

BEFORE THE OHIO POWER SITING BOARD

- - -

In the Matter of the :  
Application of Buckeye :  
Wind, LLC for a :  
Certificate to Install :  
Numerous Electricity :  
Generating Wind Turbines : Case No. 08-666-EL-BGN  
in Champaign County to be :  
Collected at an Electric :  
Substation in Union :  
Township, Champaign :  
County. :

- - -

PROCEEDINGS

before Ms. Greta See and Ms. Katie Stenman,  
Administrative Law Judges, at the Public Utilities  
Commission of Ohio, 180 East Broad Street, Room 11-A,  
Columbus, Ohio, called at 9:00 a.m. on Tuesday,  
November 17, 2009.

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VOLUME VI

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1 Tuesday Morning Session,  
2 November 17, 2009.

3 - - -

4 ALJ SEE: Let's go on the record. First  
5 let's start with appearances of the parties that are  
6 here. Mr. Petricoff.

7 MR. PETRICOFF: Thank you, your Honor.  
8 On behalf of the applicant, Buckeye Wind, we have M.  
9 Howard Petricoff, Michael Settineri, and Gina Russo.

10 ALJ SEE: Mr. Margard.

11 MR. MARGARD: Thank your Honor. On  
12 behalf of the staff of the Power Siting Board, Werner  
13 Margard and John Jones, Public Utilities Section of  
14 the Attorney General's office, Margaret Malone and  
15 Christina Grasseschi, Environmental Enforcement  
16 Section.

17 ALJ SEE: Mr. Van Kley.

18 MR. VAN KLEY: Thank you, your Honor.  
19 Jack Van Kley and Chris Walker from Van Kley & Walker  
20 representing intervenors UNU, Julie Johnson, and  
21 Robert and Diane McConnell.

22 ALJ SEE: Mr. Brown.

23 MR. BROWN: Daniel A. Brown, Brown Law  
24 Office in Dayton representing the Urbana Country  
25 Club.

1 ALJ SEE: Ms. Napier.

2 MS. NAPIER: On behalf of Champaign  
3 County and the townships of Goshen, Rush, Salem,  
4 Urbana, Union, and Wayne, I'm Jane Napier along with  
5 Nick Selvaggio, Champaign County Prosecuting  
6 Attorney.

7 ALJ SEE: Okay. Mr. Petricoff.

8 MR. PETRICOFF: Yes, your Honor. One  
9 administrative detail. Over the evening hours we did  
10 get a chance to look at UNU Exhibits 53 and 58 and we  
11 have no objection to their being admitted into  
12 evidence.

13 ALJ SEE: So if there are no objections  
14 to UNU 53 and 58, those exhibits are admitted into  
15 the record.

16 (EXHIBITS ADMITTED INTO EVIDENCE.)

17 ALJ SEE: On behalf of UNU, your next  
18 witness.

19 MR. WALKER: Thank you, your Honor. For  
20 our first witness we call Tom Sherick.

21 ALJ SEE: Mr. Sherick, if you would raise  
22 your right hand, please.

23 (Witness sworn.)

24 ALJ SEE: Thank you.

25 (EXHIBITS MARKED FOR IDENTIFICATION.)

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THOMAS E. SHERICK, MAI

being first duly sworn, as prescribed by law, was  
examined and testified as follows:

DIRECT EXAMINATION

By Mr. Walker:

Q. Good morning, Mr. Sherick.

A. Good morning.

Q. I have provided you with a set of  
documents beginning with UNU Exhibit 22A. Is that  
the direct written testimony that you've submitted in  
this matter?

A. Yes.

Q. I should begin by asking, Mr. Sherick,  
would you state your name and address for the record.

A. Tom Sherick. Business address is 4770  
Duke Drive, Suite 190, Mason, Ohio 45040.

ALJ SEE: Mr. Sherick, could you use the  
mic, please.

THE WITNESS: This mic?

ALJ SEE: Either one you prefer.

ALJ STENMAN: There's a red button on the  
back.

THE WITNESS: How's that?

ALJ SEE: That's fine. You can push it  
up a little or bring it closer to you.



1 THE WITNESS: Okay.

2 ALJ SEE: You might prefer that one. It  
3 may keep you from leaning over into the mic.

4 THE WITNESS: How's that?

5 ALJ SEE: That's better.

6 THE WITNESS: Sorry about that.

7 Q. (By Mr. Walker) Mr. Sherick, I've also  
8 provided in the package copies of UNU Exhibits 22  
9 through 26. Would you take a quick look at those and  
10 confirm that those are the exhibits -- Mr. Sherick,  
11 they are binder clipped to your direct testimony.

12 A. Oh, okay.

13 Q. Please take a look at those and tell me  
14 whether those are the exhibits that you included with  
15 your written direct testimony.

16 A. Yes. Yes, they are.

17 Q. Do you have any changes to your direct  
18 testimony this morning?

19 A. No, I don't.

20 Q. If I were to ask you the questions in  
21 your direct testimony, would your answers be the same  
22 today?

23 A. Yes.

24 MR. WALKER: Your Honor, Mr. Sherick is  
25 available for cross-examination.

1 ALJ SEE: Ms. Napier.

2 MS. NAPIER: Yes.

3 - - -

4 CROSS-EXAMINATION

5 By Ms. Napier:

6 Q. Mr. Sherick, my name is Jane Napier. I  
7 represent Champaign County and several townships in  
8 Champaign County. I've reviewed your direct  
9 testimony and some of the studies that you had  
10 discussed and I had a few questions for you.

11 On page 6 of your testimony you had  
12 looked at a Bard College study; is that correct?

13 A. Yes.

14 Q. And you had indicated that the increases  
15 in property values had countered the negative -- the  
16 possible negative impacts on the property values in  
17 your opinion, correct?

18 A. That's what it appears to be, yes.

19 Q. And how would you estimate the property  
20 values will be in this economy at this point in time?

21 A. Depending on how you define a start date,  
22 property values have declined due to market  
23 conditions since roughly 2007. Insomuch as  
24 extracting a percentage, I would use the same index  
25 as a starting point, but then I would also rely on

1 statistical data from the local board of realtors  
2 board, even indications from the local property  
3 assessor or, in this case, the county auditor.

4 Q. Do you believe that looking at pre-2007  
5 data would be necessary for a study, you know, an  
6 adequate study?

7 A. It depends on what point in time your  
8 data is being collected. In this case we'd have to  
9 figure out exactly when the Buckeye Wind Project was  
10 announced or when it was rumored within the  
11 community, at least in terms of a rough time frame,  
12 and then if we're going to measure any changes in  
13 property value either caused by the project or just  
14 in terms of generic market condition declines, once  
15 you define the starting point, then you can measure  
16 that difference.

17 Q. On page 7 you had looked at the Poletti  
18 report; is that correct?

19 A. Excuse me?

20 Q. You had looked at, I'm sorry, EPIC  
21 Consulting's critique of the Poletti report.

22 A. Yes.

23 Q. Can you tell me why you felt as though --  
24 or, did you agree with the conclusions of the Poletti  
25 report or the EPIC Consulting's critique?

1           A.    I didn't have access to Poletti's report.

2           Q.    Okay.

3           A.    Repeated efforts to try to find it.  I  
4 just couldn't come up with it.  But I noted in  
5 several of the other pieces of information that I had  
6 Poletti's findings were minimized or talked down to  
7 by a number of different critiques, both EPIC, even  
8 the Bard College study sort of indicated that  
9 Poletti's findings were "inadequate" is a word that I  
10 would use, I guess.

11           Q.    And you had noted in the middle of page 7  
12 on line 11 that market perceptions have a significant  
13 effect on property values.  Can you explain that?

14           A.    Yes.  I can put it in a different,  
15 completely different context.  Something happens in a  
16 neighborhood and it causes people to want to move, or  
17 leave the area, or relocate to a different part of  
18 the county or the city or the township.  Nothing  
19 material has necessarily altered the land or even the  
20 structures in the area, but there's been something  
21 happen to change the perception of the area.  That  
22 will cause a movement within the marketplace and it  
23 will affect property values.  It can be turbines, it  
24 can be problems with the schools, it can be a number  
25 of different stimuli.

1           Q.   And for this project do you think that  
2 the market perception has already occurred?

3           A.   In my opinion it has, yes. I don't know  
4 that it's occurred in total, because we don't  
5 actually have turbines sited and operating yet, but  
6 in terms of affecting market perception I believe it  
7 has, based on my conversation with a local realtor,  
8 yes.

9           Q.   So would you agree that the fear or the  
10 anticipation of having a wind turbine may affect  
11 property values --

12          A.   Yes.

13          Q.   -- either way?

14          A.   Absolutely.

15          Q.   Even if those are incorrect perceptions.

16          A.   Yes. It's not -- perception isn't  
17 subject to correct or incorrect. Perception is  
18 perception and that's what drives market movements.

19          Q.   And you had also reviewed the Renewable  
20 Energy Policy Project, which I will call REPP --

21          A.   Yes.

22          Q.   -- because it's easier to say, and that's  
23 how it's noted in your testimony, correct?

24          A.   Yes.

25          Q.   And it's my understanding you had

1 indicated that that study covers ten wind farm  
2 projects, correct?

3 A. Yes. If I recall correctly, it is ten,  
4 yes.

5 Q. And some of those are not located in  
6 areas with significant population, correct?

7 A. Yes.

8 Q. Okay. Do you disagree, and why, to that  
9 study? Isn't that study -- isn't some of the area  
10 compatible with Champaign County?

11 A. Only in a anecdotal way. One of the wind  
12 farms was in California, a few others are in --  
13 forgive me, I'm going from memory -- a couple of the  
14 others are in New York. They were scattered across  
15 the country.

16 The problem with REPP is the way that  
17 they chose to analyze the situation. They focused on  
18 what they identified to be a 5-mile radius around,  
19 and I don't recall if it's individual turbines or if  
20 it's the wind farm in total, but the problem with  
21 that is if we're measuring effect of either a visual  
22 issue or a noise issue or any other issues created by  
23 the wind farm, one thing in a property that's  
24 adjacent to a turbine with a property that's 4.99  
25 miles away from a turbine is going to nullify any

1 sort of results that that analysis would give you.

2 A property that's 5.10 miles away from a  
3 turbine or a wind farm isn't included and yet it may  
4 be affected more than a property that's nearby,  
5 either due to topography, terrain, whatever. So to  
6 simply draw a hypothetical circle around a stimulus  
7 and say this is what we're going to analyze and this  
8 is how we're going to analyze it doesn't work for me.

9 Q. You answered a bunch of questions I had  
10 after that, but I do appreciate that. And you looked  
11 at a number of studies including those that found no  
12 impact and those that had negative impact, correct?

13 A. Yes, there were several studies.

14 Q. Okay. And from your testimony I conclude  
15 that you tended to agree with those that had negative  
16 impact; is that correct?

17 A. That's my opinion, yes.

18 Q. Can you tell me why you felt that the  
19 studies that concluded a negative impact on property  
20 values were more adequate, in your opinion?

21 A. The only opinion that I reviewed prepared  
22 by an appraiser, someone of my background and  
23 training, that concluded minimal effect was Poletti,  
24 and Poletti's findings were not only minimized by  
25 Hoen and EPIC Consulting, but then there was that one

1 published statement that I found where he, in effect,  
2 disclaimed the way his own opinion in a  
3 matter-of-fact sort of manner.

4           The other studies that concluded no  
5 effects were prepared by statisticians, and  
6 statistics are great and wonderful and I use them on  
7 a daily basis, but they don't always tell the whole  
8 story. So when I then translated -- transitioned  
9 into the studies that showed negative effect, I found  
10 that in most cases those studies were prepared by  
11 appraisers, and the appraisers were actually doing  
12 compared sales analyses, comparing a property  
13 affected by a turbine versus a property unaffected by  
14 a turbine, and determining if there's a negative  
15 effect.

16           Q. But isn't paired sales data hard to do in  
17 Champaign County --

18           A. Yes.

19           Q. -- because there aren't any wind  
20 turbines?

21           A. Yes, because there aren't any wind  
22 turbines on the ground yet.

23           Q. So can you tell me how paired sales data  
24 would be helpful to this Board?

25           A. It's helpful in an analogous sort of way.



1 Turbines have a negative property value effect in  
2 west Texas, for example, as Gardner concluded. That  
3 was one of the pieces of information that I used. It  
4 doesn't necessarily translate to Champaign County or  
5 any other part of Ohio, or any other location in the  
6 country for that matter, unless you can prove that  
7 some other similar stimulus also produced a negative  
8 effect on property value.

9           The best example that we have in Ohio is  
10 high voltage transmission lines. Properties adjacent  
11 to or near high voltage transmission lines are  
12 typically affecting -- their value is typically  
13 affected in a negative manner. To take one argument  
14 and build on another, that tells me that there should  
15 be a negative effect on property value caused by  
16 turbines. How much? We don't know yet. I can  
17 formulate an opinion of what I think it will be,  
18 which I've done in my direct testimony.

19           But until we actually have turbines on  
20 the ground and we can actually measure how the market  
21 accepts them, there's no real good way of doing a  
22 paired sale analysis for turbines in Champaign  
23 County.

24           Q.    Would you also agree that paired sales  
25 data will be difficult to ascertain due to what I

1 think you said is the effect of proximity?

2 A. Yes. Yes. In order to properly analyze  
3 this situation proximity is going to be an issue.  
4 Speaking back to the REPP report, they lumped  
5 everything in a 5-mile radius together and then  
6 concluded that there's no effect. Well, something  
7 tells me that the property adjacent to a turbine was  
8 affected significantly more than the property  
9 4.9 miles away, hypothetically. Can I prove that?  
10 No, not without their data. But I think it's logical  
11 and reasonable to anticipate that going forward until  
12 there's data to prove otherwise.

13 Q. And you had also contacted a local  
14 realtor in Champaign County, correct?

15 A. Yes.

16 Q. Why did you feel it was important to have  
17 a local realtor involved?

18 A. Because I can formulate my own opinion  
19 and I'm well-versed in proper appraisal techniques  
20 and data collection, but we're dealing with a  
21 perception issue more than anything else, because  
22 right now -- and I keep going back to this, we don't  
23 have turbines in place yet. All we have is the  
24 perception that they're coming. And the question  
25 that I was asked was will this affect property value.

1 And my initial response was I don't know, let me find  
2 out.

3 Reading all of the studies, formulating  
4 my own opinion, that's all great and wonderful, but  
5 if I can't prove or disprove my opinion by contacting  
6 someone in the local market, then it's relatively  
7 invalid. So I needed to verify what I thought I was  
8 seeing with someone in that market, and that's when I  
9 contacted Patrick Hamilton.

10 Q. And would you agree, based on your  
11 expertise, that different areas may see totally  
12 different results?

13 A. Absolutely.

14 Q. And it's very difficult to say that one  
15 that happened in California, something that happened  
16 in California or something that happened in New York  
17 or Michigan will be the same thing as in Champaign  
18 County?

19 A. It's a very difficult translation.

20 Q. Because, I mean, real estate not only  
21 changes from neighborhood to neighborhood, but it  
22 certainly changes from region to region.

23 A. Yes. I agree.

24 Q. So isn't local realtors, I mean, they  
25 give you the local data, correct?

1           A.    Yes.  The important part of any appraisal  
2   is that you can formulate an opinion, and it can be a  
3   well-informed opinion but it only has credence if it  
4   affects what's happening in the local market.  It has  
5   to take into account the opinions and attitudes of  
6   buyers and sellers of real estate in that area.  You  
7   can poll individuals and you can sort of formulate  
8   what individual attitudes are, but typically the best  
9   resource is a well-informed realtor, at least as a  
10  starting point.

11           MS. NAPIER:  One moment, please.

12           Q.    In your opinion, is there a difference  
13  for purposes of property value between the 918-foot  
14  setback and a 1,640-foot setback?

15           A.    Logically there should be just because  
16  proximity, again, proximity appears to be an issue  
17  with high voltage transmission lines; it would make  
18  sense that if you have a wider or longer setback,  
19  that it should help mitigate the amount of effect, I  
20  guess.  How much?  Again, the answer is I don't know  
21  or I'm not sure.  There's no real good way of  
22  measuring that just yet.

23           Q.    And I kind of want to bring you back to  
24  market perception just for a moment.  If a  
25  manufacturer of a wind turbine has recommended a

1 certain setback and, in essence, those setbacks were  
2 decreased to 918 feet, and the recommended amount was  
3 1,640, would that negatively affect property values,  
4 in your opinion?

5 A. Can you restate?

6 Q. Okay.

7 A. If we increased the setback, is that the  
8 question?

9 Q. I will rephrase because as I was saying  
10 it I thought it was being vague.

11 A. Okay.

12 Q. If a manufacturer of the wind turbine  
13 recommended 640-foot setbacks and the installer went  
14 with a 918-foot setback, would perception that the  
15 installation recommendations weren't followed  
16 negatively affect property values, in your  
17 assessment?

18 A. It certainly could. It still falls into  
19 the I'm not sure just yet because of the siting of  
20 individual turbines. If these are -- if they're  
21 relatively isolated, maybe not. If there's a turbine  
22 that's adjacent to or relatively close to a  
23 structure, then I would say yes. So it's almost a  
24 property-specific question that you're asking.

25 Q. And are you aware there is some

1 disagreement in how people feel about the wind  
2 turbines in Champaign County?

3 A. Yeah, that's pretty well known.

4 Q. Will that affect market perception and  
5 then property values?

6 A. I would expect it to because one of two  
7 things, you can look at one of two and maybe a  
8 combination of both effects. Either you'll have a  
9 number of people decide they don't want to live in an  
10 area with turbines and they'll move out. If you  
11 flood the market with more supply than what it's used  
12 to having, especially in a market with current  
13 conditions in the current economic climate, values  
14 are going to go down even more.

15 The other thing that could happen is  
16 Champaign County, until the latest economic downturn,  
17 was poised to benefit from a significant influx of  
18 new households, new housing. I would have --  
19 significant in terms of what Champaign County is in  
20 terms of population. Because it's geographically  
21 located near, relatively near Marysville where  
22 Honda's located, it's near Dayton with the  
23 Wright-Patterson Air Force Base employment  
24 increasing, there are a number of different reasons  
25 why there was population growth expected in Champaign

1 County.

2 If you site turbines in the area and  
3 people don't want to live near turbines, then you  
4 could be affecting that future demand.

5 Q. And that's a negative effect.

6 A. And that is negative, yes.

7 MS. NAPIER: Thank you. I have no  
8 further questions.

9 ALJ SEE: Mr. Weithman, do you have  
10 questions for this witness?

11 MR. WEITHMAN: I do not, no.

12 ALJ SEE: Mr. Brown.

13 MR. BROWN: Yes, your Honor.

14 - - -

15 CROSS-EXAMINATION

16 By Mr. Brown:

17 Q. Mr. Sherick, I represent the Urbana  
18 Country Club.

19 A. Okay.

20 Q. I just have a couple questions following  
21 up on your direct testimony. It appears to me from  
22 reading through it it's mostly focused on residential  
23 property; is that true?

24 A. By and large, yeah.

25 Q. Is that because -- what was the reason

1 for focusing on residential properties in your direct  
2 testimony?

3 A. That's the predominant use of real estate  
4 not only in Champaign County, but in most locations.

5 Q. All right. Your qualifications, do they  
6 extend to the valuation of commercial property as  
7 well as --

8 A. Yes.

9 Q. -- residential property?

10 A. Yes.

11 Q. So you feel comfortable talking about the  
12 valuation of commercial property?

13 A. Yes, I do.

14 Q. All right. Is the income approach an  
15 accepted method for valuing commercial property?

16 A. Yes, it is.

17 Q. Can you explain what that is?

18 A. It's a mathematical representation where  
19 you're measuring a property owner or a buyer's  
20 anticipation for future income. You use that  
21 projection of income to determine what a reasonable  
22 price for the real estate would be as of the date of  
23 appraisal.

24 Q. So you really kind of look at the  
25 property as what is its earning potential in coming



1 up with what the value of the property is?

2 A. Yes.

3 Q. All right. So I just have a question.  
4 Based on your experience in real estate and as an  
5 appraiser, I just want you to consider a set of facts  
6 and then I'll ask you a question, all right?

7 A. Okay.

8 Q. If property A is an outdoor recreation  
9 facility that generates revenue from fees collected  
10 from people using that property, and if an activity  
11 on an adjacent or nearby property causes fewer people  
12 to visit property A and causes -- therefore causes  
13 the revenue for the owner of property A to be  
14 reduced, does the market value of property A  
15 decrease?

16 MS. RUSSO: Objection, your Honor,  
17 foundation for this question. We have no facts  
18 regarding property A or B, and also this is friendly  
19 cross.

20 ALJ SEE: I'm sorry. What was the last  
21 part of that?

22 MS. RUSSO: This is friendly cross.

23 MR. SELVAGGIO: Judge, for purposes of  
24 the record I'm not sure I understand the objection  
25 "friendly cross" and would ask maybe for some

1 guidance from the court for the basis for that  
2 objection.

3 ALJ SEE: I think it's really  
4 inappropriate for me to do it at this point. If  
5 you'd like Ms. --

6 MS. RUSSO: Russo.

7 ALJ SEE: -- Russo to explain further her  
8 objection, that's fine.

9 MS. RUSSO: I'd be happy to do so.

10 ALJ SEE: Please do.

11 MS. RUSSO: The witness has been given a  
12 time period to submit direct testimony and witness  
13 testimony has been written and submitted as of  
14 November 2nd which was the order from the Board.  
15 So at this point all Mr. Brown is doing is eliciting  
16 further direct testimony. This is not probing  
17 what -- his knowledge or his direct testimony as  
18 submitted.

19 MR. BROWN: I think I get a chance to  
20 respond.

21 ALJ SEE: You get a chance to respond. I  
22 think that was just more of an explanation for  
23 Mr. Selvaggio.

24 MR. BROWN: All right. I would submit  
25 this is not friendly cross. This is not on behalf of

1 the UNU who has offered this witness. This is on  
2 behalf of my client. This person has got real estate  
3 experience, his testimony can be further -- it can be  
4 used to help my client. That's why I'm asking the  
5 question. It's not friendly cross. It's not on  
6 behalf of the person who has put this witness on the  
7 stand.

8 MS. RUSSO: Your Honors, with all due  
9 respect, that's the exact definition of friendly  
10 cross. Mr. Brown is attempting to use this witness,  
11 this expert witness who he admittedly has not  
12 retained on behalf of his clients, for the benefit of  
13 his clients when that's not the purpose of  
14 cross-examination.

15 ALJ SEE: Thank you. Thank you all.  
16 Have a seat.

17 The objection is overruled. Continue  
18 your cross, Mr. Brown.

19 Q. (By Mr. Brown) Do you remember the  
20 question, Mr. Sherick?

21 A. I believe so.

22 Q. And I think the follow-up to all of the  
23 foundation, setting of the foundation was does the  
24 activity from off site cause a diminution in property  
25 value or does the market value of property A

1 decrease?

2 A. Logically, yes. If it's -- if a property  
3 is generating less income after property B starts  
4 operating, then it's worth less.

5 MR. BROWN: Thank you. That's all the  
6 questions I have.

7 ALJ SEE: Mr. Margard.

8 MR. MARGARD: No questions, thank you,  
9 your Honor.

10 ALJ SEE: Ms. Russo.

11 MS. RUSSO: Yes, your Honor, thank you.

12 - - -

13 CROSS-EXAMINATION

14 By Ms. Russo:

15 Q. Mr. Sherick.

16 A. Hi.

17 Q. Hi. My name is Gina Russo, I have  
18 introduced myself to you before but I'd like to do so  
19 again on the record. I represent Buckeye Wind in  
20 this proceeding.

21 I'd like to follow up first with some  
22 questions that you've already been asked and mainly  
23 with regard to some of the studies that you reviewed.  
24 You referred to the REPP report a number of times.

25 A. Yes.

1           Q.    Okay.  That was a study that considered  
2 about ten wind farm sites?

3           A.    Yes.

4           Q.    And this also, report, was cited in your  
5 direct testimony.

6           A.    Yes.

7           Q.    You indicated that this study focused on  
8 sales within a 5-mile radius.

9           A.    Yes.

10          Q.    But I think you used the words that they,  
11 the researchers, lumped their findings together for  
12 all the sales within a 5-mile radius.

