in
22 order to make a closing statement and I said no
23 because he's here in a representative capacity on
24 behalf of other people.

1 MR. SCHOPP: Okay, we're going to
2 introduce some county exhibits for the record at
3 this point in time. County Exhibit 1 is the
4 Application For County Siting Approval for Pleasant
5 Ridge Wind Energy Project, Invenergy, Livingston
6 County, Illinois, August 20th, 2014. County Exhibit
7 2 is Pleasant Ridge Energy, LLC, Supplement 1,
8 October 15th, 2014. County Exhibit 3 is the
9 Pleasant Ridge Wind Energy Project, Birds and Bats
10 Materials, November 6, 2014. County Exhibit 4 is
11 the Pleasant Ridge Wind Energy Project, Figure 1-3,
12 Proposed Project Site Plan with the proposed
13 locations of the batch plant, construction staging
14 area, laydown area, and O and M building area.
15 That's November 7th, 2014. County Exhibit 5 is
16 Livingston County Regional Planning Commission,
17 September 5th, 2014, correspondence and press
18 release to inform landowners in the area of the
19 Pleasant Ridge Wind Energy Project about the special
20 use application being filed. County Exhibit No. 6
21 is the Pleasant Ridge Certificate of Publication of
22 the notice of hearing published in the Pontiac Daily
23 Leader October 28th of 2014. County Exhibit No. 7
24 is a file with a list of property owners in the area

1 of the proposed Pleasant Ridge Wind Energy Project
2 of whom were sent notices of this hearing beginning
3 this evening. And County Exhibit 8 is
4 correspondence from the Illinois Department of
5 Natural Resources dated September 8, 2014, with
6 reference to the Invenergy Wind Energy, LLC,
7 Pleasant Ridge Energy Facility, Livingston County
8 Endangered Species Consultation Program, EcoCAT
9 Database Review 1410117.

10 And at this time I believe we have a
11 motion that we're going to have Mr. Griffin address
12 now.

13 MR. LUETKEHANS: Before you do, is there a
14 microphone or something? Is it possible to get
15 copies of those exhibits? We have not been sent
16 those at all. We have Exhibits 1 and 2 and I
17 believe I have the exhibit from the IDNR, which is
18 Exhibit 8, but 3 through 7 were submitted to you and
19 not submitted to us.

20 MR. SCHOPP: Okay, we will provide them to
21 you.

22 MR. LUETKEHANS: Okay, before the
23 testimony starts or -- I mean not this second, but
24 before Mr. Blakeman[sic] starts with any of these

1 witnesses, obviously I'd like to have it in front of
2 me. If he supplied something to you, I'd like to
3 have it, that's all.

4 MR. SCHOPP: Sure.

5 MR. GRIFFIN: Good evening, this is Jim
6 Griffin. As Mr. Schopp said, an attorney
7 representing the county here. There is a motion to
8 dismiss that has been filed by the United Citizens
9 of Livingston County. I want to advise the zoning
10 board that there is no procedure under the zoning
11 board's ordinance or state law for the zoning board
12 to dismiss an application. As Mr. Cornale explained
13 earlier, the zoning board's obligation is to
14 consider the application, the evidence submitted by
15 all parties, and then make a recommendation to grant
16 or deny the application to the county board.
17 Certainly the sufficiency of the information
18 submitted by the applicant may be a part of the
19 consideration the zoning board gives, but there's no
20 authority for the board to dismiss an application.
21 The only authority the zoning board has is to make a
22 recommendation to the county board on the
23 application.

24 MR. LUETKEHANS: Mr. Griffin, I understand

1 your ruling, not that I actually agree with it
2 obviously, but I would also ask that my motion now
3 include the four new exhibits that I did not know
4 were filed that were filed sometime in November,
5 which I think are County Exhibits 2, 3, 4 and maybe
6 5, since I haven't seen them, I'm not exactly sure,
7 but I would ask that my motion be amended to include
8 that. Thank you.

9 MR. BLAKEMAN: Mr. Chairman, based upon
10 the argument or the statement of Mr. Griffin, I
11 would recommend that the ZBA deny the motion to
12 dismiss.

13 MR. BLAZER: May I be heard on that for
14 just a moment, Mr. Blakeman? Can you hear me?
15 There we go.

16 Just very briefly, and I know you denied
17 the motion, but I just want to state for the record,
18 Mr. Luetkehans and I have spoken at length over the
19 last week and a half or so. He had submitted a
20 letter to us on the 7th requesting ten different
21 categories of information that frankly aren't even
22 called for by your ordinance which we have agreed to
23 provide him. I made it clear to him that if he
24 wanted any other information that we had supplied to

1 the county or that we had available, including our
2 exhibits, he was more than welcome to them, we would
3 provide them to him in advance. We had a
4 conversation Friday. All he asked me for were three
5 maps.

6 So I recognize he may not have seen these
7 items for whatever reason, but the bottom line is he
8 had every opportunity to get that information from
9 me if he wanted and he didn't avail himself of the
10 opportunity.

11 MR. LUETKEHANS: If I may respond, I had
12 no idea that Exhibits 3, 4 or 5 even existed, so it
13 would be very hard for me to ask Mr. Blakeman[sic]
14 for something I had no idea existed. They're not
15 his exhibits. They're the county's exhibits. So I
16 just want that for the record that I had no idea
17 these existed. And I would ask -- thank you. Mr.
18 Schopp gave me Exhibits 2, 3, 4. I have 2. What I
19 don't have is 5 if you get the chance.

20 MR. SCHOPP: Probably need to make a copy.

21 MR. LUETKEHANS: That's fine, but -- so
22 I'll give you back 2. I didn't mean to take your
23 document.

24 MR. BLAZER: I -- just to be clear again,

1 and I think you're all getting the idea this is
2 going to be a little bit contentious, but the
3 documents that he's referring to, we submitted 20
4 hard copies of every one to the zoning department.
5 They were available to anyone who chose to come in
6 and look at them. Again, if Mr. Luetkehans chose
7 not to, I don't think that's a basis for him to
8 complain that he closed his eyes and didn't see what
9 information was available.

10 CHAIRMAN CORNALE: All right. Based on
11 the discussion, I think it's best if the zoning
12 board acts on the motion to dismiss. It can either
13 be to dismiss or to deny the dismissal. I need a
14 motion and a second, then we'll go to roll call
15 vote, and then we can move on whichever way we
16 decide. Do you guys have any discussion regarding
17 that?

18 MR. BLAKEMAN: I think the chairman has
19 authority on his own to deny the motion to dismiss
20 because he's in charge of it. That's my
21 recommendation.

22 CHAIRMAN CORNALE: All right, based upon
23 the county's recommendation, our counsel, I will
24 deny the motion to dismiss. I will simply ask that

1 all evidence be provided early enough that we can
2 get it distributed accordingly. I think it's
3 everybody's responsibility if you want to see the
4 evidence to search it out and find it and get it.

5 Okay, with that, let's begin with the
6 applicant. Come forward. We're going to have to
7 swear several of you in at the same time.

8 MR. BLAZER: If I may, Mr. Chairman, we
9 obviously have a rather large crowd here, so I think
10 it might be appropriate first to introduce who these
11 folks are and then you can swear them in en masse,
12 if that's okay with you.

13 CHAIRMAN CORNALE: Yeah, that would be
14 fine.

15 MR. BLAZER: Okay, all right. First is
16 Mr. Kevin Parzyck. Mr. Parzyck is a professional
17 engineer. He's vice-president of development for
18 Invenergy. He's responsible for Invenergy's wind
19 project development efforts in central and eastern
20 North America which includes part of Canada and
21 nearly half of the United States. He will be
22 talking to you about Invenergy as a whole, the
23 company, and also give you an overview of the
24 project.

1 Next is Mr. Jacob Baker. Mr. Baker is
2 regional operations and maintenance manager for
3 Invenergy, and he'll be speaking more specifically
4 about some of the technical aspects of the project,
5 descriptions of the wind turbines, things of that
6 nature.

7 Third is Mr. David Rautmann, professional
8 engineer. Mr. Rautmann has 35 years of experience
9 in engineering project manager and he'll be
10 addressing the decommissioning plan.

11 Fourth is Professor Mark Thayer, Ph.D.
12 Professor Thayer is with San Diego State University
13 and one of the world's leading authorities on the
14 issue of impacts of wind farms --

15 MR. LUETKEHANS: Can I object here?

16 MR. BLAZER: -- on property values and
17 that's the issue that --

18 MR. LUETKEHANS: Can I object? If Mr.
19 Blazer wants to put these guys on the stand to
20 testify, that's fine, but him telling you their
21 qualifications and how wonderfully qualified they
22 are ahead of time is really just absolutely useless
23 and is not subject to cross-examination. If he
24 wants to tell you who they are and list them, that's

1 fine, but to sit here and go through that, it's just
2 irrelevant at this point.

3 CHAIRMAN CORNALE: All right, shorten up
4 your introduction, give us their names and their
5 position with your company, and we'll move on.

6 MR. BLAZER: Sure. Professor Thayer I
7 identified. Next is Michael MaRous, member of the
8 Appraisal Institute, Counselor of Real Estate, who
9 will be discussing the study that he did with
10 respect to property values around the Cayuga Ridge
11 wind farm.

12 After Mr. MaRous is JoAnne Blank who will
13 be addressing the -- a shadow flicker study that
14 Invenergy commissioned and she will also be
15 addressing the project's consistency with Livingston
16 County's comprehensive plan.

17 Next is Mr. Michael Hankard, a member of
18 the Institute of Noise Control Engineering and the
19 Acoustical Society of America. He'll be speaking to
20 you about acoustics in general and specifically
21 about the noise study that was conducted for this
22 project.

23 Next is Dr. Mark Roberts, an
24 epidemiologist who will be speaking to you about

1 alleged health impacts from wind farms.

2 After him will be Dr. Jeffrey Ellenbogen
3 who is a board certified neurologist. He will also
4 be addressing alleged health impacts from wind
5 farms.

6 After him is Mr. Terry VanDeWalle, a
7 wildlife biologist who will be addressing birds,
8 bats, and other species.

9 And finally, Professor David Loomis who
10 will be addressing the economics, the economic
11 impact of this project.

12 CHAIRMAN CORNALE: Very good. Thank you.
13 Could you all please raise your right hand?

14 (All presenters were sworn.)

15 CHAIRMAN CORNALE: Applicant, you can go
16 ahead and begin.

17 MR. BLAZER: Thank you, Mr. Chairman. The
18 first person to present will be Mr. Parzyck. Mr.
19 Chairman, if I could just have 30 seconds to make
20 sure this works.

21 (Brief pause.)

22 MR. PARZYCK: All right.

23 MR. BLAZER: That's an auspicious
24 beginning.

1 MR. PARZYCK: Goes sideways quickly. Let
2 me just get started with a little bit of
3 introduction, and then when we get to the map, we'll
4 get to the map. Again, my name is Kevin Parzyck.
5 I'm the vice-president of business development at
6 Invenergy, one of the vice-presidents, and my
7 responsibility, my team is responsible for the
8 development effort, to work with landowners, to work
9 with consultants, et cetera, in preparing this
10 project, working through land agreements, working
11 through the design to the point where we can turn it
12 over to our team for construction and financing.

13 Number one. Members of the ZBA, members
14 of Livingston County, thank you for giving us this
15 time to present our project. I think it will be
16 lengthy, but I think it will be very informative for
17 everybody as to the particulars of many of the
18 issues that have been raised in this matter. Can
19 everybody hear adequately here? Okay, thank you.

20 My background is I have a bachelor of
21 civil engineering from the University of Michigan.
22 I also have a master's of structural engineering
23 from the University of California at Berkeley. I
24 have a history of consulting engineering in the

1 nuclear power industry as well as commercial
2 structural engineering for high-rise buildings and
3 other commercial buildings. I'm a licensed
4 structural engineer and licensed professional
5 engineer in the State of Illinois. However, those
6 licenses are currently not -- they're not current as
7 I'm not currently practicing in that role. I have
8 some experience in the wireless phone industry and
9 have been with Invenergy since 2008.

10 So with that, I'd like to just sort of
11 step into Invenergy and who we are. I guess I was
12 going to show a slide. The slide that was going to
13 be up there was a rather extensive slide that shows
14 the breadth of our projects throughout North
15 America. Invenergy is North America's largest
16 independent wind power generation company. We've
17 placed into service 46 wind farms across the U.S.
18 and Canada and Europe, totaling over 4300 megawatts
19 of energy generation. Another 1100 megawatts of
20 Invenergy wind projects are currently under contract
21 or under construction.

22 Now, Invenergy has developed these large
23 number of wind projects, but we also have over 2800
24 megawatts of thermal or national gas projects

1 throughout the United States, we have nearly 50
2 megawatts of solar projects in the U.S., and we
3 have -- we're in the midst of completing over 65
4 megawatts of battery storage. The point in laying
5 that out is that we have a breadth of experience:
6 natural gas, wind and other renewable projects.

7 Specifically here in Illinois we are based
8 here in Chicago, it's our corporate headquarters,
9 and as such we have a number of projects here in
10 Illinois as well as projects that stretch from
11 Oregon to New York to Texas. Here in Illinois we
12 have a two phase project called Bishop Hill and --
13 Bishop Hill 1 and 2 in Henry and Stark Counties up
14 to the north. We have four phases of our Grand
15 Ridge project which is in LaSalle County. We
16 have -- we developed the White Oak project in McLean
17 County, although we no longer operate that project,
18 and we have the California Ridge project in
19 Vermilion and Champaign counties that just came on
20 line a couple of years ago.

