

**In The Matter Of:**  
*LIVINGSTON COUNTY ZONING BOARD OF APPEALS*

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*November 19, 2014*

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

4 November 19, 2014  
5 7:00 PM

6 Pontiac Township High School  
7 Pontiac, Illinois

8 BOARD MEMBERS

9 Michael Cornale, Acting Chair  
10 Howard Zimmerman

11 Rich Kiefer  
12 John Vitzthum

13 Joan Huisman  
14 Diana Iverson

15 Tom Blakeman, Attorney for Zoning Board of Appeals

16 Charles T. Schopp, Administrator  
17 Livingston County Regional Planning Commission  
18 112 W. Madison Street  
19 Pontiac, IL 61764

20 James R. Griffin  
21 Attorney for Livingston County  
22 Schain, Banks, Kenny & Schwartz  
23 70 W. Madison Street, Suite 5300  
24 Chicago, IL 60602  
312.345.5700

25 Appearing For Applicant/Invenergy:

26 Michael T. Blazer  
27 Attorney at Law  
28 Jeep & Blazer, LLC  
29 24 North Hillside Avenue, Suite A  
30 Hillside, IL 60162  
31 708.236.0830  
32 mblazer@enviroatty.com

33 Appearing for United Citizens of Livingston County:

34 Phillip A. Luetkehans  
35 Attorney at Law  
36 Schirott, Luetkehans & Garner, LLC  
37 105 E. Irving Park Road  
38 Itasca, IL 60143  
39 630.760.4601  
40 pluetkehans@slg-atty.com

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1 (Commencing at 7:04 p.m.)

2 CHAIRMAN CORNALE: Call the meeting to  
3 order. Chuck, roll call please.

4 MR. SCHOPP: This is the November 19th,  
5 2014, continuation hearing of the Livingston County  
6 Zoning Board of Appeals review of the Livingston  
7 County Zoning Case SU-7-14, Pleasant Ridge Energy,  
8 LLC/Pleasant Ridge Wind Energy Project, taking place  
9 at Pontiac High School at 1100 Indiana Avenue in  
10 Pontiac. Mike Cornale.

11 CHAIRMAN CORNALE: Here.

12 MR. SCHOPP: John Vitzthum.

13 MR. VITZTHUM: Here.

14 MR. SCHOPP: Rich Kiefer.

15 MR. KIEFER: Here.

16 MR. SCHOPP: Diana Iverson.

17 MS. IVERSON: Here.

18 MR. SCHOPP: Howard Zimmerman.

19 MR. ZIMMERMAN: Here.

20 MR. SCHOPP: Joan Huisman. Gibs Nielsen.

21 We have a quorum.

22 CHAIRMAN CORNALE: Thank you. Our counsel  
23 would like to address the audience briefly on  
24 clarifying the process a little bit. I know there

1 were several questions. I tried my best to get  
2 through it, but Mr. Blakeman I think will help to  
3 streamline it a little bit for us so we better  
4 understand the process for everyone.

5 With that, Mr. Blakeman.

6 MR. BLAKEMAN: It is contemplated that the  
7 applicant will complete its initial presentation  
8 tonight, correct? And we will begin the process of  
9 questioning the applicant's witnesses and evidence.  
10 And you do not have to sign up to be able to ask  
11 questions.

12 There is a sequence to be followed  
13 according to the ZBA hearing guidelines and  
14 procedures. First, the members of the Zoning Board  
15 of Appeals have the opportunity to question the  
16 applicant's witnesses who will provide evidence and  
17 exhibits. Next will be representatives of local  
18 government including school districts. Third,  
19 interested parties represented by an attorney who  
20 shall identify himself or herself and who he or she  
21 is representing for the record. Fourth, other  
22 interested parties. We ask that you identify  
23 yourself and provide us with your address for the  
24 record. And then last, Livingston County staff and

1 consultants.

2           The purpose of this phase of the  
3 proceedings is to ask questions, so-called  
4 cross-examination of the applicant's witnesses, and  
5 questions about the exhibits submitted. If you wish  
6 to testify or submit exhibits or make a statement,  
7 this will begin at a later time in the proceeding,  
8 and to do that, you will have to sign up, again Jane  
9 is out in the commons area to be signed up, and  
10 remind you to do this.

11           Another short reminder. All the exhibits  
12 that have been submitted to date are available on  
13 the Livingston County website.

14           CHAIRMAN CORNALE: All right. With that,  
15 certainly like to welcome everybody here and just  
16 remind everybody, cell phones, if you could go ahead  
17 and turn them to silent, that would be great.

18           And the applicant, go ahead and get  
19 started.

20           MR. BLAZER: Thank you, Mr. Chairman.  
21 Before we begin, I believe Mr. Luetkehans was going  
22 to identify who his clients are.

23           MR. LUETKEHANS: Okay. Linda and P.  
24 Thomas Ambrose at 19840E 300 North Road in Fairbury.

1 Karen and Mick Branz, B-R-A-N-Z, at 3891 North 3350  
2 East Road in Chatsworth. Mae, M-A-E, Brown, 16028  
3 North 1600 East Road in Pontiac. Matthew  
4 Cavanagh --

5 CHAIRMAN CORNALE: Mr. Luetkehans, not to  
6 interrupt, is that list available? Could we --

7 MR. LUETKEHANS: It's the only one we have  
8 right now.

9 CHAIRMAN CORNALE: We could not submit it  
10 in the record?

11 MR. LUETKEHANS: I can submit it. I can  
12 make a copy and I can send it to Mr. Schopp  
13 tomorrow, whatever you like, but I have 86 names.  
14 If you want them all, I can give them to you or I  
15 can email them to everybody tomorrow.

16 MR. BLAZER: On behalf of the applicant,  
17 Mr. Chairman, so we don't chew up an hour with a  
18 list of names, I think circulating a list, if we  
19 could get a copy as well, I think that would be  
20 appropriate.

21 CHAIRMAN CORNALE: All right, that would  
22 be a good idea. If you could make that available to  
23 the county first thing in the morning.

24 MR. LUETKEHANS: Yeah, it will be late

1 morning by the time I get to my office tomorrow, but  
2 you'll have it tomorrow.

3 CHAIRMAN CORNALE: All right. Just a  
4 reminder, moving forward, anything you present, 15  
5 hard copies.

6 MR. LUETKEHANS: I have 15 of everything.

7 CHAIRMAN CORNALE: Thank you.

8 MR. BLAZER: Mr. Chairman, our next  
9 witness is Mr. Terry VanDeWalle. For the record,  
10 Mr. Chairman, I had given Mr. Blakeman copies of Mr.  
11 VanDeWalle's presentation earlier. That is Pleasant  
12 Ridge Exhibit 113.

13 CHAIRMAN CORNALE: All right, the county  
14 will accept Pleasant Ridge Exhibit 113 as the avian  
15 and bat study summary presentation from Stantec.

16 MR. VANDEWALLE: All right. Good evening.  
17 My name's Terry VanDeWalle. I am a senior biologist  
18 with Stantec Consulting Services. I manage  
19 Stantec's Independence, Iowa, office. I have a  
20 bachelor of science degree in animal ecology and a  
21 master's degree in biology. I've been working as an  
22 environmental consultant for 25 years, the last  
23 eight years principally with the wind industry.  
24 I've conducted pre and post construction natural



1 resource surveys and permitting at 57 wind farms in  
2 15 states, including 13 projects here in Illinois.

3           Tonight I'd like to give you a summary of  
4 the avian and bat surveys that have been done at the  
5 Pleasant Ridge site, also some information about the  
6 consultations with the U.S. Fish and Wildlife  
7 Service and the Illinois Department of Natural  
8 Resources.

9           To date, there have been ten bird and bat  
10 surveys conducted at the site. Some of the surveys  
11 have been habitat assessments where the  
12 investigators have gone out and mapped the wildlife  
13 habitat on the site. Other surveys have been  
14 surveys of specific species or specific species  
15 groups. Stantec did not conduct all the surveys nor  
16 was I personally involved in all of them, but  
17 however I have reviewed all of the surveys and am  
18 familiar with the results, and my professional  
19 opinion is that all the surveys were conducted to  
20 industry standards and are consistent with the  
21 methodologies used at other wind farms in the  
22 midwest.

23           Just to kind of quickly summarize some of  
24 the results for you, starting with the habitat

1 assessments, one thing you'll notice about this  
2 table is that the numbers in this table are slightly  
3 different than what Ms. Blank mentioned last night,  
4 and that's because the survey areas are different.  
5 Ms. Blank was talking about the project area and the  
6 project footprint. These are the study areas for  
7 the wildlife surveys and they're often larger than  
8 the actual footprint. So as I'm sure everybody that  
9 lives in the area already knows, the project area is  
10 highly agricultural, mostly cultivated crops,  
11 principally corn and beans, and, you know, anywhere  
12 from -- Ms. Blank mentioned 98 percent of the  
13 project area is crop. The study areas that we  
14 looked at, you know, are around 93 percent crop, so  
15 it's a highly agricultural area. Only about 1  
16 percent of the project area is natural habitat,  
17 things like woodlands, wetlands, grasslands.

18           The natural habitat that is available  
19 within the project area is highly fragmented, so you  
20 have these little patches of habitat scattered  
21 throughout the project area, woodlots sometimes  
22 often associated with farmsteads, maybe some wooded  
23 streams, things like that, and on occasion  
24 grassland, but no large contiguous patches of

1 natural habitat within the intended project area.

2           Due to that, the highly disturbed nature  
3 of the project area and the cropland and the lack of  
4 suitable habitat, cropland is really of limited  
5 value to wildlife, to a diversity of wildlife  
6 anyway. There are some disturbance of avian species  
7 that use these areas, but in general birds won't  
8 nest in crop fields. They do forage or feed in crop  
9 fields, particularly again the disturbance of avian  
10 species like blackbirds or crows, Canadian geese,  
11 something like that.

12           Bats. Bats will not roost in crop fields.  
13 The bats in this area typically roost under the bark  
14 of trees or in hollows of trees. So crop fields  
15 don't provide roosting habitat. There are a few of  
16 the bats that will forage over crop fields, so the  
17 big brown bat, for instance, one of the more common  
18 bats, you know, in Livingston County.

19           Looking at some of the surveys, the bird  
20 use survey, one year of bird survey was conducted at  
21 the site. The investigator set up 35 survey points  
22 scattered throughout the project or throughout the  
23 survey area. Each of the 35 points was visited  
24 several times, many times actually, over the course

1 of the year; was visited weekly during the spring  
2 and fall migration and monthly during the winter.  
3 At each point the observer would sit for 20 minutes  
4 and report all large birds observed within an 800  
5 meter radius of the point and then all small birds  
6 either observed or heard within a hundred meters of  
7 the point. So all told, there were 509 total  
8 individual surveys at those points.

9           You can see from the slide, during that  
10 time they introduced or they observed 67 species.  
11 Again, these are all disturbance of avian species.  
12 The most abundant species observed were the  
13 nonnative European starling, brown-headed cowbirds,  
14 crows and red-winged blackbirds, a total of just a  
15 little over 5300 individual bird observations.  
16 That's not individual birds; those are observations.  
17 They could have seen the same bird more than once.  
18 But when you think about going out and counting  
19 birds in these areas, over the course of a year,  
20 seeing only 5300 birds is a pretty low number. 67  
21 species is also pretty low considering Illinois has  
22 something over 400 of species of breeding birds in  
23 the state. So we have pretty low diversity, pretty  
24 low numbers or abundance of birds. That's typical,

1    though, for a highly agricultural site here in the  
2    midwest, so it's pretty typical of what you'd see.

3            Only one sentient species was observed.  
4    That is the Northern Harrier. Northern Harriers are  
5    a hawk, they're a diurnal hawk, come out during the  
6    day. They fly low to the ground. All of the ones  
7    that were seen here were not within the zone.

8    That's pretty typical for Northern Harriers, they're  
9    pretty commonly seen, especially during migration,  
10   you know, throughout the midwest, and they're picked  
11   up, observed at wind farms pretty often as well.