13          A.    Okay.

14          Q.    Isn't that what you said?

15          A.    I believe so, yeah.

16          Q.    Okay.  Isn't it true that those  
17 researchers actually looked at ten different sites  
18 and looked at sales varying in proximity in that  
19 5-mile radius?

20          A.    Yes.  I think that's exactly what I said.

21          Q.    Okay.  So they did, in fact -- they  
22 didn't just look at homes or sales of homes at  
23 4.99 miles away from the wind turbines.

24          A.    No.  That's the definition of a turbine  
25 within a 5-mile radius.

1           Q.    So they did look at sales of homes  
2 adjacent to the setback for the proposed wind  
3 turbine.

4           A.    And they lumped them in with sales of  
5 properties 4.99 miles away as well.

6           Q.    Okay.  But my question is they did look  
7 at sales directly --

8           A.    Yes.

9           Q.    -- upon the setback area.

10          A.    Yes.

11          Q.    And they looked at ten different wind  
12 farms.

13          A.    Yes.

14          Q.    And multiple sales transactions.

15          A.    Yes.  I don't recall the specific number,  
16 but yes.

17          Q.    Okay.  You also talked about the EPIC  
18 Consulting report.

19          A.    Yes.

20          Q.    And that was done by a Mr. Miller?

21          A.    I believe so, yes.

22          Q.    Mr. Miller did not prepare his own report  
23 of a paired sales analysis; is that right?

24          A.    No.  No, his report was to do a  
25 statistical critique of --

1           Q.    And he critiqued the reports of Poletti  
2 and REPP.

3           A.    I believe so, yes.

4           Q.    But you yourself did not read the Poletti  
5 report.

6           A.    I did not have access to it.

7           Q.    Okay. And you relied extensively on  
8 Mr. Miller for your own critique of the Poletti and  
9 the REPP reports in your direct testimony.

10          A.    I used it as a sounding board, if you  
11 will, after I read through REPP and concluded that he  
12 knows more about statistical analysis than I do,  
13 so . . .

14          Q.    And since you didn't read the Poletti  
15 report, you used his findings as your own.

16          A.    Yes.

17          Q.    Okay. Now, with regard to Mr. Miller, I  
18 believe upon Ms. Napier's questioning you made a  
19 distinction between statisticians and appraisers.

20          A.    Yes.

21          Q.    And I think that you had some criticism  
22 with statisticians' reports.

23          A.    In a sense, yes.

24          Q.    I took your testimony, and correct me if  
25 I'm wrong, to mean that a real estate appraiser might

1 be more qualified to render an opinion on the impact  
2 or the potential impacts of property values.

3 A. Yes.

4 Q. Okay. Are you aware that Mr. Miller in  
5 the EPIC report had that same criticism with regard  
6 to real estate appraisers?

7 A. No.

8 Q. In fact, he felt the opposite. He felt  
9 that statisticians were more qualified to render that  
10 opinion.

11 A. Okay.

12 Q. All right. You were not aware of that?

13 A. It's his opinion; he's entitled to it.

14 Q. You currently work for Gem Real Estate --

15 A. Yes.

16 Q. -- is that right?

17 A. Yes.

18 Q. And in response to Mr. Brown's  
19 questioning you indicated that your direct testimony  
20 mainly focuses on residential properties.

21 A. By and large, yes.

22 Q. Now, the majority of your focus while  
23 working for REM, though, is on commercial real  
24 estate.

25 A. Working for who?



1           Q.    Gem Real Estate who you currently work  
2 for.

3           A.    Yes.

4           Q.    And your focus is mainly on the appraisal  
5 of commercial properties.

6           A.    And included in that would be a number of  
7 land developments for residential construction.

8           Q.    It's about 90 percent commercial real  
9 estate?

10          A.    In terms of commercial mortgage and  
11 what's classified as commercial property, yes.

12          Q.    And you focus -- your work focuses, as  
13 far as residential, 10 percent of the time.

14          A.    Yes. In terms of individual houses, yes.

15          Q.    And then prior to that when you worked  
16 for Property Advisors, you worked for that entity for  
17 about four years?

18          A.    Correct.

19          Q.    And you focused there, again, on  
20 commercial properties.

21          A.    Correct.

22          Q.    It was about a 98, 99 to 2 percent split.

23          A.    That sounds correct. Sure.

24          Q.    All right. Now, at some point you were  
25 retained by UNU and the McConnells and Julia Johnson

1 to testify in this proceeding; is that right?

2 A. Yes.

3 Q. And you were made aware that UNU, the  
4 McConnells, and Ms. Johnson oppose the construction  
5 and development of the wind farm in Champaign County?

6 A. That became apparent after I got started,  
7 yes.

8 Q. Prior to this assignment you had never  
9 been involved in analyzing the potential impact on  
10 property values as a result of the development or  
11 construction of a wind farm.

12 A. No, I had not.

13 Q. You have no training as an engineer.

14 A. No.

15 Q. And you have no scientific background.

16 A. No.

17 Q. You've never lived near a wind farm?

18 A. No.

19 Q. Okay. And I believe the only time you've  
20 ever observed a wind farm is on the vacation you took  
21 to Mackinac Island.

22 A. Yes.

23 Q. Okay. Now, I want to talk a little bit  
24 about the work you performed in connection with this  
25 particular project. As you've told us, you were

1 asked the question to identify the general impacts on  
2 property values.

3 A. Yes.

4 Q. All right. You were not asked to look at  
5 specific properties.

6 A. Correct.

7 Q. And you agree, and I think it's -- you've  
8 responded this way in response to some of the  
9 questioning already, but you agree that there are  
10 several different types of properties within the  
11 project area.

12 A. Yes, there are.

13 Q. I'm sorry. Go ahead, finish.

14 A. Yes, there are.

15 Q. Okay. Both residential and commercial.

16 A. And agricultural and light industrial,  
17 et cetera.

18 Q. Okay. Thank you.

19 And you essentially took four different  
20 steps to render your opinions in this case.

21 A. Yes.

22 Q. You did research which would include the  
23 review of the Buckeye Wind application.

24 A. Yes.

25 Q. And when you reviewed the Buckeye Wind

1 application, you mainly focused on the maps.

2 A. Correct.

3 Q. As I understand it you contacted a local  
4 realtor in Champaign County.

5 A. Yes.

6 Q. You prepared an analogous situation or an  
7 analogous analysis, if you will, to each HVTL lines  
8 I'll call them, high voltage transmission lines.

9 A. Yes.

10 Q. And is it okay if I refer to that as  
11 "HVTL"?

12 A. Sure.

13 Q. After you did those analyses you checked  
14 your findings versus the reports that we've briefly  
15 discussed.

16 A. Yes.

17 Q. Okay. I want to talk a little bit more  
18 in depth on those reports that you actually relied  
19 upon. First of all, there's different methodologies  
20 employed by different researchers to determine  
21 potential impacts to property values, correct?

22 A. Yes.

23 Q. Some of these researchers use surveys.

24 A. Surveys, yes.

25 Q. Where they might ask local appraisers

1 what their thoughts and ideas are, their opinions are  
2 if a construction such as a wind farm is proposed?

3 A. Yes.

4 Q. Okay. Others I think that you just told  
5 us about, statistics.

6 A. Yeah.

7 Q. Reports based upon pure statistics.

8 A. Yes.

9 Q. And then there's the paired sales  
10 analysis.

11 A. Yes.

12 Q. Okay. I'm understanding it from my  
13 review of the literature, and correct me if I'm  
14 wrong, but I think there's paired sales analysis on  
15 analogous situations such as the HVTLS --

16 A. Yes.

17 Q. -- and then there's paired sales analysis  
18 on actual home sales transactions within the area  
19 affected by wind farm turbines.

20 A. I don't know that there are. The data  
21 that was used in REPP and some of the other studies,  
22 the raw data wasn't made available.

23 Q. Okay. All right. We'll get to that.

24 If that data were available, though, and  
25 I think Ms. Napier was alluding to this, if that data

1 were available, and that being raw data available  
2 from home sales transactions nearby a proposed and/or  
3 constructed wind farm, wouldn't that be the ideal  
4 data that you would want to perform your -- excuse  
5 me, form your opinions?

6 A. Yes, that's the best-case scenario.

7 Q. Thank you.

8 And ideally in order to do that you would  
9 like to have a larger sample size.

10 A. You'd like to have as many data points as  
11 possible. What I would hesitate to do would be to  
12 lump them in and analyze them as a group, but more  
13 data is always better, yes.

14 Q. And it would be helpful in that sense to  
15 know the distance of the proposed turbine to the  
16 affected home.

17 A. Among other things, yes.

18 Q. Okay. Now, you mentioned earlier the  
19 Bard College report.

20 A. Yes.

21 Q. And I believe in your direct testimony  
22 you referred to this report as fundamentally flawed.  
23 Or your interpretation is that report is  
24 fundamentally flawed.

25 A. Yeah, that's my opinion.

1           Q.    And that was based upon two things:  One,  
2  you believed that the researchers there had a lack of  
3  applicable data.

4           A.    Yes; in one particular spot within that  
5  document they even acknowledged as such.

6           Q.    Okay.  And then the second factor was  
7  that you believed that the researchers failed to  
8  consider the change in real estate market conditions.

9           A.    Yes.

10          Q.    Okay.  Now, you did not review that  
11 report in its entirety.

12          A.    No, not in its entirety.  I can't cite  
13 chapter and verse what's in it.

14          Q.    Instead, you focused mainly on the  
15 results.

16          A.    Yes.

17          Q.    All right.  And that report did conclude  
18 that there would be no impact to property values from  
19 a proposed wind farm.

20          A.    Correct.

21          Q.    And you did not agree with those results.

22          A.    The results were stated in terms of  
23 statistical terminology that 20 years ago when I was  
24 an undergrad I might have been able to understand and  
25 translate into real-world examples, but if the

1 results clearly state that there's no affect -- the  
2 data offered does not think that turbines affect  
3 property value, the other stuff just sort of gets  
4 lost in the minutia, if you will.

5 Q. So the basis for their opinions was not  
6 100 percent comprehensible to you.

7 A. Correct. It goes back to what we started  
8 with, there wasn't any hard raw data cited or  
9 provided so that I could at least try and follow  
10 along.

11 Q. Well, didn't that report indicate that it  
12 considered the sale of approximately 280 homes in the  
13 impacted area?

14 A. Yes.

15 Q. All right. And those homes were within  
16 the range of between 3/4 of a mile to 5 miles away  
17 from a proposed wind turbine.

18 A. I believe that's the case, yes.

19 Q. And the report also acknowledged that 140  
20 of those sales occurred after the construction on  
21 that wind farm.

22 A. Yes.

23 Q. Okay. And all those sales took place  
24 from approximately 1996 to 2005.

25 A. Yes.



1 Q. And that's what the data showed.

2 A. That's what the data showed.

3 Q. And with those 280 sales transactions  
4 that report concluded that there was no impact on  
5 those property values.

6 A. That's what it concluded.

7 Q. Now, in your direct testimony you also  
8 referred to another report by Ryan Wiser and Ben  
9 Hoen, this is on page 6 of your direct testimony.  
10 The study is entitled "Do Wind Facilities Affect  
11 Local Property Values?"

12 A. I thought that was the Bard College  
13 study.

14 Q. This is actually a separate study. This  
15 is the presentation.

16 A. Oh, this is the slide show, okay. Yes.

17 Q. Okay. And you indicated there on page 6  
18 of your direct testimony that you had the same  
19 critiques of that presentation or study, if you will.

20 A. Yes. And again, not having access to  
21 their raw data I had a bit of a disadvantage in  
22 reading that.

23 Q. Okay. That study, if you will, looked at  
24 four separate wind farms.

25 A. That sounds -- yes, I believe so.

1           Q.   And they were in different areas across  
2 the country.

3           A.   I don't recall -- I thought they were all  
4 in New York and Pennsylvania, but I'm not -- I'm not  
5 specifically certain from memory.

6           Q.   I'm just going to check it for my own --  
7 I don't want to speak inaccurately. Okay. Two sites  
8 in New York and two sites in Pennsylvania, does that  
9 sound accurate?

10          A.   Yes, that sounds accurate.

11          Q.   And they have a sample size of about 350  
12 homes per site.

13          A.   That sounds familiar, yes.

14          Q.   Which would equal about 2,195  
15 transactions that they looked at.

16          A.   Yes.

17          Q.   And there again, those researchers found  
18 no impacts.

19          A.   That's what they concluded, yes.

20          Q.   Now, you did refer to some reports in  
21 your direct testimony in which found negative impacts  
22 to property values.

23          A.   Yes.

24          Q.   And that was the Appraisal One Group in  
25 September of 2009.

1           A.    Yes.

2           Q.    And then also the Gardner Appraisal Group  
3 out of Texas.

4           A.    Yes.

5           Q.    And I think you acknowledge in your  
6 direct testimony that the topography and the rural, I  
7 guess the makeup of the land in Texas is not directly  
8 transferable to Champaign County.

9           A.    Correct.

10          Q.    Neither of these reports relied upon the  
11 methodology that you used and that being the paired  
12 sales analysis of an analogous situation.

13          A.    No, not of an -- start over. They did  
14 not rely on an analogous situation.

15          Q.    Thank you.

16                All right. There is one report that you  
17 did cite and you relied upon as sort of a guide and  
18 that was the Zarem report.

19          A.    Yes.

20          Q.    And that report was done, I believe that  
21 is Exhibit 26 to your testimony.

22          A.    It is.

23          Q.    That report used the same methodology  
24 that you used.

25          A.    Yes.

1           Q.    And that was the paired sales analysis of  
2 the analogous HVTL --

3           A.    Yes.

4           Q.    -- lines, okay.  Now if you can take a  
5 look at that report, I guess it's not numbered, but  
6 on the back of sort of the first page, if you will --

7           A.    Okay.

8           Q.    -- it's in letter form, June 6th, 2005,  
9 is at the top.  I guess it would be page 1 of the  
10 report.

11          A.    Yes.

12          Q.    It indicates there what Mr. Zarem did to  
13 form his opinions.  It looks like he conducted a  
14 literature review.

15          A.    Yes.

16          Q.    And you too told us that you conducted a  
17 literature review.

18          A.    Yes.

19          Q.    He did a drive-by inspection of the  
20 proposed locations.

21          A.    Yes.

22          Q.    And I believe that you did drive the line  
23 of the property in Champaign County.

24          A.    Yes.

25          Q.    Okay.  And it looks like 3 is more

1 literature review there.

2 A. Yes.

3 Q. A discussion of property valuation  
4 methodology.

5 A. Proper valuation.

6 Q. Excuse me. Proper.

7 A. Yes.

8 Q. Okay. And then, 5, a presentation of  
9 readily available high voltage electric transmission  
10 lines, paired data analysis.

11 A. Yes.

12 Q. Okay. And he did his, I guess his sample  
13 size was two suburban Milwaukee subdivisions.

14 A. Yes.

15 Q. All right. And he concluded, looking at  
16 these two separate subdivisions -- well, first let me  
17 back up. Both of these subdivisions were developed  
18 near high voltage transmission lines.

19 A. Yes.

20 Q. And he concluded that the units that were  
21 affected -- and when I say "affected," I mean closer  
22 to the high voltage transmission line from those that  
23 were unaffected being further away from the high  
24 voltage transmission line -- had a negative impact on  
25 those property values.

1 A. Yes.

2 Q. Okay. And this was very similar to what  
3 you did.

4 A. Yes.

5 Q. Now, in your sort of paired sales  
6 analysis you looked at two developments also near  
7 high voltage transmission lines.

8 A. Yes.

9 Q. One being the Wellington Estates.

10 A. Yes.

11 Q. And that was in Butler County.

12 A. No, Wellington Estates is in --

13 Q. Excuse me. Warren.

14 A. Warren County.

15 Q. Sorry. Colonial Manor Square, which is  
16 in Butler.

17 A. Yes.

18 Q. And Warren and Butler are adjacent  
19 counties.

20 A. Yes.

21 Q. And I think in response to Ms. Napier's  
22 questioning you did not conduct a paired sales  
23 analysis in Champaign County.

24 A. No. Part of doing a paired sale analysis  
25 is actually having enough data to glean out or pull

1 apart a specific adjustment.

2 Q. And you didn't have the data from  
3 Champaign County.

4 A. No.

5 Q. In fact, you didn't look at whether any  
6 homes had been put up for sale since this project has  
7 been announced, did you?

8 A. Yes, I did.

9 Q. Okay. And did you conclude anything from  
10 those findings?

11 A. That the specific example that I cited in  
12 my written testimony speaks to there being an effect  
13 on perception. I cannot measure the effect on value  
14 just yet because that property has not sold.

15 Q. I'm sorry. Let me be clear. Despite or  
16 besides the conversation that you had with  
17 Mr. Hamilton and those potential sales, you yourself  
18 did not look into the sales of potentially impacted  
19 homes in Champaign County.

20 A. Yes, and I found none. I did look for  
21 them, yes.

22 Q. Okay. Just a moment.

23 MS. RUSSO: Your Honor, may I approach?

24 ALJ SEE: Yes.

25 Q. Mr. Sherick, I've handed you -- well, let

1 me back up.

2           You recall meeting me earlier this month;  
3 is that correct?

4           A.    Yes.  It was a week or so ago.

5           Q.    Okay.  November 6th, thereabouts?

6           A.    Yeah.

7           Q.    And you recall me taking your deposition  
8 in connection with this particular proceeding.

9           A.    Yes.

10          Q.    Okay.  And at that time there was a court  
11 reporter present?

12          A.    Yes.

13          Q.    And you were placed under oath.

14          A.    Yes.

15          Q.    And you swore to tell the truth.

16          A.    Yes.

17          Q.    And that was because you wanted to be as  
18 accurate as possible.

19          A.    Yes.

20          Q.    Can you turn to page 119 of your  
21 deposition transcript, please.

22          A.    Okay.

23          Q.    Drawing your attention to line 10 --

24          A.    Okay.

25          Q.    -- it says "Question:  Were you aware of



1 any purchasers of property in Champaign County since  
2 the Buckeye Wind Project has been announced?

3 "Answer: I am sure there's been property  
4 that has sold, yeah.

5 "Question: Are you aware of any?

6 Answer: I would have to know exactly  
7 when the project was announced. If I recall  
8 correctly, it was June or July of 2008. Is that  
9 roughly correct? The one that comes to mind is 8290  
10 Metz Road. That particular property was purchased  
11 because it was unaffected by the project."

12 Now, let me stop myself there. Before I  
13 go on, did I read that correctly?

14 A. I believe so, yeah.

15 Q. And 8290 Metz Road is the property that  
16 Mr. Hamilton informed you about?

17 A. Yes.

18 Q. Going on on line 23, "Question: Okay,  
19 are you aware of any other purchases in the  
20 potentially affected area of the Buckeye Wind  
21 project?"

22 Going on to page 120, "Answer: No. I  
23 did notice that obviously the Ludlow Road property  
24 still hasn't sold."

25 And let me stop again there. First of

1 all, did I read that correctly?

2 A. Yes.

3 Q. And the Ludlow property is also the  
4 property that Mr. Hamilton informed you about.

5 A. Yes.

6 Q. Going back to line 2, "I also observed  
7 when I was up there on Sunday and through my research  
8 leading up to this that there are a number of  
9 properties that are for sale."

10 Now, I'll stop there. First of all, let  
11 me ask you, did I read that correctly?

12 A. I believe so Yes.

13 Q. And when I asked you in this deposition  
14 when you had visited this wind farm and you made  
15 reference to that Sunday, that was the Sunday after  
16 you had submitted direct testimony.

17 A. Yes.

18 Q. Okay. Going back to page 120, line 6, "I  
19 didn't run any sort of tabulation as to how long or  
20 why or how much because, again, that spoke to  
21 specifics that were outside the original bounds of  
22 the question.

23 "Question: You were not asked to do  
24 specifics?

25 "Answer: Correct.

1                   "Question: So you did not look or  
2 research into the real estate market in Champaign  
3 County and specifically in the area in which the  
4 Buckeye Wind project is planned to be constructed.

5                   "Answer: I didn't isolate any specific  
6 adjustments that could be measured, no."

7                   Did I read that correctly?

8                   A. Yes.

9                   Q. Okay. Now, when you looked at the two  
10 different projects in Warren and Butler Counties,  
11 your conclusion was that the units that were closer  
12 to high voltage transmission lines sold for less.

13                  A. Yes.

14                  Q. All right. Let's focus in on the  
15 Wellington Estates portion of that. You received  
16 that information from that piece of property -- those  
17 were sales or that sale to the seller, because I  
18 understand that this was a sale to the seller for  
19 ultimate resale to home builders.

20                  A. If you're referring to the land  
21 transactions that were acquired by the developer,  
22 yes.

23                  Q. Thank you.

24                  A. Sure.

25                  Q. Said that a lot better than I could.

1                   Okay. And this was a sale that occurred,  
2 again, in 2006 and 2007.

3                   A. Yes.

4                   Q. All right. And this is an example that  
5 you have in your files, correct?

6                   A. Yes.

7                   Q. This is not something that you went out  
8 and did in connection with this particular project.

9                   A. No. I did recall this file information  
10 and wanted to go back and make sure that it was still  
11 factually correct.

12                  Q. And you didn't --

13                  A. So --

14                  Q. Sorry. Were you finished?

15                  A. Yes.

16                  Q. If you have more to add, please go ahead.

17                  A. Not really. I think I was just going to  
18 keep rambling.

19                  Q. Okay.

20                  A. Sorry.

21                  Q. You did not talk to any of those ultimate  
22 home buyers of the Wellington Estates units.

23                  A. I spoke with the developer. I did not  
24 speak with home buyers, no.

25                  Q. Okay. And what you found with the

1 Wellington Estates property was that even if the  
2 price varied among the affected units versus the  
3 unaffected units, the affected units sold quicker,  
4 did they not?

5 A. So far they have, yes.

6 Q. You also looked at the Colonial Manor  
7 Square development.

8 A. Yes.

9 Q. And that is approximately 256 units.

10 A. That sounds correct, yes.

11 Q. Approximately 15 of those were affected.

12 A. I believe so, yes.

13 Q. And not only were those 15 units affected  
14 by high voltage transmission lines, but they were  
15 also affected by a petroleum pipeline; isn't that  
16 right?

17 A. Yes, the pipeline runs congruent with or  
18 underneath the transmission line easement.

19 Q. And the actual pricing of these units  
20 affected versus unaffected didn't change.

21 A. The pricing did not. The actual lot  
22 areas that were -- the affected lots were  
23 significantly larger than the unaffected lots.

24 Q. And you looked at sales of these units  
25 from November of 2003 through February of 2005.

1           A.    That sounds correct, yes.

2           Q.    And again, this is an example that you  
3 have in your files.

4           A.    Yes.

5           Q.    And this is not something that you or a  
6 study that you undertook directly in connection with  
7 this particular project.

8           A.    No.  In conjunction with this project,  
9 like I said before, I went back and made sure that my  
10 facts were correct.

11          Q.    All right.  You did not prepare a report  
12 of your findings other than your direct testimony.

13          A.    Correct.  I wasn't asked to.

14          Q.    You are aware that Mr. Zarem criticized  
15 his own study.

16          A.    Yes.

17          Q.    And, in fact, he said that the size of  
18 this study, which is -- the observation or analysis  
19 of two subdivisions was, quote, "too small to draw  
20 statistically meaningful conclusions."

21          A.    Yes.

22          Q.    Okay.  He also noted that, quote, "the  
23 appraiser assumes" -- that being himself -- "that the  
24 transmission line view impacts are reasonably  
25 comparable to wind turbine view loss impacts based on

1 the observed view loss in each case."

2 A. Okay.

3 Q. So he was assuming that the view loss  
4 from HVTLS and wind turbines were the same.

5 A. I don't know if he was saying they're the  
6 same. I think he was hanging his hat on the term  
7 "analogous," but I don't want to necessarily speak  
8 for him either.