21 With the variety of projects we have, just
22 to explain the breadth of our experience in this
23 area, we have nearly 1900 turbines operating in the
24 U.S. with the capacity of approximately 3,000

1 megawatts. As in terms of operating those assets,
2 we have over 72 million operating hours in the U.S.
3 and over 12 million hours operating here in
4 Illinois. That all translates to a value of
5 approximately \$8 million in installed wind assets.

6 So that basically shows the breadth of our
7 installation, the background that we bring to this
8 project, and the level of experience that we bring
9 to this project. That gives you a sense of our
10 financial capacity and the assurance that we have
11 the ability to finance and build this project.

12 As an example, we've included -- let's see
13 if I have it. Will it come up? Yeah, it does.
14 Okay, we have a letter from one of our lenders,
15 CoBank, that was part of our application, that's one
16 of the many lenders that we have worked with, and
17 their identification of us as a top tier developer
18 and our ability to finance projects throughout a
19 variety of conditions, everywhere from the 2008-2009
20 recession that took place, we were financing
21 projects, and we continue to do so at this date.

22 The best -- now, as we develop these
23 projects and we build these projects, the important
24 thing for us is going into a community and, across

1 these 46 projects in the U.S., integrating ourselves
2 into the community and being good neighbors to the
3 area. Probably the best way that I can explain that
4 is through a video that I'd like to present and
5 we'll see if that will happen here.

6 (Video shown as follows:

7 It is a global issue and a local concern.
8 It is beyond comprehension and yet as simple as
9 this. It is a problem that needs to be solved. We
10 are Invenergy. We know wind isn't the only solution
11 to our energy needs, but there are reasons why so
12 many communities are turning to this renewable
13 resource to support the growing hunger for power.
14 Happily wind energy is the future.

15 I feel that it's imperative that we as a
16 country start looking for other sources of energy.

17 And I think that the wind power is the
18 cleanest source available. There's no doubt.

19 And we need to stop relying so heavily on
20 foreign oil. Put some of the resources that we have
21 here in our country to work. We've got more wind
22 than we know what to do with. It needs to be put to
23 work.

24 For one thing, it's renewable energy, and

1 I think for all of us the wind farm brings that
2 whole element which is good for our environment.

3 We've got to get rid of the coal. We've
4 got to get rid of the oil. The wind is the answer.

5 Wind energy is the fastest growing new
6 source of energy in the U.S., and that's because
7 wind farms can support communities, the environment,
8 and our power supply.

9 It's brought new energy into our county.

10 It's around \$3 million a year to the
11 county in taxes and that makes a big difference to
12 our county that in the past was probably one of the
13 five poorest counties in the United States.

14 Wind we looked at as a good opportunity to
15 get more jobs in the community and to increase our
16 property values here.

17 It brings economic development to us. It
18 helps our landowners. People that have almost lost
19 their farms or their ranches have actually been able
20 to keep those farms and ranches because of the
21 monies that they get from those towers, those
22 turbines being on their properties now. And so it's
23 just been a win/win situation all the way around.

24 People call and say what do you think of

1 wind turbines? How does it fit into what you're
2 doing? And is it profitable for me? And generally
3 what I say is get with them and make a deal and get
4 through with it and don't worry about it. Just get
5 it done because it works well.

6 Like a harvest of crops, the harvest of
7 wind sustains us all. Side by side with nature, it
8 just comes naturally.

9 I appreciate what my parents left for me
10 and my grandparents, and I certainly hope I can
11 leave something as good or better for my children
12 and I have a grandchild on the way, so I'm hoping we
13 can leave a clean environment and some energy that
14 comes with clean technology.

15 My name is Paul Painter, I'm the man with
16 the paint brush, own the hardware store right here
17 in Montana. I actually was born and raised here,
18 left, went to the big city, chose to come back with
19 my family. And we've seen good times and bad times.
20 And wind energy is part of the good times. It's a
21 brand-new site. It's a brand-new horizon. It's a
22 brand-new vision. It's something that wasn't there
23 that exists now in a big huge way. We see new faces
24 on the street. We see new faces in the store. We

1 have charge accounts for the wind farm, if you will.
2 I mean we never had those before. And we spend
3 money which circulates in the town. It's a win/win,
4 win/win situation for everybody.

5 I've met a couple of officials from the
6 company and they're fantastic. They're just all so
7 positive about what they're doing. They believe in
8 what they're doing. It's not just a job for them.
9 It's something that is helping themselves and the
10 community and the nation. They're dedicated.
11 Invenergy has given us the chance to grow here and
12 we're doing just that.

13 I mean if you've got any apprehensions
14 come talk to the people here that were involved with
15 this. Come talk to the folks, come look and see
16 what's on that horizon. I mean it is a good deal.
17 And we have to do something as a nation to promote
18 our natural resources and this is one of them.

19 Invenergy is the leading independent
20 provider of wind energy nationwide. Since 2003 the
21 company has invested billions of dollars in this
22 clean and renewable resource.

23 Several of our community members who are
24 the most conservative and, may I say, maybe a little

1 negative once in a while have been totally positive
2 with this whole thing.

3 Communications with like the officials and
4 with them has been very open door.

5 Invenergy has kept all the promises in my
6 opinion and to my knowledge that they have promised
7 us. They maybe have even gone beyond that. They've
8 just been great community members I have to say.

9 When I drive up the road and see the
10 towers, it's just -- it's exciting for me. I love
11 seeing them out there. And I have had people that
12 have not seen them before stop here in the bar and
13 they'll come in and they'll say wow. It's pretty
14 awesome for anybody that drives through.

15 A beautiful sunset, but a sunset with the
16 towers there, it is just an additional bonus.

17 It has the power to propel us, to move us.

18 We're just amenable to any hope for the
19 future and hope for the next generation.

20 It has the power to light our cities. It
21 cools us. It warms us. It sustains us. It is the
22 wind and we are ready for harvest.

23 We believe that it is definitely a crop
24 that we want to continue with and it will help us be

1 able to pass our ranch on to the next generation and
2 that's very important to us.

3 End of video.)

4 MR. PARZYCK: So the point -- I guess the
5 important thing that I would like to stress is our
6 involvement in the community.

7 MR. LUETKEHANS: Objection. Is this video
8 going to be placed into evidence as an exhibit or
9 what are we doing here, Mr. Blazer?

10 MR. BLAZER: Are you asking me or are you
11 asking --

12 MR. LUETKEHANS: Well, I'm asking if
13 you're going to submit this as an exhibit or what
14 you're doing with it.

15 MR. BLAZER: It's part of the Power Point
16 and --

17 MR. LUETKEHANS: It's a Power Point
18 exhibit? Because I haven't seen it.

19 MR. BLAZER: It will be once we're done.
20 I discussed that with counsel for the county.

21 AUDIENCE VOICE: Sorry, I can't hear you.

22 MR. BLAZER: I've discussed it with
23 counsel for the county and will be tendering as a
24 group all exhibits addressed by each witness as they

1 complete their presentations. The video itself
2 obviously is not part of the PDF version of the
3 Power Point, but I'll be providing you with, Mr.
4 Luetkehans, even though you didn't ask for it,
5 digital copies of everything that we'll be
6 tendering.

7 MR. LUETKEHANS: I will ask for a copy of
8 everything you're going to be putting on with every
9 witness beforehand just as you have asked me to do.
10 I think that's only fair.

11 MR. BLAZER: Well, actually I gave you
12 things that we weren't required to --

13 CHAIRMAN CORNALE: Mr. Blazer, let's --
14 that is a good idea. We should get the Power Points
15 prior to the presentation. That way, we can follow
16 along.

17 MR. BLAZER: Sure.

18 CHAIRMAN CORNALE: I understand the
19 Invenergy video will not be included in there.
20 There's no way to do that. Somehow make available
21 electronically to Mr. Luetkehans that video, could
22 you please?

23 MR. BLAZER: Absolutely, and I --

24 CHAIRMAN CORNALE: Okay, if you can bring

1 your Power Points over to us, then we can follow
2 with this one.

3 MR. BLAZER: Sure. I can do that right
4 now.

5 CHAIRMAN CORNALE: Okay, and prior to all
6 other witnesses, please send them over.

7 MR. BLAZER: Sure.

8 CHAIRMAN CORNALE: Okay.

9 MR. BLAZER: One thing I should add, Mr.
10 Chairman, I did request from Mr. Luetkehans several
11 days ago that he provide us with the same
12 consideration. I still haven't received anything
13 from him.

14 MR. LUETKEHANS: Okay, and in response to
15 that --

16 CHAIRMAN CORNALE: I do believe that Mr.
17 Blakeman did address this with the 15 copies as he
18 spoke, so let's just move forward. Let's -- prior
19 to anybody speaking, if you have information, please
20 submit it to us. We will take this as a county
21 exhibit.

22 MR. BLAZER: Actually --

23 CHAIRMAN CORNALE: Or as an applicant
24 exhibit. What number is --

1 MR. BLAZER: The number is on the exhibit,
2 Mr. Cornale.

3 CHAIRMAN CORNALE: We're going to accept
4 Pleasant Ridge Exhibit 12, a Power Point
5 presentation by Mr. Parzyck.

6 MR. PARZYCK: Thank you, Mr. Chairman.
7 The point I'd like to stress is that as stated in
8 the video, it's important for us that we work very
9 closely with the community and we have acceptance in
10 our communities. We stand by what we say. Now,
11 what I'd like to get into then is the specifics
12 regarding the project.

13 What you have up on the screen is
14 difficult to see, there's a lot of detail, but it's
15 essentially the layout of our project with the green
16 properties being properties that have signed up to
17 be participants, landowners that are signed up to
18 participate in the project.

19 This project has been under development
20 since approximately 2006, 2007. It's a project
21 that, you know, has -- it takes a while to get this
22 done, takes quite a long time depending upon certain
23 market conditions, and we're finding at this point
24 that the conditions based on the energy market,

1 transmission, et cetera, that it's desirable to move
2 forward on this project, develop and then sell the
3 power.

4 So what we have here is a slide for our
5 site plan and then as a -- the next slide is our
6 ancillary facilities plan which includes our
7 operations and maintenance building, the O and M
8 building here at the bottom of the slide right here,
9 which is our -- what we're planning right now for
10 our O and M building. Our concrete batch plant
11 which is right here near -- just north, the northern
12 edge of Forrest. And our construction staging area
13 that we've identified up here which is an agreement
14 with the landowner to host the construction crews,
15 equipment, et cetera.

16 The project is planned for 136 wind
17 turbines and the turbines would be either General
18 Electric 1.79 100 turbines, which means that it has
19 a 100 meter rotor diameter, or the GE 1.72 103,
20 which means that it has a 103 meter rotor diameter.
21 Now I apologize for the need to go through this with
22 regard to meters, et cetera, but the nomenclature in
23 the wind industry is in the meters -- is in meters
24 because all this technology has been developed over

1 in Europe and it's -- from an international
2 perspective, it's all done on the metric system.

3 So what that means is that these turbines
4 will be on 80 meter towers, which means that the
5 towers themselves will be 262 feet tall with a rotor
6 of either 328 feet in diameter or approximately 338
7 feet in diameter.

8 The -- so with those 136 turbines, with
9 that layout, with the participating landowners that
10 we have in the project, we have put together what we
11 have identified here as our setback map. And
12 generally speaking, the setback requirements, the
13 setback requirements are established in the
14 Livingston County zoning ordinance, and we followed
15 them, identified our compliance with those setbacks
16 in our application. The setback requirements from
17 primary structures, which is the first requirement
18 that we've identified, is three times the tower
19 height or 1200 feet, whichever is greater. The
20 combined above ground tip height, so it's from the
21 ground to the tip of the blade, which is essentially
22 the tower height plus half of the rotor or plus the
23 rotor radius or half of the diameter, is 130 meters
24 or 426.5 feet for the GE 100 turbines, or 131.5

1 meters or 431 feet for the 1.72 103 turbines.

2 Essentially that translates to a setback requirement
3 from residences of 1,279.5 feet for the 100 turbine
4 and 1,293 feet for the 103 turbine.

5 So as we've laid this out considering
6 those setbacks and what was necessary to make the
7 project functional, we have established in the
8 layout the closest nonparticipating residence to a
9 turbine is approximately 1,555 feet, and the closest
10 participating residence to a turbine is
11 approximately 1,540 feet. The point there being
12 these turbines all exceed the setback requirement
13 established in the zoning ordinance.

14 Now, there are other zoning setback
15 requirements. All turbine towers shall be set back
16 a distance of at least 1.1 times the turbine tower
17 height or the tip height that I referenced earlier
18 from public roads, transmission lines and
19 communication towers, and we meet that requirement.
20 All turbine towers shall be set back a distance of
21 at least 1.1 times the turbine tower height from
22 adjacent property lines as measured from the closest
23 edge of the tower structure, and we meet that
24 requirement for all nonparticipating properties.

1 Our agreements with participants all contain waivers
2 of that property line setback, so therefore we are
3 in compliance.

4 Another requirement is that an
5 incorporated village or municipality must approve of
6 the location of any tower to be located within 1.5
7 miles of the corporate limits of such incorporated
8 village or municipality. We have an agreement with
9 the village of Forrest and it provides that we will
10 not construct any turbines within one-half mile of
11 the village border, and the village is deferring
12 their zoning authority to the county for anything
13 beyond that. There are 11 turbines between one-half
14 mile and one and one-half miles from the Forrest
15 village border.