12           The raptor nest surveys were done, so  
13   raptors are hawks, owls, eagles and falcons. Two  
14   surveys were done, one in 2009 and then Stantec  
15   repeated the survey in 2014 earlier this year. We  
16   did a survey early in the year before the leaves  
17   came out and we did an aerial survey of the project  
18   site, the project area, and the ten mile buffer  
19   that's in compliance with the U.S. Fish and Wildlife  
20   Service Eagle Conservation Plan Guidance.

21           So we had an airplane, we flew transects  
22   of the project area and the ten mile buffer  
23   recording all raptor nests that were observed, and  
24   then whether they were active or not. All that we

1 found were two active red-tailed hawk nests in that  
2 area and no bald eagle nests were observed.

3 Two species that the agency brought up as  
4 species of concern during the initial consultations  
5 back in 2008 and 2009 were the American golden  
6 plover and Smith's longspur, and so specific surveys  
7 for those species were conducted. You can see  
8 during the survey 113 American golden plovers were  
9 observed. American golden plovers do not nest here  
10 in Illinois, but they do fly through a migration,  
11 primarily the spring migration, and they will use  
12 wet crop fields. They'll stop and feed in those  
13 crop fields during migration.

14 Again, none of those were observed in the  
15 rotor swept zone though, so they're all flying low  
16 to the ground, and when they actually migrate, as  
17 they're passing overhead, they fly much higher than  
18 the turbines. Smith's longspur is a little songbird  
19 that migrates through the area. None were observed  
20 during the surveys.

21 Turning to bats. Just based on geographic  
22 range, there are nine species of bats that could  
23 occur in Livingston County. Of those, the Indiana  
24 bat is federally endangered and the northern

1 long-eared bat is currently proposed to be listed as  
2 federally endangered and that listing decision is  
3 expected in April of 2015.

4           Two different bats surveys have been  
5 conducted at the site. First is an acoustics  
6 survey. Last night we heard quite a bit about  
7 acoustics and the range of hearing for us humans and  
8 the sound below, the low levels below our hearing.  
9 Well, bats are on the other end of the spectrum,  
10 they have ultrasound, so most of the bats are above  
11 the range of human hearing. But actually bats, like  
12 dolphins, echolocate. So they send out a high  
13 frequency sound, it travels out, hits an object,  
14 comes back, and the bats can tell the size and shape  
15 of the object, the distance, the direction it is  
16 from the bat, and so on. But we can record those,  
17 those echolocations of bats, and that gives us an  
18 idea of the bat activity in the area. We can't tell  
19 how many bats, we can't look at abundance because  
20 you could have the same bat passing back and forth  
21 in front of the detector, but it gives us a relative  
22 frequency.

23           And so the surveys that were conducted at  
24 the site, they set -- they put the detectors on five

1 of the meteorological towers, one detector at the  
2 base of the tower and one detector up higher on the  
3 tower within the rotor swept zone, and then there  
4 was a sixth detector set at a nonmeteorological  
5 tower location. What they found was that -- by the  
6 way, this is a fall only survey, so it was conducted  
7 from mid-July through most of October. That's  
8 really the fall migratory period for bats. What  
9 they found was that activity peaks in late August,  
10 which again is really typical for what we see at  
11 wind farm sites here in the midwest.

12           When we do these surveys, you find -- we  
13 see pretty low activity during the spring migration,  
14 a little bit of activity in the summer with the  
15 resident bats, but then a real peak in activity in  
16 the fall. And that activity usually peaks late  
17 August, early September and then trails off by the  
18 time you get to the end of October. So again,  
19 this -- at this site, it peaked in late August.

20           Most of the bats that were seen, were  
21 recorded, were low frequency bats, so we divide bats  
22 up into groups based on their -- based on the  
23 frequency of their call. Low frequency bats are  
24 bats that are below 30 kilohertz. Those are things



1 like the big brown bat, the silver-haired bat and  
2 the hoary bat. The two listed bats, Indiana bats  
3 and northern long-eared bats, are high frequency  
4 bats, so they have frequencies above 40 kilohertz.

5           There were -- there were some, about 60  
6 percent of the calls recorded at this site were low  
7 frequency bats and about 14 percent were the high  
8 frequency bats. I should say that it's not only  
9 northern and Indiana bats that are high frequency,  
10 there's also little brown bats, tricolor bats and  
11 red bats, and red bats are really common during  
12 migration, so -- but what this tells us is that most  
13 of the bats migrating through are these low  
14 frequency bats.

15           The way we look at that activity is the  
16 number of bat passes per detector night. You can  
17 see here it's about three. So that means that, on  
18 average, three bats passed past the detector on any  
19 given night. That again is on the low end of the  
20 scale for what we see in the midwest of the sites  
21 that Stantec has surveyed here in the midwest. The  
22 number of bat passes per night ranges from about  
23 three on up to seven or eight. You know, if you get  
24 in a habitat where you have a lot of -- or get into

1 an area where you have a lot of good habitat, like  
2 the woodlands ground, bat passes might be 20 or 30  
3 bat passes per night. So, again, really what we see  
4 for this activity, per bat activity at this site, is  
5 really typical of these highly agricultural sites in  
6 the midwest.

7           The other bat study that was done was a  
8 mist netting survey. This is where they actually go  
9 out and try to capture the bats. They go to areas  
10 that are most likely to yield bats, which are along  
11 streams and places like that. Not right out in the  
12 middle of a cornfield, but along streams is where  
13 we'd expect to catch bats. They trap the bats. And  
14 at this site they did catch five species of bats.

15           The big brown bat, the common one in this  
16 area, accounted for about two-thirds of the --  
17 two-thirds of the captures. You will notice that  
18 northern long-eared bats were captured during this  
19 survey. There were a few. Again, not a surprise,  
20 even though northern long-eared bats are currently  
21 listed for -- or proposed for listing as federally  
22 endangered, that's because of declines on the east  
23 coast, but we haven't seen declines yet here in the  
24 midwest, and so we typically will capture northern

1 long-eared bats here in most surveys that we do in  
2 the midwest, so not a surprise that we found them  
3 here. No Indiana bats were captured at the site.  
4 Again, those are the ones that are currently  
5 federally listed.

6 All of this site does have, you know,  
7 relative low quality habitat for wildlife in that  
8 the surveys did show, you know, fairly low use with  
9 birds and bats. Even though those conditions exist,  
10 Pleasant Ridge recognizes that there is still some  
11 risk to birds and bats as a result of the wind  
12 facility. And so as a result of that, they have  
13 developed a bird and bat conservation plan.

14 Bird and bat conservation plans or  
15 conservation strategies are recommended in the U.S.  
16 Fish and Wildlife Service, a land-based wind energy  
17 guidance that they put out. The purpose of a BBCS  
18 is really for the company to develop a plan to avoid  
19 and/or minimize impacts to birds and bats and lays  
20 out the strategy for doing that, and you develop  
21 your BBCS in consultation with the Fish and Wildlife  
22 Service. And that's what has happened here. It has  
23 been developed and submitted to the Fish and  
24 Wildlife Service.

1           Really, avoiding impact to birds and bats  
2 begins with project siting, and that is again what  
3 happened here. The project, the project facilities  
4 for Pleasant Ridge are sited in previously disturbed  
5 areas, crop fields, and that is what's recommended  
6 by Fish and Wildlife Service for siting wind  
7 turbines. Fish and Wildlife Service prefers to see  
8 them sited in crop fields, again because it reduces  
9 impacts to birds and bats. And so as you heard over  
10 the past couple of nights, that's where the project  
11 facilities for this project are located.

12           Specific measures have been incorporated  
13 into the BBCS for Indiana and northern long-eared  
14 bats. First, any project turbine or I should say  
15 all project turbines that are in an area where there  
16 is suitable or occupied bat habitat have been sited  
17 a minimum of a thousand feet away from that habitat.  
18 U.S. Fish and Wildlife Service considers that a  
19 buffer of a thousand feet to be avoidance of summer  
20 habitat. Both Indiana and northern long-eared bats  
21 will forage within the woodlands and along the  
22 edges, but they don't get out more than a thousand  
23 feet from the edges of the woodlands, so if turbines  
24 are sited more than a thousand feet, Fish and

1 Wildlife Service considers that avoidance.

2           The second and important measure that's  
3 been incorporated here is that the cut-in speed of  
4 the turbines will be raised to a wind speed of 6.9  
5 meters per second at night during the fall migratory  
6 season. So the cut-in speed of the turbine is the  
7 wind speed at which the turbines begin to generate  
8 power and send it to the grid. So for the turbines  
9 that are proposed for this project, the  
10 manufacturer's rated cut-in speed is around 3 meters  
11 per second. We know that there's an inverse  
12 relationship between wind speed and bat activity.  
13 As wind speed increases, bat activity decreases.  
14 The bats are just not as active on high wind nights  
15 because the bats themselves are pretty small and  
16 they can't handle the high wind and the insects that  
17 they feed on are not out on high wind nights either.

18           So what we have seen, and there have been  
19 a number of studies that show this, is that raising  
20 cut-in speeds of turbines reduces bat mortality, and  
21 at present the only proven method for reducing bat  
22 mortality at wind farms or at wind turbines is  
23 raising cut-in speeds. There have been a number of  
24 studies that have shown 6.9, at a cut-in speed of

1 6.9 meters per second, you get over 90 percent  
2 reduction in bat mortality. And Fish and Wildlife  
3 Service considers 6.9 an avoidance level for Indiana  
4 and northern long-eared bats. So say 6.9 you'll get  
5 over 90 percent reduction in overall bat mortality,  
6 and you would not expect any mortality of Indiana or  
7 northern long-eared bats at that level.

8 In addition, the turbine blades or the  
9 turbines will be feathered below the cut-in speed,  
10 which means that the blades will be turned, will be  
11 turned parallel to the wind, the wind direction, and  
12 so the blades will not be freewheeling under the  
13 cut-in speed. They may turn, but if they do,  
14 they're going to turn very slowly. And there is a  
15 study at the Fowler Ridge wind farm in Indiana which  
16 has shown that if you do nothing other than feather  
17 the blades below the cut-in speed, you get about a  
18 33 percent reduction in bat mortality.

19 So that combination of raising the cut-in  
20 speed and feathering below the cut-in speed, you  
21 know, currently is shown to be highly effective for  
22 reducing bat mortality.

23 Tree cutting. Very -- you know, there's  
24 not a lot of woodland within the project area to

1 begin with, so there's not going to be a lot of tree  
2 clearing. The tree clearing that will occur is for  
3 the overhead transmission line and where it crosses  
4 the Vermilion River. Tree clearing there will occur  
5 during the winter. Again, as I mentioned before,  
6 the bats will roost up under the bark of trees, but  
7 that's where they spend the summers. In the winter,  
8 they migrate somewhere else. They're not under the  
9 trees anymore. So if you cut during the winter, you  
10 will not -- it will not result in direct take of  
11 bats, and so that seasonal clearing is a pretty  
12 common avoidance measure that both the Fish and  
13 Wildlife Service and the DNR recommend.

14 A couple other components of the BBCS. It  
15 does have both a monitoring and an adaptive  
16 management plan. Post construction monitoring will  
17 occur at this site, and the post construction  
18 monitoring is a -- it currently would be fall, fall  
19 carcass searches, which is walking around under the  
20 turbines looking to see, to find any mortality of  
21 birds or bats. Fall carcass, intensive fall carcass  
22 searches during the first three years of the project  
23 and then less intensive searches every three years  
24 after that for the life of the project. In

1 addition, there will be American golden plover  
2 surveys in the spring to determine the timing of use  
3 by the plovers, and then of course will be -- when  
4 they're doing the carcass searches, they'll be  
5 looking for plovers as well.

6 Adaptive management. There are adaptive  
7 management measures built into the BBCS in case  
8 there is a take of endangered species, at-risk  
9 species, so the Indiana bat or the northern should  
10 be listed, or if there's take of a bald or golden  
11 eagle. And then there are some other adaptive  
12 management measures built in if it's found that  
13 there's some other variable that affects or  
14 negatively affects bats. So, for instance, air  
15 temperature. If at some point it's discovered that  
16 you have more bat mortality at a certain air  
17 temperature, then another plan, adaptive management  
18 measures, can be pulled in to account for that.