9 Q. And from that assumption he concluded  
10 that although the conclusions are deemed to be  
11 reasonable for specific circumstances defined within  
12 this report, the overall reliability of the  
13 conclusions is below average relative to typical  
14 valuation adjustments.

15 A. Yes. That speaks directly to what we  
16 were talking about before. If we're going to do a  
17 correct analysis, it almost certainly has to be done  
18 in a historical perspective. We have to have  
19 turbines in place and we have to analyze what  
20 happened to specific properties in terms of their  
21 value.

22 Q. Otherwise, it's an incomplete analysis.

23 A. It's --

24 Q. Or is there --

25 A. I don't know if I'd use the word

1 "incomplete," but it's an informed analogy. It's  
2 anecdotal evidence. It's pointing you in a specific  
3 direction, if you will. But ultimately you need to  
4 be able to prove or disprove that supposition or  
5 conclusion with factual evidence specific to the  
6 matter at hand.

7 Q. And in Zarem's words, he defines that as  
8 below average.

9 A. Yeah.

10 Q. Now, with regard to the similarities or  
11 the dissimilarities between high voltage transmission  
12 lines and wind turbines, you did not survey  
13 individuals as to their beliefs or their impressions  
14 of those two, of either the high voltage transmission  
15 lines or the wind farm, or the wind turbine, excuse  
16 me.

17 A. The high voltage transmission lines, did  
18 I -- I did not conduct a specific survey, that's just  
19 sort of been built over my experience, if you will.  
20 In terms of conducting a survey for turbines, no. We  
21 were under quite a bit of time constraint, and I  
22 thought about it and didn't know how to specifically  
23 put together a survey that would yield accurate or  
24 meaningful results.

25 Q. Okay. So in other words, you didn't



1 conduct a survey amongst any individuals including  
2 the residents of Champaign County about their beliefs  
3 of HVTL lines versus a wind turbine.

4 A. In effect I did because when I spoke to  
5 Mr. Hamilton, the local realtor, that was part of the  
6 conversation. I don't know that we got necessarily  
7 that specific, but I do recall asking him his  
8 thoughts on what a wind turbine would do -- adjacent  
9 to a property would do compared to high tension  
10 lines. He said -- and if I recall correctly, his  
11 response was "Well, that's probably about the best  
12 example you're going to come up with."

13 Q. And that was your questioning of one  
14 realtor in the area.

15 A. Yeah.

16 Q. And your conversations with Mr. Hamilton  
17 dealt with one of his clients?

18 A. One of his clients and then his opinion  
19 as well, yes.

20 Q. Okay. Are you aware of the study cited  
21 in the Bard College report from Ireland, it's a 2003  
22 study, that indicates based upon a survey from 1,200  
23 people that wind farms were preferred over HVTL  
24 lines, or wind turbines were preferred?

25 A. I recall seeing a reference to that. I

1 don't recall what the --

2 Q. You didn't take that into account in your  
3 analysis.

4 A. No. I saw several documents that were  
5 produced. I recall seeing one in Ireland, I recall  
6 seeing one from Denmark, I recall seeing one from  
7 Great Britain, but I didn't necessarily know how to  
8 take those opinions and apply them to Champaign  
9 County, Ohio.

10 Q. And you agreed with Ms. Napier earlier  
11 that, in fact, people's views do vary about wind  
12 turbines even within the same community.

13 A. Sure.

14 MS. RUSSO: Your Honor, if I may, I have  
15 a procedural question and that is we would like to  
16 move to strike pages 11 beginning line 13 through 12,  
17 line 20.

18 ALJ SEE: You want to strike page 11  
19 beginning at -- page 11, line 13, through?

20 MS. RUSSO: Twelve, line 20.

21 ALJ SEE: Your basis for that motion?

22 MS. RUSSO: The reason being this  
23 testimony is all based upon conversations with  
24 Mr. Hamilton. There is no independent analysis done  
25 here. This is hearsay, lack of foundation, so we

1 would ask that it be stricken from the record and not  
2 allowed to be admitted into evidence.

3 I do so now because if the objection is  
4 overruled, then I would like to cross-examine him on  
5 that. If not, then I will waive any  
6 cross-examination, obviously, on that.

7 ALJ SEE: Mr. Walker.

8 MR. WALKER: Your Honor, Mr. Sherick is  
9 testifying as an expert. Experts are entitled to  
10 rely upon hearsay information that a fact witness  
11 would not be able to rely upon. He consulted with  
12 Mr. Hamilton in the course of preparing his opinions  
13 and his discussions with Mr. Hamilton and the  
14 information he obtained from Mr. Hamilton is no  
15 different from his consultation of the reports that  
16 he reviewed. So we see no basis to strike his  
17 testimony on those pages.

18 MS. RUSSO: Your Honor, may I respond?  
19 Your Honor, may I respond briefly to Mr. Walker?

20 ALJ SEE: Go ahead.

21 MS. RUSSO: Okay. I'd just like to note  
22 for the record that while it's true an expert may  
23 rely upon many different bases to form his opinion,  
24 if you look at this testimony, it's based solely upon  
25 hearsay. In this instance Mr. Sherick did not take

1 what he was told from Mr. Hamilton and go out into  
2 the field and do further investigation. He relied  
3 solely upon Mr. Hamilton's out-of-court statements  
4 alone and basically regurgitated them here into his  
5 direct testimony.

6 MR. WALKER: Your Honor, there's no  
7 foundation . . .

8 ALJ SEE: Go ahead, Mr. Walker.

9 MR. WALKER: There's no foundation for  
10 Ms. Russo's statement, and I believe if Mr. Sherick  
11 was examined further, it would be determined that he  
12 did independent evaluation of the information  
13 Mr. Hamilton provided to him.

14 MS. RUSSO: Your Honor, I can propose a  
15 compromise.

16 ALJ SEE: What are you proposing,  
17 Ms. Russo?

18 MS. RUSSO: Well, if Mr. Walker would  
19 like me to establish that these are merely -- this  
20 direct testimony is merely from Mr. Hamilton, I can  
21 do that. And if your Honors are not convinced that  
22 this is directly from Mr. Walker without  
23 Mr. Sherick's independent I guess work or follow-up  
24 of what Mr. Hamilton told him, then I will go ahead  
25 and cross-examine on it and I'll withdraw the

1 objection.

2 ALJ SEE: Go ahead.

3 MS. RUSSO: Okay.

4 Q. (By Ms. Russo) Mr. Sherick, you contacted  
5 a local realtor in Champaign County, correct?

6 A. Yes.

7 Q. And he purported to tell you about a  
8 potential sale to a client in Champaign County.

9 A. I don't know if I'd use that wording, but  
10 I'll play along just to see what question you're  
11 getting at.

12 Q. Okay.

13 A. Sorry.

14 Q. No. No. That's okay. Let me try it  
15 again. Let me try it again.

16 This wasn't an effort to undertake a  
17 paired analysis in Champaign County.

18 A. No. This was an effort to at least try  
19 and gauge if there's been any change in perception in  
20 Champaign County. There is no paired sale analysis  
21 to be done yet because we don't have any turbines in  
22 the ground.

23 Q. Okay. At any rate, you contacted a local  
24 realtor in Champaign County to talk about the  
25 potential impacts to property values as a result of

1 this proposed wind farm.

2 A. Yes.

3 Q. And I believe that you were retained in  
4 this matter in October of 2009.

5 A. The specific date escapes me but I want  
6 to say October -- mid-October.

7 Q. Last month.

8 A. Yes, last month.

9 Q. And you submitted your direct testimony  
10 which is in front of you on November 2nd, 2009.

11 A. That sounds correct, yes.

12 Q. Okay. And you did not go out to visit  
13 either of these properties that Mr. Hamilton told you  
14 about until after you submitted the direct testimony;  
15 isn't that right?

16 A. I didn't feel the need to.

17 Q. So your conclusions based upon those two  
18 properties, those two properties being the Metz and  
19 the Ludlow properties, are based solely upon what  
20 Mr. Hamilton told you.

21 A. No.

22 Q. Okay. Prior to that, prior to anything  
23 that you -- well, let me back up. Prior to writing  
24 your report, your direct testimony --

25 A. Yes.

1 Q. -- you did not go visit the property?

2 A. I didn't have to.

3 Q. My question is you didn't visit the  
4 property.

5 A. And I responded with no, I didn't have  
6 to.

7 Q. And you didn't talk to the home buyers  
8 themselves.

9 A. Again, I didn't have to.

10 Q. Okay. And you solely talked to  
11 Mr. Hamilton.

12 A. And confirmed that conversation with the  
13 public record and data taken from the MLS. The  
14 Multiple Listing Service, sorry.

15 Q. The data taken from the MLS and the  
16 public record, that's not cited in your direct  
17 testimony.

18 A. I --

19 Q. Any of the data that you referred to.

20 A. I can provide it.

21 Q. Okay. My question is, it's not cited or  
22 relied upon in your direct testimony.

23 MS. NAPIER: Objection. Your Honor, I  
24 don't think she has the foundation.

25 I think you're totally incorrect, but I

1 don't believe you have a foundation.

2 MS. RUSSO: Well, is it --

3 ALJ SEE: I'm sorry. Hold on.

4 Ms. Napier, I'm sorry. Objection  
5 overruled.

6 A. Can you restate the question?

7 Q. Yes.

8 A. I don't know where we are.

9 Q. I'm sorry.

10 MS. RUSSO: Madam court reporter, could  
11 you please read back my last question.

12 (Record read.)

13 A. Okay.

14 Q. On pages 11 or 12 of your direct  
15 testimony when you are discussing your conversation  
16 with Mr. Hamilton --

17 A. Okay.

18 Q. -- you do not cite there to any  
19 documentation or your review of the MLS.

20 A. I didn't think it was necessary. I have  
21 that information available if you'd like to see it.  
22 But your question seems to be pointed at this being a  
23 paired sale analysis. And that isn't what it is  
24 because the affected property has not sold. So any  
25 paired sale analysis that I would prepare would be



1 faulty at best because there isn't an actual sale.

2 Q. And I may have misspoke. It may not be a  
3 paired sales analysis, and that's my mistake.

4 Regardless, you don't cite to any  
5 evidence that you rely upon or purportedly relied  
6 upon found through the MLS.

7 A. Okay, I apologize for the oversight.

8 Q. My question is --

9 A. Sorry.

10 Q. It's not a problem. I'm just saying you  
11 did not cite it in your testimony.

12 A. I don't believe I did cite it, no.

13 Q. And you did not cite any references to  
14 any other review, your independent review of public  
15 documents.

16 A. Okay, no, I didn't.

17 MS. RUSSO: All right. Based upon that  
18 and based upon the fact that he submitted this direct  
19 testimony without his actual independent visitation  
20 to the site or any other work that he did to follow  
21 up with the conversation with Mr. Hamilton, again, we  
22 would object to this testimony based solely upon the  
23 statements from Mr. Hamilton as inadmissible hearsay.

24 ALJ SEE: Mr. Walker.

25 MR. WALKER: Your Honor, Mr. Sherick has

1 testified that he did independently confirm the  
2 information provided by Mr. Hamilton through public  
3 records and through the Multiple Listing Service so,  
4 you know, it's not solely hearsay.

5 In addition to that, as I pointed out  
6 earlier, as an expert Mr. Sherick is entitled to  
7 consider information from other individuals that  
8 would for a fact witness be considered hearsay.

9 ALJ SEE: Motion to strike page 11  
10 starting at line 13 through page 12, line 20, your  
11 motion to strike is denied.

12 MS. RUSSO: Thank your Honors.

13 Q. (By Ms. Russo) Mr. Sherick, you contacted  
14 Mr. Hamilton who is a realtor in Champaign County.

15 A. Yes.

16 Q. Okay. And he told you about a potential  
17 or a client that he had in the market for a real  
18 estate purchase.

19 A. Yes.

20 Q. And that was also in Champaign County.

21 A. Yes.

22 Q. And Mr. Hamilton told you that his  
23 client, who -- do you know the name of this  
24 individual?

25 A. I do not.

1 Q. You never met him.

2 A. No.

3 Q. Never talked to him yourself.

4 A. No.

5 Q. Okay. Mr. Hamilton told you that this  
6 unidentified person was interested in purchasing a  
7 property, I believe on 1596 South Ludlow Road in  
8 Union Township.

9 A. Yes.

10 Q. And that project is apparently within the  
11 project footprint.

12 A. I think we spoke about this during my  
13 deposition. I'm not sure how to specifically answer  
14 that because my understanding is the project is still  
15 siting specific turbines, but in a general context,  
16 it is in the affected area, yes.

17 Q. Okay. On page 11 of your direct  
18 testimony you indicate "It is located within the area  
19 of the proposed Buckeye Wind Project."

20 A. Yes.

21 Q. And then the other property is 8290 Metz  
22 Road in Wayne Township.

23 A. Yes.

24 Q. And that property apparently is not  
25 within the project area.

1           A.    Yes.  Correct.  Sorry.

2           Q.    Okay.  It is not, just for --

3           A.    It is not, sorry.

4           Q.    Okay.  And what Mr. Hamilton told you was  
5 that once he became aware that the South Ludlow was  
6 in, or, excuse me, the South Ludlow home was within  
7 the project area, he no longer was interested in that  
8 property.

9           A.    Correct.

10          Q.    And from your discussions with  
11 Mr. Hamilton, Mr. Hamilton told you that the South  
12 Ludlow property and the Metz property were  
13 comparable.

14          A.    Yes, that was his assertion.

15          Q.    Okay.  And you indicate in your direct  
16 testimony that the South Ludlow property had been on  
17 the market since May of 2008?

18          A.    Yes.

19          Q.    And since your last I guess check in  
20 October of 2009, or at least your last check as of  
21 the date of your direct testimony, it had not sold.

22          A.    Yeah, I believe the last date I checked  
23 was October 29th or thereabouts.

24          Q.    All right.  And that property's asking  
25 price went from 399-9 reduced to 369.

1           A.    Yes.   Correct.

2           Q.    Now, the Metz Road property, who --  
3 Mr. Hamilton told you was comparable.

4           A.    Yes.

5           Q.    And at the time that you wrote your  
6 direct testimony, you had not visited these  
7 properties.

8           A.    No, but as I mentioned before, I had  
9 public record and MLS information that provided me  
10 both interior and exterior photographs of both.

11          Q.    Okay.

12          A.    Since I wasn't doing a paired sale  
13 analysis I didn't necessarily need to go visit them.

14          Q.    And you noted that there were differences  
15 in these homes.

16          A.    Yes.

17          Q.    Now, the Metz property, Mr. Hamilton's  
18 client that was concerned about the South Ludlow  
19 property did not purchase the Metz Road property.

20          A.    No.   No.   Something transpired, I don't  
21 recall what it was, but that party didn't purchase  
22 either of the two being considered here.

23          Q.    So the only person Mr. Hamilton told you  
24 about who was concerned about the South Ludlow house  
25 within the project area and went to view the Metz

1 Road property, which was without the project area,  
2 did not ultimately end up purchasing the property  
3 outside of the project area.

4 A. Correct. And that's exactly why I didn't  
5 take this information into consideration for forming  
6 any sort of paired sale analysis.

7 Q. In fact, didn't the Metz Road property  
8 sell for \$370,000?

9 A. That sounds correct, yeah.

10 Q. Which is precisely the amount that the  
11 South Ludlow house is still up for sale for.

12 A. It's roughly the same amount, yes.

13 Q. \$1,000 different.

14 A. Yes.

15 Q. Nevertheless, from that one particular  
16 instance you concluded that the Buckeye Wind farm  
17 project has a negative effect on the value of the  
18 South Ludlow property.

19 A. Yes, I did.

20 Q. Okay. You didn't know -- or, you don't  
21 know as you sit here today, do you, how far the  
22 proposed wind turbine would be from the South Ludlow  
23 home?

24 A. No, I don't know.

25 Q. All right. Now, when we met last time, I

1 took your deposition on November 6th which was four  
2 days after you submitted your direct testimony in  
3 this case, at that time you could not tell me how  
4 much acreage was within the proposed construction  
5 area.

6 A. Correct.

7 Q. And you still can't do that?

8 A. I don't have any -- if there's  
9 information to that fact, I missed it.

10 Q. And you couldn't tell me how many  
11 residential properties were within that area.

12 A. No, I --

13 MR. WALKER: Objection. Ambiguous.

14 Q. Do you understand what I mean by that?

15 ALJ SEE: Just a moment. Go back and  
16 read the question, please, Maria.

17 (Record read.)

18 ALJ SEE: Rephrase the question, please.

19 MS. RUSSO: Yes, your Honor.

20 Q. Mr. Sherick, you couldn't tell me how  
21 many residential properties were within the proposed  
22 Buckeye Wind farm project area.

23 MR. WALKER: Same objection. The term  
24 "project area" is a term of art in the application.

25 ALJ SEE: Mr. Sherick, do you understand

1 the term "project area" as it's been used in the  
2 application?

3 THE WITNESS: I would use the term  
4 "affected area."

5 ALJ SEE: And how are you defining  
6 "affected area"?

7 THE WITNESS: In a very generic, nebulous  
8 sense. I don't know how to specifically define it.  
9 It's one of those things I can see it on a map and I  
10 can stand at a specific point on the map and  
11 understand an affected area or what I think is the  
12 affected area, but in terms of the project area or  
13 something like that, that -- "project area" to me  
14 denotes specific sites of specific turbines.

15 MR. WALKER: Your Honor, my concern for  
16 the record is that the term "project area" in the  
17 application was specifically defined as the turbines  
18 and specified setback area around those turbines, and  
19 I think that the question's misleading to use the  
20 term "project area" when Mr. Sherick may not have  
21 been aware of that.

22 ALJ SEE: Ms. Russo, try rephrasing your  
23 question, please.

24 MS. RUSSO: Okay.

25 ALJ SEE: Mr. Walker, please use the mic.



1           Q.    (By Ms. Russo) Mr. Sherick, at the time  
2 of your deposition you could not tell me how many  
3 residential properties were within the proposed area  
4 for the wind turbines plus 914 feet for the setback  
5 area.

6           A.    Correct. I don't have an accurate  
7 inventory of the area.

8           Q.    Okay. And within that term as I just  
9 defined it, the project area being the proposed  
10 turbines plus 914 feet for the setback area, you  
11 could not tell me how many commercial properties were  
12 within that designated area.

13          A.    Correct. I don't have an accurate  
14 inventory of properties.

15          Q.    And prior to submitting your direct  
16 testimony which is now being admitted as evidence you  
17 did not visit any part of that project area.

18          A.    Not in conjunction with this assignment,  
19 no. I'm familiar with the area, I've been to it  
20 several times.

21          Q.    My question, though, is you did not visit  
22 it prior to submitting your direct testimony.

23          A.    Not in conjunction with this project or  
24 assignment.

25          Q.    And I believe that you did go to the

1 project area or part of it the Sunday after you  
2 submitted your direct testimony.

3 A. Yes.

4 Q. And at that time you didn't take any  
5 measurements.

6 A. I'm not sure what I'm supposed to -- what  
7 you're insinuating I should be measuring, but no, I  
8 didn't.

9 Q. And you didn't interview any of the  
10 residents that live within the area.

11 A. No.

12 Q. And you didn't visit any of their  
13 particular homes or property lots.

14 A. Visit in terms of what?

15 Q. Go to --

16 A. Did I observe them? Yes, I observed  
17 them. Did I trespass without being invited? No.

18 Q. Okay. And I take it you weren't invited  
19 to any of those homes.

20 A. No, I was not. That's an appraiser's  
21 sort of hesitation.

22 Q. And other than your visit or I guess your  
23 sort of observation of the Nantucket wind farm when  
24 you were on vacation with your family, you've not  
25 visited any other wind farms in the country.

1           A.    That was Mackinac Island or Mackinac  
2 City, not Nantucket.

3           Q.    Sorry.

4           A.    That's the only wind farm I recall making  
5 any sort of observation about.

6           Q.    Okay. And you've not interviewed any  
7 other residents of nearby wind farms.

8           A.    No. Again, given -- we spoke about this  
9 during my deposition, given the proper amount of time  
10 and resources I would love to do that.

11          Q.    I just want to talk briefly about your  
12 opinions on page 15. As I understand your direct  
13 testimony there, you essentially make three separate  
14 opinions in the answer which begins on line 11.

15          A.    Yes.

16          Q.    And that's that the land value of vacant  
17 land will decrease by 6.5, home values would decrease  
18 by 10 percent, and land -- parcels with development  
19 potential would decrease by as much as 50 percent.

20          A.    Yes. I was going to add there's  
21 important context attached to each one of those  
22 percentages. Vacant land at least 6.5 percent;  
23 development, as much as 50 percent; home values, at  
24 least 10 percent. And that speaks to exactly what we  
25 were talking about before, there's no hard data that

1 allows me to say specifically this property will be  
2 affected this much, this other property will be  
3 affected a different amount. There's no --

4 Q. These are all generalized --

5 A. Yes.

6 Q. Not certainties.

7 A. Correct.

8 Q. And, in fact, the 6.5 percent attached to  
9 vacant land, that was based purely upon your analysis  
10 of the Wellington Estates and Colonial Manor  
11 examples?

12 A. Yes, it was based on the paired sales  
13 analysis.

14 Q. And basically you just transferred that  
15 number over to any potentially affected areas in  
16 Champaign County.

17 A. Until I get other information that tells  
18 me that's -- that amount or that figure is incorrect,  
19 yes.

20 Q. And you did that also with regard to the  
21 10 percent on home values and the 50 percent on the  
22 potentially developed -- potentially developable  
23 lands.

24 A. Yes.

25 Q. Easy for me to say.

1 All right. So you didn't do any  
2 comparison lot by lot in Champaign County.

3 A. No, because there isn't a great deal of  
4 new construction in Champaign County. There isn't a  
5 great deal of sales volume in Champaign County so  
6 that you can take this sort of approach and analyze  
7 it correctly. That's part of why people live in  
8 Champaign County is they don't want that amount of  
9 activity around them.

10 Q. And because these are generalities and  
11 not certainties, that's technically the reason for  
12 your equivocal language in that answer when you say  
13 "it's apparent to me."

14 A. Yes.

15 MS. RUSSO: Okay. I have nothing  
16 further. Thank you.

17 ALJ SEE: Mr. Walker.

18 MR. WALKER: Thank you, your Honor.

19 - - -

20 REDIRECT EXAMINATION

21 By Mr. Walker:

22 Q. Mr. Sherick, before November 2nd when  
23 we submitted your direct written testimony were you  
24 familiar with the character of that portion of  
25 Champaign County that's being proposed as the site

1 for the Buckeye Wind Project?

2 A. Yes.

3 Q. How were you familiar?

4 A. I've had several assignments in Champaign  
5 County, Union County, Logan County, Clark County,  
6 over the past several years. When you get an  
7 assignment in one of the more rural counties, your  
8 analysis cannot be so geographically specific that  
9 you eliminate other comparisons, so when you analyze  
10 commercial property in Urbana, you have to go to  
11 Marysville and consider what commercial property  
12 value is there.

13 When you're looking at farmland values in  
14 Champaign County, you have to also consider farmland  
15 values in Logan County or even Shelby County or any  
16 of the other surrounding counties that have a similar  
17 demographic makeup, similar economic makeup. You  
18 can't compare things in downtown Columbus to  
19 Champaign County, but you can certainly compare rural  
20 county to rural county.

21 Q. Okay. You've mentioned several times in  
22 your testimony here today the term the perception or  
23 a perception issue.

24 A. Yes.

25 Q. How is perception important to your

1 analysis?

2           A.    It's paramount because what we're dealing  
3 with in terms of measuring what's going to happen to  
4 property values, if you will, that becomes a function  
5 of economics and I'm not an economist, I don't have  
6 any formal, you know, Ph.D. in economics or anything  
7 like that, but my understanding of economics as it  
8 relates to a real estate market is that markets  
9 fluctuate based on social and psychological and  
10 emotional effects or occurrences or stimulus or  
11 stimuli.

12                As soon as you change something in a  
13 market, then prices, sales volumes, a variety of  
14 other things could be affected. And when the  
15 original question was posed, Mr. Sherick, "Do you  
16 think that this will have an effect on property  
17 value?" my initial response was "I don't know, let me  
18 go find out."