16 The wind ordinance also requires that no
17 part of a tower or foundation shall encroach on a
18 public or private sewage disposal or septic system.
19 As a practical matter, that would not happen since
20 we erect those towers in fields well set back from
21 homes where one would not expect sewers or septic,
22 but in the odd instance that we run across that
23 during our construction, we will, you know,
24 terminate the construction of that tower and meet --

1 in order to meet the requirement.

2 Now, I'd like to mention a few additional
3 aspects of the project, some of which are unique and
4 associated, that are not necessarily part of the
5 zoning ordinance. We have a proposed agricultural
6 impact mitigation agreement, which is up here on the
7 screen, and as far as we know, this is the first
8 time a wind project has done this in Illinois,
9 although many of the issues that are addressed here
10 in this agreement are followed by most wind
11 developers.

12 This has not yet been the subject of any
13 negotiations with the county, but we are prepared to
14 abide by any or all of the provisions that are laid
15 out in this proposed agreement. These are just a
16 few of the key provisions.

17 First, there is an emphasis on preserving
18 agricultural land and topsoil. Locations for
19 project facilities shall be selected and have been
20 selected in a manner so as to minimize the extent
21 reasonably practicable, direct adverse -- to
22 minimize direct adverse impacts to ongoing
23 agricultural activities occurring on the land
24 adjacent to the project facilities.

1 All underground electrical cables will be
2 buried with a minimum of five feet of top cover
3 where they cross cropland. Where they cross pasture
4 lands or other agricultural lands comprised of
5 soils, they're classified by the USDA as being prime
6 soils. So we're going to be basically five feet
7 below ground with our collection lines.

8 Any excavation shall be performed in a
9 manner to preserve topsoil. Commercially reasonable
10 efforts will be made to store the topsoil near the
11 excavation site in such a manner that it will not
12 become intermixed with subsoil materials. So we're
13 working with our landowners to make sure that we do
14 not contaminate the topsoil with some of the other
15 subgrade soils.

16 We've also heard concerns, and we've dealt
17 with this on a number of our projects throughout the
18 country, about damage to drain tile. We always take
19 care of that on our project, but we put that
20 requirement -- let's see, here we go, we put that
21 requirement in the agreement as well to make sure
22 everyone understands what we will be committing to.

23 Some of those requirements are if an
24 underground drainage tile is damaged by

1 construction, it will be repaired in a manner that
2 assures the tile is aligned for proper operation at
3 the point of repair.

4 The following standards and policies shall
5 apply to the tile line repair. Tile lines that are
6 damaged, cut or removed shall be staked or flagged
7 with stakes or flags placed in such a manner that
8 they will remain visible until permanent repairs are
9 completed. If water is flowing through any damaged
10 tile line, the developer, we, shall utilize
11 commercially reasonable efforts to immediately and
12 temporarily repair the tile line until such time
13 that the developer can make permanent repairs. The
14 original tile line alignment and gradient shall be
15 maintained.

16 Our practice is that when we are trenching
17 through croplands, if we damage a tile, we
18 immediately take a GPS coordinate of that location,
19 take a photograph of the tile, and document any
20 repairs so that if a problem does arise in the
21 future with our participating landowners, we can
22 zero in on any breaks in their tile lines and go
23 back and repair them in the future. Since we are a
24 long-term operator and owner of this project, we

1 will be there to repair any of these issues that may
2 crop up in the future.

3 The next thing we've been working on is
4 coordination with the Livingston County Soil and
5 Water Conservation District. We have asked them to
6 provide a natural resource inventory report. We
7 applied for this report in September and we've had
8 ongoing discussions with them. They've reviewed our
9 special use application and asked us for additional
10 information which we provided to them earlier this
11 month. We met with them recently and they are
12 prepared to get out into the field and they brought
13 additional staff to go out and monitor all of the
14 locations for our access roads and turbines.

15 Next, there is our historical review. Up
16 on the screen there is a U of I, University of
17 Illinois letter report that we submitted to the
18 Illinois Historic Preservation Agency and we are in
19 the midst of following through with formal
20 consultation with the agency and we will have that
21 formal consultation with them prior to the issuance
22 of a building permit.

23 I'd like to briefly mention the fact that
24 we are prepared to discuss an economic benefit

1 agreement, an agreement that would add millions of
2 dollars to Livingston County's economy, and it would
3 be based on the agreement that Iberdrola put
4 together for the Deer Run project. As part of the
5 application, we have a decommissioning plan which
6 will be elaborated upon later by Mr. Rautmann, but I
7 just want to focus on the financial provisions and
8 specifically highlight the fact the plan includes
9 the obligation for Invenergy to provide the
10 financial resources necessary to decommission the
11 project so that those costs will never have to be
12 paid by the county, the participating landowners or
13 taxpayers.

14 Lastly, I'd like to quote something from a
15 website run by opponents having to do with a
16 neighbor agreement that has been submitted as part
17 of our application. The website states, quote, the
18 neighbor agreements are being mailed out. They used
19 to be called good neighbor agreements. Guess what?
20 They were called out on that one. Bottom line, get
21 a good attorney. You know the review. Even the
22 Farm Bureau has to not sign without an attorney, end
23 quote.

24 We agree. One needs to -- if one signs an

1 agreement regarding their property, one should have
2 an attorney review this, and we stress this with any
3 agreements that we work with with any landowners.
4 In fact, we've rarely found it to be the case that
5 landowners are not fully aware of any impacts there
6 may be on their properties.

7 MR. LUETKEHANS: Objection, foundation.

8 CHAIRMAN CORNALE: We'll allow that.

9 MR. PARZYCK: The next statement from the
10 website is, quote, please use this good neighbor
11 agreement facts sheet to help landowners understand
12 they will lose their right to sue a wind company
13 over noise, shadow flicker, electronic interference
14 or other damages if they sign a good neighbor
15 agreement. Wind companies are, quote, bad
16 neighbors, end quote, so they want adjacent
17 nonparticipating landowners to be compensated for
18 the potential health issues caused by low frequency
19 vibrations, audible noise, shadow flicker, et
20 cetera, end quote.

21 MR. LUETKEHANS: Objection, hearsay.

22 CHAIRMAN CORNALE: We're going to allow
23 that. Just remember, we'll let the applicant go
24 through this slide and his testimony. You can have

1 questions of him later.

2 MR. BLAZER: Mr. Cornale, just for the
3 record, it might be easier if Mr. Blakeman reminds
4 Mr. Luetkehans that the rules of evidence do not
5 apply to this proceeding.

6 MR. LUETKEHANS: Oh, I'm aware of the
7 rules, thank you, Mr. Blakeman. I know you know I'm
8 aware of them as well. I just want to make sure
9 what the rules are for both parties, thank you.

10 MR. PARZYCK: Okay, the statement was
11 taken from the website. Now, our agreement is none
12 of that. It's up on the screen. No gag rules. No
13 waivers. Just if you're a participant, you're a
14 nonparticipant, if you live within a half mile of a
15 turbine, there's a payment of \$1200 a year for 40
16 years with a 2 percent compounding. This agreement
17 will also run with the land, which means that if
18 somebody who signed the agreement sells their home
19 down the road, the buyer of that property would get
20 the benefit.

21 And I'd like to end my presentation on
22 this note. That there's a lot of information that
23 is out there. As I referenced, that our -- the
24 folks that we will be presenting tonight and going

1 forward will clarify, validate the truth on these
2 matters, but I think what's -- but this statement
3 about this agreement highlights what has been
4 happening here for the last couple of months or
5 more, a lot of incorrect information and a lot of
6 rumors. We hope to correct those misimpressions
7 during this hearing.

8 Now I'd like to turn this over to the rest
9 of our team for more specifics on the project, and I
10 thank you for your time.

11 CHAIRMAN CORNALE: Thank you. I've got a
12 quarter after 7:00. I promised everybody a break at
13 about an hour and 15 in, so let's take ten minutes.
14 Come back in about 7:25 and we'll just resume where
15 you guys left off.

16 MR. PARZYCK: Thank you.

17 (Recess at 7:16 p.m. to 7:28 p.m.)

18 CHAIRMAN CORNALE: All right, we're going
19 to begin again. Just a quick reminder, the sign-up
20 sheets are out there and are available. You do need
21 to sign up in order to speak. We can't stress that
22 enough. So if you're inclined to speak, you
23 possibly might want to speak, sign up. If we come
24 to your name, you're not here, you're not here, we

1 move on to the next one. So -- and they will be
2 available not only tonight but as we proceed through
3 the hearings.

4 All right. With that, applicant, go
5 ahead.

6 MR. BLAZER: Thank you, Mr. Chairman.
7 Just for the record, we have, first of all, 15
8 copies each of the documents that were addressed in
9 Mr. Parzyck's presentation. For the record, those
10 are Invenergy No. 1 is the map of Invenergy power
11 generation assets.

12 MR. LUETKEHANS: Mike, I don't mean to
13 interrupt, but are you calling these Invenergy or
14 Pleasant Ridge?

15 MR. BLAZER: Pleasant Ridge, they're all
16 Pleasant Ridge exhibits for the record.

17 MR. LUETKEHANS: All right, thank you.

18 CHAIRMAN CORNALE: These are submittals
19 within the Power Point presentation; is that
20 correct?

21 MR. BLAZER: Correct. No. 1 is the map
22 that was sideways originally.

23 CHAIRMAN CORNALE: All right.

24 MR. BLAZER: No. 2 is the letter from

1 CoBank.

2 CHAIRMAN CORNALE: All right, we'll accept
3 that -- we'll accept 1 as 1. We'll accept 2 as the
4 map from CoBank.

5 MR. BLAZER: The letter from CoBank.
6 No. 3 is the large site map and they all have
7 exhibit markings on them. There are 15 copies of
8 each, so --

9 CHAIRMAN CORNALE: All right.

10 MR. BLAZER: No. 4 is the ancillary
11 facilities map, that's the one that shows the
12 bachelor plant, the O and M building and the --
13 yeah, it's right there.

14 CHAIRMAN CORNALE: We'll accept 3 as the
15 site map.

16 MR. BLAZER: Right. 4 as the ancillary
17 facilities map. That's the one that shows the
18 bachelor plant, the O and M facility and the
19 construction laydown yard.

20 CHAIRMAN CORNALE: We'll accept 4, the O
21 and M plant.

22 MR. LUETKEHANS: I'll get them after you.
23 You've got enough going on. I'll come over in a
24 minute, Tom.

1 CHAIRMAN CORNALE: For all members in the
2 audience, these are simply sheets that were included
3 in the Power Point. You guys have seen them.
4 They're color coded and maybe a little bit bigger.

5 MR. BLAZER: Okay, we're good to No. 4.
6 No. 5 is actually that video which we have provided
7 to the county on a thumb drive, and I've told Mr.
8 Luetkehans that tomorrow I'll actually give him a
9 direct download so he can have digital copies of
10 everything we've used today and everything we'll be
11 using tomorrow.

12 MR. LUETKEHANS: I would just make an
13 objection for the record, foundation and hearsay, to
14 Exhibit No. 5.

15 MR. BLAZER: Okay.

16 MR. BLAKEMAN: Again, I would reemphasize
17 that strict rules of evidence do not apply to the
18 proceedings, but your objection is duly noted.

19 MR. LUETKEHANS: Thank you.

20 MR. BLAZER: All right. No. 6 is the
21 setback map. That's the one with the purple blobs
22 on it.

23 CHAIRMAN CORNALE: We'll accept No. 6
24 Pleasant Ridge exhibit with the setback map.

1 MR. BLAZER: I don't know how you want to
2 address the video because you don't actually have it
3 in front of you. I did give it to Chuck and --

4 CHAIRMAN CORNALE: For all interested
5 parties, the video will be available. If you would
6 like to view it, Chuck could make it available or --

7 MR. BLAZER: Actually the easiest way to
8 see the video is if folks go to the Invenenergy
9 website, it's right there. That's where it came
10 from.

11 CHAIRMAN CORNALE: Www --

12 MR. BLAZER: InvenenergyLLC.com.

13 CHAIRMAN CORNALE: InvenenergyLLC.com, the
14 video you used tonight, but we're accepting it as
15 Pleasant Ridge Exhibit 5.

16 MR. BLAZER: 6 is the setback map. 7 is
17 our standard form easement agreement which includes
18 the setback waivers.

19 CHAIRMAN CORNALE: Pleasant Ridge Exhibit
20 7 is marked as an agreement regarding easements, a
21 several page document.

22 MR. BLAZER: Okay, No. 8 is the
23 cooperation agreement with the village of Forrest.

24 CHAIRMAN CORNALE: We'll accept Pleasant

1 Ridge Exhibit 8 as the cooperation and release
2 agreement with the village of Forrest dated August
3 19th, 2014.

4 MR. BLAZER: No. 9 is the proposed
5 agricultural impact mitigation agreement.

6 CHAIRMAN CORNALE: We'll accept Pleasant
7 Ridge Exhibit 9 as the agricultural impact
8 mitigation agreement.

9 MR. BLAZER: No. 10 is the June 5, 2014,
10 archeological desktop review report.

11 CHAIRMAN CORNALE: Pleasant Ridge Exhibit
12 10 we'll accept as a University of Illinois at
13 Urbana-Champaign letter dated June 5th, 2014, from
14 Ms. JoAnne Blank or to Ms. JoAnne Blank from Kevin
15 McGowan.