19 The BBCS was developed, submitted to the  
20 Fish and Wildlife Service, and the Fish and Wildlife  
21 Service did accept the BBCS and, as a result of  
22 that, issued a technical assistance letter for the  
23 project. That technical assistance letter was  
24 issued on November 5th.



1           Just kind of quickly run through some of  
2 the measures. Some of these we talked about. The  
3 technical assistance letter does address bald  
4 eagles. It's over 25 miles to the nearest bald  
5 eagle nest. Pleasant Ridge will implement a carrion  
6 or a roadkill removal program. By removing roadkill  
7 and carrion, you're less likely to attract bald  
8 eagles or golden eagles, if they were in the area,  
9 to the site. As a result of that, Fish and Wildlife  
10 Service considers the collision risk for eagles to  
11 be low and the service does not recommend applying  
12 for an eagle take permit at this time.

13           Migratory birds. There are migratory  
14 birds that use the area, but no large flocks.  
15 American golden plovers were shown to use the area,  
16 but Pleasant Ridge will conduct two years of post  
17 construction monitoring for the -- during the spring  
18 for the plovers, and then, again, that post  
19 construction mortality monitoring will include all  
20 birds; so intensive monitoring for three years and  
21 less intensive every three years for the life of the  
22 project.

23           Whooping cranes. There's an experimental  
24 population of whooping cranes that does pass through

1 the area. This population is considered  
2 experimental and nonessential by the Fish and  
3 Wildlife Service, which means that it is not  
4 protected under the Endangered Species Act, but it  
5 is protected under the Migratory Bird Treaty Act.  
6 These are birds that are raised in captivity in  
7 Wisconsin and then led -- using ultralight aircraft,  
8 they're led on their migration down towards and into  
9 Florida where they spend the winter, but when they  
10 do that, they do pass over Illinois and potentially  
11 Livingston County here.

12 Fish and Wildlife Service encouraged  
13 Pleasant Ridge to contact the International Crane  
14 Foundation. Pleasant Ridge did that. It sent a  
15 letter to Operation Migration USA on October 8  
16 informing them of the plans for the project and its  
17 location and so on, so they are aware of it and can  
18 build it into their migration route. I will note  
19 that even within the primary migration route for  
20 whooping cranes, which is really through Kansas,  
21 North Dakota, South Dakota, Nebraska, there has not  
22 been a reported whooping crane mortality as a result  
23 of a collision with a turbine.

24 Indiana and northern long-eared bats.

1 Again, we talked about most of this, but minimal  
2 summer habitat in the area, and so this is -- the  
3 site is primarily a fall migration risk. Turbines  
4 will be set back a minimum of a thousand feet from  
5 any suitable or occupied habitats, primarily along  
6 the Vermilion. As a result, Fish and Wildlife  
7 Service considers that avoidance of summer take. It  
8 will implement that 6.9 meter per second cut-in  
9 speed at night in fall migration period, so that's  
10 avoidance of the fall migratory take, and again the  
11 feathered blades below cut-in speed, and once again  
12 the carcass monitoring, the pre or the post  
13 construction monitoring for bats.

14 All right. On to some consultation with  
15 the Illinois DNR. Back on April 8th of this year,  
16 Stantec sent a letter to the Illinois DNR requesting  
17 some information on current or current information  
18 on potential threatened and endangered species or  
19 other issues within the project area. DNR was  
20 consulted back in 2008, 2009. Since it had been a  
21 while and the project boundaries had changed  
22 slightly, we asked again. So, again, we did that in  
23 April. It was on September 8th, then, that we  
24 finally heard back from the DNR and that letter was

1 submitted to the county.

2 In that letter, there were 15  
3 recommendations that the county made for some  
4 additional work that they might want to see done at  
5 the site. Just want to kind of quickly go through  
6 those with you. I'm not going to read every word of  
7 every condition, but I'll summarize what it is and  
8 the response.

9 Recommendation one really is asking for  
10 Pleasant Ridge to conduct more mist netting at the  
11 site. We really don't think that's necessary for a  
12 couple reasons. One, habitat hasn't changed within  
13 the project area since the original mist netting was  
14 done, so we really have no reason to expect that  
15 we'd find bats in different places or find more bats  
16 than before.

17 In addition, if you remember, they caught  
18 northern long-eared bats last time, so we already  
19 know that they're present, and Pleasant Ridge is  
20 just going to assume presence of northern long-eared  
21 bats. No Indiana bats were caught, but they'll  
22 assume presence there as well because I mean the  
23 mitigation or the avoidance measures are the same.  
24 So they're assuming the presence of the bats and

1 again they're implementing that 6.9 meter per second  
2 cut-in speed which again is avoidance.

3 Recommendation two asks for one activity  
4 season of post construction monitoring to establish  
5 baseline mortality at the site. Although it's not  
6 specifically stated in this recommendation, really  
7 what this recommendation is asking for is that the  
8 first year of post construction monitoring or the  
9 first year of operation be uncurtailed. That's  
10 really the only way to set baseline information for  
11 mortality, if you don't curtail.

12 Again, Pleasant Ridge doesn't feel that  
13 this is necessary for a couple reasons. One, it  
14 presents an unnecessary risk to bats. Again, with  
15 6.9, what they're proposing, we can reduce bat  
16 mortality by 90 percent. Uncurtailed we're going to  
17 have much -- have the potential for much higher  
18 overall bat mortality. In addition, uncurtailed,  
19 there is potential for the take of a listed species,  
20 and so Fish and Wildlife Service is not in favor of  
21 this recommendation either because if you're going  
22 to have take of a listed species, you need to have  
23 coverage for that. So again, we're -- Pleasant  
24 Ridge is just going to implement that 6.9 here.

1            Recommendation three is asking for a  
2 thousand foot setback from the woodlands. Pleasant  
3 Ridge agrees with this and has already incorporated  
4 that into the project design.

5            Recommendation four is asking that  
6 turbines not be allowed to freewheel below cut-in  
7 speed. Again, Pleasant Ridge agrees with this and  
8 has already committed to feathering turbines below  
9 or feathering blades below the cut-in speed to  
10 prevent freewheeling.

11           Recommendation five asks to implement  
12 mortality measures during the fall, and in this case  
13 the department specifically asked for a cut-in speed  
14 of 5.5 meters per second when air temperatures are  
15 above 15 degrees celsius or 60 degrees Fahrenheit.  
16 Again, we know that if you raise cut-in speeds from  
17 the manufacturer's rated cut-in speed of 3 or so up  
18 to 5.5, you get about a 50 percent reduction in bat  
19 mortality. Pleasant Ridge has already committed to  
20 raising it to 6.9, so what they've agreed to do is  
21 actually more protective of the bats than this  
22 recommendation would be. And Fish and Wildlife  
23 Service has also agreed with that and issued the  
24 technical assistance letter based on that. So

1 Pleasant Ridge will implement fall protective  
2 measures but at a much higher protection level.

3 Recommendation six asks for an additional  
4 activity season of the post construction monitoring.  
5 This one actually relates back to that  
6 recommendation for the uncurtailed year. Again,  
7 this one is really not necessary because Pleasant  
8 Ridge is already committed to that intensive, three  
9 years of intensive monitoring and then three -- less  
10 intensive monitoring every three years after that.  
11 And the monitoring will be done at turbines that  
12 have the minimization measures.

13 Recommendation seven asks, recommends that  
14 Pleasant Ridge obtain a state incidental take  
15 authorization. Again, we feel this is not  
16 necessary. Because of the 6.9 meter per second  
17 cut-in speed, we're already at the avoidance level  
18 for take of the listed species. We're not expecting  
19 Indiana or northern long-eared bats to be taken. As  
20 a result of that, Fish and Wildlife Service has  
21 confirmed that an Endangered Species Act incidental  
22 take permit is not needed and -- because we're at  
23 avoidance level and don't think a state incidental  
24 take authorization is needed here.

1           Recommendation eight asks for one full  
2 season of avian post construction monitoring, so for  
3 birds. Again, Pleasant Ridge is actually going  
4 beyond that by doing the first three years of  
5 intensive and, you know, every three years after  
6 that, and the Fish and Wildlife Service again agrees  
7 with that in the technical assistance letter.

8           The next three all relate to construction.  
9 Recommendation nine asks that any broken field tiles  
10 be replaced or repaired. Ten asks that once they  
11 regrade the site they regrade it to the natural  
12 contours. And 11 asks for effective erosion control  
13 measures. Pleasant Ridge agrees with all of these,  
14 and all of these are addressed by the proposed  
15 agricultural impact mitigation agreement that's been  
16 submitted to the county. In addition, Pleasant  
17 Ridge has prepared a storm water pollution  
18 prevention plan which I have reviewed and it does  
19 include erosion of field measures.

20           Recommendation 12 asks for an acoustic  
21 kinetic study to look at the effect of aquatic noise  
22 generated by turbines. You know, again, we don't  
23 really feel this one is necessary. We're not aware  
24 of any commercially available scientific data that



1 suggests turbine noise and vibration will impact  
2 freshwater aquatic species. Did a quick search of  
3 the literature on that. Was not able to find  
4 anything on freshwater species. We did find some  
5 literature on marine species, which in fact show  
6 that marine mussels, clams, will -- when they put  
7 turbines in off-shore, the turbine foundation is  
8 underwater, mussels will actually colonize the  
9 turbine base in that case. So obviously vibration  
10 is not affecting those. In addition, they have not  
11 noticed any changes in fish populations as well.

12           Here it should be noted none of these  
13 turbines are going to be placed in an aquatic  
14 environment anyway. They're all on land and they're  
15 some distance, sometimes miles, from a stream, so  
16 really we don't think that this recommendation is  
17 necessary.

18           Recommendation 13 asks that the applicant  
19 conduct biological surveys of each stream and  
20 channel to characterize invertebrate mussel, fish  
21 and amphibian communities, and then in follow-up  
22 studies to monitor any changes attributable to wind  
23 turbine operation. Again, we're not -- we don't  
24 think this one is necessary. Some of the same

1 reasons. We're not aware of any commercially  
2 available scientific data that suggests that turbine  
3 operation has an effect on invertebrate mussel, fish  
4 or amphibian community composition. Even if you  
5 were to do the study and you noticed that there was  
6 some change in community composition, it would not  
7 be possible to show any causal link between wind  
8 turbine operation and changes in fish or mussels or  
9 frog populations. And you certainly would not be  
10 able to conclude that any changes in the population  
11 were attributable to wind turbine operation. So  
12 again, it's -- you know, we don't think that this  
13 recommendation is necessary.

14 Recommendation 14 asks for instrumental  
15 monitoring of acoustic and kinetic vibration at the  
16 Felky Slough/Saunemin Reach, Indiana -- I'm sorry,  
17 Illinois Natural Areas Inventory Site. Again, this  
18 one's not necessary. This preserve is located  
19 approximately 4.5 miles from the nearest proposed  
20 turbines. According to the DNR letter, there are no  
21 records of threatened or endangered species at this  
22 site, and again Pleasant Ridge is not aware of any  
23 commercially available scientific data that suggests  
24 noise and vibration will affect freshwater mussels

1 or fish at a distance of 4.5 miles.

2           And the last one, 15, very similar to 14,  
3 this just really asks for the same thing, that  
4 instrumental monitoring of acoustic and kinetic  
5 vibration, but at this time at the Charlotte Reach  
6 Illinois Natural Areas Inventory Site. Again,  
7 really not necessary. According to the DNR letter,  
8 no records of threatened or endangered species at  
9 this site, and once again, we're not available -- or  
10 we're not aware of any data that suggests that  
11 turbine noise or vibration can affect mussels at a  
12 distance of more than three miles.

13           One last issue I want to address just  
14 briefly, I know sometimes it comes up, doesn't have  
15 anything to do with birds and bats, but that is that  
16 wind turbines may have an effect on livestock. Did  
17 a search for this as well, and as far as I'm aware,  
18 there are no scientifically defensible studies that  
19 show that the wind turbines have an effect on cattle  
20 or hogs.