19                That's precisely why I focus on  
20 perception, because perception is going to drive  
21 whatever effect on property value will or will not be  
22 proven going forward.

23           Q.    Okay. You were asked some questions  
24 early in your testimony about setbacks and  
25 comparables, comparative setbacks. Do you have any

1 opinion as to what an appropriate setback would be  
2 for wind turbines in Champaign County?

3 A. I have an uninformed opinion, but I don't  
4 think it necessarily applies to this.

5 Q. You testified about Mr. Gardner's  
6 analysis.

7 A. Yes.

8 Q. It was an analysis relating to Texas,  
9 right?

10 A. Yes.

11 Q. Does the Gardner analysis have any  
12 relevance to your assessment and your evaluation in  
13 this case?

14 A. It does because it speaks to specifically  
15 wind turbines as opposed to high voltage transmission  
16 lines and it also speaks to proximity being an issue.

17 Q. You also talked about Mr. Zarem's report,  
18 and I believe Ms. Russo walked through and made some  
19 comparisons between what Mr. Zarem did in his report  
20 and what you did in your report. Did you do anything  
21 in your analysis, not report, your analysis in  
22 addition to what Mr. Zarem did?

23 A. I would like to think that my  
24 conversation with Mr. Hamilton sets the perception  
25 issue. It does not yield any sort of measurable



1 results in terms of dollar amounts because that  
2 Ludlow Road property has not yet sold. It's still  
3 currently on the market, the asking price is  
4 \$369,000. When it does sell, then I or someone else  
5 can go through and do an actual paired sale analysis  
6 of that property compared to the Metz Road property.

7 But my conversation with Mr. Hamilton  
8 gave me the perception issue that I was looking for,  
9 because in this volume of information there are  
10 conflicting opinions. There are opinions that say  
11 there's no effect. There's opinions that say that  
12 there is an effect. My initial viewpoint is I don't  
13 know, let me find out.

14 Well, after doing all this review I  
15 started formulating an opinion, but that opinion's  
16 only as good as what I can verify within the  
17 marketplace. I couldn't verify it with any actual  
18 hard sales data, but I was able to verify the  
19 perception issue.

20 Q. Okay. As far as my question, whether you  
21 did anything in addition to what Mr. Zarem did, what  
22 specifically did you do in your analysis that  
23 Mr. Zarem did not do?

24 MS. RUSSO: I'm going to object as asked  
25 and answered.

1 ALJ SEE: I couldn't hear you.

2 MS. RUSSO: I'm sorry. That was asked  
3 and answered by Mr. Sherick.

4 ALJ SEE: Read back his answer.

5 (Record read.)

6 MR. WALKER: Your Honor, I'll withdraw  
7 the question.

8 ALJ SEE: Okay.

9 Q. Mr. Sherick, based on your experience as  
10 a professional property appraiser do you believe that  
11 it's generally accepted within your profession that  
12 HVTLS, as we're calling them, have a negative impact  
13 on nearby property values?

14 A. That's the general indication, yes.

15 Q. So are the case studies, the Colonial  
16 Manor and Wellington Estates case studies that you  
17 offer in your direct testimony, the only basis of  
18 your opinion concerning the impact of HVTLS?

19 MS. RUSSO: I'm going to object to the  
20 extent that this is outside of his direct testimony.

21 ALJ SEE: Overruled. Answer the  
22 question, Mr. Sherick.

23 THE WITNESS: Can you reread it? Sorry.

24 ALJ SEE: Sure. Maria.

25 (Record read.)

1           A.    No.  Those are just the examples that I  
2 have specifically analyzed.  With regard to HVTLS,  
3 there's just as much, if not more, literature to read  
4 and analyze as to how transmission lines affect  
5 property values, but -- and I've read quite a bit of  
6 that.

7                   The case studies that I've provided as  
8 part of my direct testimony, though, are analyses  
9 that I've done myself.  I know, speaking back to some  
10 of the other reports that were cited in this matter,  
11 I have the raw data and I can analyze my own raw data  
12 and rely upon those conclusions.

13           Q.    Okay.  Ms. Russo asked you whether you  
14 spoke with any home buyers in the Wellington Estates  
15 development.  In your opinion, was it necessary to  
16 talk to home buyers?

17           A.    No, because the amount of information  
18 that I have on that particular development, I  
19 appraised both pieces of that development when they  
20 were proposed, as a function of that assignment I had  
21 several conversations with the lender, several  
22 conversations with the developer, and I was provided  
23 with reams of purchase contracts and marketing  
24 materials from the home builders that were involved.

25                   In that instance when you have that

1 amount of information and what you're measuring is  
2 based on lot value, not home value, an interview with  
3 the home buyer would be great, but I don't know that  
4 it necessarily dovetails into the analysis that I was  
5 doing.

6 Q. Okay. With regard to the Bard study --

7 A. Yes.

8 Q. -- do you recall how close the nearest  
9 home was to a turbine in connection with that study?

10 A. It was some distance. The specific  
11 distance escapes me. I want to say 3/4 of a mile,  
12 but I'm not certain, I'm going from memory.

13 Q. All right. If I were to represent to you  
14 that the nearest home was 4,000 feet from a turbine,  
15 would that be significant to your analysis of the  
16 Bard study as compared to your analysis of the  
17 proposed Buckeye Wind Project?

18 A. Yes.

19 Q. Can you elaborate?

20 A. Sure. The analysis that I've done and  
21 the analysis that anyone does needs to properly  
22 account for proximity. If you're going to -- in the  
23 Bard example -- have, I don't know if they're legal  
24 setbacks of 4,000 feet or if that was just the market  
25 data that was available to him to analyze, but if it

1 starts at 4,000 feet and works out, then you're not  
2 properly or maybe you aren't able to properly analyze  
3 the effect of proximity because there is going to be  
4 a substantial difference between a thousand-foot  
5 setback as opposed to a 4,000-foot setback.

6 That sort of analysis would need to be  
7 considered in both the Bard example and then if we  
8 were to ever conduct that same sort of study on this  
9 project, you'd have to take that into consideration  
10 as well.

11 Q. All right. One more question,  
12 Mr. Sherick, and that's relating to the Poletti  
13 study. You mentioned that you were unable to review  
14 the Poletti study itself.

15 A. Yes.

16 Q. Are you aware that the Poletti study was  
17 requested in discovery and that Buckeye Wind was  
18 unable to produce that document?

19 A. I think we had had a conversation about  
20 that, but I'm not -- I know that there were repeated  
21 efforts to obtain a copy of that study and we haven't  
22 been able to get ahold of it.

23 MR. WALKER: Your Honor, for the record,  
24 the Poletti study was requested in discovery and  
25 Buckeye Wind represented that they were unable to

1 find a copy of that.

2 Thank you, Mr. Sherick. That's all the  
3 questions that I have.

4 ALJ SEE: Mr. Weithman.

5 MR. WEITHMAN: No.

6 ALJ SEE: Ms. Napier.

7 MS. NAPIER: Yeah, just a couple of  
8 questions in regard to things that Mr. Walker had  
9 brought up.

10 - - -

11 RECROSS-EXAMINATION

12 By Ms. Napier:

13 Q. Even though wind turbines aren't present  
14 in Champaign County, if a wind turbine is placed on  
15 what I would call participating landowners'  
16 property -- do you understand what that means,  
17 participating landowner?

18 A. I'll give you the same answer I gave  
19 Ms. Russo: I think, and I'll play along just to see  
20 where you're going with the question.

21 Q. Okay. That is such a distance away from  
22 a nonparticipating landowner's property --

23 A. Okay.

24 Q. -- that it inhibits the nonparticipating  
25 landowner from building a structure or splitting a

1 piece of property for residential purposes let's say.  
2 Would you conclude that a particular setback distance  
3 has a negative property value effect on the  
4 nonparticipating landowner because they're inhibited  
5 from splitting or building a structure on that  
6 property?

7 MS. RUSSO: Objection, your Honor. I'm  
8 just going to object for the record. Lacks  
9 foundation.

10 ALJ SEE: Your objection is noted.

11 Answer the question, Mr. Sherick.

12 A. In valuing real estate you deal with a  
13 concept called bundle of rights, in that sort of  
14 context if there's a setback or an easement that  
15 legally affects the title of an adjacent property,  
16 then logically and rationally and reasonably its  
17 value is affected as well.

18 Q. So then are you saying in your expert  
19 opinion that in order to avoid that negative impact  
20 that any easement or any setback should be outside of  
21 that nonparticipating landowner's property line?

22 MS. RUSSO: Again, your Honor, I'm going  
23 to object. I don't think this witness has made it  
24 clear that he knows what nonparticipating landowner  
25 versus a participating landowner is.

1 ALJ SEE: Objection sustained.

2 MS. NAPIER: May I ask him if he knows?

3 Q. Can you explain to me -- I've asked you  
4 the question about nonparticipating landowner. Can  
5 you explain to me what you believe that to be?

6 A. If I'm understanding you correctly, a  
7 participating landowner would be someone who owns  
8 property that Buckeye Wind has targeted as a  
9 potential site for a turbine, and a nonparticipating  
10 landowner would be a hypothetically adjacent  
11 landowner that will not have a turbine. Is that  
12 correct?

13 Q. Well, I'll let that stand as it is.

14 A. Okay.

15 Q. I'm going to ask you the question,  
16 though, again, assuming what you believe. Would you  
17 conclude in your expert opinion on that definition  
18 that to avoid a negative impact to the  
19 nonparticipating landowner's property the setback or  
20 easement or whatever should be outside of the  
21 nonparticipating landowner's property line?

22 A. Yeah.

23 MS. RUSSO: Your Honor, I'm sorry, I'm  
24 just going to object again for the record. Again,  
25 based upon a lack of foundation, but also the



1 question as it's stated is ambiguous. I'm not sure  
2 that I even understand the hypothetical.

3 ALJ SEE: Mr. Sherick, do you understand  
4 the question?

5 THE WITNESS: I believe so.

6 ALJ SEE: Okay.

7 THE WITNESS: Sorry. I believe so.

8 ALJ SEE: Go ahead.

9 A. If the setback, and I don't know how to  
10 state this much better than what I'm going to give  
11 you right now, if the setback encroaches across a  
12 property line onto a nonparticipating property  
13 owner's land, then that is detracting from that  
14 person's property rights. If it's detracting from or  
15 taking away property rights, then it's affecting that  
16 person's property value.

17 So back to the question that you were --  
18 that you asked me, if the setback is contained to the  
19 participating landowner's property lines, then it  
20 becomes a -- there's still a proximity issue there,  
21 how much becomes a much more difficult question to  
22 answer.

23 Q. Going on to something else, you had  
24 stated to a previous question that some of the  
25 studies had different types of property uses I guess

1 you'd say, or classifications, I think you had said  
2 agricultural, residential, commercial, light  
3 industrial; is that correct?

4 A. Yes.

5 Q. Did I leave out any?

6 A. Yeah, country club, tennis club,  
7 whatever. You can name a hundred different uses.

8 Q. And isn't it true that the impacts may  
9 vary on those properties that are characterized in  
10 different ways?

11 A. I would expect them to, yes.

12 Q. Okay. And some of the studies that you  
13 looked at such as, if I can remember, the Wellington  
14 Estates and the Colonial Manor Square, those were  
15 basically residential.

16 A. Yes, those are residential subdivisions.

17 Q. So I guess other than those studies did  
18 the other studies, were they specific as to the  
19 impacts according to different uses?

20 A. I don't believe they were. I think those  
21 studies made a similar conclusion that I did, that  
22 the property type that's -- I don't want to use the  
23 term "easiest," but there's enough relevant data to  
24 analyze is single-family residential just because of  
25 the sheer numbers. You can call it density patterns

1 or whatever the cause, there's more residential  
2 property than any other property type as a rule in  
3 most marketplaces. My analysis, sorry, my analysis  
4 focused on the same thing for the same reasons.

5 Q. And -- I'm sorry, I keep doing that to  
6 you.

7 A. That's all right.

8 Q. And would you conclude that Champaign  
9 County is pretty typical in having a majority of  
10 single-family residences?

11 MS. RUSSO: Objection, your Honor. Lacks  
12 foundation.

13 MS. NAPIER: I believe I'm asking the  
14 question. I'm not presuming anything.

15 ALJ SEE: The objection is sustained.

16 Q. You had previously, I believe,  
17 characterized Champaign County as a bedroom  
18 community, correct?

19 A. I don't know that I used that term, but  
20 it's not necessarily incorrect either.

21 Q. Okay.

22 A. It's sort of a combination of bedroom  
23 community and agricultural area. Very rural.

24 Q. And in your opinion, would agricultural  
25 values go up in price, or up in value excuse me, with

1 wind turbines on them, if you know?

2 MS. RUSSO: Objection, your Honor. This  
3 lacks foundation.

4 ALJ SEE: Did you want to respond,  
5 Ms. Napier?

6 MS. NAPIER: No.

7 ALJ SEE: Objection sustained.

8 Q. And the studies other than the Wellington  
9 Estates and the Colonial Manor Square, you had stated  
10 that they did not specifically set forth specific  
11 impacts, correct?

12 A. The Wellington Estates example provides  
13 two different measurements, one for the vacant land  
14 prior to development and then another example for  
15 completed building lots.

16 Q. Okay.

17 A. Those comparisons are based on the  
18 analogous situation of high voltage transmission  
19 lines.

20 Q. And the studies other than that, do you  
21 know whether or not those had varying uses in those  
22 studies?

23 A. The Gardner study focused on, I don't  
24 know if "agricultural land" is the right term, but  
25 vacant land or large tracts of land with a single

1 house. The Bard College and REPP studies focused on  
2 single-family homes. Zarem focused on building lots.  
3 My analysis, again, had building lots but then it  
4 also had that vacant land comparison as a basis as  
5 well.

6 Most of the -- going from memory, most of  
7 the studies that I read focused on single-family  
8 houses.

9 Q. Was there any stated purpose as to why  
10 single-family dwellings and vacant lots were targeted  
11 for those studies?

12 A. I don't recall it being stated  
13 specifically, but again, I have a hunch it has to do  
14 with the amount of data that's available. If you're  
15 going to analyze a manufacturing facility and you  
16 want to measure the effects of a wind turbine on a  
17 manufacturing facility, well, in order to do that you  
18 have to have two identical manufacturing facilities  
19 that have sold at roughly the same point in time in  
20 roughly similar geographic locations and they're of  
21 roughly similar physical characteristics, one  
22 affected by a turbine, one not affected by a turbine,  
23 what's the price differential between the two, that's  
24 your paired sale analysis for an industrial property.

25 As you make these sorts of analyses more

1 and more and more specific, the amount of relevant  
2 data becomes severely limited. If you're taking a  
3 statistical approach such as some of the larger-scale  
4 studies have done, the obvious target, then, is  
5 single-family residential. Where my study sort of  
6 went an additional step is to have that comparison of  
7 a tract of development land adjacent to a  
8 transmission line compared to an identical tract of  
9 development land not adjacent to a transmission line.

10 Q. Did you review or did you locate any  
11 studies dealing with agricultural lands only?

12 A. I'm sure at some point I came across  
13 something. I don't recall anything specific. The  
14 findings of any sort of statistical study on  
15 agricultural land is going to be even more difficult  
16 to understand because there's going to be a general  
17 lack of applicable data, I would assume.

18 There's also going to be a sales volume  
19 issue because in order to have any sort of meaningful  
20 statistics, the one report studied a ten-year time  
21 frame and that was for housing. I would hazard a  
22 guess that there's far less than -- I think in that  
23 case there were 280 houses that had sold in that  
24 ten-year time frame. I would hazard a guess there  
25 were far fewer tracts of ag. land that sold in that

1 same general area during that same time period.

2 So the statistics would become even less  
3 reliable as most of the criticisms of those reports  
4 sort of indicated. That's why when given a  
5 statistical analysis as an appraiser, I'm  
6 automatically skeptical but I'm open to the  
7 possibility that that analysis may be correct. My  
8 verification for my opinion will come later when I  
9 look at actual paired sales.

10 So in your example I would want to see,  
11 in rural Wisconsin, I want to see a tract -- a  
12 40-acre piece of agricultural land that's affected by  
13 proximity to wind turbines and I'd want to see a  
14 relatively identical 40-acre tract of land that's  
15 unaffected and I'd want to see what the sales price  
16 was of each and then I'd want to make that  
17 comparison.

18 MS. NAPIER: Thank you. I have no  
19 further questions.

20 ALJ SEE: Mr. Brown.

21 MR. BROWN: No questions.

22 ALJ SEE: Mr. Margard.

23 MR. MARGARD: No thank, your Honor.

24 ALJ SEE: Ms. Russo.

25 MS. RUSSO: Just briefly.

## RECROSS-EXAMINATION

By Ms. Russo:

Q. Mr. Sherick, let me be clear here that you did not analyze any specific properties within or potentially affected properties within the Buckeye Wind farm.

A. The area around it?

Q. Yes. As we've described it, the proposed turbine sites plus 914 feet, you --

A. Correct. I haven't analyzed that because, I keep referring to this and I hope I'm not insulting, it's because there aren't any turbines actually placed and operating yet.

Q. And you were not given the information or you didn't analyze specifically any residential properties.

A. No. Again, this was just a general what do you think sort of analysis because, again, we're dealing with a bit of an unknown, admittedly.

Q. And you at the time that I took your deposition, you couldn't tell me with certainty what the proposed setback was going to be.

A. Correct. I don't know that that's been stated as a matter of fact just yet.

Q. Okay. And with regard to commercial



1 properties, again, you didn't specifically analyze  
2 any potential impacts to commercial properties.

3 A. Again, I did not because I wasn't asked  
4 to.

5 Q. Okay. Mr. Walker asked you about what  
6 you did in addition to, if anything, in addition to  
7 what Mr. Zarem did.

8 A. Yes.

9 Q. And I believe -- I interpreted your  
10 answer to mean or to identify that you had that  
11 conversation with Mr. Hamilton and were able to gauge  
12 sort of the perception in the market.

13 A. Correct.

14 Q. But you agree with me that the  
15 information that you got from Mr. Hamilton did not  
16 allow you to complete any type of paired sales  
17 analysis in Champaign County.

18 A. That sort of analysis can't be done until  
19 that second house sells; correct.

20 Q. That's right. And any analysis based on  
21 the incomplete information Mr. Hamilton gave you, to  
22 use your words, would be pie in the sky.

23 A. I don't know that I said "pie in the  
24 sky," but yeah, I will agree with that because  
25 there's -- while the Ludlow Road property is

1 currently on the market still at \$369,000, there is  
2 nearly always, especially in a down market, if you  
3 will, a difference between asking price and ultimate  
4 sale price.

5           Estimating or guessing as to what that  
6 sale price will be is faulty logic. It could very  
7 well sell tomorrow at 369. You could suddenly have a  
8 bidding war and it would sell for 375. But it's also  
9 equally or, I would argue, more likely that it won't  
10 sell anytime soon and it may ultimately sell for  
11 something severely less than 369 though. Each of  
12 those three possibilities exists and I don't know  
13 which one is more likely at this point. So any sort  
14 of paired sale analysis of those two properties would  
15 be ultimately -- it would be misleading at this  
16 particular point in time, yes.

17           Q.    Thank you.

18                   And just as a final question to you, you  
19 agree that you are in need of additional information  
20 in order to prepare a thorough analysis as to how the  
21 Buckeye Wind farm would, in fact, impact property  
22 values.

23           A.    Yes. I don't know that I want to speak  
24 for my entire peer group, but as a rule most  
25 appraisers, myself included, value data. If I have

1 one example, great. If I have two examples, even  
2 better. If I have 30, that's ultimately the best.  
3 But each of those 30 examples has to be properly  
4 analyzed.

5 Q. Okay. And --

6 A. That's ultimately what I would want to  
7 get ahold of.

8 Q. And you didn't have that information  
9 prior to when you submitted your direct testimony on  
10 November 2nd.

11 A. No. I don't know that that information  
12 exists just yet.

13 MS. RUSSO: Thank you.

14 ALJ SEE: Mr. Sherick.

15 THE WITNESS: Yes.

16 ALJ SEE: We have a couple questions from  
17 the Bench.

18 - - -

19 EXAMINATION

20 By ALJ See:

21 Q. Clarify something for me. Was  
22 Mr. Hamilton the only realtor in the area that you  
23 spoke to regarding the perception of the proposed  
24 wind project?

25 A. He's the only one I spoke to, yes.

1           Q.    He's the only realtor you spoke to; is  
2 that correct?

3           A.    Yes.

4           Q.    Is he the only person that you spoke to  
5 from the area about the perception of the wind  
6 project?

7           A.    Spoke to directly, yes.

8           Q.    Did you attend the public meeting at the  
9 end of October on the project?

10          A.    No, but I've sort of heard what took  
11 place. I don't have any specific citations or --

12          Q.    Heard from whom?

13          A.    I read a couple newspaper articles that  
14 just sort of referred to them and the one word that I  
15 recall hearing was "disagreeable."

16          Q.    Okay. You indicated that you verified  
17 the information that you were given from Mr. Hamilton  
18 by checking the MLS, the Multiple Listing Service?

19          A.    Yes. The Ludlow property is still on the  
20 market and, as a result, the listing information is  
21 still there.

22          Q.    And you also indicated that, did I  
23 understand you correctly that it's not that the  
24 Ludlow property was being -- the client that was  
25 looking at the Ludlow property did not ultimately

1 purchase the Metz Road property, correct?

2 A. Correct.

3 Q. Are you aware of any other reason why the  
4 client did not or may not have wanted to purchase the  
5 Ludlow Road property?

6 A. That was the specific example that he was  
7 given, or specific -- "example" is the wrong word.  
8 Specific reason I was given by Mr. Hamilton is they  
9 liked -- that client, quote/unquote, liked the  
10 property, but when they found out it was in the area  
11 of the wind farm, they were no longer interested.

12 Q. Did you inquire of Mr. Hamilton if there  
13 were any other factors about the property that they  
14 liked or did not like?

15 A. When he mentioned that they liked the  
16 property, I took that to mean they had a similar --

17 Q. Did you ask Mr. Hamilton if there were  
18 any other factors that the client liked or did not  
19 like about the Ludlow Road property?

20 A. Specific indications, no.

21 Q. Okay. In this economy is it common for a  
22 property to be on the market for a substantial period  
23 of time?

24 A. Yes, but over a year is a little -- well,  
25 it's more than a little, it's excessive.

1 Q. Okay. Even for a community that's --

2 A. Traditionally in Champaign County the  
3 run-of-the-mill residence or home will be on the  
4 market anywhere from 60 to 120, maybe 150 days. I  
5 have seen it take as long as six to nine months to  
6 sell a house. This one has been -- Mr. Hamilton has  
7 been marketing this property for a year and a half.

8 Q. Okay. Is the period of time that the  
9 house is on the market affected by the price?

10 A. Yes.

11 Q. Would your answer change, as to  
12 commenting on the market, six to nine months if it  
13 were a home in the 100- to 200,000 dollar range?

14 A. At that point the marketing period is  
15 going to be different, yes, because a 100- or 200,000  
16 dollar house isn't going to compete to the same  
17 potential home buyer as a 300- or 400,000 dollar  
18 house, so it changes, but the same measurement or  
19 gauge would apply.

20 Q. Okay. On page 15 of your direct  
21 testimony your last statement is that you believe,  
22 it's apparent to you, that home values will decrease  
23 at least 10 percent.

24 A. Yes.

25 Q. What are you basing that at least 10

1 percent calculation on?

2 A. Two things. In the two examples that I  
3 have analyzed, the Wellington Estates and the  
4 Colonial Manor Square, you can measure the effect on  
5 lot value of the high voltage transmission lines and  
6 in each of those examples it shows that lot value is  
7 decreased by about 50 percent.

8 In both of those examples I have analyzed  
9 an allocation of lot price to total home price, so  
10 that 50 percent applies to just the lot, but it's  
11 going to be substantial -- in terms of a percentage  
12 it's going to be substantially less than that for the  
13 entire home once the house is built and sold.