16 MR. BLAZER: No. 11 is the proposed
17 neighbor agreement.

18 CHAIRMAN CORNALE: No. 11 we'll accept as
19 Pleasant Ridge exhibit, the neighbor agreement.

20 MR. BLAZER: No. 12 was Mr. Parzyck's
21 presentation which I gave you previously.

22 CHAIRMAN CORNALE: No. 12 we previously
23 accepted.

24 MR. BLAZER: Correct. And what I have

1 here, Mr. Chairman, is marked Pleasant Ridge Exhibit
2 26, and these are hard copies of the presentation
3 that you're about to see from Mr. Baker.

4 CHAIRMAN CORNALE: Very good, all right.

5 MR. BLAZER: And I already gave one to Mr.
6 Luetkehans.

7 CHAIRMAN CORNALE: All right. Appreciate
8 the audience's patience in this. We do have to go
9 through this process, it is lengthy, but we'll
10 accept this as Pleasant Ridge Exhibit 26, Invenergy
11 Pleasant Ridge turbine technical information. It's
12 a Power Point. Looks like Mr. Baker will be
13 presenting on this.

14 MR. BLAKEMAN: Do you have copies of all
15 exhibits, Mr. Luetkehans?

16 MR. LUETKEHANS: Give me a second.

17 CHAIRMAN CORNALE: With that, Mr. Baker,
18 why don't you go ahead and begin. If you're short
19 something, Mr. Luetkehans, please let us know.

20 MR. LUETKEHANS: I have it, thank you.

21 MR. BAKER: Everybody hear me? Yes? Sort
22 of? Better? All right. My name is Jacob Baker.
23 I'm the regional O and M manager for Invenergy.
24 Some of the sites that Kevin mentioned earlier,

1 Grand Ridge Energy Center, which not only has 140 GE
2 machines up there, it also has our first large scale
3 solar installation, 20 megawatts, and also our first
4 battery storage installation as well; Bishop Hill
5 which Kevin mentioned; the California Ridge project;
6 also Forward Energy which is up in Brownsville,
7 Wisconsin; and Prairie Breeze which is out in Elgin,
8 Nebraska.

9 I started with Invenergy in 2008 and have
10 worked in wind since 2006. As Kevin mentioned,
11 there will be two turbine types for this project.
12 Both are GE 1.7 -- it's correct on here. Both are
13 GE 1.7, just with two different rotor diameters, the
14 100 meter rotor diameter and 103. It's kind of
15 offset here. This actually should be up here. On
16 the hard copy it actually is correct.

17 Rated power between the two, there's a
18 slight difference, 1709 kilowatts on the 100 meter,
19 1720 on the 103. Blade diameter obviously is
20 different, 328 feet on the hundred meter, 338 feet
21 on the 103. Similar to the three, three blade
22 design, upwind, so the blades are facing up towards
23 the wind. Drive train is behind it. Rotor speed or
24 the swept area between the two, 84,500 square feet

1 for the 100 meter rotor and a 5,000 increase to
2 89,600 square feet for the 103.

3 Rotor speeds at between rated, between
4 cut-in and rated, can vary on 100 between 9.65 RPM
5 and 17.9, and 103 can vary up to between 10 and
6 17.14.

7 Tip speed, maximum tip speed, so that at
8 17.9 RPMs for the 100 meter rotor is 86 meters per
9 second or 192 miles an hour. Maximum tip speed on
10 the 103, 84.8 meters per second or 189 miles per
11 hour.

12 Speed regulated pitch on both machines,
13 and I'll speak a little bit about that later. As
14 far as aerodynamic braking, the primary braking
15 system. I'll speak about that later in another
16 slide.

17 And each blade operates independently.
18 And then the yaw system, pointing into the wind, it
19 rotates at about .5 degrees per second, yawing into
20 the wind or pointing into the wind.

21 The units operate when wind is available,
22 and if there's not enough wind, they do shut down.
23 The blades will pitch back, pitch back to 90 from
24 zero to conserve energy, just conserve the bearings.

1 It's not going to sit there and rotate looking for
2 wind if there's not enough to sustain generation.

3 Other reasons you might see a machine
4 stopped. Preventive maintenance activities, which
5 we usually try and cluster, you'll see two or three
6 towers together during the day for preventive
7 maintenance. Repair of a fault. If there's a
8 larger outage, it could be line constraints on the
9 main transmission line. The utility might call us
10 up and say, hey, we have this constraint and it
11 needs to be shut down, curtailed either megawatt
12 wise or curtailed to zero.

13 Within the turbine, types of fluids.
14 Gearbox oil, depending on the gearbox type, GE uses
15 several gearbox types, is anywhere from 70 to 105
16 gallons of lubricating oil. Hydraulic oil, there is
17 about I'd say a gallon, but there's actually less
18 than a gallon of hydraulic oil. That's for the
19 secondary brake.

20 Grease. There's two main types, low speed
21 grease for the yaw bearing, main bearing and pitch
22 bearings, and then there's a high speed grease for
23 the generator. There's no auto lubers in any of
24 these machines. Kind of our company philosophy, we

1 don't believe in their effectiveness.

2 And then at the base of the tower, there's
3 a 50/50 glycol/water mix for the coolant. Didn't
4 put the capacity in, but it's less than 20 gallons.

5 Some turbines will have the low noise
6 trailing edge, LNTE for short. The turbine numbers
7 are stated there. For the 100 meter, rotors will be
8 4, 10, 22, 49, 68, 73, 76, 109, 126, 129 and 136.
9 For the 103 meter, blades, rotors I should say, it
10 will be 68, 73, 126 and 129.

11 Will have a presentation a little later
12 about how it impacts as far as noise, but the --
13 wanted to show a picture. This is like you're
14 standing below the tower looking up. The trailing
15 edge is the serrated edge on the last third of the
16 blade, and this tower does have it. You can see it
17 kind of starts from here and goes that way. Kind of
18 hard to see from a distance, but up close it looks
19 like a pretty, pretty jagged edge on the trailing
20 edge of the blade.

21 These are not new to the industry.
22 They're -- for us, this would be our first project
23 that has low noise trailing edge blades, but they're
24 not new to the industry.

1 The LNT map. It's kind of hard to see.
2 On the right, it gives the LNT. LNT turbines are
3 shaded in the purple. The next slide shows a
4 zoomed-in view which shows 129, 68, 73, just this
5 portion of the map, just to show how it's identified
6 on the map that was submitted.

7 The primary braking system of the turbine
8 is the pitch of the blades, so they go from catching
9 the wind to pitching out of the wind, so catching it
10 and turning into three giant paddles to slow it.
11 Put a picture here just to show this is pitched into
12 the wind ready to run or running, and then pitched
13 out of the wind. So you can see the broadside of
14 the blade gets turned out of the wind.

15 The secondary braking system is on the
16 high speed shaft of the gearbox, so we have the hub
17 where the three blades are attached, the main shaft,
18 gearbox, and then on the back side of the gearbox,
19 kind of hard to see by GE's picture here, there's a
20 braking system similar to -- it's a disc brake
21 similar to your car, but the brake disc is a little
22 over four feet in diameter. It's a single piston
23 caliper, and that's what the brake system drives on
24 the back side of the gearbox, and that's mainly for

1 overspeed conditions to reduce and bring the speed
2 back down.

3 Electrical design of the tower conforms to
4 IEC, or International Electrical Mechanical --
5 Electrical Technical Commission Standard 60364-5-52.
6 And within the U.S., it falls under the NFPA's
7 Standard 70E, so -- and then NFPA's process of
8 development has been approved by the American
9 National Standards Institute or ANSI.

10 Transformers within the project. The
11 project will consist of two generation step-up
12 transformers, or GSUs, in our collection substation.
13 These will be the transformers that increase it from
14 the collection voltage, the underground wires, from
15 34,500 volts AC to 345,000 volts AC at the point of
16 interconnection with the utility. Each will contain
17 approximately 8 to 10,000 gallons of cooling,
18 insulating oil, depending on the configuration,
19 mineral oil, and they will be housed at our
20 collection substation in the northwest part of the
21 project.

22 Each wind turbine will also have a pad
23 mount transformer, a PMT, that increases the
24 generator voltage, which is 690 volts AC, to current

1 or collection voltage mwhich is 34,500 volts AC.

2 Obstruction light or Federal Aviation
3 Administration lighting plan. We put in our
4 application for a no hazard determination with the
5 FAA. You can see the map here that was submitted.
6 Anything with red were submitted to -- or we're
7 planning to have an obstruction light on. And then
8 anything that is yellow is just going to be the
9 white paint, daytime visibility. All will have
10 white paint, but the ones with red will have an
11 obstruction light. And they will be red flashing
12 synched at night.

13 Within Invenergy, we have our obstruction
14 light failure policy. We do it kind of on a
15 three-pronged approach. One is electronically each
16 machine monitors, so if the obstruction light itself
17 doesn't power up at night, the obstruction light
18 detects a fault, it will send a signal to the
19 controller of the turbine, and that's monitored by
20 our control center. They'll create a work order.
21 They'll also be the one to issue a note or notice
22 with the FAA.

23 We also have a function test during our
24 preventative maintenance. Three times a year

1 they'll literally cover up the sensor to ensure that
2 each light is functioning, flashing. It will also
3 ensure -- lights of today, they're not a single bulb
4 anymore, it's a string of LEDs, ensure that the LEDs
5 aren't going out, there's enough -- that they're not
6 going out, an indication that there's not a problem.
7 And visually once a month to ensure that they're all
8 in sync. So either early in the morning or late at
9 night just observing to ensure that they're all in
10 sync.

11 Our transmission line. An interconnection
12 line between our collection substation and the
13 utility. It'll be a pole of similar design, a steel
14 pole, monopole, with three conductors, three
15 insulators, and then a static line communication
16 line on the top.

17 So the transmission line location to show
18 our set of collection, proposed collection
19 substation to the point of interconnection with the
20 utility, and then showing the path that it will take
21 with the participant, on participating land, is
22 notating -- I don't know if we did a zoomed-in view.
23 No. Notating at the bottom left that it is set back
24 I think 75 feet, 75 feet from a nonparticipant's

1 land for any line swing.

2 CHAIRMAN CORNALE: This particular sheet,
3 is this available? It's not in the Power Point
4 presentation. It's not in the packet.

5 MR. BLAZER: Mr. Cornale, I have what is
6 marked as Pleasant Ridge Exhibit 98, which are
7 actually all of the schematic sheets showing the
8 transmission line and towers, and attached to that
9 is the map.

10 CHAIRMAN CORNALE: All right. So we'll
11 accept Pleasant Ridge Exhibit 98 as the schematics
12 from the Power Point presentation along with the
13 full map that you guys are seeing there. It is not
14 included in Pleasant Ridge Exhibit 26. So this
15 should be a submittal to that.

16 MR. BLAZER: I'm sorry, sir? Oh, right.
17 I'm not sure why, but for some reason it's not in
18 the Power Point, but that is the document.

19 CHAIRMAN CORNALE: Okay. Go ahead,
20 continue. Sorry.

21 MR. BAKER: All right. Next up we
22 submitted a preliminary emergency response plan or
23 ERP. We submitted a preliminary emergency response
24 plan or ERP. It's kind of in a draft form. We've

1 done initial outreach to services providers within
2 the region, provided them with a project summary,
3 the ERP, and the site plan. We received three
4 responses so far from the city of Fairbury, OSF
5 Life Flight and SELCAS, South East Livingston County
6 Ambulance Service.

7 I'll say this. As the project moves into
8 construction and operations, for us it's always ever
9 evolving, usually like to partner with local EMS
10 just to discuss, one, their role in any rescue
11 situations. And then the other, we found it very
12 valuable in Illinois to partner and discuss becoming
13 first responder trained. We've used local hospitals
14 to get first responder training for all of our
15 technicians that work. We've also used local fire
16 departments, if they have the ability, to train as
17 well.

18 MET towers. We reached out to the
19 Illinois Agricultural Association, Aviation
20 Association, to discuss the marking of our temporary
21 meteorological towers, or MET towers, and providing
22 the GIS coordinates in the wind towers after
23 construction and then permanent MET towers.

24 Here's an example of our temporary MET

1 tower. From the ground, we have an orange ball and
2 then also yellow markers as far as anybody working
3 in the field. Doesn't show up. The tower itself is
4 red and white, and then it also has marker balls at
5 the top, orange as well.

6 Another concern is aerial spraying around
7 either wind turbines or also permanent MET towers or
8 temporary MET towers. The site currently has five,
9 which we're more than willing to share the GIS
10 location with anybody that has concerns with those.
11 And it was a concern when I first got into wind as
12 far as flying around wind towers. I have since
13 observed quite a few aerial spray pilots that have
14 circumnavigated the towers without any issue.

15 And next will be a video.

16 (Video viewed as follows: Bishop Hill out
17 by Tower 95, crop duster. End of video.)

18 MR. BAKER: So that was actually me out in
19 the field, we're doing a tower on it, and he was
20 dusting the field just to the west of us, I believe.

21 So microwave path study. We completed a
22 microwave path study to ensure that our towers don't
23 inhibit or get in the way of any existing
24 communication paths, specifically microwave

1 communication. It's kind of hard to see, but
2 everything that's a red line is actually a
3 communication path. And a zoomed-in view here. So
4 red line being the communication path, the yellow
5 dots being our towers, the blue lines are the
6 proposed underground collection system to show
7 existing communication and how our towers will not
8 impact them.

9 Also received a letter from the National
10 Telecommunication Information Administration which
11 has -- we have received saying that we're not of
12 concern for any existing or blocking of
13 radiofrequency transmissions. I think that's it.
14 Any questions?