21           As far as I can tell, there's only been  
22 one veterinary study done and that was actually  
23 domestic geese. They took some domestic geese.  
24 They placed one group at about 50 meters from a

1 turbine and another group about 500 meters from the  
2 turbine. The group that was at 50 meters did show  
3 some effects. They had lower weight gain and higher  
4 levels, higher blood levels of stress hormone, so  
5 lower weight gain and higher levels of stress  
6 hormones than the group out at 500. By the time you  
7 got out to 500 meters, there was still some effect,  
8 but it was much less than it was closer to the -- to  
9 the birds that were closer.

10 We did contact a veterinarian here in  
11 Illinois who works with some cattle producers in an  
12 area where a wind farm was constructed about two  
13 years ago. She reported that she has had no reports  
14 of adverse effects on the cows and she has not  
15 observed any in her practice as well. So thank you.

16 MR. BLAZER: Mr. Chairman, we have  
17 fortunately one of the smaller piles. These would  
18 be Pleasant Ridge Exhibits 103 through 112. And  
19 then 119, Mr. Chairman, that's the one that was the  
20 storm water pollution prevention plan. That was  
21 accidentally attached to another group on Monday. We  
22 actually left it here, so there are a few on the  
23 table I believe. That's our 119. And the collated  
24 piles are all right here.

1           MR. LUETKEHANS: Mike, I don't think I  
2 have 119.

3           MR. BLAZER: You did from Monday. It's  
4 probably in one of your piles.

5           CHAIRMAN CORNALE: The county will accept  
6 Pleasant Ridge Exhibit 102 as the VanDeWalle  
7 curriculum vitae. County will accept Pleasant Ridge  
8 Exhibit 103 as the Pleasant Ridge Avian Final  
9 Report. The county will accept Pleasant Ridge  
10 Exhibit 104 as the Pleasant Ridge Bat Acoustic  
11 Studies. County will accept Pleasant Ridge 105 as  
12 Pleasant Ridge CRA. County will accept Pleasant  
13 Ridge Exhibit 106 as the Pleasant Ridge Mist Net  
14 Report. County will accept Pleasant Ridge 107 as  
15 the Aerial Raptor Nest Survey. The county will  
16 accept Pleasant Ridge Exhibit 108 as the Pleasant  
17 Ridge BBCS. The county will accept Pleasant Ridge  
18 No. 109 as the United States Fish and Wildlife  
19 Service Technical Assistance Letter.

20           The county will accept Pleasant Ridge  
21 Exhibit 110 as the IDNR Consultation Letter. The  
22 county will accept Pleasant Ridge Exhibit 111 as the  
23 Response to IDNR Consultation Letter. The county  
24 will accept Pleasant Ridge Exhibit 112 as the

1 Operation Migration Outreach Letter. And we've  
2 already accepted 113. And 119 we've previously  
3 accepted. Is that --

4 MR. BLAZER: No, it wasn't because it was  
5 attached to a group of exhibits that a prior witness  
6 hadn't talked about, so you actually do need to  
7 admit it today.

8 CHAIRMAN CORNALE: All right, so the  
9 county will accept Pleasant Ridge Exhibit 119 as the  
10 Pleasant Ridge Draft SWPPP. The county will also  
11 accept Pleasant Ridge Exhibit 118, the Economic  
12 Impact of Pleasant Ridge Wind Energy Project  
13 presented by David G. Loomis.

14 MR. LOOMIS: Good evening. My name is  
15 David Loomis and I'm president of Strategic Economic  
16 Research, LLC. I have a Ph.D. in economics from  
17 Temple University, I graduated in 1995, and I'm a  
18 professor of economics at Illinois State University.  
19 Became a full professor, ranked a full professor in  
20 2010.

21 I also served as the director of the  
22 Center for Renewable Energy at Illinois State  
23 University and have been in that position since  
24 2007. And I serve as the director of the Illinois

1 Wind Working Group since 2006. Had over 25  
2 peer-reviewed publications and given expert  
3 testimony before county boards, Illinois Senate  
4 Committees and the Illinois Commerce Commission and  
5 Missouri Public Service Commission. My full vitae  
6 is listed in the exhibits.

7           Probably most pertinent to this report is  
8 a report that I did for the state energy office, the  
9 Illinois Department of Commerce and Economic  
10 Opportunity, where I examined the economic impact of  
11 wind farms across the state for the State of  
12 Illinois. Those were existing wind farms, looking  
13 kind of historically at wind farms in its totality  
14 across the state of Illinois and then projecting  
15 what are the total economic benefits that come to  
16 the State of Illinois due to those wind farms in  
17 existence.

18           The purpose of my testimony here tonight  
19 is to quantify the economic impacts of the Pleasant  
20 Ridge project as well as to highlight some of the  
21 school tax benefits, school district tax benefits  
22 that will accrue should the project be completed.

23           My methodology for the economic impact was  
24 to use the Jobs and Economic Development Impact

1 model referred to as the JEDI model. This model was  
2 developed by the National Renewable Energy  
3 Laboratories, and as you can see, the plan number  
4 that I used there, it is updated and it's based on  
5 the IMPLAN model. IMPLAN is a standard economic  
6 impact analysis software. There's two leading  
7 brands of software, IMPLAN and REMI. IMPLAN happens  
8 to be the one that is used as the basis or platform  
9 for the JEDI model.

10           When you're doing an economic impact  
11 analysis, we're really going to divide the world  
12 into two parts. First, we're going to take a look  
13 at the initial capital expenditures, the  
14 construction expenditure time. Those only are  
15 short-term benefits that only last during the time  
16 of construction. And then secondly, we'll look at  
17 the operations expenditures, the ongoing operations  
18 of the existence of a wind energy project, and say  
19 what's the economic impact over the long-term of  
20 that project.

21           And when you're doing an economic impact  
22 analysis, you want to in particular look at where  
23 those expenditures are made. So we've divided this  
24 chart into three parts, the local expenditures, the



1 state and regional expenditures, and then the  
2 nonregional expenditures. So what we want to look  
3 at is to say how much of those, the expenditure on  
4 this project, is going to be spent here in McLean --  
5 I'm sorry, in Livingston County and then how much is  
6 going to be spent, say, in the state of Illinois and  
7 then outside the state of Illinois. So we did -- I  
8 did two separate analyses, one that was a county  
9 level analysis for Livingston County and then one  
10 that was looking at the -- for the state of  
11 Illinois.

12 And when you look at the right-hand side,  
13 we're looking at the multiplier effect. We're  
14 looking at those effects of the initial investment  
15 and then how that reverberates throughout the  
16 economy. And in particular what we're looking at is  
17 economic leakage, so we're looking at those  
18 expenditures that would go outside of Livingston  
19 County. Those would be those expenditures that  
20 would, in economics terms, leak out so that the  
21 benefits aren't captured within the county.

22 A similar type analysis would be where we  
23 draw the boundaries around the State of Illinois and  
24 say how much leaks out and how much gets spent

1 outside of the state of Illinois, maybe in  
2 purchasing wind turbine parts from Colorado or other  
3 states. Those would be counted as economic  
4 leakages.

5           We further divide this into kind of three  
6 separate effects. So the first effect you'll see,  
7 number one, is the on-site labor and professional  
8 services. So when we look at those, that's the  
9 direct effect. These are either jobs that are  
10 workers employed by Invenergy, or contractors that  
11 are going to do either, in the first effect, the  
12 construction jobs, actually building the turbine,  
13 and then those ongoing during the operations would  
14 be largely wind turbine technicians that would be  
15 there for the operations and maintenance of the wind  
16 energy project.

17           Number two over there is the equipment  
18 production and supply chain. So this is looking at  
19 the jobs that will be created through the purchases  
20 of equipment and supplies that are going to build  
21 the wind turbine project or replacement parts that  
22 will happen during the ongoing operations and  
23 maintenance of the wind farm. Sometimes these are  
24 referred to as the indirect effect. So number one

1 would be the direct effects. These would be the  
2 indirect effects.

3           Finally, number three is the induced  
4 economic activities. These would be household  
5 purchases due to the injection of income into the  
6 area. So we look at those effects. It would be as  
7 if you have additional workers that go out -- due to  
8 their now newfound income, would go out to eat at a  
9 local restaurant. That local restaurant may have  
10 increased revenue and increased demand such that  
11 they hire an additional waitress or waiter. So that  
12 job would be counted in the induced economic impact  
13 that would come from the activity here and from the  
14 additional income.

15           Now, whenever you're doing an economic  
16 impact study, there are some cautions, and this is  
17 not specific to this particular study. It is --  
18 with the exception of the last one, would be  
19 systematic cautions that you would say with any  
20 economic impact study. The results are an estimate  
21 and they're highly dependent on the assumptions  
22 used. The results are not a measure of project  
23 viability. So we're not looking at the feasibility  
24 of the project or the project economics counting the

1 revenues and expenses and cash flow and things like  
2 that. We're just taking the project cost as given.

3           The results are reported as gross jobs not  
4 net jobs, and by that I mean we don't look at the  
5 effect of what that wind farm might be replacing in  
6 the way of other forms of electricity generation.

7 So we only look at those gross jobs, the jobs that  
8 are coming to the county as a result of this project  
9 and not netting those out as a replacement for any  
10 other effect that that would have in the electricity  
11 market.

12           We made suppositions around local sourcing  
13 and procurement that are fundamental in determining  
14 the local economic activity. So, for example -- and  
15 those suppositions were very conservative I would  
16 say. So when we looked at those indirect effects  
17 and said how many, for example, the equipment,  
18 that's the turbines, the towers, the blades.

19 Obviously in Livingston County we don't have a  
20 manufacturer of those things and it would be heroic  
21 for us to assume that one would be developed in a  
22 short amount of time, and so we assume that zero  
23 percent of all of those resources are going to be  
24 sourced from within the county. But we looked at

1 those labor impacts, where are the jobs going to  
2 come from, the construction jobs, the materials that  
3 would be sourced. Like concrete and rebar, those  
4 types of things were also included as being sourced  
5 locally.

6           And the last one is one that oftentimes is  
7 not done, but we did it in this study. The jobs  
8 that are reported out, you're going to see in the  
9 next tables, are reported out as full-time  
10 equivalent jobs. So when I count a job in this  
11 study, it's a full-time equivalent which means that  
12 it equates to 2080 hours worked in a year. So if  
13 you were to have a part-time worker or temporary job  
14 that would only constitute part of a job, we're  
15 going to scale that back. So, if anything, the  
16 number of jobs, the actual jobs, are going to be  
17 underreported because we're converting that to a  
18 full-time equivalent job.

19           So I'm going to show you next that we're  
20 going to see 384 new jobs during construction.  
21 Actually if those people were just employed for six  
22 months, we might actually have 768 workers that work  
23 for six months, but because they were only working  
24 full-time for six months, we're going to take them

1 as a full-time equivalent and divide those in half.  
2 And so the numbers are counted and are meant to be  
3 very conservative.

4 So here's a chart and I've broken it up  
5 into two parts. You can see the first part of the  
6 chart is looking at construction and the second part  
7 of the chart is looking at operations, so we're  
8 breaking up these two time periods.

9 In the first line there under  
10 construction, and I'll concentrate on the Livingston  
11 County numbers rather than the State of Illinois  
12 numbers, but we did run both of those, the project  
13 development and on-site labor impacts, those direct  
14 impacts are 177 jobs full-time equivalence, the  
15 indirect turbine and supply chain impacts would be  
16 173, the induced impacts would be 34, for a total  
17 new local jobs that be supportive of this project is  
18 384 jobs.

19 During operations that number comes down  
20 quite a bit, but remember these are annual jobs that  
21 are going to last during the life of the project.  
22 We have on-site labor impacts of 13, local revenue  
23 and supply chain impacts of another 56, induced  
24 impacts of 23, for a total of 92 local long-term

1 jobs that are supported by this project.

2 Now, we also wanted to look at labor  
3 earnings, so looking at the total injection of  
4 earnings into the local economy, and rather than go  
5 through each number in the table, I'll just point to  
6 you that summary number that looks at \$24 million  
7 that would come from new local earnings during the  
8 construction period, and then during operations  
9 we're looking at \$4 million annually.