14 Q. Okay.

15 A. And I took those measurements, which  
16 Colonial Manor Square is at 8.7 percent and  
17 Wellington Estates concludes that transmission lines  
18 affect home values approximately 9.5 percent, and  
19 then made a qualitative comparison of high voltage  
20 transmission lines to wind turbines.

21 Q. So you added a factor to account for wind  
22 turbines?

23 A. In effect, yes.

24 Q. And what was that qualitative factor as  
25 you call it, based on?

1           A.    There has to be a difference between a  
2   100-foot or 150-foot transmission line tower and a  
3   400- or 500-foot wind turbine.  The latest number I  
4   heard is 492 feet is how tall these are going to be.  
5   Obviously, there's a size issue there.

6                    The other part that concerned me more was  
7   the movement or motion of a wind turbine as opposed  
8   to transmission lines which for the most part just  
9   sort of sit there dumb and happy.

10          Q.    Okay.

11          A.    In my own mind I sort of minimized that  
12   until I started doing some more research, and there  
13   are several instances where you can see how the  
14   motion of the turbine blades affect lighting and  
15   other such things inside a house.  There are videos  
16   available on the internet and other sort of sources  
17   that show that.  I didn't want to exaggerate that  
18   effect by saying it's monumental and colossal, but  
19   there has to be something there.

20          Q.    But you believe the motion of the turbine  
21   has some effect.

22          A.    Has to, in my opinion, yes.

23          Q.    I'm sorry.  I missed the last part of  
24   that.

25          A.    It has to, yes, in my opinion.



1 ALJ SEE: Thank you.

2 THE WITNESS: Do I need to leave this  
3 here?

4 ALJ SEE: I'm not sure what you brought  
5 up there.

6 THE WITNESS: I didn't bring anything up  
7 there.

8 ALJ SEE: Leave it there then.

9 THE WITNESS: Okay.

10 MR. WALKER: Your Honor, at this time we  
11 move UNU Exhibits 22A, 22, 23, 24, 25, and 26 into  
12 evidence.

13 ALJ SEE: Are there any objections to the  
14 admission of UNU 22, 22A, 23 through 26?

15 MS. RUSSO: Your Honor, I'm just going to  
16 renew my objection as to those portions of his direct  
17 testimony dealing with Mr. Hamilton's -- the  
18 conversation with Mr. Hamilton and basically just for  
19 an offer on the record.

20 EXAMINER PRICE: Okay. Your objection is  
21 noted, it's still overruled, and if there are no  
22 further objections to the admission of 22A and 22  
23 through 26, UNU Exhibits 22, 22A and 23 through 26  
24 are admitted into the record.

25 (EXHIBITS ADMITTED INTO EVIDENCE.)

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1                   ALJ SEE: Let's go off the record for a  
2 minute.

3                   (Discussion off the record.)

4                   (At 11:30 a.m. a lunch recess was taken  
5 until 12:45 p.m.)

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1 Tuesday Afternoon Session,  
2 November 17, 2009.

3 - - -

4 ALJ SEE: Let's go back on the record.  
5 Mr. Van Kley.

6 MR. VAN KLEY: Yes.

7 ALJ SEE: Your next witness, please.

8 MR. VAN KLEY: We would call Rick James.

9 ALJ SEE: Mr. James, if you'd please  
10 raise your right hand.

11 (Witness sworn.)

12 ALJ SEE: Thank you. Have a seat.

13 (EXHIBITS MARKED FOR IDENTIFICATION.)

14 - - -

15 RICHARD R. JAMES

16 being first duly sworn, as prescribed by law, was  
17 examined and testified as follows:

18 DIRECT EXAMINATION

19 By Mr. Van Kley:

20 Q. Good afternoon, Mr. James.

21 A. Good afternoon.

22 Q. Would you state your name for the record,  
23 please, and provide us with your business address.

24 A. My name is Richard R. James. Business  
25 address is PO Box 1129, Okemos, Michigan.

1 Q. Okay.

2 MR. VAN KLEY: Your Honors, I've put  
3 Mr. James's testimony and his three exhibits on the  
4 Bench and I've handed those out to all counsel.

5 Q. Mr. James, I've handed you your direct  
6 testimony which we have marked as UNU Exhibit 31A,  
7 and attached to it are Exhibits 31, 32, and 33. Is  
8 this a copy of your written direct testimony in this  
9 case and the three exhibits referenced in that  
10 testimony?

11 A. Yes, it is.

12 Q. All right. And do you have any  
13 corrections to that testimony?

14 A. I have several.

15 Q. Would you lead us through those, please.

16 A. Beginning on page 12, question No. 36,  
17 the fourth line of the answer, we need to delete the  
18 words "sound level"; it's in twice. It should read  
19 "in the range of 45 to 50" -- or, "I would expect  
20 that sound levels outside the homes within  
21 1500 feet," would be within the range of 45 to 50  
22 dB(A).

23 ALJ SEE: I'm sorry. Read that sentence  
24 for me again, Mr. James.

25 THE WITNESS: It's the fourth sentence of

1 answer 36, towards the end of the line, it should  
2 read "I would expect that sound levels," delete the  
3 next words "sound" and "level," then start again  
4 "outside the homes within 1500 feet of turbines," and  
5 the sentence continues as is.

6 ALJ SEE: Okay.

7 A. The second correction is question No. 77  
8 and in the question it states "waye (2004)" and that  
9 should be "Pedersen (2004)."

10 Q. Would you spell "Pedersen," please?

11 A. P-e-d-e-r-s-e-n. Probably also should  
12 say "she" discusses since both Pedersen and  
13 Persson Waye are women, "she discusses in her  
14 testimony."

15 The next correction is for question 83 on  
16 page 21, I'd like to correct a misconception in that  
17 first paragraph by adding the word "background"  
18 between the word "that" and "sound" on the first line  
19 of the answer such that it would read "If we assume  
20 that Mr. Hessler's models are correct, he states in  
21 his conclusion that background sound levels would  
22 vary from 43 to 44 dBA," and then that continues.

23 Later on in the same answer on page 22,  
24 paragraph 2, the formulas would read, where it says  
25 "outside the walls of home will be 43+5," would be

1 "39+5" [sic], and the total then would be 43.

2 Q. Could you point out where you made those  
3 corrections?

4 A. Yeah. It's the third sentence of the  
5 second paragraph on page 22 in the answer for  
6 question 83.

7 Q. Okay. Go through the correction again,  
8 please.

9 A. Okay. Let me read it as it should be.  
10 ". . . then we can conclude that the sound levels  
11 outside the walls of homes will be  $38+5=43$ " and  
12 scratch the rest of the line. "This means that the  
13 sound levels outside of homes of people in the  
14 footprint of the Buckeye Wind project will be  
15 subjected to 43 dB(A) or higher" would be the  
16 corrected sentence.

17 Q. All right. Does that conclude your  
18 corrections?

19 A. Yes, it does.

20 Q. All right. Now, as corrected if I were  
21 to ask you the same questions in this testimony as is  
22 written in this testimony, would your answers  
23 provided today be the same?

24 A. Yes.

25 MR. VAN KLEY: Your Honor, the witness is

1 available for further questioning.

2 ALJ SEE: Mr. Weithman.

3 MR. WEITHMAN: No, thank you.

4 ALJ SEE: Ms. Napier.

5 MS. NAPIER: Thank you.

6 - - -

7 CROSS-EXAMINATION

8 By Ms. Napier:

9 Q. Mr. James, my name is Jane Napier, and I  
10 represent Champaign County and the townships included  
11 in Champaign County that are within the project area  
12 of this application. I've read your testimony and  
13 have a few I guess clarifying points I wanted to ask.

14 Isn't it true that you had set forth a  
15 standard of 5 decibels above background noise to be  
16 used due to the fact that above that there would be  
17 some noise heard by a person?

18 A. At 5 decibels above background we begin  
19 to get -- the noise is very noticeable, we'll call  
20 it, and not -- yet not so loud as to affect the  
21 majority of people in a negative way.

22 Q. Did you review a Mr. Hessler's testimony  
23 that was presented in this application?

24 A. Yes, I did.

25 Q. Okay. Is that the same standard that

1 Mr. Hessler puts forth?

2 A. The L90 plus 5 is a well-established rule  
3 of thumb in acoustics for land use planning, and yes,  
4 it is the same. We're both drawing on the same frame  
5 of reference there for --

6 Q. Okay. So the standard is consistent.

7 A. Yeah. It's not truly a standard, it's a  
8 common practice. It's a -- it's evolved as the  
9 consensus standard. But there is no standard with a  
10 number that necessarily supports that.

11 Q. Okay. So the difference, in my  
12 understanding, is in the calculation of background  
13 noise; is that correct?

14 A. Well, Mr. Hessler's background noise  
15 levels aren't really that different than mine,  
16 they're a few decibels higher, and so I would say  
17 that his recommended design goal I believe was 34  
18 dB(A), and because my levels were slightly lower, my  
19 recommended design goal would be 32 dB(A).

20 Q. Okay.

21 A. And that's really almost within the  
22 tolerance of the instruments.

23 Q. So is it a fair assessment that you both  
24 are looking at some variation in background noise  
25 range and he is picking a higher number than you for



1 some reason?

2 A. Well, I picked many of my test sites to  
3 be the edge of the property line towards where the  
4 wind turbines would be located, which for most of my  
5 test sites were in people's yards where the roads  
6 were shielded in all except one, which was the  
7 McConnells'. And I think Mr. Hessler picked test  
8 sites with his instruments out more in the open out  
9 closer to roads, so his would be a little bit higher  
10 because of that.

11 Q. And in your opinion you had stated that  
12 the wind turbines should be located at least  
13 1.25 miles from the nearest residential property --

14 A. Yes.

15 Q. -- correct?

16 A. Yes.

17 Q. Is that residential structure or  
18 residential property lines?

19 A. Property lines.

20 Q. And that's approximately 6,600 feet.

21 A. Yes.

22 Q. In this application it is a little over  
23 500 feet from the property line and 918 feet from a  
24 residential structure. As a minimum do you have an  
25 opinion as to whether that is sufficient?

1           A.    That is --

2                   MR. SETTINERI:  Object, your Honor.

3   We're going down the friendly cross path again.

4                   MS. NAPIER:  Your Honor, may I speak to  
5   that?

6                   ALJ SEE:  Yes.  Go ahead.

7                   MS. NAPIER:  I have been questioning  
8   Mr. James on his comparison with Mr. Hessler, I  
9   believe.  I would like to lay a foundation to ask him  
10   questions that would compare the responses of  
11   Mr. Hessler on the setback that I believe Mr. Hessler  
12   had responded to, and I believe that it certainly  
13   goes to weight and not admissibility.

14                   ALJ SEE:  The objection is overruled.

15                   MS. NAPIER:  Thank you.

16           Q.    (By Ms. Napier) Do you remember the  
17   question?

18           A.    Let's restate it.

19                   ALJ SEE:  We can have it read back.

20                   MS. NAPIER:  Thank you.  I appreciate  
21   that.

22                   (Record read.)

23           A.    That would be a truly, I'll call it  
24   unbearable situation.  At 2,000 feet we're looking  
25   at, if I can refer to I think it's plot 2C of

1 Mr. Hessler's contour maps, it's hard to get a scale  
2 on that, but it looks like his 34 dB(A) line extends  
3 out probably well over 2,000 feet, maybe even 3,000  
4 or 4,000 feet.

5 In trying to estimate what that contour  
6 would mean to two of the people who I did the  
7 background test for, the McConnells in particular, I  
8 found their house was about 1,800 feet away from the  
9 nearest turbine and was estimating that the sound  
10 levels there would be somewhere in the neighborhood  
11 of the high-30s, low-40s.

12 So if we drop that 1,800 feet back to  
13 900 feet, the sound levels would be 6 decibels higher  
14 which would put them in the mid-40s, high-40s, and  
15 that would be functionally the same as living near a  
16 noisy highway compared to the current rural  
17 conditions, which are very quiet.

18 ALJ SEE: I need you to speak into the  
19 mic, please, or pull it up.

20 Q. And I'm not sure you answered. The  
21 1.25 miles from a property line --

22 A. Yes.

23 Q. -- you had stated that it was due to your  
24 personal experience.

25 A. Personal experience and in the

1 Kamperman-James "How To" Guide we have a section in  
2 there where we calculate how far away a home would  
3 have to be from a bank of turbines in order for the  
4 audible sounds to have attenuated enough that they're  
5 not a sleep disturber at night, and also for the low  
6 frequency sounds to have attenuated enough that  
7 they're not causing a sense of rumble in a quiet  
8 bedroom, and that works out to be about 1.25 miles  
9 for this type of community.

10           The other part of that is that in  
11 late-winter of 2008 we were asked to review the data  
12 that Dr. Pierpont is using for her study, the sound  
13 data not the medical data, and in reviewing that data  
14 we found that of the different subjects that she was  
15 tracking for adverse health effects, at distances of  
16 about 1.25 miles we seem to have reached the boundary  
17 where the adverse health effects were showing up.

18           So I have actually three bases for it:  
19 One is looking at data where we know people are  
20 having health effects and where that health effect  
21 limit seems to be 1.25 miles on flat land;

22           The second is the computer -- the  
23 modeling that we did shows that we need to be that  
24 far back in order for the ambient sounds to mask the  
25 amplitude modulated wooshing of the blades at night

1 which are much of the source of the audible noise  
2 disturbance for people that sleep with their bedroom  
3 windows open;

4           And then the third one is the low  
5 frequency sounds which travel much farther without  
6 attenuation than high frequency would still be strong  
7 enough at distances less than a mile and a quarter to  
8 be an audible source of rumble in a bedroom. The  
9 example here is if you have thunder in the distance,  
10 let's say there was a thunderstorm coming, the first  
11 thing you hear is this deep rumble, and that's  
12 because the lowest frequencies travel farther than  
13 the higher frequencies, which would be the crack of  
14 the lightning.

15           When the storm gets closer, you begin to  
16 hear the lightning and the rumble, and when the storm  
17 is right on top of you, many times the higher  
18 frequency sounds, the cracking of the lightning and  
19 the wind and rain, mask the rumble.

20           So when we're looking at a mile and a  
21 quarter, we're not only looking at the limiting  
22 factor for the audible sounds, but also the limiting  
23 factor for these low frequency rumbles that people  
24 complain about in their bedrooms as a sleep  
25 disturbing agent.

1           Q.    And I believe from previous testimony  
2 there seemed to be at least a statement that there's  
3 a difference between what you hear in your house and  
4 maybe --

5           A.    Yes.

6           Q.    -- what you hear at the property line.

7           A.    Yes.

8           MR. SETTINERI: Your Honor, again, I'll  
9 object as friendly cross. This is simply  
10 supplementing his direct testimony.

11           MS. NAPIER: Actually, your Honor, I  
12 believe Mr. Hessler had said there was a difference  
13 between what you heard in your home and what you  
14 would hear at your property line.

15           ALJ SEE: I realize that it may be  
16 somewhat friendly, but I'm going to allow it.

17           A.    When you're inside your home,  
18 particularly if the windows are closed, the low  
19 frequency sounds will come through the walls with  
20 much less attenuation than the high frequency sounds,  
21 and that means -- and you can think of this also  
22 during a thunderstorm. If you're outside, there's a  
23 lot of sounds that are mid to high frequencies,  
24 cracking, hissing, wind blowing. When you get inside  
25 the house what you listen to, again, is the rumble.

1           What happens when you have low frequency  
2 inside a home is that certain room sizes, certain  
3 room volumes and shapes can let that energy build up  
4 so it's actually louder inside the home from the low  
5 frequency than outside. And this was a point that  
6 was made in the NASA study very clearly including  
7 examples of how that happens.

8           And I've also personally experienced it  
9 in homes where sounds that are not -- low frequency  
10 sounds that are not audible outside are clearly  
11 audible inside, along with window rattle, knickknacks  
12 moving on the shelves, things like that.

13           Q.    So you're saying there may be things  
14 inside that are louder than outside?

15           A.    The acoustic energy begins to affect the  
16 walls and the ceiling and the floor and particularly  
17 small objects then will begin to move, or you'll see  
18 the glass pane wiggle, similar to like if a truck  
19 goes by on the street and hits a chuckhole, you'll  
20 see the windows wiggle. So all of these add a visual  
21 context to the audible sensation and the rumble, and  
22 that is something I personally experienced where  
23 outside the home it's actually less noisy than inside  
24 when we're looking at the low frequencies.

25           MS. NAPIER: No further questions. Thank

1 you very much.

2 ALJ SEE: Mr. Brown.

3 - - -

4 CROSS-EXAMINATION

5 By Mr. Brown:

6 Q. Yes, I just have one clarification  
7 question, Mr. James. On the top of page 10 of your  
8 direct testimony --

9 A. Okay.

10 Q. -- it's trying to talk about what is a  
11 line source.

12 A. Yes.

13 Q. In that first line, it doesn't make any  
14 sense to me. Should that word "no," should that be  
15 an "a"?

16 A. Yes. An additional correction. Thank  
17 you.

18 Q. All right. So it should say "where there  
19 is a row or array pattern."

20 A. "It is called."

21 MR. BROWN: That's the only question I  
22 had. Thank you.

23 ALJ SEE: Mr. Margard.

24 MR. MARGARD: I have no questions. Thank  
25 you, your Honor.



1 ALJ SEE: Mr. Settineri.

2 - - -

3 CROSS-EXAMINATION

4 By Mr. Settineri:

5 Q. Good afternoon, Mr. James.

6 A. Good afternoon.

7 Q. My name is Mike Settineri. I represent  
8 the applicant in this proceeding.

9 You graduated in 1971 from what was then  
10 known as the General Motors Institute, correct?

11 A. That is correct.

12 Q. And you graduated with a bachelor's  
13 degree in mechanical engineering with a subspecialty  
14 in acoustical engineering, correct?

15 A. That is correct.

16 Q. You do not hold a postgraduate degree,  
17 correct?

18 A. No, I do not.

19 Q. You have not taken any courses in any  
20 graduate program, correct? That would be a master's  
21 or a Ph.D. program, sir.

22 A. I've taken courses -- I've taken courses  
23 as continuing education credits.

24 Q. Okay. But to answer my question, you  
25 have not taken any --

1           A.    No.

2           Q.    -- courses in a master's or Ph.D.

3 program, correct?

4           A.    No.  You're right.

5           Q.    If you don't mind, please just let me

6 finish my question before you answer so we don't

7 confuse the record.

8                    You're not a medical doctor, correct?

9           A.    That is correct.

10          Q.    You're not an epidemiologist, correct?

11          A.    That is correct.

12          Q.    Are you familiar with the INCE/Europe

13 series of wind turbine noise conferences?

14          A.    Yes, I am.

15          Q.    Are you aware that there have been three

16 conferences over the last few years, Berlin in 2005,

17 Lyon, France, in 2007, and just recently in June 2009

18 in Aalborg, Denmark?

19          A.    Yes.

20          Q.    Did you attend any of those three

21 conferences?

22          A.    No, sir.  I am limited on my travel.  I

23 can't fly.

24          Q.    Okay.  Would you agree with me that many

25 experts in the field of wind turbine noise attend

1 those conferences?

2 A. Many people who have an interest in wind  
3 turbines attend those conferences.

4 Q. Do you think those conferences are  
5 valuable?

6 A. I think it is a good forum for  
7 understanding different viewpoints on wind turbines.

8 Q. If you could turn to your answer to  
9 question 6 of your direct testimony, please. Do you  
10 have that in front of you, sir?

11 A. Yes, I do.

12 Q. In your answer to question 6 of your  
13 direct testimony you state that you have worked with  
14 "some of the top medical researchers in occupational  
15 hearing health and with occupational medical doctors  
16 that managed the medical programs for my clients,"  
17 correct?

18 A. That's correct.

19 Q. Isn't it true that none of the work  
20 referenced in that sentence relates to utility scale  
21 wind turbine facilities?

22 A. No; they relate to my ability to look at  
23 medical research and interpret it.

24 Q. Now, isn't it true that the first  
25 background noise study you performed for a wind farm

1 project was in 2006?

2 A. That is correct.

3 Q. And that was a study to determine the  
4 background noise levels at a proposed wind turbine  
5 project site in Huron County, Bingham Township,  
6 Michigan, correct?

7 A. That is correct.

8 Q. And that was the only study you performed  
9 in 2006, correct?

10 A. At that time I was beginning to recover  
11 my health and that was the only study I did.

12 Q. Okay.

13 A. I think you need to understand that  
14 between 2001 and 2004 I was under doctors orders from  
15 a viral infection on my heart not to work.

16 Q. Yes, sir.

17 A. And when I got back to work, it was very  
18 slow and easy.

19 MR. SETTINERI: Your Honors, at this time  
20 I'd like to mark Buckeye Wind Exhibit 13.

21 (EXHIBIT MARKED FOR IDENTIFICATION.)

22 Q. Mr. James, do you have in front of you  
23 what has been marked as Buckeye Exhibit 13?

24 A. That's correct.

25 Q. Do you recognize this document?

1           A.    Yes.  It's a slide from a presentation in  
2 2007.

3           Q.    And --

4           A.    Or 2008, I mean.  Excuse me.

5           Q.    And you prepared this document?

6           A.    Yes.

7           Q.    Isn't it true that that presentation was  
8 to the Champaign County Wind Study Group?

9           A.    That is correct.

10          Q.    And that was in February 2008.

11          A.    Yes, it was.

12          Q.    You're aware that that group consisted in  
13 part of county representatives, UNU representatives,  
14 and EverPower representatives, correct?

15          A.    That's correct.

16          Q.    Okay.  This page is meant to reflect your  
17 wind turbine experience, correct?

18          A.    That is true.

19          Q.    Looking at the first bullet point,  
20 subbullet point for Michigan, the Huron County,  
21 Michigan, notation, the Bingham Township reference,  
22 was that the project work you did in 2006 --

23          A.    Yes.

24          Q.    -- we just discussed previously?

25          A.    Yes.

1           Q.    And again, if you don't mind, let me  
2 finish my question before you answer, please, just to  
3 make sure the record's good for the court reporter.

4                   The second one, Deere and Company, that  
5 also was in Michigan, correct?

6           A.    Yes, it is.  It's right adjacent to the  
7 Bingham Township project.

8           Q.    In regards to that project which you note  
9 as, you say it's operating, is that to refer to an  
10 operating wind turbine?

11          A.    Yes.

12          Q.    Okay.  You were there, isn't it true you  
13 acted as a coadviser to a student who was doing a  
14 thesis on wind turbine noise?

15          A.    Yes.

16          Q.    And in that project you monitored the  
17 student's field setup, correct?

18          A.    Yes.

19          Q.    But the student performed the work?

20          A.    Yes.

21          Q.    In regards to the Mackinac City reference  
22 on that page, you indicate there that that also  
23 represents an operating wind turbine facility,  
24 correct?

25          A.    That is correct.

1           Q.    Okay.  Isn't it true that the experience  
2 you refer to there consisted of stopping several  
3 times on trips to Mackinac City where they have two  
4 small turbines and that you collected sound levels  
5 from those turbines to see how they vary from one  
6 weather condition to another for your own interests?

7           A.    That is correct.  My own professional  
8 interest, not casual interest.

9           Q.    Going to Wisconsin, in regards to the  
10 reference to the town of Chilton, Calumet County,  
11 isn't it true that the work you did there consists of  
12 making recommendations to the Calumet County board of  
13 commissioners regarding wind turbine siting  
14 guidelines for noise?

15          A.    The work I did there was with the county  
16 board of commissioners working for the chairman of  
17 the board to develop a standard, yes.

18                ALJ SEE:  Mr. James, the Bench can't  
19 hear.  I need you to speak into the mic.

20                THE WITNESS:  Let me move this over to  
21 the right, see if that helps.  Is that any better?

22                ALJ SEE:  Yes, it is.

23                FROM THE FLOOR:  No.

24                (Discussion off the record.)

25          Q.    In regards to your work in Fond du Lac

1 County, Wisconsin, that related to two separate wind  
2 turbine projects, correct?

3 A. During the process of helping the Chilton  
4 and Calumet County people develop a standard we took  
5 trips to several other wind turbine projects and  
6 interviewed people that were living in the project  
7 areas, proposed or operating project areas.