15 MR. BLAZER: Not at this point.

16 MR. BAKER: Questions for later.

17 MR. BLAZER: I do have all the documents
18 that Mr. Baker referenced. Would you want to do
19 those now or at a break?

20 CHAIRMAN CORNALE: Let's hold off on doing
21 all of those now. Do you have another person that
22 you'd like to have speak?

23 MR. BLAZER: Okay, thank you. This is
24 just another copy. Next presenter will be Mr.

1 Rautmann. For the record, Mr. Chairman, I have
2 Pleasant Ridge Exhibit 29 which is Mr. Rautmann's
3 presentation.

4 CHAIRMAN CORNALE: All right.

5 MR. BLAZER: I am handing one to Mr.
6 Luetkehans.

7 CHAIRMAN CORNALE: County will accept
8 Pleasant Ridge Exhibit 29 as a decommissioning plan
9 summary presentation. Mr. Blazer, if you could
10 collate all those other submittals for us and send
11 them over in a group of 15. That way, I can just
12 take them and take them all at once, everybody can
13 get a stack, if you can work on that.

14 MR. BLAZER: We'll do that.

15 CHAIRMAN CORNALE: So get that done before
16 the end of the meeting.

17 MR. BLAZER: Sure.

18 MR. RAUTMANN: Good evening. My name is
19 Dave Rautmann. I'm with Stantec Consulting
20 Services, Inc. There will be actually a number of
21 us from Stantec presenting. Stantec was retained by
22 Invenergy to provide information on this project.
23 It's not on?

24 Just a little bit of information on

1 Stantec because, like I say, there are a couple of
2 us that will be presenting. Stantec has more than
3 14,000 employees, many different types of engineers,
4 many different types of scientists, architects,
5 planners, surveyors, other types of professionals,
6 all within about 230 offices here in the U.S. and
7 Canada.

8 At Stantec, our brand is that we always
9 design with community in mind. Just a couple of
10 statistics. Of those 14,000, 3,000 of those are
11 within environmental services, as are the three of
12 us that are presenting. That is the major group
13 that gets involved in permitting these types of
14 projects. Stantec has worked on more than 12,000
15 megawatts of wind turbine projects, and I don't have
16 a statistic for transmission lines, but we just
17 commmitted -- or recently completed a project where
18 we had more than 400,000 program hours on a major
19 transmission line project.

20 Who am I? I am a registered engineer in
21 Illinois, Wisconsin, Michigan and Minnesota. I have
22 a bachelor's and a master's degree in nuclear
23 engineering from UW Madison. I have ten years of
24 experience in the power utility industry working for

1 Northern States Power and 25 years of experience in
2 environmental engineering and consulting, 20 of
3 which was as the owner of my own firm. I do have
4 experience in power, including renewables, oil and
5 gas, mining, transportation, community development,
6 water and our buildings business lines.

7 To the decommissioning plan, our
8 decommissioning sequence. Basically it's really
9 just constructing the project in reverse. So we'll
10 reinforce the access roads and prepare the site,
11 deenergize the turbines and make the entire project
12 safe. Then dismantle, remove the rotors and the
13 turbines, remove the towers, remove the transformers
14 and the collection system, remove the foundation
15 pedestals, remove the crane pads, and then finally
16 remove the access roads and regrade the site and
17 restore and revegetate all of the disturbed land.

18 The decommissioning cost estimate. Just a
19 little bit on methodology because there are no real
20 world costs for wind farm decommissioning, mainly
21 because none of them have been decommissioned as
22 yet. However, there is extensive real world data
23 for decommissioning and demolition in many, many
24 different, other different types of industries, so

1 that's mainly what we use.

2 In coming up with this, we consulted with
3 engineering specialists at Stantec, specifically
4 some structural engineers, some electrical engineers
5 and transportation engineers. We also consulted
6 with some construction firms. And then lastly, we
7 compared our decommissioning costs to those that we
8 could obtain for other wind farms just to make sure
9 that they were, they were reasonable. The total
10 expense that we calculated was 19,890,500. The
11 major components of this is overhead, management,
12 mobilization, local road repair after the project is
13 done, the turbine and step-up transformer
14 disassembly and removal, crane pad installation
15 removal, turbine foundation demolition, the
16 substation removal, the access road removals and
17 then of course the -- again, the topsoil replacement
18 and restoration.

19 The total revenues that we would estimate
20 from the project, this is really all coming from
21 salvage value on the project, so it's the wind
22 turbine, generator and towers, the substations and
23 transmission lines, and a little bit from the
24 aggregate reuse. So looking at the expenses and

1 subtracting the potential revenues, our total
2 decommissioning costs, our net decommissioning cost
3 is just over 5 million. On a per turbine basis,
4 that comes out to just shy of 37,000 each and that's
5 based on 136 turbines.

6 We felt this was a very conservative
7 estimate based on a number of factors. Each
8 individual component has a conservative estimate and
9 it is all additive within the total. As I said, no
10 wind farms have currently been decommissioned, but
11 as decommissioning starts in the future, the
12 decommissioning industry will mature and be refined
13 and I suspect costs will go down as that industry
14 moves forward. Also the relative cost of salvage
15 materials right now is fairly low. That will go up
16 as time progresses because there will be a decline
17 in raw materials and there will be a growing demand
18 for salvage materials.

19 Also the decommissioning costs during the
20 first 15 years of service, if the project would go
21 down early, will be significantly lower because the
22 turbines actually would be dismantled, repurposed
23 and sold as operating units as opposed to salvage.

24 It is my professional opinion that the

1 decommissioning plan cost estimate may be 25 percent
2 higher than actual. Thank you.

3 MR. BLAZER: I assure you not all the
4 presentations will be quite that exciting. What I
5 have for the record, Mr. Chairman, are Pleasant
6 Ridge Exhibits 27 and 28. I've collated them for
7 you. 27 is Mr. Rautmann's statement of
8 qualifications. 28 is the decommissioning plan.

9 CHAIRMAN CORNALE: All right. We'll
10 accept Pleasant Ridge Exhibit 2 --

11 MR. LUETKEHANS: Can I just ask a question
12 before you do? Just one question. Before you do, I
13 assume this is the exact same decommissioning plan
14 that's in the report, Mr. Blazer?

15 MR. BLAZER: It's in -- the
16 decommissioning plan that's in what?

17 MR. LUETKEHANS: It's in the amended --
18 the same decommissioning plan that's in the amended
19 application.

20 MR. BLAZER: The original amended
21 application.

22 MR. LUETKEHANS: Well, in the submittal to
23 the county your client filed in early October.

24 MR. BLAZER: Yes.

1 MR. LUETKEHANS: I think October 16th give
2 or take. Is this the exact same plan is my
3 question?

4 MR. BLAZER: It is.

5 MR. LUETKEHANS: Thank you.

6 CHAIRMAN CORNALE: The county will accept
7 Pleasant Ridge Exhibit 27 as a Stantec submittal of
8 David Rautmann's professional vitae. And 28 will
9 be, Pleasant Ridge Exhibit 28, decommissioning plan.
10 It is understood that this plan is exactly the same
11 as what's been previously submitted in the
12 application.

13 MR. BLAZER: It was submitted I believe,
14 Mr. Chairman, on October 10th. I think that's the
15 date on it.

16 MR. LUETKEHANS: October 15.

17 MR. BLAZER: October 15, I apologize.

18 CHAIRMAN CORNALE: All right, October
19 15th, so this plan is exactly the plan that was
20 submitted on the 15th.

21 MR. BLAZER: Yes.

22 CHAIRMAN CORNALE: Okay.

23 MR. BLAZER: This might be a good time to
24 take five. The next witness will be fairly lengthy

1 and we can organize the exhibits for you. That will
2 be Mr. Thayer.

3 MR. BLAKEMAN: When you say lengthy, what
4 does that mean?

5 MR. BLAZER: Probably half an hour. Or we
6 can keep going.

7 CHAIRMAN CORNALE: Let's keep going.

8 MR. BLAZER: I'll grab his presentation at
9 least.

10 CHAIRMAN CORNALE: Okay, send the
11 presentation over and the submittals can come over
12 after, and there may be the possibility of us
13 getting out of here at a reasonable hour tonight.

14 Again, as a reminder to the audience,
15 these documents that we are taking as exhibits, they
16 are available if you do want to further research
17 those. I'm sure that Chuck, if you stop into his
18 office, he can make them available for you. Sorry,
19 Chuck, for the extra work. But if there's something
20 specific that you guys would like to take a look at,
21 feel free.

22 MR. BLAZER: For the record, Mr. Chairman,
23 Pleasant Ridge Exhibit 39 is Mr. Thayer's
24 presentation.

1 CHAIRMAN CORNALE: All right, the county
2 will accept Pleasant Ridge Exhibit 39, impact of
3 wind power projects on residential property values
4 in the United States, an overview of research
5 findings presented by Mr. Mark Thayer, San Diego
6 State University.

7 MR. THAYER: Good evening. My name is
8 Mark Thayer. I'm an economics professor at San
9 Diego State University and I'm here to talk about
10 the impact of wind power projects on residential
11 property values in the United States.

12 This is a little bit about me. I received
13 my Ph.D. in 1979. I'm a chair of the economics
14 department at San Diego State University, the chair
15 on and off since 1990. I've been working in the
16 environmental energy field for 30, 35 years, had
17 numerous publications and conducted numerous studies
18 for a variety of entities.

19 The presentation I'll be giving today is
20 primarily based upon two revealed preference
21 studies. Revealed preference means that we're going
22 to be looking at actual market data for preferences.
23 Two studies I'll be talking about mostly are The
24 Impact of Wind Power Projects on Residential

1 Property Values in the United States, a Multi-Site
2 Hedonic Analysis, by myself, Ben Hoen, Ryan Wiser,
3 Peter Cappers and Gautam Sethi. And the second
4 study, 2013, A Spatial Hedonic Analysis of the
5 Effects of Wind Energy Facilities on Surrounding
6 Property Values in the United States, again by a
7 similar cohort of coauthors, with the exception of
8 we added Jason Brown and we added Tom Jackson and
9 Gautam no longer works with us.

10 Both these studies were conducted by the
11 Lawrence Berkeley National Lab with funding from the
12 Department of Energy. These are the title pages for
13 the studies. The first one on the left was 2009 in
14 December and the one on the right is August 2013.
15 The one on the left has been downloaded more than
16 300,000 times.

17 The conclusion from our studies. Based on
18 our analysis of 58,000 single family home sales
19 before, during and after wind farm development in
20 the United States, we concluded that there was no
21 impact from wind farms on the sale prices of these
22 residential properties.

23 In addition, if you look at what happens
24 in the literature from the period 2010 to 2014, we

1 see six other studies: Jennifer Hinman in Illinois,
2 a rural study, 3,851 home sales; Jason Carter,
3 Illinois, also a rural study, 1,298 home sales,
4 these are again actual home sales; Heintzelman and
5 Tuttle, New York, 11,331 home sales; Magnusson and
6 Gittell in New Hampshire, 2593 home sales; Carol
7 Atkinson-Palombo in Massachusetts, this is more a
8 rural/urban mix, 122,198 home sales, 6,081 within
9 one mile of the turbine; and then finally the study
10 in Rhode Island with 48,500 home sales, 3,254 within
11 one mile of the turbine. The Rhode Island study is
12 mostly an urban area study.

13 Given all these studies, the overall
14 conclusion, all large scale empirical studies of
15 U.S. wind facilities conclude that post construction
16 operation, there's no identifiable effect of wind
17 power projects on nearby residential property
18 values. That's based upon 248,560 actual home sales
19 evaluated in eight studies.

20 All of these studies use basically the
21 same methodology. It's called the hedonic pricing
22 methodology. It's based upon the idea that
23 proximity to and views of environmental amenities
24 and disamenities can impact property values. So,

1 for example, if you live near a Superfund site or
2 landfill or waste transfer station, you'd expect --

3 CHAIRMAN CORNALE: Mr. Thayer, stop you
4 real quick. I do want to make a note the previous
5 slide was not --

6 MR. THAYER: I'm sorry, I forgot, I was a
7 little too nervous, I changed the order slightly.

8 CHAIRMAN CORNALE: No, no, the statistics
9 were incorrect.

10 MR. THAYER: On which one?

11 CHAIRMAN CORNALE: The previous slide.

12 MR. THAYER: Uh-huh, what's --

13 CHAIRMAN CORNALE: Have you got the slide,
14 have you got the Power Point in front of you?

15 MR. THAYER: 248,560.

16 CHAIRMAN CORNALE: No, ours says 598.

17 MR. THAYER: Oh, that's wrong, it's 560,
18 that's the true number. It's 560.

19 MR. BLAKEMAN: So you wish to amend the
20 Power Point.

21 MR. THAYER: I wish to amend the Power
22 Point, sorry about that.

23 But there is another problem. I have to
24 change the order of the slides slightly, but I'll

1 tell you when that comes around. Okay, so it's
2 based on 248,560 actual home sales evaluated in
3 eight studies. Are we ready? Okay, so back to
4 this.

5 Proximity to and views of environmental
6 amenities and disamenities can negatively or
7 positively affect property values. So things that
8 could negatively affect values would be next to a
9 Superfund site. If you're next to the ocean, a
10 green space, that's a positive impact upon your
11 property values. This has been extensively studied,
12 okay, in using this hedonic pricing method, so this
13 is a little bit about the hedonic pricing method.
14 The next two or three slides, these are the ones
15 that are out of order.