10 Now, the third output is total economic  
11 impact or total output. We would compare this  
12 number -- as opposed to earnings, we're looking at  
13 things that are comparable to the GDP, or gross  
14 domestic product, so we see how large the economy is  
15 growing, the value of all goods and services in the  
16 economy, and so when we talk about total output,  
17 that's kind of the measure that we're looking at but  
18 at a county level to see how much total economic  
19 impact is there going to be due to this project.  
20 And you see it's \$55.7 million during construction  
21 and slightly over \$20 million during operations, and  
22 that's an annual number.

23 The slide is sideways, but I will mention  
24 that this is a slide that I got from the Prairie

1 Central School District superintendent report. I  
2 summarize it on the next page, so let me just go to  
3 that. Currently Prairie Central is termed under  
4 financial review. These are a distinct category by  
5 the Illinois State Board of Education that ranks  
6 school districts in different classifications. And  
7 what financial review means is that it's being  
8 monitored for potential downward trend. In the  
9 superintendent's school district report, he  
10 listed -- and also in his budget, which I believe  
11 are going to be entered into evidence as exhibits,  
12 the annual budget deficits are projected from 2015  
13 to 2019 to grow each year resulting in a \$1.4  
14 million deficit in 2019.

15 As part of his recommendations that was on  
16 the previous slide, he asked for reductions of  
17 staff, suspension of purchases and elimination of  
18 bus pick-ups, and those were all those  
19 recommendations from the school superintendent.

20 The information on the Prairie Central  
21 financial condition came from the Prairie Central  
22 budget and the school district superintendent's  
23 presentation that was listed on the school  
24 district's website. I would characterize the school



1 district's finances as dire and deteriorating.

2           The assumptions. As we look at the  
3 analysis that I did of what this project would do to  
4 the school district, I assumed that the valuation of  
5 the wind farm would be the same as set forth in  
6 Public Act 95-0644, and that was a law that was  
7 passed by the Illinois legislature that determined  
8 how we were going to value a wind farm. Previous to  
9 this act, each county assessors were responsible for  
10 valuing a wind farm on their own, and we had various  
11 different methodologies across different counties  
12 across the state, and so the same wind farm,  
13 depending on which county it could be in, could end  
14 up being assessed at a different level.

15           Wind developers did not appreciate that,  
16 because usually the assessment is not done until  
17 after the project comes into being, and so it was  
18 difficult for a wind developer to know what their  
19 tax was going to be because they had to wait until  
20 the assessor -- until the project was built and the  
21 assessor came in and determined that.

22           And so this law was passed to determine  
23 what that was going to be statewide, and that law  
24 says that the fair cash value of a utility scale

1 wind turbine in Illinois is \$360,000 per megawatt of  
2 capacity beginning in 2007, that is when the law was  
3 passed, and it's annually adjusted for inflation and  
4 depreciation.

5           The inflation adjustment, also known as  
6 the trending factor, increases each year according  
7 to the Bureau of Labor Statistics Consumer Price  
8 Index for all cities for all items. The  
9 depreciation is allowed 4 percent per year up to a  
10 maximum depreciation of 70 percent. In April of  
11 2010, the Illinois legislature extended this act  
12 which was set to expire at the end of 2011, so they  
13 extended it until 2016. And the important point to  
14 underscore here is that if in the future this law  
15 were allowed to expire, the determination of the  
16 equalized assessed value of a wind farm would revert  
17 back to the county assessor's office. So there's  
18 been some people that have conjectured that it would  
19 go to zero, and that is simply not correct. It  
20 would be then put back on the Livingston County  
21 assessor's office to say what is the proper  
22 valuation of this wind farm. I would have to say  
23 that after having been assessed under this law, that  
24 they would be hard-pressed to have a wildly

1 different valuation than what had been in there  
2 previously.

3           So when I did the analysis, I was assuming  
4 that this law was still going to be in effect or was  
5 still valid by the county assessor's office. I  
6 assumed that inflation was constant at 2.2 percent,  
7 and that the depreciation is going to be 4 percent  
8 until it reaches that maximum of 70 percent. I also  
9 assumed a constant overall tax rate at the county  
10 level of 9.3471 percent and a constant school  
11 district tax rate of 4.8215 percent. I assumed that  
12 the wind farm was placed in service on January 1st,  
13 2016. That was just ease of reporting so that we  
14 didn't have, you know, a partial year to have to  
15 deal with. And I had a fair cash value of  
16 103,294,187 as properly calculated by that public  
17 act.

18           It assumes that the wind farm is  
19 decommissioned in 20 years for this analysis and  
20 pays no more taxes after it's decommissioned, and I  
21 also assumed that there's no changes in the school  
22 funding formula or the foundation level as  
23 determined by the state. And we all know that there  
24 are proposals in the state legislature that would

1 change, in fact, the school funding formula, but for  
2 the purposes of this analysis, it was not possible  
3 to go all through the different proposals that were  
4 out there, so we're doing kind of business as usual  
5 and saying what's going to be the impact. So really  
6 what I want to do is to say here's the baseline of  
7 what's going to happen if Pleasant Ridge does not  
8 get built and then what's the impact of Pleasant  
9 Ridge getting built.

10           Pertinent to this analysis is a report  
11 that I helped coauthor that was put out by the  
12 Center for Renewable Energy entitled "Wind Farm  
13 Implications for School District Revenue" that  
14 detailed how a wind farm affects the local school  
15 district's revenue. And there's a couple things  
16 that I want to point your attention to that are very  
17 important for the school district and generally the  
18 county to be aware of.

19           So in -- and I don't have the entire table  
20 represented here. It is -- the entire table is in  
21 the report. But just so that the numbers didn't get  
22 too small and for readability, you can see that I  
23 cut out those years from 2024 to 2030 just so I  
24 could get the pertinent information in here. So let

1 me just point because there's a lot of numbers here  
2 across those columns.

3           So first we're looking at the taxable  
4 value of the wind farm, and the next column over is  
5 the total taxes, so that's taking that total tax  
6 rate that I said, the constant overall tax rate of  
7 9.3471 percent, and that's giving you the total  
8 taxes. The next column over is the total school  
9 district taxes that they would receive, so that  
10 portion of the overall tax rate that would flow to  
11 the school district.

12           Now, once -- so the way that school  
13 district finances work, the general state aid that  
14 comes from Springfield is based on your equalized  
15 assessed value in the county, so depending on how --  
16 think of it as how wealthy a county is in terms of  
17 its equalized assessed value or how poor a county is  
18 will -- I'll give differences in terms of how much  
19 generalized state aid that you're going to receive.

20           So when a wind farm is going to come into  
21 a particular school district, that's going to raise  
22 the equalized assessed value, and so there is a  
23 reduction that comes from the state to that school  
24 district. But what happens, and you can see it

1 illustrated in this first year, what happens is that  
2 there's a lag. So when the wind farm gets placed  
3 into service on January 1st, 2016, you receive --  
4 the local school district will receive the tax  
5 revenue in that year, but what happens is that the  
6 GSA, the state aid, looks at the year before. So  
7 for one year there is no reduction in state aid, so  
8 the school district makes out very, very well in  
9 year one. In fact, in my calculations, it's to be  
10 over \$1.66 million for which they see no reduction  
11 in state aid.

12 Year two of the project, 2017, the state  
13 picks up on that, the one year lag is over, so they  
14 know that the equalized assessed value has increased  
15 and so they reduce the amount of state aid that they  
16 give to the local school district. Yet even after  
17 netting out the reduction from state aid, the school  
18 district in year two, or 2017, is still ahead by  
19 595, almost \$596,000. Now that number does decrease  
20 because this project is depreciated, so by -- it's  
21 depreciated by 4 percent a year, and then the  
22 trending factor, or the CPI, is increasing the value  
23 of the project by 2.2 percent a year, but obviously  
24 you get a reduction in value. So you can see that

1 first column, the numbers are coming down.

2 But as I said before, in the law there's a  
3 cap on how much depreciation you can get, and so  
4 once that depreciation hits, you're going to max out  
5 on the depreciation, it bottoms out, but the  
6 trending factor is still there, so you still get  
7 that 2.2 percent per year of a trending factor  
8 inflation.

9 And so overall, the school district will  
10 receive an average annual increase over the life of  
11 the project of \$428,408 due to the Pleasant Ridge  
12 wind energy project.

13 Now, let me point out another  
14 consideration. As we pointed out in the school  
15 district report that the Center for Renewable Energy  
16 did, the bonus, if you will, that you get from year  
17 one, from the fact that you're one year in arrears  
18 in terms of state aid, comes back in a sense to  
19 haunt you when the project goes off because here  
20 it's projected out to be 2038. What happens is that  
21 the wind farm is decommissioned under my assumptions  
22 and there's no longer an EAV, but the state still  
23 thinks that you have a wind farm because it's one  
24 year in arrears.

1           Now, fortunately in this case it's a  
2 depreciated wind farm, so they're looking at -- for  
3 determining 2038, they're looking at 2037 and  
4 saying, oh, you still have that wind farm. We look  
5 at it in your EAV when we calculate that. And so  
6 you're going to get or the school district will  
7 receive a reduction in their state aid in that year  
8 for which they're receiving no revenue, and so there  
9 is a negative \$489,407 in that year. So it would be  
10 wise and prudent of a school district to take that  
11 \$1.66 million bonus that they get in year one and  
12 save it for a rainy day because we know 20 years  
13 from now that's going to go down.

14           Now, this is a static effect, so as we  
15 look at the overall effect for the school district,  
16 this is just looking at the effect of the Pleasant  
17 Ridge wind project. 20 years from now, that  
18 \$489,000 is going to get rolled up into all the EAV  
19 and all the projects and all the economic  
20 development that's happened in that school district,  
21 in the county, for that time. So it's not like  
22 you're going to all of a sudden realize this bill,  
23 but the analysis is showing just, you know, business  
24 as usual versus, having a wind energy project, what



1 is the tax effects for the school district, and  
2 that's a consideration to be taken into account.  
3 And I will say that the average annual amount that I  
4 put in there does include that extra year, so we  
5 were honest in terms of the total impact that was  
6 here.

7           So in conclusion, the Pleasant Ridge Wind  
8 Energy project supports 384 new local jobs in  
9 Livingston County during construction, 92 new local  
10 long-term jobs during the life of the project, \$55.7  
11 million in economic impact or output during  
12 construction, \$20.1 million in economic output  
13 annually for the life of the project, and an average  
14 annual net increase of \$428,408 to the Prairie  
15 Central School District.

16           Finally, I'll note that it's my  
17 understanding that Invenergy is prepared to enter  
18 into an economic benefits agreement that would add  
19 several million dollars more in addition to the  
20 analysis that I've put in this report. So when I've  
21 looked at that, it's just looking at the value of  
22 the construction and the ongoing operations and  
23 maintenance expense of Invenergy and the normal  
24 taxation legally required for the school district in

1 the analysis. Thank you.

2 MR. BLAZER: Mr. Chairman, for Professor  
3 Loomis, then, we would have -- you already have 118.  
4 It would be 114 through 117. And 121.

5 CHAIRMAN CORNALE: All right. County will  
6 accept Pleasant Ridge Exhibit 114 as the Loomis  
7 curriculum vitae. County will accept Pleasant Ridge  
8 Exhibit 115 as the Economic Impact Report. The  
9 County will accept Pleasant Ridge Exhibit 116 as the  
10 fiscal year '15 Prairie Central Official Budget.  
11 The county will accept Pleasant Ridge Exhibit 117 as  
12 the fiscal year '15 Budget Presentation. And the  
13 county will accept Pleasant Ridge Exhibit 121 as the  
14 Wind Farm Implications For School District Revenue.  
15 Just as a -- is there any chance that you could  
16 submit the quote or the portion thereof of Public  
17 Act 95-0644?

18 MR. BLAZER: The statute?

19 CHAIRMAN CORNALE: That he directly  
20 quoted.

21 MR. BLAZER: Sure. What I'll do, Mr.  
22 Chairman, is --

23 CHAIRMAN CORNALE: I know it's lengthy, so  
24 if we could get the portion thereof that he --

1           MR. BLAZER: Oh, sure, yeah. I will --  
2 I'll email a copy of it tomorrow. I'll make --

3           CHAIRMAN CORNALE: Make it available at  
4 the next meeting.

5           MR. BLAZER: I'll email it to the  
6 attorneys tomorrow and then we'll bring a copy to  
7 the Monday meeting.