8 Q. Let me just back up to my question,  
9 though. In regards to your work in Fond du Lac  
10 County, did that relate to two separate wind turbine  
11 projects?

12 A. That relates to Blue Sky Green Fields and  
13 Horicon Marsh.

14 Q. And as of February 2008 when you prepared  
15 this slide, I think you just indicated you had done a  
16 survey of the project areas without instrumentation  
17 prior to construction and talked to people in the  
18 project area, correct?

19 A. We took a tour of the areas the wind  
20 turbines were being field tested and I did have some  
21 instruments, but it wasn't official testing.

22 Q. Now, am I correct that -- strike that.

23 Continuing on, you note that you have  
24 experience with a Kewaunee, Wisconsin, operating wind  
25 project, correct?



1           A.    That was one of the places we went with  
2 the board of commissioners to look at operating wind  
3 turbines.

4           Q.    Okay. On that tour you did not take any  
5 sound measurements, correct?

6           A.    No, we did not.

7           Q.    Your work in Trempealeau County,  
8 Wisconsin, isn't it true that that work related to  
9 assisting them in writing noise standards?

10          A.    Yes, it is.

11          Q.    In regards to the Elcho notation on that  
12 page, that designates an operating wind turbine as  
13 well, correct?

14          A.    A community-scale wind turbine, yes.

15          Q.    And that relates to turbines located on  
16 friends of -- property owned by friends of yours,  
17 correct?

18          A.    That is correct.

19          Q.    And isn't it true that while visiting  
20 your friends you had the opportunity to see the  
21 turbines and listen to them?

22          A.    That is correct. And to talk to the  
23 people who were operating them.

24          Q.    You also reference an Allegheny start-up  
25 in West Virginia, correct?

1           A.    Yes.

2           Q.    And that is on the exhibit marked as  
3 Buckeye Exhibit 13, correct?

4           A.    Yeah.

5           Q.    Thank you.

6           A.    It's on the Wind Turbine Experience page,  
7 yes. Not wind turbine project page. Wind Turbine  
8 Experience page.

9           Q.    Right. And isn't it true that for  
10 that -- isn't it true that on that project you were  
11 retained to look for background sound levels?  
12 Correct?

13          A.    The Allegheny project was one looking at  
14 background sound levels as the wind turbines were  
15 being built, yes.

16          Q.    Isn't it true that you hired a consultant  
17 to take the background data because you were unable  
18 to travel at that time?

19          A.    That's true.

20          Q.    So as of February 2008 you were  
21 representing your experience to the Champaign County  
22 Wind Study Group as listed on this page, correct?

23          A.    That is correct.

24          Q.    Is it fair to say, then, that less than  
25 five months later you were working with George

1 Kamperman to prepare a paper recommending wind  
2 turbine siting guidelines?

3 A. That's actually true that at the time I  
4 was putting this presentation on I was working with  
5 George Kamperman and Dr. Pierpont in putting together  
6 that paper, yes.

7 Q. And one version of those siting  
8 guidelines is attached to your direct testimony as  
9 UNU Exhibit 32, correct?

10 A. Is that -- are you referring to the "How  
11 To" Guide or the noise --

12 THE REPORTER: I'm sorry. "Or the  
13 noise" -- what did you say?

14 THE WITNESS: I referred to "The 'How To'  
15 Guide to Siting Wind Turbines to Prevent Health Risks  
16 from Sound," which is Exhibit 32. I didn't know if  
17 he was referring to a subset of that or the whole  
18 document.

19 ALJ SEE: Let's go off the record for a  
20 minute.

21 (Discussion off the record.)

22 ALJ SEE: Let's go back on the record.

23 Q. Mr. James, I was referring to UNU Exhibit  
24 32 as "The 'How To' Guide to Siting Wind Turbines"  
25 dated October 28th, 2008, version 2.1.

1           A.    Okay.

2           Q.    Mr. James, isn't it true that as of this  
3 date you have only modeled projected sound levels at  
4 one utility-scale wind turbine facility?

5           A.    I don't understand the context of the  
6 question.

7           Q.    I'm simply asking as of today isn't it  
8 true that you have only modeled projected sound  
9 levels from turbines at one utility-scale wind  
10 turbine facility --

11          A.    I was --

12          Q.    -- in McLean County, Illinois?

13          A.    No, I wouldn't say that at all. The  
14 models -- the model that I did there is something  
15 that I pretty routinely do in all my projects.  
16 That's the only one where the model has been entered  
17 into the record.

18          Q.    That facility in McLean County was an  
19 Invenergy facility, correct?

20          A.    That's correct.

21          Q.    You didn't model sound propagation from  
22 all turbines in that wind farm, did you?

23          A.    I modeled the turbines that were adjacent  
24 to the people who were challenging or litigating  
25 against Invenergy, and I looked at the turbines that

1 had a reasonable likelihood of having an impact on  
2 their homes.

3 Q. And backing up to my prior question, as  
4 of this date isn't it true that you have not modeled  
5 sound propagation from a utility-scale wind turbine  
6 facility for all turbines at that facility?

7 A. That is absolutely true. There have not  
8 been any other jobs that I've been requested to.

9 Q. Thank you.

10 Going back to your modeling of the  
11 Invenergy facility, isn't it true that you did not  
12 conduct any field verification measurements to  
13 confirm your modeling of the turbines around your  
14 clients' homes?

15 A. At the time that model was constructed  
16 there were no turbines, and as a result of the  
17 settlement the ten turbines that were most likely to  
18 affect my clients were removed.

19 Q. Do you agree with the following  
20 statement, Mr. James: Modeling is an essential tool,  
21 but it cannot be used as a sharp laser tool, it's got  
22 to be looked at in terms of its potential for errors?

23 A. That is true.

24 Q. Okay. Do you agree with the following  
25 statement: Modeling may be a good tool, but there

1 needs to be some validation?

2 A. That is also true.

3 Q. If a model was able to be field verified,  
4 would you agree with me as an engineer that the model  
5 may be a good tool for planning purposes?

6 A. Models that have been verified like the  
7 FAA's model and the Federal Highway's model are  
8 independently verified. People who do the models do  
9 not validate their own models.

10 I got into a situation in the 1970s with  
11 my original model, SOUND6, where one of the major  
12 challenges against my work was from other consultants  
13 who were challenging the fact that I validated my own  
14 model. I learned my lesson then, and I continue to  
15 say the person that builds the model does not  
16 validate it. It is too easy to have an even  
17 unconscious bias because you want show your model as  
18 correct.

19 Q. Assume that the person does do the  
20 modeling field verification, assume for me that that  
21 person has no bias, would you agree with me that the  
22 model's able to be field verified --

23 A. I have never met --

24 Q. Let me finish, please.

25 A. I've never met such a person.

1           Q.    Let me back up and start my question  
2 again.   Please don't cut me off during questions.

3                    Again, assume that you have a person with  
4 no bias who performs the field measurement and also  
5 did the modeling, and there's no bias at all, would  
6 you agree with me that if the model is able to be  
7 field verified, that the model would be a good tool  
8 for planning purposes?

9           A.    Given all the hypotheticals, I would have  
10 to add that the model -- there are certain  
11 assumptions that go into the model including  
12 conditions of wind direction, wind speed, sound power  
13 output of the wind turbines, other factors that are  
14 very detailed.   Assuming that the validation was done  
15 such that all of those original modeling factors were  
16 in place at the time of the validation measurement,  
17 and the person was unbiased, then it might work.   But  
18 that is not what I have seen in the models that have  
19 been validated.

20           Q.    Do you recall testifying before the  
21 Tazewell County Zoning Board of Appeals on May 1st,  
22 2008?

23           A.    I remember testifying.

24           Q.    Isn't it true that you made  
25 recommendations to the Tazewell County Zoning Board

1 of Appeals that the background sound levels in that  
2 community were typical of what you would see in other  
3 communities and that the operation of wind turbines  
4 in that community result in increases high enough to  
5 result in sleep disturbances and/or annoyances?

6 A. That is correct.

7 Q. Isn't it true that the board rejected  
8 your recommendations in that proceeding?

9 A. The board rejected the decisions in that  
10 proceeding and I'm now working with a client there  
11 who has a noisy turbine located in his backyard.

12 Q. Can you turn to page 16 in your  
13 testimony, please. In your answer to question 54 you  
14 present what you believe are several errors in the  
15 way Mr. Hessler created his model for this project,  
16 correct?

17 A. That is correct.

18 Q. Now, isn't it true that your complaint  
19 about people using models for wind turbines is not  
20 that they use the Cadna software, but rather you  
21 believe people using the models do not disclose the  
22 known tolerances and errors and add them to their  
23 model predictions which leaves people reading the  
24 reports with the idea that models are precise?

25 A. That is the thrust of my disagreement.



1           Q.    At part 4 of your answer to question 54  
2 you critique Mr. Hessler's use of sound power level  
3 data from the manufacturer and claim that he did not  
4 disclose normal measurement errors, correct?

5           A.    That is correct.

6           Q.    Now, you are aware that Mr. Hessler  
7 reviewed the sound power level data for two turbine  
8 manufacturers, REpower and NORDEX, correct?

9           A.    That is correct.

10          Q.    Isn't it true that from the small pieces  
11 of information that you have received from the two  
12 manufacturers, NORDEX and REpower, there was no  
13 discussion of measurement error nor any information  
14 that the data they reported included it?

15          A.    That was not the full report. That was  
16 just a page with the results on it. Typically, a  
17 full report will have the -- will be about four or  
18 five pages long, and that looked like it was only the  
19 summary page.

20          Q.    So as of today you can't tell me whether  
21 the sound power level for the NORDEX and REpower  
22 models reviewed by Mr. Hessler incorporated  
23 measurement errors, correct?

24          A.    The standard way that the labs report the  
25 data is to report the median data and then report the

1 error. All acoustical measuring instruments have  
2 known errors, even the best laboratory, meters are  
3 inaccurate to about one decibel. The kind of test  
4 setups used by IEC 61400 includes tape recorders,  
5 connections, and by the time you total up the known  
6 errors and tolerances, it's about 2 decibels.

7 Q. Now, is it fair to say that if  
8 Mr. Hessler were to redo the model treating turbines  
9 as line sources where there are lines of turbines,  
10 add 5 decibels to his input data to account for  
11 uncertainty, then you think the model would be a  
12 useful tool for planning the project, correct?

13 A. I think it would be -- I think at that  
14 point it would be suitable for planning the project,  
15 yes.

16 Q. So if you were to assume that turbines  
17 are to be treated as point sources, not line sources,  
18 and that Mr. Hessler's inputs to the models are  
19 correct, wouldn't you agree with me that the model's  
20 a useful tool for this project?

21 A. If we add 5 decibels and we correct for  
22 the higher sound power output that would be expected  
23 when the turbines are operating at nominal operating  
24 speed.

25 Q. Okay.

1           A.    He chose a less-than-nominal operating  
2 speed so power output would be quieter.

3           Q.    And to be sure I'm clear here, in regards  
4 to your critique of Mr. Hessler's model, am I correct  
5 that you believe he should have added a plus or minus  
6 3 dB margin of error to account for the height of the  
7 turbine, and that he should have added another plus  
8 or minus 2 dB to account for what you believe to be a  
9 margin of error in the sound power level from the  
10 manufacturer?

11          A.    The ISO 9613 standard states that it is  
12 only applicable to situations that meet the distance  
13 and heighth limits of their table 5 accuracy. This  
14 is for ground based noise sources that are typically  
15 no more than I'd say 20, 30 feet off the ground.

16                The 3 dB error of the ISO model is the  
17 error that is known when it is used for noise sources  
18 and receivers that meet the conditions of that table.  
19 The models of wind turbines with turbines at 80-meter  
20 hub heights and distances out to several thousands of  
21 feet do not meet any of the conditions of that table.  
22 So the plus or minus 3 dB error is the minimum error,  
23 not the maximum error.

24          Q.    Just trying to --

25          A.    The ground effects is probably worth 2

1 decibels, and the measurement errors is worth another  
2 2.

3 Q. Previously you just answered a question  
4 regarding -- stating that Mr. Hessler should have  
5 added 5 decibels to his input data, correct?

6 A. That's correct.

7 Q. Does that represent the plus or minus 3  
8 dB margin of error that you just mentioned --

9 A. Yes.

10 Q. -- in regards to the ISO standard?

11 A. Yes.

12 Q. Okay. And then the 2 dB would account --  
13 that 2 dB relates to the margin of error that you  
14 would measure --

15 A. Of the manufacturer.

16 Q. -- in the measurements from the  
17 manufacturer, correct?

18 A. That's correct.

19 Q. As an engineer am I correct that when you  
20 have -- when you build margins of error into a model,  
21 that the model results will also include a margin of  
22 error?

23 A. That is -- yes, but they should be  
24 disclosed as margins of error.

25 Q. So if a wind turbine model included a

1 plus or minus 5-decibel tolerance, that would mean  
2 that if the model predicted 45 and you went out and  
3 measured 50 or you went out and measured 40, you  
4 would still be able to claim the model reflected your  
5 measurements, correct?

6 A. I wouldn't characterize it that way. If  
7 I went out and measured it and the wind speeds  
8 weren't exactly the same and the power output of the  
9 turbine wasn't exactly the same as the model, that  
10 amount of difference could be just due to operating  
11 parameters and weather conditions.

12 Q. Do you recall being deposed on November  
13 5th?

14 A. For you.

15 Q. Yes, sir.

16 A. Or for someone else. Yeah.

17 Q. Okay. Do you recall making the statement  
18 in an answer to a question that, quote, "You have a  
19 plus or minus 5-decibel tolerance. That means that  
20 if my model predicted 45 and I went out and measured  
21 50 or I went out and measured 40, I would still be  
22 able to claim the model reflected my measurements"?  
23 Do you remember that statement, sir?

24 MR. VAN KLEY: Objection, your Honor.  
25 Could we get the context of this answer like maybe

1 the question that was being asked.

2 MR. SETTINERI: I'm just trying to ask  
3 him if he recalls answering a -- making that  
4 statement, your Honor. It's pretty straightforward.

5 A. If I went out --

6 ALJ SEE: I'm sorry. Just a minute,  
7 Mr. James.

8 I'll allow it. I think it's  
9 straightforward enough. Go ahead and answer the  
10 question.

11 A. If I went out and I was doing the  
12 validation and I knew that the wind speeds, the wind  
13 direction, the power output of the wind turbine all  
14 met the assumptions of the model, and I -- then plus  
15 or minus 5 would be true, yes.

16 MR. SETTINERI: Could I have that answer  
17 read back to me again, please.

18 (Record read.)

19 Q. So that would be a 10-decibel spread.

20 A. Yep.

21 Q. Doesn't that make planning difficult when  
22 you build a 10-decibel spread into a model?

23 A. That's an unfortunate consequence of  
24 decibels.

25 Q. Okay. If you could turn to your answer

1 to question 29, please. The question in 29 asks you  
2 "Do you hold an opinion, to a reasonable degree of  
3 engineering certainty, as to the distance that needs  
4 to be maintained between Buckeye Wind's turbines and  
5 nearby residences to avoid an increase of more than  
6 five decibels above background sound levels?"

7 Correct?

8 A. That's correct.

9 Q. Isn't it true that you believe a  
10 reasonable degree of engineering certainty means you  
11 verify your opinion both with engineering principles,  
12 mathematics, modeling, but also that you verified it  
13 through your personal experience?

14 A. That's correct.

15 Q. Okay. Isn't it true in regards to the  
16 Buckeye Wind Project that you have not performed any  
17 modeling of sound propagation for the turbines as  
18 laid out in this project?

19 A. That is true.

20 Q. As well you have not performed field  
21 verification of any model you completed for an entire  
22 utility-scale wind turbine project as it relates to  
23 sound propagation, correct?

24 A. That is true.

25 Q. If you could turn to UNU Exhibit 32

1 attached to your direct testimony, please, page 19.

2 At page 19 in that document there is a section  
3 entitled Establishing Long-Term Background Noise  
4 Levels, right?

5 A. That is correct.

6 Q. And you were a coauthor of this document  
7 with George Kamperman, correct?

8 A. I was coauthor with George Kamperman,  
9 yes.

10 Q. Part 1-d, that section, states that "The  
11 measurement objective is to determine the quietest  
12 ten minute period at each location of interest."  
13 That relates to the long-term background sound  
14 measurement, right?

15 A. That is correct.

16 Q. And would that relate to the  
17 determination of the L90 dB(A)?

18 A. L90 is used to measure the long-term  
19 background sound, yes.

20 Q. In your testimony you referenced some  
21 background studies that you did in the project area,  
22 correct?

23 A. That's correct.

24 Q. Did you apply the measurement objective  
25 from part 1-d of what has been marked as UNU Exhibit



1 32 to the background studies you did --

2 A. In Champaign?

3 Q. -- in Champaign County?

4 A. Yes. Those are 10-minute samples  
5 selected from longer samples.

6 Q. Just to help us along here, reading that  
7 statement in the pamphlet am I correct that when you  
8 do background measurements, you look for the quietest  
9 10-minute interval? Correct?

10 A. The quietest 10-minute interval is -- the  
11 long-term background sound level is one that has no  
12 components from sounds that are nearby and represents  
13 the type of sound level you would have at that point  
14 when community activities are -- it's independent of  
15 season and it's independent of community activity.

16 The way it is specified in the ANSI  
17 standards is it can be a 10-minute sample or a  
18 60-minute sample, but the purpose of the test is the  
19 acoustical engineer doing it has to do a listening  
20 test to make sure that the conditions do not have  
21 contaminating noise.

22 Q. And so --

23 A. At that point the 10-minute test is done,  
24 because it is sometimes hard to get 10 minutes in a  
25 community without some short-term event contaminating

1 the data.

2 Q. Just to make sure I understand this,  
3 then, when you state in the siting guideline document  
4 the measurement objective is to determine the  
5 quietest 10-minute period at each location of  
6 interest, you are determining what is the quietest 10  
7 minutes during your sampling time.

8 A. That is correct.

9 Q. And then the L90, am I correct that that  
10 represents 10 percent of the quietest time within  
11 that 10-minute sample?

12 A. It represents the sound level exceeded  
13 90 percent of the time. But if you are doing a test  
14 at night when there are not many contaminating  
15 short-term events, there aren't cars going by,  
16 there's no dogs barking, no planes flying over, the  
17 L90 and the Leq and the other statistics would all be  
18 very close together.

19 Q. Just to make sure I'm clear here because  
20 I don't think, well, we may be noise experts by now  
21 but I doubt it, when you say the L90 represents the  
22 90 percent greater sound level, it's my understanding  
23 that the L90 represents the quietest 10 percent --

24 A. That's also true.

25 Q. Okay. Now, you conducted a study of

1 background noise at various locations in the project  
2 area, correct?

3 A. Correct.

4 Q. And those locations were on Julia  
5 Johnson's property, the McConnells' property, Larry  
6 and Linda Gordon's property, Larry Peace's property,  
7 and Jim and Anita Bartlett's property, correct?

8 A. That's correct.

9 Q. If you could turn to page 12 of your  
10 testimony and answer 37, I'd like to ask you some  
11 questions about those background studies. First of  
12 all, in your answer you state that you performed --  
13 strike that.

14 In your answer to 37 you state that  
15 "During May and August of 2008 I conducted a study of  
16 late evening and night time sound levels"; is that  
17 correct?

18 A. That's correct.

19 Q. In regards to your studies in August of  
20 2008, those studies simply consisted of two  
21 measurement -- two locations for measurement,  
22 correct?

23 A. The study in May involved readings that  
24 were in the afternoon, evening, and night at each of  
25 the test sites.

1 Q. And actually --

2 A. I was looking at the nighttime because  
3 that's the most critical listening time. In August I  
4 was returning from a hearing in West Virginia and one  
5 of my readings at Julie Johnson's home, I wanted a  
6 second check, I did a second check on it, and so I  
7 came through Urbana on the way back from West  
8 Virginia to pick up that sample.

9 Q. And when was that sample taken in terms  
10 of time?

11 A. It was taken late evening.

12 Q. Can you give me a feel for late evening,  
13 please?

14 A. Probably about 8 o'clock at night.

15 Q. Okay.

16 A. After the golfers had gone.

17 Q. And how long was that sample?

18 A. I took probably a 30-minute sample.  
19 That's my general rule. At this point I can't put my  
20 finger on the data, the raw data.

21 Q. And when you take that sample, then, do  
22 you calculate the L90 dB(A)?

23 A. The software is -- or the instrument is  
24 designed to work with a computer. When I get it back  
25 to my office, I load it into my system, pull up the

1 file and it shows basically a display of the sound  
2 levels over the period, and then I window in on the  
3 10 minutes that I want and it gives me the analysis  
4 for that 10 minutes.

5 Q. Do you recall what the L90 level was for  
6 that measurement?

7 A. I believe at Julie's it was down at  
8 somewhere like 27 -- well, actually I had it, 27.4.  
9 My previous reading had been taken closer to the golf  
10 course and it was 26, so I used the 27.4 because it  
11 was closer to her property line.

12 Q. Instead of 27.4 would that measurement  
13 have been 27.8 decibels?

14 A. Could have been.

15 Q. And so you took no other background sound  
16 measurements in August of 2008 other than the one you  
17 did at Julie Johnson's home.

18 A. That's the only one that I took that was  
19 for the purpose of this study, yes.

20 Q. So it's fair to say that the bulk of your  
21 work was done in May 2008.

22 A. (Witness nods head.) Fewer in '6.

23 MR. SETTINERI: At this time, your  
24 Honors, I'd like to mark Buckeye Exhibit 14 and  
25 Buckeye Exhibit 15.

1                   ALJ STENMAN: Mr. Settineri, you gave me  
2 two.

3                   MR. SETTINERI: Thank you.

4                   ALJ SEE: Mr. Settineri, are you going to  
5 give us a clarification as to which of these is  
6 Exhibit 14 and which one is 15?

7                   MR. SETTINERI: I am going to do that.

8                   ALJ SEE: Okay.

9                   MR. SETTINERI: Fourteen has a map on the  
10 front page. Buckeye Exhibit 15 has a notation of the  
11 McConnells' driveway on the front page.

12                   ALJ SEE: Okay. The exhibits are so  
13 marked.

14                   (EXHIBITS MARKED FOR IDENTIFICATION.)

15                   Q. (By Mr. Settineri) Mr. James, can you  
16 identify Buckeye Exhibit 14 for me.

17                   A. Buckeye Exhibit 14 is a printout of my  
18 data sheets for the testifying I did with the  
19 CEL-480.

20                   Q. Could you identify Buckeye Exhibit 15,  
21 please.

22                   A. That's a printout of the data I collected  
23 with my CEL-573.

24                   Q. Am I correct that the locations  
25 designated in the various maps in Buckeye Exhibit

1 14 -- when I say "locations designated," there's a  
2 thumbtack -- does that represent the location of  
3 where you performed your background sound  
4 measurement?

5 A. Correct.

6 Q. So, for instance, in regards to the  
7 McConnells, your background sound measurement was  
8 taken to the east of the house.

9 A. Yes.

10 Q. Would you agree with me that many of the  
11 measurements taken -- that you took during this  
12 background study were for very short intervals of  
13 time?

14 A. In this pack I think you have complete  
15 tests and probably complete tests -- I suspect this  
16 is a complete Doppler of all the data.

17 Q. And looking at Exhibit 14, if you turn to  
18 page 23, do you see that graph?

19 A. Yes.

20 Q. Now, that represents a test, a sound  
21 measurement you performed from, looks like starting a  
22 little after midnight running through the next  
23 morning; is that correct?

24 A. That is correct.

25 Q. You notice at around 5 in the morning

1 there is an increase in the decibels that are  
2 recorded on that graph; correct?

3 A. That is correct.

4 Q. Do you know why that increase occurred?

5 A. Morning chorus.

6 Q. So traffic.

7 A. No; morning chorus. Morning chorus is  
8 when the birds just before sunrise start chirping  
9 like crazy, and since the microphone and instrument  
10 was located in their backyard between bird feeders,  
11 we were picking up very near-term birds.