16 So the definition of a hedonic pricing
17 method is it's a method for estimating the implicit
18 price of characteristics that differentiate
19 closely-related products. So it's a method that
20 allows you to figure out the value of specific
21 characteristics of composite products, all right?
22 So the best way to understand the hedonic pricing
23 model is to compare it to an appraisal model. Most
24 people are familiar with how appraisals work.

1 So on the left-hand side, I have some
2 characteristics of appraisal models and compare
3 those to the hedonic pricing model. The appraisal
4 model is designed to determine the estimated selling
5 price of an individual home, but we're not
6 interested in appraisal price of individual homes,
7 we're interested in the value of specific
8 characteristics, so the hedonic pricing method on
9 the right-hand side is designed to place an economic
10 value on specific characteristics, for instance, the
11 value of an additional bathroom, the value of a pool
12 or view of the wind turbines.

13 The appraisal model is usually based upon
14 a small area of home sales, called comps, whereas
15 hedonic pricing model uses thousands of
16 observations, uses a large number of home sales. So
17 one is a small data set, one is a large data set.

18 Appraisal model controls or holds constant
19 a small number of variables. Looking at two
20 different homes, the square footage, does it have a
21 pool, what's the home style, et cetera. Hedonic
22 pricing model, on the other hand, we control for
23 everything that can possibly be controlled for. Use
24 a large number of observations to control for all

1 possible confounding variables.

2 The appraisal model uses data from a very
3 restricted area, near the home, so the neighborhood,
4 whereas hedonic pricing model can use data from a
5 very large area, and we need a large area because of
6 variation in the characteristics of the homes.

7 Continuing. Appraisal models use data
8 from a very restricted time period, previous three
9 months, previous six months. Hedonic pricing models
10 can either use data from a restricted time period or
11 from an extended time period depending on
12 situations, so it's either cross-sectional or a time
13 series type analysis.

14 Appraisal models cannot be used to
15 effectively evaluate the contributory value of a
16 specific characteristic. There's not enough data.
17 On the other hand, hedonic pricing models can be
18 used effectively to appraise homes because the data
19 set is very extensive. However, it's very expensive
20 to put together these data sets. But this is
21 exactly what Zillow does. So when you go to Zillow
22 website, they give you the Z best estimate. Their Z
23 best estimate is a hedonic pricing model, so that's
24 exactly what they're doing. They have the

1 characteristics of the home and they create for you
2 an appraised value. So you can use hedonic pricing
3 for appraising but it's not often the case, but
4 Zillow does it.

5 Finally, an appraisal model oftentimes
6 that's using compared sales is an attempt to
7 evaluate a specific home characteristic, but it
8 can't be done because there's not enough data to do
9 that, whereas hedonic pricing can really be
10 considered to do a very large compared sales
11 analysis. So hopefully you'll get a feel for what
12 we're trying to do. What we're trying to do is
13 value individual characteristics of homes not
14 appraise homes, all right, compared to the appraisal
15 model.

16 All right. Now this type of model has
17 been used extensively, so this right here is a list
18 of location attributes where the hedonic pricing
19 model has been used in the literature. So remember,
20 this procedure is 40 years old, it's over 40 years.
21 Anything you could possibly imagine has been valued
22 using the hedonic pricing method.

23 So on the left-hand side, you see some of
24 the location characteristics. Are you near a

1 crematory or by a Superfund or by a lead smelter or
2 are you in an earthquake special study zone? Are
3 you near a landfill, transmission lines, et cetera?
4 These are all things that have been studied over
5 time. And then the rest of the table shows the
6 office of the studies, the location of the studies,
7 and then shows the types of impacts that you can
8 find in the literature.

9 So, for example, if you look at
10 Superfunds, the second listing, Superfund, this is
11 Grand Rapids, Michigan, within a mile of a
12 Superfund. So remember the Superfund, it's a
13 negative 4 to 6 percent. Go to the middle of the
14 thing, earthquake special study zone, so this is a
15 special designation in California. They tell you
16 you live in a special study zone for earthquakes.
17 To be in that, it's a negative 3.3 to 5 percent
18 reduction in your property value.

19 So the point of this is that, number one,
20 the methodology has been used extensively, and two,
21 if you look at the values up on the fourth column,
22 you see the numbers aren't very big, it's 3 percent,
23 it's 5 percent, it's 7 percent. Even things that
24 are pretty bad, next to Superfund site, 7 percent,

1 et cetera.

2 So the numbers are, you should be -- when
3 you're thinking about the impacts of wind turbines,
4 these are the kind of values you should be thinking
5 about, and if somebody says to you, oh, the damage
6 from wind turbines is 50 percent or 80 percent, you
7 have to know that's out of bounds with the
8 literature. The literature does not support those
9 kind of numbers.

10 Okay. So what we're going to do in our
11 study is we're going use hedonic pricing methodology
12 and look at the impact that wind turbines have on
13 nearby residential property values. So here are
14 three types of concerns that we would have with wind
15 turbines.

16 First is area stigma and that is that
17 concern that the surrounding area will be more
18 industrialized or developed. That's area stigma.
19 Second, scenic vista stigma. You can see the
20 turbines, so a concern that seeing the turbines will
21 decrease the quality of your scenic vista from your
22 home. It will ruin your view. And finally,
23 nuisance stigma concerns factors occurring in close
24 proximity such as noise, vibration, shadow flickers

1 will have unique impacts, you won't be able to sell
2 your home. Each of these effects could impact
3 property values and the effects are not mutually
4 exclusive.

5 Okay. So in our 2009 study -- so I'm
6 going to talk about two, both studies, but in the
7 2009 study, we tried to improve on what had been
8 done in the past in the literature. So we looked at
9 multiple U.S. wind project locations. We looked at
10 only valid residential sales values. We're not
11 looking at assessed values, multiple listing, none
12 of those type of things.

13 We look at a large sample size of sales
14 transactions from each wind farm area, over 400
15 observations at least in each wind farm area. We
16 make field visits to every home. So in the 2009
17 study we visited 6,600 homes. And from each of
18 those homes we took pictures and identified, put
19 them on a grid, et cetera. We're going to use the
20 hedonic pricing model as we talked about, we're
21 going to test for all three potential effects, and
22 we're going to rigorously analyze the data and have
23 the results peer reviewed.

24 The research questions, if you're

1 interested. Number one, do views of turbines
2 measurably affect home sale prices, so what did you
3 see? Two, does proximity to turbines measurably
4 affect home sales, near or far from the turbines?
5 Are the results stable over time and are there other
6 observable impacts?

7 Okay. So in this 2009 study we go collect
8 data from ten study areas surrounding 24 wind farms
9 in nine states. The data set size was 7,459
10 residential sales, actual sales again. And you can
11 see our study areas, they're the ones in the red, we
12 pretty well cover the United States wind farm
13 facilities, which are in the blue, or I think it's
14 blue, maybe purple. So the blue are the wind farm
15 facilities throughout the United States, our study
16 area.

17 We do a pretty good job of covering the
18 United States except for California. California is
19 a special case, their wind farms are relatively old,
20 and in order to do these studies, you have to have
21 sales before and after the wind farms go up, and we
22 just don't have the actual data there in California.

23 So we also look, if we have data, from
24 preannouncement, post construction, and the

1 in-between period, post announcement/
2 preconstruction, and those things are important.

3 These are study areas. So the study areas
4 are listed, ten areas, whatever that was, and then
5 at the bottom Livingston, Illinois, Livingston
6 County, Illinois, for comparison. And so you see if
7 you look at the comparative values, population,
8 population per square mile, median age, median
9 income, et cetera, that Livingston, Illinois, is in
10 the bounds of our data. So we would think that our
11 study is going to apply to Livingston, Illinois,
12 because it's similar to our study areas. So if you
13 take any of these characteristics, for example,
14 median income, median income ranges from a low of
15 around 35,000 to a high of around 53,000. Well,
16 Livingston County, Illinois, is 48,000, so it's
17 right in the bounds there. So we feel like
18 Livingston County is similar to our study area. And
19 so our study area -- study is going to be applicable
20 to this area.

21 A median home value for Livingston, I put
22 two numbers, one is for all homes, median home
23 values, and single family detached, so those are the
24 two numbers there, but again, they're within the

1 bounds of our data.

2 Okay. So again, we're going to use the
3 hedonic pricing model. So in order to do this, you
4 need information on a large number of sales, so we
5 have 7,459 actual sales. But you also need data on
6 all the characteristics of the homes, and the
7 characteristics include things like quantity
8 measures, how big is the home, how many square feet,
9 what's the lot size, number of bathrooms, bedrooms,
10 et cetera. You also need quality measures, what
11 does the house look like, how many fireplaces does
12 it have, does it have air conditioning, what's the
13 condition of the home, does it have a swimming pool,
14 does it have scenic vistas? These are all
15 characteristics you need to find out.

16 Also there are location specific
17 variables, like what's the local school quality, the
18 demographics, what is the socioeconomic data,
19 distance from important activities, like central
20 business district, et cetera. There's also measures
21 of environmental quality, are you on a lake, what's
22 the air quality? Those are the kinds of things you
23 need to measure. And finally for us, you need to
24 know something about the variables of interest,

1 which is does the house have a view of the turbines
2 and what's the distance to the wind turbines?

3 So all this data, you have to generate all
4 this data, so you can imagine this is a very data
5 intensive study. It's not something you can do
6 overnight. Each home in our data set, this is why
7 we do all these homes, each home in the data set is
8 given a view rating. And so a home either has no
9 view or, starting from the left, goes from minor
10 view, moderate, substantial, and also you can see
11 the extreme. It's hard to see the turbine in the
12 minor, but you can see the turbines become more
13 prominent as you go around and finally get the
14 extreme view. So every home in our data set was
15 given a view rating based upon a visit to the home.

16 In addition, each home is placed on a
17 grid, so you want to know where it is relative to
18 the turbine. So on this map here, the red crosses
19 are turbines and the purple box, I think it's
20 purple, those are home sites, so you can see that
21 some homes are very close to the turbines, but you
22 can also see some homes are far away from turbines.
23 And you need that variation in space if you're going
24 to identify the impact of being close to a turbine,

1 so you need variation across it. So variation is
2 very important. That's why you need lots of data
3 points.

4 So we define nuisance stigma as inside a
5 mile, area stigma between one and three miles, and
6 we also look at the view. This is from Lee County,
7 Illinois. All right, so then -- so we're looking at
8 scenic vista stigma, area stigma, nuisance stigma.

9 So first let's consider scenic vista
10 stigma. The risk of property value impacts are
11 often expected or discussed, but our research
12 suggests that property value impacts related to view
13 and distance are not significantly different from
14 zero. Specifically, there's no statistical evidence
15 that the sale prices of homes with a view of
16 turbines were significantly affected even if the
17 view was dramatic.

18 All right. So this is a graph of the
19 results from our study. So on the -- across the
20 bottom you see the view of turbines gets worse and
21 worse, more prominent, no view all the way to
22 extreme view. You would expect if this were the
23 case, home sale prices or changes are on the
24 left-hand side, you would expect as the view gets

1 more prominent or worse, you would expect home sale
2 prices to fall, but we don't see that. What we see
3 is absolutely no pattern whatsoever. Up, down, all
4 around is zero. We see no impact whatsoever. So we
5 do not see what we would have expected, so we do not
6 see any effect of scenic view of turbines, all
7 right, even if the view is extreme.

8 Likewise, looking at area stigma, nuisance
9 stigma and also timing, we find the same thing for
10 all of these. No statistical evidence that sale
11 price of homes near wind facilities are
12 significantly affected compared to those farther
13 away. We also, in terms of timing, no evidence of a
14 trend in sale price of homes in terms of consistent
15 with scenic vista, area or nuisance stigma. Just
16 did not see anything. Again, consistent with the
17 rest of the literature.

18 We also -- just for robustness or
19 sensitivity, we also looked at other models besides
20 the base hedonic model. Repeat sales, so these are
21 homes that sold more than once, once before the
22 turbines went in, once after the turbines went in.
23 Repeat sales approach. Appreciation rates for homes
24 near wind farms is not significantly different than

1 appreciation rates for homes located farther from
2 wind farms.

3 We also looked at sales volume because
4 there's a concern that, well, maybe I can't sell my
5 home or it's more difficult to sell my home if I'm
6 near wind turbines. No statistical evidence that
7 the sales volume of homes near wind farms is
8 different from the sales volume of homes located
9 farther from wind farms. Basically just don't have
10 decline whatsoever.

11 Okay, so that was the conclusion of our
12 first study in 2009. Very strong conclusions. We
13 had the most comprehensive, data rich analysis ever
14 conducted, and all the literature that's been done
15 supported and confirmed and validated exactly what
16 we did. So why did we do a second study? You know,
17 you've got to wonder, what are you guys doing over
18 here?

19 So we did a second study because we kept
20 thinking, well, maybe we missed something, maybe
21 there's something out there, maybe it's small, and
22 if it's small, maybe we need more data. Maybe 7500
23 data points is not enough. So one of the reasons we
24 took on a second study is let's see if we can find

1 something. So we looked at additional.

2 Our next study, we have many more home
3 sales than previous. We also were criticized that
4 we had a small number of sales in close proximity to
5 turbines and so maybe our results were diluted or
6 there was dilution. So we said, well, okay, what
7 we're going to do in our second study is get a lot
8 more home sales near turbines.

9 Unfortunately for us, they were also doing
10 the same thing in Massachusetts and Rhode Island.
11 So remember in Massachusetts they have over 6,000
12 homes within a mile of a turbine, and in Rhode
13 Island they had over 3,000 homes within a mile of a
14 turbine. So everybody else is thinking the same
15 kind of thing.