8           CHAIRMAN CORNALE: Very good, thank you.

9           MR. LUETKEHANS: I think the attorneys can  
10 find it.

11          MR. BLAZER: But it's going to be marked  
12 as an exhibit.

13          CHAIRMAN CORNALE: With that, why don't we  
14 take a ten minute break for the audience. Ten  
15 minute break. I've got 25 after 8:00. Let's try to  
16 be back at 35 after.

17                   (Recess at 8:24 p.m. to 8:39 p.m.)

18          CHAIRMAN CORNALE: So just a few  
19 housekeeping things. Sounds like tonight we're  
20 going to go for about another half-hour or so, but  
21 probably be about a quarter after 9:00. Next  
22 Monday, we do have a scheduled meeting next Monday.  
23 They will be starting at 6:30 in the evening. They  
24 will be at the Walton Center located at 100 West

1 Locust Street in Fairbury, Illinois. So next week,  
2 Monday, 6:30, the 24th.

3 After that, we look to schedule meetings  
4 Monday, December the 8th, and Tuesday, December the  
5 9th, with a start time of 6:30 for both of those  
6 evenings, again in Fairbury, so at the Walton  
7 Center, 100 West Locust Street, Fairbury. So Monday  
8 the 24th at 6:30, Monday December 8th at 6:30, and  
9 Tuesday December 9th at 6:30.

10 With that, applicant.

11 MR. BLAZER: Mr. Chairman, it's only been  
12 three days, it seems like three months, but we're  
13 done.

14 (Audience applause.)

15 MR. BLAZER: Thank you, I appreciate that.

16 CHAIRMAN CORNALE: So with that, the next  
17 phase of the hearing will begin with questioning.  
18 We will question -- we can question their witnesses,  
19 the board can question their witnesses, this will be  
20 an opportunity for counsel to question witnesses,  
21 and the audience. We'll have -- the board will have  
22 the first opportunity to question. We do ask to  
23 please listen to questions, and if they're within  
24 the general scope of your question, hopefully we can

1 eliminate some questions if you listen well and  
2 listen to the responses. It will help the process  
3 continue along.

4 Counsel, do you have anything else that  
5 you'd like to add to that.

6 MR. BLAKEMAN: Not at this time.

7 CHAIRMAN CORNALE: Okay. And one other  
8 note. As a board, we do reserve the right to ask  
9 questions at any point during the process, so we do  
10 have that capability and authority. So with that,  
11 I'll turn it over to our board for questions.

12 Gentlemen, questions at that end? Joan? I would  
13 say we can start with any person. I think the best  
14 thing is that we throw the question out and they'll  
15 give us the best person to answer the question.

16 MS. HUISMAN: Wait a minute here. I was  
17 thinking if we started questioning tonight, it ought  
18 to be somebody we're going to continue with on  
19 Monday, you know, like if they get up there and  
20 somebody starts. Does that make any sense? I  
21 suggested that we start with someone that can  
22 continue and be at the hearing on Monday. Counsel,  
23 does that work with you? You suggested that we pick  
24 topics that we will bring witnesses back here in

1 groups, if that makes sense, for folks that have to  
2 travel.

3 MR. BLAZER: Mr. Luetkehans and I did  
4 discuss that. The only person who actually cannot  
5 be here next week is Mr. Parzyck, so if you have any  
6 questions for him, it might make sense to do those  
7 today. We also talked about potentially grouping  
8 the two real estate witnesses, Professor Thayer and  
9 Mr. MaRous. They can both be here Monday.

10 MS. HUISMAN: And Mr. MaRous is not here  
11 tonight, is that --

12 MR. BLAZER: Yeah. I'm sorry, Mr.  
13 Rautmann and Ms. Blank -- all right, Mr. Rautmann is  
14 out next week. He was the decommissioning plan. I  
15 just heard that one, I apologize. He can be here in  
16 December obviously. So those are the only possible  
17 ones. Dr. Ellenbogen obviously has a patient  
18 schedule. He can be here Monday for the one day if  
19 absolutely necessary, but obviously it may make  
20 sense to group him with Dr. Roberts and Mr. Hankard  
21 since their group of presentations are somewhat  
22 interrelated, so you may want to save those until  
23 December, I don't -- that's just a suggestion.

24 So, you know, if you want to start real

1 estate today with Professor Thayer, for example, or  
2 Mr. Parzyck if you have any questions relating to  
3 Invenergy or sort of the macro view of the project.

4 MS. HUISMAN: I guess --

5 MR. BLAZER: Or anything else. I don't  
6 want to limit you obviously. It's your call.

7 MS. HUISMAN: I would start with going  
8 backwards because these are the questions that are  
9 fresh in my mind from what we talked about tonight.  
10 I need to go back and review my questions for Mr.  
11 Parzyck for later, so I guess I would start with Mr.  
12 Loomis.

13 CHAIRMAN CORNALE: All right. And, Joan,  
14 if you have a question specific of anyone, I think  
15 if we throw -- they're all here now, we'll throw  
16 them out here now, and they're all ready, willing  
17 and able to answer these questions this evening, and  
18 we'll sort through, if they're not in a meeting,  
19 when they can be there the next time to get the  
20 questions asked. That is why it was important for  
21 everyone in the audience to write their questions  
22 down.

23 So, Joan, do you want to start or do you  
24 want me to start?

1 MS. HUISMAN: Go ahead.

2 CHAIRMAN CORNALE: All right. And this  
3 would be to Mr. Parzyck. Just want to make sure.  
4 You presented some documentation of a neighbor plan.  
5 Can you explain to me the breadth of who that's --  
6 who has the possibility of getting the neighbor  
7 plan?

8 MR. PARZYCK: Certainly. Actually just  
9 before, I do want to correct one thing. In my  
10 earlier presentation for Monday night, I made a  
11 reference to our installed capacity of -- I used \$8  
12 million worth of installed across the United States  
13 and it was actually \$8 billion. So I'm sure you  
14 probably figured that out, but I just wanted to  
15 clarify my presentation from Monday.

16 But to your point, Mr. Chairman, regarding  
17 the neighbor agreement, the agreement is identified  
18 as an annual payment to a landowner for a residence,  
19 a house that is within a half mile of a turbine.  
20 It's an annual payment that begins at \$1200,  
21 correct, \$1200 a year with a CPI increase on an  
22 annual basis. It's -- it's compounded on an annual  
23 basis.

24 The payment is made and it's a recorded



1 document, it would be recorded so that it would run  
2 with the land, and so if somebody new had purchased  
3 that property, the idea is there may be those that  
4 are not participating in the project, they don't  
5 have any land in the project, but consistent with  
6 other projects within Illinois, consistent with what  
7 we've done and found to be effective at our Grand  
8 Ridge project up in LaSalle County, we felt that it  
9 was a good idea and it's been used by a lot of other  
10 developers, so it's an annual payment.

11           There are -- if one goes to the specifics  
12 of the project, there are no sort of legal  
13 requirements that limit what that landowner can or  
14 cannot do. It is a payment because of their  
15 location, their proximity to the turbines.

16           CHAIRMAN CORNALE: How many, how many  
17 homes are potential -- have the potential of  
18 receiving that benefit?

19           MR. PARZYCK: It's roughly about 95 to a  
20 hundred homes.

21           CHAIRMAN CORNALE: 95 to a hundred homes,  
22 okay.

23           MR. PARZYCK: And then, again, those are  
24 homes that are nonparticipating.

1           CHAIRMAN CORNALE:  So -- but it would be  
2 fair to assume that every home that fell within the  
3 project boundary, as prescribed by several of these  
4 maps, is not eligible for that.

5           MR. PARZYCK:  That's correct, the payment  
6 is for any of those homes within a half a mile.

7           CHAIRMAN CORNALE:  Okay.  Just for the  
8 sake of -- how many homes are within the project  
9 boundary, just so I get a grasp on that?

10          MR. PARZYCK:  Would that include  
11 participating and nonparticipating or are you sort  
12 of going after --

13          CHAIRMAN CORNALE:  All homes, all homes  
14 within the prescribed project boundary footprint,  
15 however we want to perceive that.

16          MR. PARZYCK:  So our current number from  
17 our tabulation is 235 homes within the footprint.

18          CHAIRMAN CORNALE:  Okay.  All right, let's  
19 see.  How many -- well, can you estimate -- as we  
20 reach outside your boundary, can we estimate  
21 within -- Mr. Thayer, what was your reference?  
22 Where was your breaking point for your project  
23 boundary?  It was within one mile and inside or was  
24 it within a half a mile?

1           MR. THAYER: We did several different  
2 studies, several different versions. We used within  
3 one half mile, within one mile. Those are the two  
4 most common that we used.

5           CHAIRMAN CORNALE: Okay. So -- and this  
6 may not be available and you can report back to me  
7 on this, but homes within one mile of your project  
8 boundary?

9           MR. BLAZER: How many there are?

10          CHAIRMAN CORNALE: Yes.

11          MR. BLAZER: All right, that's --

12          MR. PARZYCK: We don't have, we don't have  
13 that. We can provide it though.

14          CHAIRMAN CORNALE: Fair enough, that's  
15 good. We spoke about creation of jobs. I guess my  
16 question is as these jobs are created for building  
17 the towers, how many of these jobs are actually and  
18 in the past have been -- you guys have experience  
19 building towers. How many of them are local people  
20 versus transient population that may progress with  
21 the projects or have a better understanding and  
22 follow projects like that along?

23          MR. PARZYCK: I guess I would -- it varies  
24 as we do projects across the country, you know,

1 based upon the local skills within the county  
2 itself. The projects -- you know, the primary, you  
3 know, the contractor is going to be drawing from the  
4 local halls for all the various trades. As to  
5 whether or not that can be fulfilled from those  
6 workers from Livingston County, it's hard for me to  
7 say specifically. I don't know if -- David, is  
8 there anything you could add to that?

9 MR. LOOMIS: Yes, in our -- in the  
10 modeling effort that I did, when we look at the  
11 construction cost, we're looking and we assume 75  
12 percent of the labor for foundation, erection,  
13 electrical, management, supervision, miscellaneous,  
14 across the board is 75 percent would come from  
15 within Livingston County. That would mean 25  
16 percent would be leakage or outside of Livingston  
17 County.

18 CHAIRMAN CORNALE: Okay.

19 MR. PARZYCK: I guess I just want to add  
20 to that, that, you know, because of the skill sets,  
21 wind development in the area, there is a more  
22 experienced labor pool from which to draw from  
23 within the county.

24 CHAIRMAN CORNALE: Okay. Do you feel that

1 the 75 percent accurately represents what your past  
2 wind farms have utilized?

3 MR. PARZYCK: Again, I think it's a fair  
4 representation for this particular area. Certainly,  
5 you know, in the mountains of West Virginia it would  
6 be quite different. So it doesn't represent what  
7 we've seen on all of our projects, but I think  
8 that's a fair representation of what we would see  
9 here in Livingston County and the labor pool that's  
10 available here.

11 CHAIRMAN CORNALE: Fair enough, okay.

12 MR. LOOMIS: I just wanted to clarify my  
13 comment and make sure that it was clear. When I  
14 mention the 75 percent, that's not 75 percent of  
15 those 384 jobs are going to come from Livingston  
16 County. That's the net result. So we assumed going  
17 into the model that 75 percent is going to be  
18 sourced from within, and the 384 jobs during  
19 construction in Livingston County is after that  
20 assumption. It's a result. So all of those 384  
21 jobs are in Livingston County. Does that make  
22 sense?

23 CHAIRMAN CORNALE: I understand the 384  
24 full-time equivalence, which can equate to 768

1 half-time people for a six month duration, I  
2 understand all that, wrap my head around that. I'm  
3 just concerned that as we discuss this we're talking  
4 about using local labor force to create this. And I  
5 guess as long as Mr. Parzyck feels that the 75  
6 percent -- I'm talking about during the construction  
7 process. You're talking about a result and I'm  
8 talking about during the process.