12 Q. And so am I correct, then, that as of  
13 5 a.m. going forward the morning chorus resulted in a  
14 decibel sound level above 45 and in some instances  
15 above 50?

16 A. Yeah. That's what you get when birds are  
17 close to the microphone. Sometimes you get more than  
18 that.

19 Q. And did you place your microphones  
20 underneath or by trees?

21 A. I put them in the middle of a group of  
22 about four trees in an open space.

23 Q. If you would turn to page 27, please, of  
24 Exhibit 14. This is an example of a test run at  
25 Julie Johnson's location, correct?



1           A.    I'm going to check.  Just a second.

2           Q.    Page 26 just prior shows the location.

3           A.    Yes.  Yes, that's correct.

4           Q.    And this was an 11-minute sample,  
5 correct?

6           A.    Correct.

7           Q.    When you took this sample, did you  
8 believe that that was the quietest moment available  
9 to you to record an L90?

10          A.    I had set up a round, I had set up a  
11 structure for how I was going to do the testing, and  
12 this is the -- these are the conditions that were  
13 present at the time I took the test.  That isn't  
14 necessarily the -- I'm looking here.  Yeah, that was  
15 one of the tests.  I thought there was another data  
16 sheet here.

17          Q.    The following page, page 28, shows a  
18 graph.  Can you walk me through how you went from  
19 your sample measurement to come up with an L90 on the  
20 second page as indicated being 28.4 dB(A)?

21          A.    This is about a 10 -- this graph shows  
22 roughly 10 minutes, from 11:22 until 11:31.  At the  
23 beginning of the graph we have some high levels  
24 because I was under the microphone, and at the end of  
25 the graph we have some high levels as I come back to

1 the microphone. The plateau in between are the  
2 levels that are there when I'm not present.

3 The analysis of the chart showed 28.4 dB  
4 over that ten-minute period including the sounds of  
5 me coming and going.

6 Q. When you say "analysis" of that chart,  
7 what do you mean?

8 A. Well, when you look at the very fine  
9 print on the bottom, it says that the L90, the  
10 calculated -- it's almost below the level of my  
11 bifocals.

12 The calculated LA90 is 90.4 on or between  
13 the cursors, and the cursors were set up to include  
14 my walking, but since we're looking for the quietest  
15 10 percent of the time, what it tracked was the  
16 middle period, which is about 28 on the graph.

17 Q. And in regards to that graph there's a  
18 notation at the bottom that says "LAS90."

19 A. Yeah, that's -- yeah, LSA90, 28 on or  
20 between the cursors. Is that the one you're  
21 referring to?

22 Q. No, I'm sorry. The legend right below  
23 it. The graph. Do you see it starts with "LASm" --

24 A. Oh, yes. Yes.

25 Q. -- to LAS90?

1           A.    Yes.

2           Q.    Would the LAS90 represent the LA90?

3           A.    Yes.   Yes.   And it's the bottom straight  
4 line, dashed line.   Without color it's hard to make  
5 out.

6           Q.    And then am I correct to get 28.4 you  
7 take the quietest 10 percent of that sample and  
8 simply average the readings?

9           A.    Well, it's not simply average, but  
10 statistically each of the different samples are  
11 analyzed and 10 percent of the time it was 28.4  
12 decibels.

13          Q.    Going back to the morning chorus, would  
14 you agree with me that it's reasonable to conclude  
15 that people are sleeping at 5 a.m. in the morning?

16          A.    Given the qualification that people are  
17 sleeping in their homes and morning chorus is  
18 happening out by my microphone, yes.

19          Q.    If you could turn to page 31 of Exhibit  
20 14, please.   There's a notation there before the  
21 graph stating "Lawn mowing on grounds of golf course  
22 raise the background sound levels above natural  
23 background."   Do you see that notation?

24          A.    Yes, I do.

25          Q.    Now, am I correct that this sound

1 measurement was taken between -- just before  
2 10 o'clock in the morning till about 10:20?

3 A. That is correct.

4 Q. If you could turn to Exhibit 15, please.

5 A. Okay.

6 Q. Just so we understand for the record,  
7 what is the difference between what is represented in  
8 Exhibit 14 versus Exhibit 15?

9 A. Exhibit 14 is data collected with my  
10 CEL-480, which I used for background sound level  
11 testing, Exhibit 15 was collected with my CEL-573,  
12 which I use to collect frequency analysis.

13 Q. And those are two separate meters,  
14 correct?

15 A. Yes, they are.

16 Q. And did you place both meters -- did you  
17 use both meters at the same time for all of these  
18 tests?

19 A. Not all the time. Sometimes.

20 Q. Why was that?

21 A. In many cases if I'm looking for  
22 background testing, I have no interest in the  
23 frequency analysis, if I'm looking for LA90.

24 Q. Do you see the notation on Exhibit 15 at  
25 the top, it says "Lawn mowing on property raises

1 sound levels to over 50 dBA"?

2 A. That's right.

3 Q. "At a distance the mowing is about 40  
4 dBA."

5 A. That's right.

6 Q. And that was at the McConnells' property?

7 A. That's right. It's a large tractor  
8 pulling a bank of mowers.

9 Q. Was this the McConnells' mower?

10 A. No, it wasn't. It was a neighbor's  
11 mower. Or it was a neighbor mowing. It was not near  
12 their property. It was down a distance from their  
13 property.

14 Q. If you could turn to page 29 of Exhibit  
15 15, please. And if you could for the record, state  
16 the meter that you used to collect the data that's  
17 reflected on this sheet, please.

18 A. That was the 573 CEL.

19 Q. And this represents an 18-minute test  
20 done at Julie Johnson's driveway, correct?

21 A. That is correct. Of the frequencies.

22 Q. Am I correct that those frequencies,  
23 then, are reflected on the graph on page 30?

24 A. That is correct.

25 Q. Am I correct that that graph shows

1 frequencies that you would consider low frequency,  
2 that is frequencies under 200 hertz?

3 A. That is correct.

4 Q. Now, that graph also, at the top it also  
5 shows a L90 of 34 dB(A), correct?

6 A. That is correct.

7 Q. Was that dB(A) reading a result of your  
8 CEL-573 meter?

9 A. Yes.

10 Q. So other than the one measurement you  
11 took in August, would Exhibit 14 and 15 be reflective  
12 of the data that you recorded and downloaded for the  
13 background studies that you did in Champaign County?

14 A. Exhibit 14 is for the background studies,  
15 and Exhibit 15 is for the frequency studies.

16 Q. If you could turn to page 13 of your  
17 direct testimony, please. In your answer to question  
18 39 you state that "In all cases I found that rural  
19 communities have little or no man-made noises at  
20 night." Do you see that statement?

21 A. That's correct. Yes, sir.

22 Q. Would it surprise you if I told you that  
23 for at least two months every fall that farmers in  
24 Champaign County operate grain dryers at night?

25 A. That would not surprise me at all.

1           Q.    Would it surprise you to know that grain  
2 bins can be up to a hundred feet tall?

3           A.    No, it wouldn't surprise me at all  
4 either.

5           Q.    Would it surprise you that farmers also  
6 dry grain that is in their grain bins?

7           A.    That's true, yes, sir.

8           Q.    And if a grain dryer operated all night,  
9 that would constitute man-made noise, correct?

10          A.    That would be man -- yes, man-made noise.  
11 Yes.

12          Q.    Would it surprise you to know that  
13 farmers in Champaign County actually do operate grain  
14 dryers and engage in grain drying activities --

15          A.    Not at all.

16          Q.    -- at night? That would not surprise  
17 you. Are you aware of any complaints from residents  
18 in Champaign County regarding the noise levels at  
19 night relating to grain drying operations?

20          A.    No, I am not.

21          Q.    If you could turn to page 18 of your  
22 testimony, please. In your answer to 64 you indicate  
23 that low frequency noise is an issue with wind  
24 turbines and that is another reason why wind turbines  
25 should stay at least 1.5 or 2 miles away from homes

1 in the Buckeye Wind Project, correct?

2 A. That is correct.

3 Q. Are you familiar with Dr. Geoff  
4 Leventhall?

5 A. I am very familiar with Dr. Geoff  
6 Leventhall.

7 Q. Are you aware that Dr. Leventhall has a  
8 Ph.D. in acoustics?

9 A. I am aware that he has a Ph.D. And he's  
10 Professor Leventhall in the U.S. He's not a medical  
11 expert.

12 Q. Would you agree with me that  
13 Dr. Leventhall is a respected acoustical consultant?

14 A. I have major differing opinions with him,  
15 and he has major differing opinions with his own  
16 work.

17 Q. Isn't it true that he has major  
18 differences of opinions with your work?

19 A. He has gone on the record saying that  
20 wind turbines do not produce significant low  
21 frequency sound. Prior to that he issued a report to  
22 the British government saying that wind turbines have  
23 significant low frequency sound; therefore, I think a  
24 lot of people question his position.

25 He spent the 1990s and the 1980s studying



1 the problems of low frequency sounds in office  
2 buildings that's referred to as a sick office where  
3 heating and ventilating systems that have low  
4 frequency sounds cause cognitive dysfunction, nausea,  
5 headache, and migraines in the workers, and yet he  
6 has problems understanding how people exposed to  
7 similar low frequency sounds from wind turbines could  
8 have the same symptoms. So I have differing opinions  
9 with him, yes.

10 Q. Are you aware that Dr. Leventhall has  
11 critiqued your "'How To' Guide to Siting Wind  
12 Turbines to Prevent Health Risks from Sound"?

13 A. Yes, I am.

14 Q. Are you aware that he has written a  
15 document laying out those critiques in specific  
16 detail?

17 A. Would you have any references to which  
18 document that is?

19 Q. This would be in reference to a document  
20 that was actually filed in the Wisconsin proceeding  
21 recently, it's a document Dr. Leventhall wrote in  
22 August of 2009.

23 A. I'm familiar with that.

24 ALJ STENMAN: Could we turn that second  
25 microphone off. That one.

1 ALJ SEE: At the back.

2 MR. SETTINERI: Your Honors, at this time  
3 I'd like to mark Buckeye Exhibit 16.

4 (EXHIBIT MARKED FOR IDENTIFICATION.)

5 Q. Mr. James, you are familiar with this  
6 document, correct?

7 A. Yes.

8 Q. Have you read the document?

9 A. Yes.

10 Q. Looking at the very first page do you see  
11 the statement by Dr. Leventhall stating that "This  
12 document by Kamperman and James (K&J), entitled 'The  
13 "How To" Guide to Siting Wind Turbines to Prevent  
14 Health Risks from Sound' places undue emphasis on  
15 infrasound and low frequency noise." Do you see  
16 that?

17 A. I do.

18 Q. And the document that is being referred  
19 to there in that statement, would that be the UNU  
20 Exhibit 32 as attached to your direct testimony?

21 A. That is correct.

22 Q. Turning to the third page, part 5, fourth  
23 line down, you see the statement that "wind turbines  
24 do not radiate strong low frequency sound"? Do you  
25 see that statement?

1           A.    That's his opinion.

2           Q.    And that differs with your opinion,  
3 correct?

4           A.    It differs with the facts.

5           Q.    I asked you if it differs with your  
6 opinion, sir.

7           A.    It differs with the facts also. I have  
8 charts of Dr. Leventhall's in which he has clearly  
9 identified the low frequency sound and even circled  
10 infrasound that he supplied to NREL. When he looks  
11 for it, he finds it.

12          Q.    If you turn to part 12 of the document,  
13 you see the statement there that "In conclusion,  
14 there is little low frequency noise in the  
15 'swoosh-boom' aerodynamic modulation, which is  
16 typically in the 500 hertz to a thousand hertz  
17 range"?

18          A.    I see that statement, and the statement  
19 was a misdirection because I never said it was in the  
20 swoosh-boom. The low frequency sound is present.  
21 The local swoosh-boom is indeed 500 to 100, or  
22 actually 200 to 800 hertz. He's just misdirecting  
23 the reader.

24          Q.    If you turn to part 21, do you see the  
25 final conclusions and do you see the statement that

1 "Kamperman and James have - failed to show that there  
2 is a general problem from infrasound and low  
3 frequency noise from wind turbines, requiring control  
4 criteria; failed to show that a C-A difference of  
5 less than 20 dB would be an appropriate criterion  
6 limit at the low levels of wind turbine noise; failed  
7 to give any indication of what proportion of  
8 residents they believe to be adversely affected"? Do  
9 you see that?

10 A. I see that part.

11 Q. And do you disagree with those  
12 statements?

13 A. Number one, in the Kamperman-James  
14 article we present published data from the wind  
15 turbine manufacturers taking the data under IEC  
16 61400, it clearly shows high frequency or low  
17 frequency sound and infrasound. We demonstrate  
18 through other research that is from pro wind sources  
19 that this is found in almost all studies except that  
20 by the use of dB(A) weighting the graphs appear to  
21 have no low frequency content.

22 Further, if there is no such problem,  
23 then why is everyone so worried about not having  
24 criteria to control it? If the wind turbines don't  
25 produce ultrasound or low frequency sound and we have

1 a criteria to control it, then they pass it, so  
2 apparently they're afraid of nothing or else they  
3 know something and are afraid of the criteria.

4 As to the C to A difference,  
5 Dr. Leventhall, Professor Leventhall excuse me,  
6 misinterpreted our article completely in that he  
7 jumped to the conclusion that we were using C minus A  
8 in the standard sense of anticipating structural  
9 vibration, and instead, if you read the criteria, you  
10 would have noticed that we were using the C-weighted  
11 level after the project goes into effect minus the  
12 A-weighted level prior to it as a way of controlling  
13 the increase in low frequency sound which, again, I  
14 will say if wind turbines don't produce it, won't  
15 bother anybody or wouldn't limit their siting.

16 All of our concerns here that he claims  
17 are overstated, because of a problem that isn't  
18 there, shouldn't bother him if unless he knows the  
19 problem's there.

20 We failed to give an indication of what  
21 proportion of residents we believe to be adversely  
22 affected. Proportion of residents in which project?  
23 It's the people who live within a mile of wind  
24 turbines and particularly those who are being asked  
25 to live within 2,500 feet of wind turbines who are

1 uniformly subjected to these kinds of sound levels,  
2 in which case it's a hundred percent of those.

3 Q. Do you believe this document represents a  
4 significant difference of opinion between you and  
5 Professor Leventhall regarding your article?

6 A. It represents a major -- to me it  
7 demonstrates that he doesn't read very closely  
8 because he's got his mind made up.

9 I have a rebuttal. Are you going to  
10 enter that into evidence also?

11 Q. I'm sorry. I'm asking the questions,  
12 sir.

13 A. Okay. Sorry.

14 Q. You know George Hessler, correct?

15 A. I am only familiar with him through  
16 review of his reports and his discussions with George  
17 Kamperman who worked with him quite a bit.

18 Q. Would you consider Mr. Hessler, and  
19 that's Mr. George Hessler, to be an experienced  
20 acoustical engineer?

21 A. I would agree that he has many years of  
22 acoustical engineering experience. I would not agree  
23 that he is an authority in the field.

24 Q. Can the same be said for you, sir?

25 A. That is probably true.

1           Q.    Isn't it true that Mr. George Hessler  
2 disagrees with your criticisms of wind turbine  
3 modeling techniques used by Hessler & Associates?

4           A.    In the same sense that Dr. Leventhall  
5 disagreed with my conclusions, yes.

6           Q.    Now, am I correct that in this proceeding  
7 you're recommending that the Board adopt a 1.25-mile  
8 setback from property lines?

9           A.    Yes.

10          Q.    And this is for the placement of the  
11 turbine, operating turbine, correct?

12          A.    Yes.

13          Q.    Can you tell me how many turbines as  
14 currently located in the application would be able to  
15 be installed as located in the application if your  
16 setback recommendation of 1.25 miles from a property  
17 line were adopted by the Ohio Power Siting Board?

18          A.    Never checked.

19          Q.    Does that matter to you, sir?

20          A.    I am not looking at it from that point of  
21 view.

22          Q.    Now, isn't it true that you've done no  
23 sound modeling specific to turbine locations in the  
24 Buckeye Wind Project area?  Correct?

25          A.    I think that after we had our deposition

1 I built a quick little model of the four or five  
2 turbines north of the McConnells just to get an idea  
3 of how my model would compare with his. But it was a  
4 very simple, quick-and-dirty model. Most of my  
5 conclusions have been based on the contour maps and  
6 the data that are in Dave Hessler's report.

7 Q. And you wrote your direct testimony prior  
8 to the deposition, correct?

9 A. That is correct.

10 Q. You stated earlier that you had three  
11 bases for your 1.25-mile setback recommendation, one  
12 of which was a computer model based on setbacks. Am  
13 I correct that that refers to modeling done --  
14 modeling that was referenced in your "How to" Guide  
15 for siting wind turbines as attached to your direct  
16 testimony?

17 A. That is correct, yes. That is correct.

18 Q. Now, isn't it true that you submitted  
19 correspondence to the Ohio Power Siting Board in case  
20 number 08-1024-EL-ORD?

21 A. I vaguely remember that, yes.

22 Q. And that would be relating to the  
23 promulgation of rules for the siting of wind turbine  
24 facilities, correct?

25 A. That would normally be my topic, yes.



1           MR. SETTINERI: Your Honors, at this time  
2 I'd like to mark Buckeye Exhibit 17.

3           ALJ STENMAN: So marked.

4           (EXHIBIT MARKED FOR IDENTIFICATION.)

5           Q. Mr. James, can you identify what's been  
6 marked as Buckeye Exhibit 17, please.

7           A. Yes. This is the letter that I mailed to  
8 the Public Utility Commission of Ohio.

9           Q. Are you aware that the Power Siting Board  
10 addressed your comments in its opinion and order  
11 dated October 28th, 2008, in case number  
12 08-1024-EL-ORD?

13          A. I am not.

14          Q. Do you recall reading an opinion and  
15 order from the Power Siting Board regarding the  
16 promulgation of windmills?

17          A. If I did, I don't remember. I don't  
18 recall it at the moment.

19          Q. Would it surprise you if I told you the  
20 Board rejected your recommendation in its opinion and  
21 order?

22          A. They have their job, I have mine.

23          Q. To answer the question, would it --

24          A. Would it surprise me? I think it  
25 would -- if they had understood what I was saying,

1 yes, it would surprise me.

2 Q. I guess what I'm just simply getting at,  
3 Mr. James, is are you aware that the Board rejected  
4 your recommendations?

5 A. I am now.

6 MR. SETTINERI: One moment, your Honors,  
7 please.

8 ALJ STENMAN: Sure.

9 Q. Mr. James, if you could please turn to  
10 your direct testimony at page 22. You state on the  
11 first top of the page, first partial paragraph,  
12 "Given that 43 dBA at night is known to result in  
13 sleep disturbance and to cause adverse health effects  
14 from studies conducted by WHO and reported in 2009,  
15 Mr. Hessler's work leads to the conclusion that the  
16 current arrangement proposed for the Buckeye Wind  
17 Project will cause adverse health effects." Do you  
18 see that sentence?

19 A. Yes, I do.

20 Q. Now, Mr. James, we know you're not a  
21 doctor, correct?

22 A. We established that, yes.

23 Q. And in your answer to question 6 of the  
24 testimony you identify yourself as a consumer of  
25 medical research, correct?

1           A.     That is correct. I've been working with  
2 Dr. Pierpont, Dr. Nissenbaum, and Dr. McMurtry to  
3 understand the medical aspects of their patients'  
4 problems.

5           Q.     Would you agree with me that you are not  
6 qualified yourself to make any judgment about the  
7 quality of the body of research related to a causal  
8 link between wind turbines and adverse health  
9 effects?

10          A.     No, I would not.

11          Q.     Do you recall giving testimony before the  
12 Tazewalt -- strike that -- Tazewell County Zoning  
13 Board of Appeals --

14          A.     Yes.

15          Q.     -- on May 1st, 2008?

16          A.     Yes.

17          Q.     Do you recall a question posed to you  
18 asking whether if you are not -- asking "You are not  
19 qualified yourself to make any judgment about the  
20 quality of the body of research." And your answer  
21 was, "I would not try to, no. That's why I rely on  
22 the international standards and the international  
23 documents from groups like that."

24          A.     I made that statement.

25                 MR. VAN KLEY: Objection, your Honor.

1 Could we at least have a page from that testimony,  
2 please, so I could follow along.

3 MR. SETTINERI: I'd be glad to, your  
4 Honor.

5 ALJ STENMAN: Okay.

6 MR. SETTINERI: For the record, this is  
7 taken from documents produced by counsel in response  
8 to discovery requests related to previous testimony  
9 by Mr. James.

10 Could you please reread the question that  
11 was pending, please.

12 (Record read.)

13 Q. Now, if you could turn to your answer and  
14 question 25, please.

15 MR. SETTINERI: Your Honors, am I  
16 speaking loud enough for you?

17 ALJ STENMAN: Yes.

18 A. Okay. I'm there.

19 Q. On that page you cite to the World Health  
20 Organization's Night Noise Guidelines from 2007; is  
21 that correct?

22 A. That is correct.

23 Q. Do you see the bullet point that --  
24 second bullet point that "There is sufficient  
25 evidence for biological effects of noise during

1 sleep: Increase in heart rates, arousals, sleep  
2 stage changes, hormone level changes and wakening"?

3 A. I believe that's a correct reflection of  
4 the World Health Organization's statement, yes.

5 Q. Are you familiar with the 2009 Night  
6 Noise Guidelines for Europe issued by the World  
7 Health Organization?

8 A. Yes.

9 Q. Have you reviewed those?

10 A. Yes, I have. They're in agreement with  
11 the 2007.

12 MR. SETTINERI: Your Honors, at this time  
13 I'd like to mark Buckeye Exhibit 18.

14 (EXHIBIT MARKED FOR IDENTIFICATION.)

15 Q. Mr. James, can you identify what's been  
16 marked as Buckeye Exhibit 18?

17 A. The World Health Organization Night Noise  
18 Guidelines for Europe, 2009.

19 Q. And to be clear for the record, this is  
20 an excerpt from that document which is quite thick,  
21 correct?

22 A. Yes.

23 Q. Could you please turn, I think it's the  
24 13th page, they are not numbered, it's page XII of  
25 the Executive Summary, the Roman numeral.

1           A.    What's the page look like?

2           Q.    It has the title "Vulnerable Groups" at  
3 the bottom of the page.

4           A.    Okay.

5           Q.    Are you at that page?

6           A.    Yes, I am.

7           Q.    Do you see the second bullet point on  
8 that page below the subtitle that says "The review of  
9 available evidence leads to the following  
10 conclusions," and that bullet point states, "There is  
11 sufficient evidence for biological effects for noise  
12 during sleep: Increase in heart rate, arousals,  
13 sleep stage changes and awakening"?

14          A.    Yes, I do.

15          Q.    Going back to your direct testimony on  
16 page 8, the second bullet point there, do you see a  
17 difference between those two bullet points? And when  
18 I say "two bullet points," I mean the bullet point in  
19 the 2009 versus the 2007 noise guidelines you cited  
20 in your direct testimony.

21          A.    I don't see the inclusion of hormone  
22 level changes.

23          Q.    And if you go back -- and if you look  
24 down at the last bullet point in your direct  
25 testimony at page 8, do you see the bullet point that

1 says "There is limited evidence"? Do you see a  
2 reference to hormonal -- strike that -- hormone level  
3 changes in that section?

4 A. Yes, in the last bullet. Yes, I do.

5 Q. I'm talking about your direct testimony.  
6 The bullet in your direct testimony, I'm sorry.

7 A. Okay. I see it.

8 Q. So would you agree with me that in the  
9 2009 Night Noise Guidelines the World Health  
10 Organization no longer states that there is  
11 sufficient evidence for biological effects of noise  
12 during sleep related to hormone level changes and has  
13 now characterized that conclusion stating that there  
14 is limited evidence?

15 A. And a plausible biological model.

16 MR. SETTINERI: Could you reread that  
17 answer, please.

18 (Record read.)