16 So the other thing we did is we said, wait
17 a second now, let's do some new stuff that maybe
18 hasn't been done, so let's do some advanced
19 econometrics. Instead of the base hedonic model,
20 let's do some more exciting stuff. So we included a
21 spatial analysis, and in order to do that we hired a
22 spatial econometrician, so that's Mr. Brown, Jason
23 Brown. We added him to our team. He's a spatial
24 econometrician.

1 We also said, well, let's look at what
2 happens over time as well over space, so now we're
3 going to look at before announcement, after
4 announcement/before construction, and after
5 construction, so we're going to use a different
6 approach called difference in difference analysis.
7 And so the treatment groups are treated -- either
8 they're both close to turbines and there's a time
9 period going on as well, so there's both time and
10 space going on. So we're going to do some advanced
11 stuff. This is, you know, science. What can I tell
12 you?

13 Okay, so now we're going to do the second
14 study. And now, again, we're going to have a lot
15 more data. Now instead of 7,459 observations, we're
16 going to get 51,276 actual home sales from 27 U.S.
17 counties related to 67 wind facilities, so we have
18 much better coverage of the United States and way
19 more data. And almost 1200 of these data points are
20 going to be within one mile of a turbine, okay, so
21 we're trying to meet the criticisms we received.

22 Results. Regardless of the data set or
23 specification, there's no evidence that homes near
24 operating or announced wind turbines are impacted in

1 a statistically significant fashion. So all we did
2 was duplicate the previous study. Did a lot more
3 data and a lot more work, but there's no change in
4 the outcome. And again, this is exactly consistent
5 with the rest of the literature. There is no
6 literature that supports any other outcome.

7 So conclusions relative to this proposed
8 project. Based upon the Lawrence Berkeley National
9 Lab reports and the larger literature, the Pleasant
10 Ridge wind project in Livingston County, Illinois,
11 will not significantly reduce the sale prices of
12 properties in the neighborhood of wind facilities.

13 A couple of minor points to finish on.
14 These are just a summary of some of the other things
15 that have been said about our work. First is that
16 we're not independent objective because we're funded
17 by the Department of Energy. Well, number one, I
18 work for a university, I don't work for the
19 Department of Energy. I don't work for a wind
20 developer either. I work for a university. I feel
21 I'm pretty independent. But even if you think I'm
22 not, the rest of the literature supports our work.
23 These other studies weren't funded by Department of
24 Energy and they all found the same thing we did.

1 Second criticism. People think we
2 shouldn't be looking at improved residential sales,
3 we should be looking at vacant land. We don't think
4 so. We think the appropriate focus is people's
5 homes, use established scientific protocols, use a
6 methodology that's been in place for more than 40
7 years. We evaluate a wide range of variables and
8 conduct extensive sensitivity analysis and our
9 results don't change.

10 Third criticism. We get criticized
11 because we use electronic data, being criticized
12 because people think we should be out in the field
13 instead of sitting in our offices in San Diego and
14 using electronic data. Well, we use actual sales
15 transactions and characteristics, actual data, and
16 remember, we made 6600 home visits.

17 We also get criticized for using multi
18 sites and pooling the data. Well, we believe that's
19 the only way our analysis is going to be relevant
20 for new areas. In order to be transferable, we have
21 to study a lot of different areas, all right, so we
22 believe that's again the right approach.

23 We also get criticized because we're not
24 appraisers, but that's why we added Tom Jackson to

1 our team, because Tom Jackson, even though he's an
2 economics or business professor at Texas A&M, he's
3 also an appraiser. So to meet that criticism, we
4 added an appraiser. So to do the things we wanted
5 to do for a few studies, we added a spatial
6 econometrician, we added an appraiser. So when we
7 get criticized, we try to do better the next time
8 around.

9 Finally, there is alternative literature
10 out, I use -- literature is a pretty strong
11 statement. There is some other work out there that
12 does not pass the standards of science. I should
13 let you know about this. So most of these -- I hate
14 to use the word studies. Most of these works of art
15 or whatever use small unrepresentative,
16 nontransparent samples. Notice we don't do that.
17 We use very large sample sizes. Everything is
18 transparent. You can have the data, you can look at
19 the data, no problem. The selection process is
20 generally undefined.

21 You also see a lot of anecdotal
22 information out there, people tell stories, this
23 happened to my property, et cetera, et cetera. We
24 don't see that in the market place. Remember, the

1 plural of anecdote is not data. Did also these
2 study use combination sales, appraisals,
3 assessments, et cetera. Small data sets, a
4 combination of things. It's just -- it's just
5 really strange. There's also some work on vacant
6 land, residential homes, but again small data sets,
7 undefined process, and vacant land should not be the
8 focus.

9 There's insufficient controls, poor
10 influences and inappropriate analytical methods, so
11 when you see this other literature, you should
12 question yourself and say is this real science? Is
13 this done by people that know what they're doing or
14 is this just a bunch of anecdotes?

15 Thank you for your time.

16 CHAIRMAN CORNALE: All right, Mr. Blazer,
17 if you've got another -- it's 20 to 9:00. Is there
18 anybody else in your panel that has 20 minutes worth
19 of presentation or --

20 MR. BLAZER: Our next one does. Actually
21 he doesn't have a presentation. We don't need a
22 Power Point for the next one.

23 CHAIRMAN CORNALE: All right, we'll take
24 him.

1 MR. BLAZER: I thought you might want that
2 one. What I do have, though, is his statement of
3 qualifications and his report, since that's what
4 we'll be dealing with. I have for the record
5 Pleasant Ridge Exhibit 40, which is Mr. MaRous's
6 statement of qualifications, and 41 which is his
7 memorandum, and this relates to his study regarding
8 property values around the original --

9 CHAIRMAN CORNALE: All right, county will
10 accept Pleasant Ridge Exhibit 40 as Michael MaRous's
11 vitae and Pleasant Ridge Exhibit 41 is a memo to Mr.
12 Blazer from Mr. MaRous.

13 MR. MaROUS: I think I got the message.
14 I'll try and be efficient. Good evening. My name
15 is Michael MaRous. I'm simply here to provide some
16 market research looking back at the Cayuga Ridge
17 farm and looking at the transactions before and
18 after or what they're telling us.

19 I am president of MaRous and Company,
20 which is a full service real estate valuation
21 appraisal firm located in Park Ridge, Illinois. I
22 hold the MAI designation, which I have for over 30
23 years. I've appraised over 11,000 properties in
24 over 30 states. Our firm and myself are active in

1 the area. We've done land in Livingston County,
2 we've done the Aldi's distribution facility up the
3 road, we've worked on the Exxon Mobile facility in
4 Joliet, the State Farm, both headquarters in
5 Bloomington, the Caterpillar distribution facility
6 in Morton, and also the entire new retail
7 development along the river in East Peoria anchored
8 by Cosco, Target, Bass Pro Shop, et cetera.

9 So I was requested to look at the land
10 values and transactions as they occurred in the area
11 outside of Odell over a ten year period based on a
12 comment that was published that there was a loss in
13 value of 25 percent in residential values over the
14 time period. So what I presented to you together
15 with my qualifications is approximately a 20 page
16 report going through the issues that impact value,
17 what we looked at, what we found, what the
18 conclusions were. The reality is that this 150 unit
19 facility came on line in about 2010. It appeared
20 that it was made public around 2007 and construction
21 started in 2008 and 2010. I'm not going to read you
22 my entire report, but basically we looked at the
23 reality of the market conditions at the time, like
24 we do any time we do a study, and I've done probably

1 over 100 impact studies in my career for landfills,
2 waste transfer, industrial, senior housing,
3 commercial facilities, et cetera. And basically --
4 that was a short battery.

5 MR. BLAZER: Use this.

6 MR. MaROUS: Basically, the reality of the
7 economy which basically -- I'm going to yell into
8 this. We experienced essentially a real estate
9 depression. That began in the fourth quarter of
10 2008, probably pronounced with the crash of Lehman
11 Brothers. We also looked at the reality of the
12 economic conditions and looked at farm pricing, and
13 all this is presented in our report.

14 Then we looked at transactions and we
15 looked at sales proximate to the turbines and those
16 that were not. We also looked in this situation at
17 basically the price points in the entire county and
18 also the Odell area. We looked at land -- I must be
19 killing batteries. I apologize.

20 And then on page 8 just summarized
21 transactions in the Odell area from '07 through '13
22 and '14, and somewhat similar to other areas in the
23 country and central Illinois, the high percentage of
24 foreclosures that really dealt, again, with economic

1 conditions.

2 We also looked at positive and negative
3 impacts. Part of the positive impacts were the
4 increase at certain time periods of agricultural
5 products which increased land values. We also
6 looked at the economic impact of the wind farm, the
7 money that was spent in all phases of this and the
8 economic benefit that it had on the community.

9 In conclusion, looking at everything in
10 totality, it was clear that there was no negative
11 impact on the residential values by the development
12 and the construction and operation of this wind
13 farm. And that really concludes my report. Thank
14 you.

15 MR. BLAZER: Mr. Chairman, you asked for
16 short, you got short.

17 CHAIRMAN CORNALE: Thank you. Do you
18 have -- you probably don't have anybody else that
19 short which is fine.

20 MR. BLAZER: She said she talks fast.
21 It's possible.

22 MS. BLANK: We could also do the shadow
23 flicker.

24 MR. BLAZER: Ms. Blank is our next

1 witness. There's two aspects to hers. The first is
2 shadow flicker. The second one is the comprehensive
3 plan. In theory, she could do the first part of it,
4 which would probably only take ten minutes, and then
5 we could do the second part tomorrow if you'd like
6 to do that, or if you'd rather just start with
7 the --

8 CHAIRMAN CORNALE: That seems reasonable,
9 because all your witnesses, we will have the
10 opportunity to question those, and we do want to get
11 through as many people as we can so that we're not
12 holding anybody up from going back to San Diego
13 where it's warm. So why doesn't she come forward
14 and we'll talk about half of her presentation and
15 then the other half we'll start with tomorrow.

16 MR. BLAZER: Let me get you her
17 presentation.

18 MS. BLAKE: I just actually wanted to move
19 around. It's a little cold back there. If my voice
20 is shaking, it's because I forgot to put my Cuddl
21 Duds on.

22 MR. BLAZER: For the record, Mr. Chairman,
23 I have Pleasant Ridge Exhibit 45 which is Ms.
24 Blank's presentation.

1 CHAIRMAN CORNALE: All right, county will
2 accept Pleasant Ridge Exhibit 45 as a shadow flicker
3 analysis summary dated November 17th, 2014.

4 MS. BLANK: Thank you. My name is JoAnne
5 Blank and I am here as well as representatives --

6 CHAIRMAN CORNALE: Microphone.

7 MS. BLANK: Can you hear me now? My name
8 is JoAnne Blank and I am an employee of Stantec, and
9 as Dave mentioned earlier, we've been commissioned
10 to do several studies for the wind farm.

11 A little bit about my background. I have
12 a master's degree in science -- of science in the
13 atmospheric and oceanic sciences and another one in
14 environmental monitoring, both of them from the
15 University of Wisconsin Madison. I have about 18
16 years of experience in the environmental consulting
17 industry, and about the last ten years I've been
18 focussing on renewable energies, specifically in the
19 wind power industry. I have worked on over 15 wind
20 projects and over 1200 megawatts of wind development
21 doing myriad studies including feasibilities,
22 facility siting, shadow flicker, which is one of the
23 things I'll be talking about tonight, sound
24 analyses, environmental permitting, construction

1 compliance and more.

2 CHAIRMAN CORNALE: If you can hold the
3 microphone a little bit closer, they're having a
4 hard time.

5 MS. BLANK: Thanks. I'm usually not
6 accused of having a soft voice, especially by my
7 husband.

8 So, first of all, I'd like to explain a
9 little bit about what shadow flicker is. I think
10 everybody has heard the term and always thinks of
11 it -- always imagines these large flashing lights
12 strobing through your house, and I just want to
13 explain a little bit the science behind it. And do
14 I have a green -- I do.

15 First of all, shadow flicker will only
16 occur when the sun is in a direct line with the wind
17 turbine and the target object. As you can see, if
18 the wind turbine blades are faced completely
19 perpendicular to the line, then you will have more
20 shadow flicker than if the wind turbine blades are
21 turned so that they are in the opposite direction.
22 So that is just one of the variables that will
23 affect the amount of shadow flicker. We'll talk
24 about some of the other ones.

1 Shadow flicker can only occur when the sun
2 is shining and when the clouds are -- when it's not
3 a cloudy sky or overcast. Today as I was driving
4 here it was quite windy, the wind turbines were all
5 turning, and there was no shadow flicker because
6 there was no sun. The turbines must be operational
7 and the blades must be turning. The amount will
8 depend, as I had mentioned earlier, on the alignment
9 of the blades to the sun and the receptor, and very
10 importantly, the effect diminishes with distance.
11 Generally about a mile is the absolute maximum that
12 you're going to see any kind of shadow flicker and
13 it really dissipates through the atmosphere over
14 distances.

15 Shadow flicker is also diminished by
16 vegetation and buildings that are in between the
17 turbines and the receptor. Now I don't want to
18 misrepresent that, because if there's trees between
19 the two objects that are a thousand feet away from
20 your home, that will not make a difference, but
21 there are -- any vegetation or buildings that are
22 nearby your home will diminish the shadow flicker
23 that is perceived.