9 MR. LOOMIS: I am talking about during the  
10 process. So that is a result of the input I got  
11 from Invenergy on how they're going to do the  
12 project. It's also consistent with what we've seen  
13 in our economic impact for all other wind farms  
14 across Illinois in terms of the -- those numbers.  
15 So the result is that 384.

16 So if you were to say how many people are  
17 act -- you know, I start counting noses, aside from  
18 the FDE, and then count how many people came from  
19 outside Livingston County, you know, were employed  
20 that move with the project as you said, the result  
21 of what you're asking is 384 jobs is what we're  
22 estimating is the Livingston County people that are  
23 going to be employed working on that project. And  
24 it may be, you know, more than that, you're going to

1 count many more than that, but that's how many  
2 Livingston County people are going to be employed by  
3 the project. That's what -- that's what the result  
4 of the model is.

5 CHAIRMAN CORNALE: Okay. With respect to  
6 Invenergy as its entity, how many permanent jobs  
7 will this project have? How many permanent jobs  
8 will doing this project create employed by Invenergy  
9 or a subsidiary thereof?

10 MR. PARZYCK: Right. We'll be locating an  
11 operations and maintenance building that I pointed  
12 out we'll be constructing, and our expectation is  
13 that we would have 13 full-time jobs, which includes  
14 management, technicians and administrative staff.

15 CHAIRMAN CORNALE: Okay, that maintenance  
16 building would be built within the project  
17 boundaries or close?

18 MR. PARZYCK: Actually within -- our  
19 expectation right now is we're looking at some land  
20 in Forrest, so it's not technically within the  
21 boundary itself, and it's that space -- we would  
22 submit subsequent to this for a permit for that  
23 building.

24 CHAIRMAN CORNALE: Okay, and that would be

1 a physical building, maintenance building,  
2 permanently taxable structure through the typical  
3 real estate taxable structure system.

4 MR. PARZYCK: That's correct.

5 MR. BLAZER: If I may just mention  
6 something since this is part of what I had to do,  
7 and I'm not a witness but it's a legal issue, we've  
8 negotiated an agreement with an existing business  
9 which is moving its facility farther north, so this  
10 will be an adaptive reuse. Invenergy will be taking  
11 an existing building which would otherwise be unused  
12 and rehabilitating it, turning it into the O and M  
13 building, and obviously the EAV will probably go up.

14 CHAIRMAN CORNALE: Thank you, okay. We  
15 spoke briefly on decommissioning, and as we have  
16 been through these hearings before, just as a point,  
17 the securement of that decommissioning plan will be  
18 in what fashion? What's the method?

19 MR. PARZYCK: I'm sorry, the plan or the  
20 financial --

21 CHAIRMAN CORNALE: The financial aspects  
22 of the decommissioning plan, without having the  
23 number right in front of me, it's in this stack,  
24 what is it?



1           MR. BLAZER: Was roughly \$37,000 per  
2 turbine.

3           CHAIRMAN CORNALE: Right.

4           MR. BLAZER: For a total of around 19 --

5           MR. LUETKEHANS: If I may, I mean Mr.  
6 Blazer should at least, if he's going to testify, he  
7 should be sworn in. He shouldn't be answering their  
8 questions.

9           MR. BLAZER: I'll shut up for now.

10          AUDIENCE VOICE: Can we speak into that  
11 microphone?

12          MR. PARZYCK: Mr. Chairman, that would be  
13 in the form of a bond. That's our current plan.

14          CHAIRMAN CORNALE: Okay. All right.  
15 Other members of the board, do you have any other  
16 questions? I can continue but -- Howard? Diane?

17          MS. IVERSON: Diana Iverson. My question  
18 is does Invenenergy have any current projects in  
19 Illinois on wind towers going up?

20          MR. PARZYCK: That are under correction  
21 right now?

22          MS. IVERSON: Yes.

23          MR. PARZYCK: No, we do not have any that  
24 are under construction right now.

1 MS. IVERSON: Okay. And I know he touched  
2 on this question, so the locals, are they coming  
3 from Illinois or are they coming from Minnesota?  
4 Are your crane operators coming from Illinois or are  
5 they coming from another state to do the work?

6 MR. PARZYCK: The -- we do not have a  
7 contractor signed up for this project yet, okay, so  
8 I can't say exactly where each person, each trade  
9 would be coming from, but the -- the locals that are  
10 in the project would be from Illinois, and the 384  
11 that Mr. Loomis had indicated would be coming from  
12 the county. Again, I want to stress the fact that  
13 there is a labor pool within Livingston County that  
14 can support it.

15 MS. IVERSON: It was said that the local  
16 roads won't be used or damaged during the process of  
17 moving all this equipment and supplies in. How is  
18 that possible? Township roads and county roads  
19 aren't built for that heavy equipment.

20 MR. PARZYCK: Actually the movement of the  
21 turbine components themselves are on vehicles that  
22 can be accommodated on state roads. However,  
23 certainly there's going to be a lot more activity on  
24 the roads, et cetera. The plan is we've gone

1 through, done a survey of the roads working with the  
2 township road commissioners. We have -- we are  
3 putting in place with each township commissioner and  
4 with the county road commission what is necessary to  
5 upgrade the roads temporarily to maintain for this  
6 traffic. And then afterward, to make sure, we will  
7 go back, we will go back after the project is  
8 completed and make sure that the roads are in as  
9 good or better condition than this survey that just  
10 took place this fall.

11 MS. IVERSON: And have you had those  
12 agreements with other townships and counties in  
13 previous projects?

14 MR. PARZYCK: Yes, we have.

15 MS. IVERSON: Have you had any issues  
16 complying with those agreements?

17 MR. PARZYCK: We've had issues with the  
18 conditions of the roads at different times during  
19 the project, but we've never had any problem being  
20 able to comply with that, you know, as -- at the end  
21 of the project.

22 MS. IVERSON: Until all roads are back to  
23 the precondition or better condition than they were  
24 at the time of the start of your project?

1           MR. PARZYCK: Yes, yes. And we have  
2 agreements to assure that we are -- you know, those  
3 agreements require us to put it in that condition.  
4 And if there are problems or problems do crop up  
5 afterward that can be tied back to that  
6 construction, that road agreement ties us back to  
7 come back and take care of that condition.

8           MS. IVERSON: Okay. And so whoever signs  
9 that agreement, if they are no longer with your  
10 company when it's found that there is damage, I mean  
11 does damage, some may not show up for a while  
12 because --

13           MR. PARZYCK: Well, number one, the  
14 company, it's not an individual, it's the company,  
15 signs an agreement with the road commission, whether  
16 it's the county or the township, so we have that  
17 obligation. We are also owners and operators, so we  
18 have an operations building there as we maintain  
19 both the turbines, the collection system, any issues  
20 with landowners as well as the roads. So if there  
21 is a problem with a road, somebody walks into or  
22 contacts our operations center and that issue is  
23 taken care of.

24           MS. IVERSON: Okay.

1           MR. PARZYCK: Just wanted to add one  
2 thing. There are financial assurances in the road  
3 agreements to make sure that we are -- continue to  
4 be in compliance. So you ask about somebody leaving  
5 or whatnot. There are financial assurances in the  
6 agreements that cover that.

7           MS. IVERSON: And you've not had any  
8 issues when road commissioners have come back to you  
9 and said, okay, we need these roads taken care of,  
10 you haven't had -- you haven't not taken care of the  
11 roads. You've always followed your agreements and  
12 taken care of them.

13           MR. PARZYCK: Right. There may be issues  
14 that crop up that we continue to find solutions, you  
15 know, we have to go back and take care of something,  
16 we've seen that different times, but our commitment  
17 is there to make sure that the roads are in place  
18 and we work with the commissioners to assure that.

19           MS. IVERSON: Okay. So this is about -- I  
20 think this is Mr. Loomis. Were these surveys for  
21 the bat and birds done in just 2009 and 2011 or were  
22 there new ones done in 2014?

23           MR. VANDEWALLE: Yeah, this is Terry  
24 VanDeWalle.

1 MS. IVERSON: I'm sorry.

2 MR. VANDEWALLE: No, that's okay. The  
3 survey for the avian use surveys and the bat surveys  
4 were done between, really between 2009 and 2011, so  
5 the bird surveys continue, were year long, so 2009,  
6 2010, and then there was the acoustics survey in  
7 that time frame, and the mist netting I believe was  
8 2011.

9 MS. IVERSON: Why should we assume that  
10 these studies, new studies aren't needed? I know  
11 it's only been a couple years, but if it -- is it  
12 not possible that with the way the conditions of the  
13 weather have changed, that maybe more bald eagles  
14 are in the area or maybe some more of these bats and  
15 birds that are on the endangered species, that  
16 there's way more now?

17 MR. VANDEWALLE: Sure. Well, regarding  
18 the eagles, we did the eagles, the eagle use --  
19 well, the avian use, the raptor nest survey was done  
20 in 2014, so that was done in the spring of this  
21 year. But to your other question about why we  
22 wouldn't need to redo the surveys again, as I  
23 mentioned before, the habitat hasn't changed. So if  
24 we went out and redid the surveys again right now,

1 would we expect to find more or less birds than we  
2 saw last time or maybe even bats than we caught last  
3 time? Sure, abundance might change from year to  
4 year. But would we expect to see different species?  
5 No.

6           And the reason is because the species are  
7 tied to the habitat, so if the habitat hasn't  
8 changed, we wouldn't expect that you would get new  
9 species moving in or out because the habitat here is  
10 again disturbed, highly agricultural, and you get  
11 those species that are common or edge-adapted  
12 species that you find in these agricultural land  
13 schemes.

14           MS. IVERSON: For the recommendations from  
15 IDNR, why should we just accept that you don't think  
16 that Invenergy or you do not think that it's  
17 necessary to follow what IDNR thinks the county  
18 should do? Why should we just say, okay, we're just  
19 going to go with what you say and not with what IDNR  
20 says?

21           MR. VANDEWALLE: Well, could you ask about  
22 a specific recommendation?

23           MS. IVERSON: Okay. You said -- if there  
24 is no data available for your 12, 13, 14 and 15

1 recommendations, how can you know for sure there's  
2 no effect on these birds or bats?

3 MR. VANDEWALLE: Well, 12, 13, 14 are  
4 not -- are not asking about birds and bats. Those  
5 were about mussels, you know.

6 MS. IVERSON: Okay.

7 MR. VANDEWALLE: Aquatic organisms.

8 MS. IVERSON: All right. So I mean how --

9 MR. VANDEWALLE: Sure. Well, again, as  
10 was stated, there are no --

11 MS. IVERSON: Go ahead.

12 MR. VANDEWALLE: Okay, so there is no  
13 literature to support that there are any, you know,  
14 acoustics, any noise or vibration effects on  
15 freshwater mussels or fish. Even if -- as we said,  
16 you know, there's some studies with marine species  
17 that show that even if you put the turbine in the  
18 water and it's operating right in the water, the  
19 mussels will colonize the turbine foundation and  
20 fish will move in. In fact, some of the marine  
21 studies have shown that the community composition of  
22 fish hasn't changed and maybe even improved.

23 In this case, you know, the turbines are  
24 not in the water. They are in many cases several



1 miles from any stream that might have mussels.  
2 There are some turbines that are closer to streams  
3 than that, within, you know, several hundred feet,  
4 but, you know, we have no data to support that  
5 vibrations from those turbines is going to affect  
6 the mussel population. So it's not really just  
7 saying we don't think you need to do it, but, you  
8 know, there's really no reason to believe that  
9 vibration would affect mussels.

10 One other thing I'll add is that there are  
11 a lot of studies with transportation projects where  
12 they're actually doing, driving piles for bridges  
13 where they're actually driving them in the rivers,  
14 and those studies have shown with fish, particularly  
15 with fish, that there's really very little impact on  
16 fish for sure when you're actually working in the  
17 river. And even if it is, it's a short-term effect.

18 MS. IVERSON: Okay. And on the  
19 recommendation, on the recommendations that you  
20 agree with, why do you think the county shouldn't  
21 put that as a requirement into the agreement?

22 MR. VANDEWALLE: So the recommendations  
23 for -- I guess thinking back to the ones we agree  
24 with would be --

1 MS. IVERSON: Speed of the turbines.  
2 Well, you didn't agree completely with that because  
3 it is slower.

4 MR. VANDEWALLE: Right, so they're  
5 proposing a more protective cut-in speed than what  
6 the department asked for there.

7 MS. IVERSON: Okay, and hogs are sensitive  
8 to their environment. I know you said that cattle  
9 wasn't affected. So how are you sure that hogs  
10 aren't affected by the shadow flicker or even the  
11 noise?

12 MR. VANDEWALLE: The -- well, again,  
13 there's no literature to support one way or the  
14 other with hogs. For instance, you know, I know  
15 that -- again, I'm from Iowa and there are a lot of  
16 hog producers in Iowa and a lot of hog farms that  
17 are in the midst of wind farms. I don't have any  
18 direct contact with those, but I know that at least  
19 the factory farms for hogs, the hogs are inside a  
20 closed building. Rather than open the windows, they  
21 have fans running to keep them either warm or cool  
22 in the summer. So, you know, I suspect shadow  
23 flicker is not an issue because they're not getting  
24 outside light in a lot of cases anyway.

1           Noise. You know, they're going to have  
2 the noise from fans. I don't know if they can  
3 actually hear the turbine noise anyway. But again,  
4 there's no data to support it and we see a lot of  
5 hog farms right around turbines.

6           MS. HUISMAN: If we could go back to the  
7 neighbor agreement.

8           MR. PARZYCK: Sure.

9           MS. HUISMAN: I think you said that within  
10 a half mile of a turbine that any residence would be  
11 offered a neighbor agreement, the payment of \$1200 a  
12 year.

13          MR. PARZYCK: A nonparticipating, yes.

14          MS. HUISMAN: Nonparticipating. Are you  
15 measuring that -- how strictly are you measuring it?  
16 Are you measuring it by the edge of the property or  
17 are you measuring it by where the home or the  
18 residence actually sits on their own property in  
19 comparison to the closest turbine? How are you  
20 measuring that?

21          MR. PARZYCK: We've measured it from the  
22 center line of the turbine to what -- to the end of  
23 the foundation of the home.

24          MS. HUISMAN: Actually goes to the

1 foundation. So potentially someone could have a few  
2 acres and they could -- if their home fell outside  
3 of that half mile, exact half mile measurement, but  
4 their property is, the edge of property is within,  
5 they wouldn't be offered a neighbor agreement.

6 MR. PARZYCK: At this time, I'm not aware  
7 of any situations where that is the case, but that  
8 based on this criteria, based on the half mile, that  
9 is possible.

10 MS. HUISMAN: Okay. Does it matter if the  
11 home or residence is within the boundary of the  
12 footprint of the wind farm? So if you have a  
13 turbine, and I'm not sure how close your turbines  
14 are to the boundaries, but if you had a home that  
15 sat outside of the footprint.

16 MR. PARZYCK: The -- it doesn't matter  
17 whether or not it's within the -- it's within the  
18 boundary of the project; it's a half mile from the  
19 turbine. I'm not aware of any turbines that are  
20 within a half mile of the boundary, but it's  
21 immaterial because it would be offered to anyone  
22 within a half mile.

23 MS. HUISMAN: Okay. And I just wanted to  
24 clarify. Did you -- Mike asked this question, Mr.

1 Cornale. How many homes are within the project  
2 boundary, meaning like the footprint of the wind  
3 farm.

4 MR. PARZYCK: You know, I gave you a  
5 number of 235. I would like to clarify that and  
6 give you a number -- we can provide a firm number on  
7 that on Monday.

8 MS. HUISMAN: You'll get back to us on  
9 that.

10 MR. PARZYCK: Sure.

11 MS. HUISMAN: Okay. And then with respect  
12 to jobs, local jobs, I think maybe it was Mr. Loomis  
13 that mentioned that concrete and rebar specifically  
14 have been sourced locally.

15 MR. LOOMIS: I used that as an example of  
16 the supply chain stuff that would typically be  
17 sourced locally because of travel, but I don't have  
18 any specific information from Invenergy saying that  
19 that -- those inputs are going to be sourced  
20 locally.

21 MS. HUISMAN: That's one of my concerns is  
22 that there are local sources for aggregates at  
23 least, concrete, metals, and can we get some kind of  
24 promise from or guarantee from Invenergy that those

1 would be sourced locally whether that's --

2 MR. PARZYCK: You know, I guess I would --  
3 a couple of things. Number one, our objective is  
4 always to use local resources, the local community,  
5 you know, whenever possible and whenever it's, you  
6 know, cost effective. Things like aggregate and  
7 concrete, we've already identified our batch plant,  
8 as we identified it in our first plan where our  
9 batch plant would be located, which is right in  
10 Forrest, which means that you get your aggregate as  
11 close to that as possible. That's the most cost  
12 effective way to run a project like this.

13 Our preference is to use local jobs and  
14 local materials and source these materials from  
15 Livingston County. It's hard for me to say exactly  
16 what we can because I'm not privy to all of the  
17 details of where these suppliers can draw these  
18 materials.

19 MS. HUISMAN: At what point in your  
20 project -- I mean I know you've looked very closely  
21 at where you're going to site the turbines, but at  
22 what point do you start doing that, trying to source  
23 the materials?

24 MR. PARZYCK: Well, the project has been

1 out for bid, we have not awarded a contract. That's  
2 sort of kind of going parallel to the permitting  
3 process, the financing process, et cetera. We would  
4 begin doing that after -- you know, early in 2015  
5 prior to the start of the construction. But we're  
6 in the midst right now of finalizing, you know, bids  
7 coming in and how all the work will be sourced.

8 MS. HUISMAN: So is it an accurate  
9 statement to say that the numbers that were provided  
10 in the presentation tonight are just your best guess  
11 at what you can do for the local economy and for  
12 Livingston County, but you really have no idea yet  
13 what you're going to source here?

14 MR. PARZYCK: No, I wouldn't say we have  
15 no idea what we can source here. We've identified,  
16 we've -- as I said, we've located and signed an  
17 option agreement for the batch plant in Forrest.  
18 We've identified, -- we are working, you know,  
19 identifying the local labor resources that are  
20 available here. We know that there are available  
21 vendors for these various materials that are used,  
22 gravel, aggregate, but we don't have those contracts  
23 signed at this time.

24 MS. HUISMAN: Is Invenergy opposed to

1 using nonunion labor in the area?

2 MR. PARZYCK: Are we opposed to using  
3 nonlabor?

4 MS. HUISMAN: Nonunion.

5 MR. PARZYCK: Nonunion labor. Well, just  
6 because you're presenting it as a negative, I want  
7 to make sure when I'm answering this that --

8 MS. HUISMAN: Well, in the footprint of  
9 the wind farm and in the local communities, there  
10 are small businesses that could thrive on some of,  
11 on some of the work that Invenergy could bring to  
12 the area.

13 MR. PARZYCK: Sure.

14 MS. HUISMAN: And a lot of those folks, a  
15 lot of those businesses do not use unionized labor.  
16 I know that there's -- I'm in support of unionized  
17 labor as much as nonunion, I think there's work,  
18 there's plenty work for both types, and I wondered  
19 what Invenergy's stance is on using union versus  
20 nonunion labor. I did not mean that in a negative,  
21 in a negative way.

22 MR. PARZYCK: On the one hand, we use  
23 union labor on our projects. We do not actually  
24 hire the labor, we hire a contractor, and we have



1 requirements for them to be, you know, engaging  
2 union labor. That's not to say that the smaller  
3 suppliers in the area could not play a role. I  
4 can't get -- I don't know which suppliers are union  
5 and are not, so I can't really say that, you know,  
6 everything we do will be union or everything we do  
7 will be nonunion. I don't want to say, look, we're  
8 willing to use nonunion labor and cut out a whole  
9 source of valuable labor that's there or vice versa.

10 So I guess my point is, I don't want to be  
11 convoluted in this, but we have requirements for  
12 using union labor in our agreements with our general  
13 contractors.

14 MS. HUISMAN: Okay.

15 MR. PARZYCK: But that doesn't preclude  
16 the use of nonlabor vendors for some sourcing.

17 MS. HUISMAN: Where are your general  
18 contractors located?

19 MR. PARZYCK: Where are they based?

20 MS. HUISMAN: Yeah, where are they based?

21 Is that something that what the -- I think Mr.  
22 Loomis used. Are they coming from Illinois or are  
23 they coming from out of state, your general  
24 contractors? I would assume you use the same ones

1 on all your wind farm projects.

2 MR. PARZYCK: No, we have -- we have a  
3 pool of contractors, and it depends on market  
4 conditions as to which contractors would be used on  
5 a project and which subcontractors would be used.  
6 They are from Illinois. They are from neighboring  
7 states in the area. That doesn't mean that -- but  
8 they are drawing from the local labor pool when they  
9 come to work in the area.

10 MS. HUISMAN: Okay.

11 CHAIRMAN CORNALE: All right. 9:15, 9:20.  
12 I think it's a good opportunity to go ahead and end  
13 for this evening. We need to take a couple -- we  
14 talked about the scheduling, okay. We need to take  
15 a couple minutes to organize. We won't officially  
16 recess the meeting for a couple more minutes here,  
17 but as far as any other comments, we're done with  
18 those.

19 Just to reiterate the scheduling for sure,  
20 we have Monday November 24th at 6:30 in Forrest --  
21 Fairbury, I'm sorry, in Fairbury, 100 West Locust,  
22 and Monday December the 8th at 6:30 and Tuesday  
23 December the 9th at 6:30, again in Fairbury. So  
24 that's for the public and everybody's invited to

1 those.

2 We're going to sort through -- not all  
3 their witnesses may be back next week. We're going  
4 to sort through that. We'll let you guys know.  
5 We're going to talk for a couple minutes so that you  
6 guys know to specifically bring your questions. If  
7 you're interested in knowing that, you're welcome to  
8 stay. If not, you're welcome to leave.

9 (Discussion off the record.)

10 CHAIRMAN CORNALE: For everyone in the  
11 audience, on Monday the 24th, the applicant will  
12 have Blank, she dealt with shadow flicker and its  
13 fulfillment of the comprehensive plan. Mr. Loomis  
14 will be there, he spoke about economics, school  
15 board, those things at the end. VanDeWalle, he  
16 spoke on avian and bat surveys. And Baker spoke on  
17 the more technical aspects of the tower, tower blade  
18 length, the lighting plan in regards to the FAA, and  
19 the transmission lines. So those individuals will  
20 be available for questions.

21 Again, we'll have questions for them,  
22 counsel may have questions, and there's the hope  
23 that we can get to audience questions focussed  
24 towards them individuals, okay? So prepare your

1 questions for those individuals, okay, for Monday  
2 the 24th.

3 Okay, with that, I need a motion to  
4 recess.

5 MR. KIEFER: So move.

6 CHAIRMAN CORNALE: Rich Kiefer has  
7 motioned.

8 MR. ZIMMERMAN: I'll second.

9 CHAIRMAN CORNALE: Howard Zimmerman has  
10 seconded. All in favor?

11 ALL MEMBERS: Aye.

12 CHAIRMAN CORNALE: Opposed?

13 (Adjourned at 9:25 p.m.)  
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24

1 STATE OF ILLINOIS )  
 )SS  
2 COUNTY OF FORD )

3

4 I, June Haeme, a Notary Public in and for  
5 the County of Ford, State of Illinois, do hereby  
6 certify that the following Livingston County Zoning  
7 Board of Appeals, Case SU-7-14 hearing was taken at  
8 the Pontiac Township High School, 1100 Indiana  
9 Avenue, Pontiac, Illinois, on November 19, 2014.

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

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

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

22

23

24

25

JUNE HAEME, CSR  
NOTARY PUBLIC

26

27 "OFFICIAL SEAL"

28 June Haeme  
29 Notary Public, State of Illinois  
30 My Commission Expires:  
31 September 27, 2016

32

33

34

35

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