24 And it also changes as the sun progresses

1 during the day. It limits -- it's a limited time on
2 each receptor. It travels -- it's generally about
3 20 minutes maximum as it travels through across your
4 home. And it's most noticeable in the very early
5 morning and the late evening as the sun rises and
6 sets, and the shadows are long, just as you know
7 with the sun and any other shadows as they lengthen
8 with the day. And they change -- it changes with
9 the seasons and as the sun's positions and angles
10 change as the seasons progress. And as I mentioned,
11 it's usually about 20 minutes.

12 The shadow is actually a pretty easy
13 effect to model because we have a software analysis
14 that steps through the year in one minute
15 increments, and it takes into account the location
16 of the turbines, the location of the sun in the sky,
17 the location of the receptors, so it's actually a
18 very accurate methodology. It calculates the
19 expected shadow of hours annually, and it takes into
20 consideration the wind speed, the direction of the
21 wind, the hours of the sunshine, operational hours
22 of the turbine.

23 It calculates maximum shadow hours per day
24 also, and as input to our models, we put in

1 residences, parks, churches and cemeteries, any what
2 we considered sensitive receptors. No vegetation or
3 blocking was considered in the model at all. This
4 is more of a worst case scenario.

5 We input over 775 receptors in the study
6 and we also put in obviously all of the turbines and
7 the elevations of each of the receptors and the
8 turbines also. The shadow flicker, it is generally
9 accepted that about 30 hours per year is an
10 acceptable limit. It's an annoyance, but it is not
11 a health factor.

12 Our study concluded that no residences in
13 the project area at all will -- are expected to
14 receive greater than 30 hours of shadow per year.
15 There are nine residences that expect, that we can
16 expect 20 to 30 hours per year, and 42 to 47 that
17 will get 10 to 20. We did the study for both the
18 100 meter rotor blades and the 103 meter rotor
19 blades, so I'm presenting here the worst case which
20 is the 47 residences. The 100 meter had actually
21 had only 42 residences between 10 and 20 hours. Out
22 of those 775 residences, most of them will receive
23 zero to ten hours of shadow flicker on their homes
24 throughout the entire year. And keep in mind that,

1 again, a lot of the times that it's the most
2 pronounced is going to be very, very early in the
3 morning or late in the day.

4 This is just a quick graphic of the area,
5 the project area. The green is kind of an outline
6 of the project area. The wind turbines you can kind
7 of -- you can see kind of a butterfly, the butterfly
8 effect, and I apologize, I was going to explain that
9 on one of the previous slides, but you can see --
10 actually I'm going to back up a little here, then
11 I'll be done and we can go.

12 This kind of shows one turbine and the
13 effect of the shadow, where you would expect to see
14 shadow flicker in relation to the turbine, so if the
15 turbine is located right here, this is the annual
16 hours of the turbine, of shadow flicker that you
17 would expect, and so these arms and/or wings of
18 the -- of this impact area represent when the sun is
19 coming up in the morning and from the east, so then
20 you're going to get shadows, more shadows in this
21 direction. So this butterfly effect we call it
22 takes into consideration the hours of the day and
23 the seasons of the year.

24 And so finally this is just a graphic of

1 the entire project area and the amount of shadow
2 that might be expected, and as you can see, most of
3 the area receives no shadow flicker, and in the blue
4 areas you'll receive about 10 to 20 hours through
5 the entire year taking into consideration that,
6 forgive my quick math here, but something like 8,400
7 hours in a year, and out of that it's expected to be
8 10 to 20 hours that they would receive shadow
9 flicker. And then there are -- then the red area,
10 and the red area are 40 or greater, or the orange
11 areas of 30 to 39 hours, there are no homes in those
12 impact areas that are expected to receive more than
13 30 hours of shadow throughout the year.

14 So 99 percent of the residences within two
15 miles of Pleasant Ridge Wind will receive less than
16 20 hours of shadow flicker throughout the year. And
17 if you want me to stop there, I can or I can go on
18 to the --

19 CHAIRMAN CORNALE: I think that's a
20 perfect place to end for the evening. I believe the
21 schedule as it stands now, just to check with
22 everybody, it's back here tomorrow evening at 6:00,
23 same time. The applicant will continue their
24 presentation with the hopes of using more than half

1 the night I take it.

2 Okay. To the audience members, jot down
3 your questions, it may be Wednesday before you're
4 actually asking questions, and any question is fair
5 game. If someone presented this evening, on
6 Wednesday when we get to questions, or tomorrow
7 evening, you're able to ask them questions, so just
8 jot them down so you don't forget. Anything else,
9 counsel?

10 MR. BLAKEMAN: Don't forget to sign up
11 with Jane if you want to address the ZBA.

12 MR. SCHOPP: There's a handout of
13 potential dates coming up. Starting at the top, we
14 want to start at six o'clock tomorrow evening, but
15 we have a conflict, so we're going to have to wait
16 and start at 7:00 on Wednesday the 19th, if that's
17 okay with everybody. After the first three
18 meetings, since the area is located in the
19 Fairbury-Forrest area, we're moving the meetings to
20 the Walton Center at 100 West Locust Street in
21 Fairbury. The tentative dates I have scheduled are
22 next Monday and Tuesday the 24th and 25th and then
23 dates Monday, Tuesday, Wednesday, 8th, 9th, 10th of
24 December, 15th, 16th, 17th. Have a meeting date on

1 December 4th. Should be noted that some people have
2 church issues, conflicts with this too.

3 CHAIRMAN CORNALE: Hold on, slow down.

4 MR. LUETKEHANS: I got through next week,
5 Mr. Schopp, but I didn't get anything --

6 MR. SCHOPP: We'll get you a copy of it.

7 MR. LUETKEHANS: Thank you, that's
8 appreciated.

9 MR. SCHOPP: Then after the 17th, we'll
10 take a break and move to January the 12th. That
11 gets us through that committee week --

12 CHAIRMAN CORNALE: All right, Chuck, I
13 think can we -- can we kind of work through it a
14 little bit as we go a little bit more. I know like
15 Tuesday and Wednesday I think we're okay with for
16 the most part, tomorrow and Wednesday we're good, so
17 let's look at those as for sures, and I think -- I
18 think can we get a quorum together for Monday the
19 24th? Tuesday is bad for Howard. Okay, so do we
20 think we can get a quorum on Monday? Okay. So I'd
21 say we could get that far. And then give us -- so
22 we're good here tomorrow night at 6:00, Tuesday at
23 6:00, Wednesday seven o'clock here, then we're going
24 to start again on Monday the 24th in Fairbury, start

1 time of -- Chuck?

2 MR. SCHOPP: Whatever you want.

3 CHAIRMAN CORNALE: 6:00? 6:00? 6:30?
4 6:30. Okay, so there we've got a few dates, Monday
5 the 24th in Fairbury at 6:30, and we'll consider the
6 rest of these dates as we kind of go along. We
7 don't know what we're going to need as far as dates,
8 we may be -- we may have heard everyone, I'm not
9 sure. So with that, I need a motion to recess.
10 Hold on.

11 MR. LUETKEHANS: Sorry, could we get
12 the -- I'll say could we get the documents that were
13 referred to in the Power Point presentation by Mr.
14 Blazer in tonight? I mean we haven't gotten those.
15 We kind of skipped over them to do it at the end of
16 the evening.

17 CHAIRMAN CORNALE: Yeah, okay, good point.

18 AUDIENCE VOICE: Can you restate that
19 question?

20 CHAIRMAN CORNALE: The question was there
21 were a few documents that were referred to earlier
22 by Mr. Blazer and we didn't want to waste your time
23 with taking those at that time, so he was supposed
24 to collate them and send them over, so we're going

1 to accept those now.

2 MR. BLAZER: That's done.

3 CHAIRMAN CORNALE: We got them all?

4 MR. BLAZER: No, they're all collated.

5 CHAIRMAN CORNALE: All collated, okay.

6 Send them over and then we'll accept them. I thank
7 everybody for coming out this evening. I know it's
8 lengthy. All right. The county is going to accept
9 Pleasant Ridge Exhibit 13 as technical documentation
10 for wind turbine generator systems. The county will
11 accept Pleasant Ridge Exhibit 14 as technical
12 documentation for wind turbine generators 1.7.
13 County will accept Pleasant Ridge Exhibit 15 as
14 technical documentation for wind turbine generator
15 system 1.7. County will accept Pleasant Ridge
16 Exhibit 16 as a proposed project site plan, the LNTE
17 blade location map.

18 MR. LUETKEHANS: That's 16.

19 CHAIRMAN CORNALE: Yes. The county will
20 accept Pleasant Ridge Exhibit 17 as a map depicting
21 the proposed project lighting plan. The county will
22 accept Pleasant Ridge Exhibit 18 as the emergency
23 response plan. The county will accept Pleasant
24 Ridge Exhibit 19 as the Pleasant Ridge Wind Energy

1 Project, Invenergy, a letter to the Pontiac Fire
2 Department and several other local municipalities'
3 emergency services. The county will accept Pleasant
4 Ridge Exhibit 20 as an email documentation.

5 MR. BLAZER: 20 is the responses to the
6 transmittals of the emergency response plan from OSF
7 Flight Plan.

8 CHAIRMAN CORNALE: Pleasant Ridge Exhibit
9 20 will be emergency responses from coordinators.
10 Pleasant Ridge Exhibit 21 will be obstruction light
11 failure reporting policy. Pleasant Ridge Exhibit 22
12 will be a photo submittal of an MET tower, two
13 photos.

14 MR. BLAZER: 23 is --

15 CHAIRMAN CORNALE: Pleasant Ridge Exhibit
16 23 will be an aerial application video submittal.
17 Pleasant Ridge Exhibit 24 will be a microwave path
18 map. Pleasant Ridge Exhibit 25 will be a letter
19 from the NTIA to Mr. Davis from Carl Nebia.
20 Pleasant Ridge Exhibit 119 is a Stantec submittal
21 draft copy of a commissioning plan.

22 MR. BLAZER: No, it's the --

23 CHAIRMAN CORNALE: Strike that. 119 will
24 be a draft copy of the pollution prevention plan.

1 MR. LUETKEHANS: Did someone testify to
2 that? No one testified to that.

3 CHAIRMAN CORNALE: Okay. Applicant is
4 withdrawing Pleasant Ridge Exhibit 119.

5 MR. BLAZER: Temporarily.

6 CHAIRMAN CORNALE: Temporarily.

7 MR. LUETKEHANS: And then the only
8 other -- the microwave plan map, I'm sorry.

9 MR. BLAZER: Path map.

10 CHAIRMAN CORNALE: Somebody testified to
11 that.

12 MR. BLAZER: That was Baker.

13 MR. LUETKEHANS: Do you have a separate
14 one? It's not in my packet.

15 MR. BLAZER: It should be. There you go.

16 CHAIRMAN CORNALE: All right, we still
17 need a motion to recess. All right.

18 MR. LUETKEHANS: I don't have a packet for
19 Thayer yet.

20 CHAIRMAN CORNALE: Court reporter, we're
21 sorry, I'm trying to be loud. All right, county
22 accepts Pleasant Ridge Exhibit 30 as a curriculum
23 vitae of Thayer. The county accepts Pleasant Ridge
24 Exhibit 31 as a 2009 Impact of Wind Power Projects

1 on Residential Property Values. Pleasant Ridge
2 Exhibit 32 the county accepts as 2010 Wind Farm
3 Proximity and Property Values, Central Illinois.
4 Pleasant Ridge Exhibit 33 is the 2011 Wind Farm
5 Effect on Property Values in Lee County. Pleasant
6 Ridge Exhibit 34 is the 2012 Impact of the Lempster
7 Wind Power Project on Local Residential Property
8 Values. Pleasant Ridge Exhibit 35, 2012 Values in
9 the Wind, A Hedonic Analysis of Wind Power
10 Facilities. County accepts Pleasant Ridge Exhibit
11 36 as the 2013 Analysis of the Effects of Wind
12 Energy Facilities on Surrounding Property Values.
13 County accepts Pleasant Ridge Exhibit 37 as 2014
14 Relationship Between Wind Turbines and Residential
15 Property Values in Massachusetts. Pleasant Ridge
16 Exhibit 38 the county accepts as 2014 property value
17 impacts of wind turbines in an urban setting.

18 That's what I've got. Okay.

19 MR. BLAZER: We're good.

20 CHAIRMAN CORNALE: Huisman made a motion,
21 motion to recess until tomorrow. John Vitzthum
22 seconded. All in favor.

23 ALL MEMBERS: Aye.

24 CHAIRMAN CORNALE: Opposed? Okay.

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(Adjourned at 9:14 p.m.)

STATE OF ILLINOIS)
)SS
COUNTY OF FORD)

I, June Haeme, a Notary Public in and for the County of Ford, State of Illinois, do hereby certify that the following Livingston County Zoning Board of Appeals, Case SU-7-14 hearing was taken at the Pontiac Township High School, 1100 Indiana Avenue, Pontiac, Illinois, on November 17, 2014.

That the said deposition was taken down in stenograph notes and afterwards reduced to typewriting under my instruction and that the deposition is a true record of the testimony given.

I do further certify that I am a disinterested person in this cause of action; that I am not a relative, or otherwise interested in the event of this action, and am not in the employ of the attorneys for either party.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 24th day of November, 2014.

JUNE HAEME, CSR
NOTARY PUBLIC

"OFFICIAL SEAL"
June Haeme
Notary Public, State of Illinois
My Commission Expires:
September 27, 2016

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