19 Q. I guess I'm just asking would you agree  
20 with me that --

21 A. I agree with the statement you made, yes.

22 Q. Thanks.

23 Do you agree with the following  
24 statement: Some people can sleep through anything,  
25 other people wake up at the slightest sound?

1           A.    I have personal experience with that;  
2   yes.

3           Q.    Now, you are familiar with the 2007 World  
4   Health Organization Night Noise Guidelines, correct?

5           A.    That was the final implementation report  
6   from the doctors. 2009 is the public relations  
7   portion of the document, not by the doctors, but by  
8   the writers, technical writers.

9           Q.    What's your basis for that statement?

10          A.    The basis for that statement is that  
11   between the technical writing, the technical document  
12   in 2007, the document's conclusions have changed  
13   without any substantiating evidence being introduced  
14   to explain why the word "hormone" was reduced from  
15   the medical reports and replaced with -- was removed  
16   from the bullet number two and added to bullet  
17   number -- the last bullet. I see nothing in here  
18   that explains what new research caused them to make  
19   that change.

20          Q.    Well, let's go to the first part of the  
21   Executive Summary, Introduction, it's Roman numeral  
22   No. IX. See the first statement in the introduction,  
23   it says "The aim of this document is to present the  
24   conclusions of the World Health Organization working  
25   group responsible for preparing guidelines for



1 exposure to noise during sleep."

2 A. I haven't found that page yet.

3 Q. I'm sorry.

4 A. What page is it, sir?

5 Q. It's Roman numeral IX in the upper  
6 right-hand corner, the page that has the title  
7 "Executive Summary" and "Introduction."

8 A. Okay, the Executive Summary page.

9 Okay. I have it now.

10 Q. Do you see the statement that says, "The  
11 aim of this document is to present the conclusions of  
12 the World Health Organization working group  
13 responsible for preparing guidelines for exposure to  
14 noise during sleep"?

15 A. Yes, I do. That's why it surprised me  
16 that they changed their conclusions.

17 Q. Okay. Are you aware of any other changes  
18 in the position of the World Health Organization in  
19 regards to Night Noise Guidelines?

20 A. They've introduced some language specific  
21 to the situation of communities that are already very  
22 noisy saying that they should set their new targets  
23 at 40, but that, again, was not in the original one.  
24 In the original one the statement was clear; we have  
25 sufficient evidence that 30 decibels and under is

1 safe and healthful for sleep, we have sufficient  
2 evidence that 40 and over causes adverse health  
3 effects, and we don't know what happens in between  
4 yet until we get more evidence.

5 Q. So you essentially pick and chose what  
6 you wanted out of the World Health Organization --

7 A. No.

8 Q. -- document as -- Mr. James, please let  
9 me finish my question before you answer.

10 I would like to know, you are simply  
11 picking and choosing between the World Health  
12 Organization documents to suit your testimony; isn't  
13 that correct?

14 A. I am trying to establish the chain of the  
15 research that they used for the conclusions and the  
16 change in the conclusions.

17 Q. But yet you didn't use the latest  
18 conclusions in your testimony, did you?

19 A. I don't see how they're supported. I  
20 used -- in my conclusions, yes, I said 40 is the  
21 maximum limit at which we observe health effects, or  
22 40 is the point at which adverse health effects is  
23 noted, 30 and under is the point at which is safe,  
24 based upon the 2007 study, and those numbers are  
25 still in the 2009 study I think in the table. Let's

1 see, in Recommendations for Health Protection in part  
2 of your statement -- it was right before page XVII  
3 Executive Summary which gives the table.

4 Q. Okay.

5 A. And it states there that below the level  
6 of 30 dB(A) no effects on sleep are observed except  
7 for a slight increase in the frequency of body  
8 movements.

9 Q. Could you give me a page number for that  
10 in the upper --

11 A. Well, it --

12 Q. -- right-hand corner?

13 A. -- doesn't have a page number, but it has  
14 a graph and the title is "Recommendations for Health  
15 Protection."

16 ALJ STENMAN: Gentlemen, could you try  
17 not to speak over top of each other. Thank you.

18 Q. I'm sorry if I spoke over you, Mr. James.

19 A. That's fine. I've done it to you enough.  
20 We're even.

21 It states there the same thing that it  
22 states in 2007.

23 Q. Just backing up, I want to find that  
24 statement.

25 A. Second paragraph underneath

1 Recommendations for Health Protection. And then the  
2 third paragraph -- oh, the third paragraph.

3 Q. Could you read that statement to me,  
4 please?

5 A. It says, "Below the level of 30 dB  
6 L-night-outside, no effects on sleep are observed  
7 except for a slight increase in the frequency of body  
8 movements during sleep due to night noise. There is  
9 no sufficient evidence that the biological effects  
10 observed at below 40 dB L-night-outside are harmful  
11 to health. However, adverse health effects are  
12 observed at the level above 40 dB L-night-outside,  
13 such as self-reported sleep disturbance,  
14 environmental insomnia, and increased use of  
15 somnifacient drugs and sedatives.

16 "Therefore, 40 dB L-night-outside is  
17 equivalent to the lowest observed adverse effect  
18 level for night noise."

19 Q. Okay. And if we turn --

20 A. To the table.

21 Q. -- to the table, please.

22 A. We see --

23 ALJ STENMAN: For clarification, are we  
24 looking on the next page?

25 THE WITNESS: Yes.

1           MR. SETTINERI: Yes, identified as Roman  
2 numeral XVII.

3           ALJ STENMAN: Okay.

4           A. We have a community here with a  
5 background sound level of under 30 dB(A) in almost  
6 all areas as confirmed both by Mr. Hessler and  
7 myself, that community is safe and healthful for  
8 sleep. If we increased the levels into the low 40s,  
9 we'll introduce adverse health effects into the  
10 public; that is what the table says to me.

11          Q. Well, let me look at what the table  
12 actually says, Mr. James. In the 30 to 40 dB section  
13 do you see the statement that "However, even in the  
14 worst cases, the effects seem modest.  
15 L-night-outside of 40 dB is equivalent to the lowest  
16 observed adverse effect level (LOAEL) for night  
17 noise"? Do you see that statement?

18          A. Yes, I do.

19          Q. Looking at the next section, 40 to 55 dB,  
20 it states that "Adverse health effects are observed  
21 among the exposed population." Do you see that  
22 statement?

23          A. Yes, I do.

24          Q. Okay. You're familiar, obviously, with  
25 the 2007 Night Noise Guidelines, correct?

1           A.    That's correct.

2           Q.    Does that document contain a table  
3 similar to this document?

4           A.    Yes, it does.

5           MR. SETTINERI:  If I could have a moment,  
6 your Honors, please.

7           ALJ STENMAN:  Sure.

8           Since we're experiencing a little bit of  
9 a break in the flow anyway, let's take a 10-minute  
10 break and go back on the record at 3:15.

11           (Recess taken.)

12           ALJ STENMAN:  Let's go back on the  
13 record.  Mr. Settineri, whenever you're ready.

14           MR. SETTINERI:  Thank you, your Honor.

15           Q.    Mr. James, referring back to Exhibit 18,  
16 the table we were discussing at Roman numeral  
17 XVII two pages from the back of the document, at the  
18 top of the table it references "Average noise level  
19 over a year," underneath that "L-night-outside."  Can  
20 you explain to me what that means, L-night-outside?

21           A.    L-night, that means the average sound  
22 level outside any person's wall at night, and like  
23 the ISO model, it's looking at a long-term average  
24 saying not just one night to the, you know, one night  
25 it's noisy and then it's quiet for the rest of the

1 year. They're saying if you have repeated nighttime  
2 sound levels at that limit, then you'll have the  
3 effects.

4 Q. So it's an average noise level taken over  
5 a year.

6 A. Very similar to the kind of prediction  
7 from ISO 9613 models.

8 Q. Okay. If you could turn to page 19 of  
9 your testimony, please. You state there that you are  
10 familiar with Dr. Nissenbaum's study of the noise  
11 effects on the neighbors of the Mars Hill wind farm,  
12 correct?

13 A. That's correct.

14 MR. SETTINERI: Counsel for UNU, I don't  
15 know if we have a copy of the previous exhibit that  
16 was marked at the stand still.

17 Q. Was that study in the form of a  
18 PowerPoint presentation that you reviewed?

19 A. His initial report to the Maine Medical  
20 Association was a PowerPoint that led to the Maine  
21 Medical Association's resolution asking for  
22 additional research and more caution in the siting of  
23 wind turbines. But his final study, which now  
24 includes the control group and controls the -- and  
25 also includes the other people, has not yet been

1 published.

2 Q. I'll stop there.

3 MR. SETTINERI: Your Honor, I guess I'll  
4 raise this motion to strike now. At answer 79 the  
5 witness describes a control group. He describes a  
6 private communication from Dr. Nissenbaum. I would  
7 ask that anything -- I would ask that the witness's  
8 entire answer to question 79 be struck from the  
9 record as hearsay.

10 ALJ STENMAN: Are you moving to strike  
11 anything else or just answer 79 at this time?

12 MR. SETTINERI: Also in answer 79, this  
13 is -- the witness testifies as to symptoms reported  
14 from -- descriptions of symptoms from others, and I  
15 would also move that that answer be stricken from the  
16 record in its entirety based on hearsay.

17 ALJ STENMAN: Okay. So just for clarity  
18 of the record, do you want to strike the sentence  
19 beginning with "In a private communication" or -- are  
20 you looking to strike specific sentences or the  
21 entire answer?

22 MR. SETTINERI: I would move to strike  
23 answer 79, the entire answer.

24 ALJ STENMAN: Okay.

25 MR. SETTINERI: Or, in the alternative,



1 anything after the word "Yes." And also the entire  
2 answer in 75.

3 ALJ STENMAN: Seventy-five also.

4 All right, at this point the Bench will  
5 take that under advisement.

6 MR. VAN KLEY: Your Honor, could I  
7 respond to that?

8 ALJ STENMAN: Sure.

9 MR. VAN KLEY: Your Honor, the Ohio  
10 Supreme Court has made it very clear that experts are  
11 allowed to take notice and to utilize in their  
12 opinions any information that they acquire even  
13 though it may not be admissible through other means,  
14 and specifically one of the major -- the major  
15 categories of information that experts can take note  
16 of are information obtained through hearsay.

17 If we were to apply the standard that has  
18 just been proposed for Mr. James and apply it to  
19 other expert witnesses in this proceeding, for  
20 example Dr. Mundt who exclusively relied on hearsay,  
21 Mr. Hessler who in many -- on many occasions relied  
22 on hearsay, certainly Mr. Shears, who quite often  
23 relied on hearsay for his opinions, we would be  
24 striking a whole lot of evidence and testimony in  
25 this case.

1           So we don't believe that this motion to  
2 strike has any validity. It's based on information  
3 that this witness has obtained in the normal course  
4 of his business including information that he would  
5 normally be required to know as an acoustic engineer  
6 who is required to know how the noise levels in his  
7 discipline are used.

8           So we believe that it's directly within  
9 his area of expertise to know what the studies say,  
10 to know what's being experienced by people living  
11 near wind turbines and, therefore, his testimony  
12 regarding those matters is admissible.

13           ALJ STENMAN: We'll defer ruling on the  
14 motion to strike at this time.

15           Mr. Settineri, was there something you  
16 wanted to say?

17           MR. SETTINERI: I did want to respond  
18 briefly and just point out that the answer to 79 as  
19 well as the answer to 75, I just want to point out  
20 that they do represent different questions and I  
21 would ask the Bench to look at each of these  
22 separately in their analysis, and point out also as  
23 to the answer to 75, that is simply an attempt to  
24 establish -- to refute Dr. Mundt's testimony by  
25 establishing a fact, an alleged fact that he has

1 interviewed a control group; that is outside of this  
2 witness's expert -- he's not a medical expert by any  
3 means. I just want to indicate that both should be  
4 reviewed separately.

5 ALJ STENMAN: Let's give the Bench a  
6 moment.

7 Let's move on.

8 Q. If you could turn to page 12 of your  
9 direct testimony, please, your first paragraph in  
10 answer 36. And, I'm sorry, Mr. James, actually I'll  
11 refer you to page 15, answer 49. Question 49 asks  
12 "What effects will noise from Buckeye Wind's turbines  
13 have on persons residing closer than 1.25 miles for  
14 point source turbines or turbines in a line?" Do you  
15 see that question?

16 A. Yes, I do.

17 Q. Am I correct that your answer there was  
18 "They will be awakened frequently, will suffer sleep  
19 deprivation, and hear the wind turbines as the  
20 dominant noise when outside their homes. The noise  
21 will also be audible inside their homes during the  
22 winter with windows closed, especially in bedrooms  
23 where the sounds interfere with sleep." Correct?

24 A. That's correct.

25 Q. With regards to your statement that they

1 will be awakened frequently, will suffer sleep  
2 deprivation, hear the wind turbines as a dominant  
3 noise when outside their homes, as an engineer that's  
4 an absolute statement, correct?

5 A. Yes. It's based upon my personal  
6 experience of staying in their homes.

7 Q. And am I correct that in your answer  
8 there you are saying that all persons residing closer  
9 than 1.25 miles from point source turbines will be  
10 awakened frequently, will suffer sleep deprivation,  
11 and hear the wind turbines as a dominant noise when  
12 outside their homes?

13 A. If they was the most vulnerable and  
14 susceptible group, yes.

15 Q. I want to be clear for the record here.  
16 You're an engineer.

17 A. That's right.

18 Q. And engineers are sticklers for details,  
19 correct?

20 A. That's correct.

21 Q. That statement as written in your  
22 testimony indicates that it would be for all persons,  
23 correct?

24 A. I said persons residing close to the  
25 1.25 miles, they will be awakened. And like I said,

1 based upon my own experience in homes of people at  
2 those kind of distances from wind farms, I personally  
3 was awakened while taking sleep medication.

4 Q. So is it your testimony here today that  
5 all persons --

6 A. No.

7 Q. -- residing closer than 1.25 miles from  
8 point source turbines will be awakened frequently and  
9 will suffer sleep deprivation?

10 A. There will be times when they are  
11 awakened, whether it is all persons, like you said,  
12 there are some people that can sleep through  
13 anything. But from all the groups, children under 6,  
14 seniors, and people with preexisting medical  
15 conditions related to sleep, that is a true  
16 statement.

17 Q. You think that group, all of the  
18 individuals in that group you just listed, will be  
19 awakened frequently, will suffer sleep deprivation.

20 A. That subset of people, yes.

21 MR. SETTINERI: One moment, your Honors.  
22 We are almost done here.

23 ALJ STENMAN: Okay.

24 Q. Mr. James, you referred in your testimony  
25 to a control group by Dr. Nissenbaum, correct?

1           A.    Yes, I do.

2           Q.    Isn't it true that you have not seen any  
3 documentation related to a control group study by  
4 Dr. Nissenbaum?

5           A.    I have seen his preliminary results.

6           Q.    When did you see that?

7           A.    Last week, Friday.

8           Q.    And those are preliminary, correct?

9           A.    Preliminary, yes.

10           MR. SETTINERI:  No further questions at  
11 this time, your Honors.

12           ALJ STENMAN:  Okay.  At this time we'll  
13 take just a brief five-minute recess.

14                   (Recess taken.)

15           ALJ STENMAN:  Let's go back on the  
16 record.  Prior to our brief -- go ahead.

17           MR. VAN KLEY:  No; I'm just checking the  
18 microphone.

19           ALJ STENMAN:  Prior to our brief break we  
20 had a pending motion to strike.  The Bench has  
21 considered that motion and with regard to the  
22 witness's answer to question 79, that will be  
23 stricken from his testimony.  With regard to the  
24 answer to question 75, the first sentence reading "I  
25 have listened to people reporting severe sleep

1 disturbance over consecutive nights from heavy blade  
2 swish and rumble in their homes" will stay, the  
3 remainder of that answer will be stricken from the  
4 record.

5 And I think at this point we're ready for  
6 any redirect you may have, Mr. Van Kley.

7 MR. VAN KLEY: All right. Thank you,  
8 your Honor.

9 - - -

10 REDIRECT EXAMINATION

11 By Mr. Van Kley:

12 Q. All right. Mr. James, I think we will  
13 start your redirect in the same general order as the  
14 cross-examination occurred since that seems to be a  
15 convenient way to read my notes. So why don't we  
16 start with a little bit of information about your  
17 qualifications and experience that were explored by  
18 Mr. Settineri and start with that information.

19 You were asked whether you attended  
20 conferences in Europe by the INCE.

21 A. Yes.

22 Q. Do you remember that?

23 A. Yes, I do.

24 Q. And I believe that you stated that you do  
25 not attend those conferences due to your inability to

1 travel on an airplane; is that right?

2 A. That is correct.

3 Q. Nevertheless, do you keep track of events  
4 and information that is provided at those  
5 conferences?

6 A. I have copies of all of the papers that  
7 were presented, the presentations and the notes.

8 Q. What else do you do to stay informed  
9 about developments concerning wind turbines and wind  
10 turbine noise?

11 A. I engage in a collaboration with about  
12 eight other acoustical consultants and people that  
13 are involved in assessing acoustics and together we  
14 are sharing libraries as information becomes  
15 available of research reports either by our own group  
16 or by others. And I also subscribe to a number of  
17 magazines on wind turbines, particularly design  
18 oriented magazines, trade magazines, to get a better  
19 understanding of how the trade views itself and what  
20 it sees its problems as being.

21 Q. Now, you were asked some questions about  
22 George Hessler, and I recall that one of those  
23 questions asked you whether Mr. Hessler was regarded  
24 as an authority in the field, and then you were asked  
25 whether -- I believe that your answer was something



1 along the lines of you did not regard him as such an  
2 authority, and you were then asked, Well, could you  
3 be regarded in the same way, and you answered yes.  
4 Could elaborate on that, please.

5 A. My reference there would be I would  
6 expect Mr. Hessler would have the same opinion about  
7 myself. Authorities in the field are not  
8 self-appointed. Authorities are there because  
9 they've learned things and other people have come to  
10 rely upon them.

11 Q. Now, you were asked about your experience  
12 specifically concerning wind farms and you were asked  
13 some questions about Buckeye Wind Exhibit 13, about  
14 your wind experience -- wind turbine experience, and  
15 I notice that you stated that this document was  
16 prepared in February 2008; is that right?

17 A. That is correct.

18 Q. Okay. Now, could you give us a snapshot  
19 of American history with regard to wind turbine  
20 siting and the evaluations of wind farm noise as it  
21 occurs in the United States.

22 MR. SETTINERI: Object. Outside the  
23 scope of cross, your Honor.

24 MR. VAN KLEY: No, your Honor, I'm  
25 setting the foundation for showing that this document

1 was created at the time when few wind farms had been  
2 sited yet in the U.S. and, therefore, you would not  
3 have --

4 THE WITNESS: There weren't any to study.

5 ALJ STENMAN: Okay. Let's rule on the  
6 objection first.

7 MR. VAN KLEY: Yeah, you would not have  
8 expected too many to be on this list, and after I  
9 talk about this list, we'll talk about everything  
10 since that time.

11 ALJ STENMAN: The objection is noted and  
12 overruled at this point, but let's move on to your  
13 point.

14 Q. (By Mr. Van Kley) So, Mr. James, this  
15 document was created around February 2008.

16 A. That is correct.

17 Q. Okay. Now, how long had wind turbine  
18 studies in the United States been going on by that  
19 time?

20 A. If we focus on what's called modern  
21 industrial-scale upwind turbines, the type that we're  
22 talking about here at Buckeye, the major projects  
23 were first announced in, somewhere around 2004 and it  
24 wasn't until almost 2007 that they were up and  
25 running. Some of the very first ones like Mars Hill,

1 which I relied on very heavily to get an  
2 understanding because it had created such a negative  
3 reaction from the community that the state had asked  
4 for a year-long noise study that provided just an  
5 infinite amount of detail of how the turbines were  
6 responding.

7           And also the Entenmann's, I think this  
8 was a project up in Nova Scotia that was an early one  
9 but there were only a very few of them at that time  
10 that were up and running such that we knew whether or  
11 not the models were correct or we knew whether the  
12 people would find the noise annoying as the European  
13 studies have indicated based upon the European  
14 experience with the same turbines.

15           Q.   Now, I believe that you indicated that  
16 around that time you and Mr. Kamperman started  
17 preparing your paper; is that right?

18           A.   Yes.   What happened is with Calumet  
19 County when the news went out that they had a  
20 standard, I started getting calls from counties all  
21 over the east side of the Mississippi and even out  
22 into the midwest, and George and I decided that  
23 rather than trying to address each of them  
24 individually, it would be better to sit down and  
25 basically write a template that we could send when

1 those questions came up.

2 Q. What is it in your background that  
3 enabled you to write that paper given the length of  
4 time that wind farms had been operating in the United  
5 States?

6 A. Well, the real background was that when I  
7 had my viral infection in my heart and was required  
8 to stay home, I spent much of that time looking for  
9 new fields that my company could enter into. We had  
10 45 people at that time working with industry, and I  
11 saw wind turbines as being another opportunity.

12 And so I spent most of my recovery period  
13 researching what was going on in Europe, New Zealand,  
14 and other countries where turbines had been up and  
15 running, establishing contacts with acoustical  
16 consultants in those countries, and in some cases  
17 even going as far as making recommendations that the  
18 other consultants could test on the turbines that  
19 were in their countries and send them back to me to  
20 answer questions that I developed based upon my  
21 research.

22 Q. Was there anything about your background  
23 before you started studying wind turbine noise that  
24 enabled you to evaluate the effects of noise from  
25 wind turbines?

1 MR. SETTINERI: Object, your Honor.

2 Outside the scope of cross.

3 MR. VAN KLEY: No, your Honors, it  
4 certainly is within the scope of cross. He was  
5 attacking Mr. James' credentials to opine about wind  
6 turbines and in trying to do so -- rather extensively  
7 I would add, and we are establishing how he became an  
8 expert with regard to wind turbine noise and how it's  
9 related to his experience before that time as well as  
10 since that time.

11 ALJ STENMAN: Objection's overruled.

12 A. I think really since the beginning of my  
13 career. I've always looked at the engineer's role as  
14 being one of preventing problems through good  
15 criteria, through good designs, through good  
16 measurement testing techniques.

17 And in my role as the first-tier supplier  
18 of noise services to major manufacturing companies  
19 from the '80s forward I've been engaged in a number  
20 of standards, both ANSI standards, company standards,  
21 and found that really when you have a new noise  
22 source introduced, you need to find out whether or  
23 not it relates to the type of criteria that you set  
24 up for other noise sources. If not, you have to  
25 design new criteria.

1           And my study of wind turbines basically  
2       led me to the conclusion that this was a new type of  
3       noise source both in terms of its unique  
4       characteristics of noise output and the fact that we  
5       were locating industrial machines in what are rural  
6       areas instead of industrial zones, and I think that  
7       is one of the things that struck me more than  
8       anything.

9           Good urban planning, good community  
10       planning says if you're going to take a machine  
11       that's noisy, you put it in an area away from where  
12       people live. You don't put a coal plant in the  
13       middle of farmland and not expect problems. You  
14       don't put other noise sources in the middle of  
15       farmland or residential communities, you put them in  
16       industrial zones which are basically set aside for  
17       the purpose of that particular industry's noise and  
18       other pollutions.

19           Q.    You were also asked some questions about  
20       your modeling experience. Before you wrote the  
21       Kamperman-James paper did you have any experience in  
22       modeling?

23           A.    I wrote the first acoustical model used  
24       in this country in public hearings. I wrote, the  
25       program was called SOUND6, it was written in Fortran

1 on a minicomputer and the results of that were used,  
2 not the results, that model was used for the  
3 community noise planning of a series of about 20  
4 different GM plants, another series of Ford plants,  
5 Goodyear plants, et cetera, and also used in hearings  
6 before the Department of Labor at a time when no one  
7 else had models. In 1980 or so it led to a Business  
8 Week article on our work with GM and how models were  
9 being used.

10 So I have always tried to look at what  
11 kind of tools can be available so that we don't move  
12 forward and make mistakes that then lead to people  
13 having health effects or some other effect. Wind  
14 turbines fell directly into that category.

15 Q. Okay. Sorry. Did you perform these  
16 models yourself?

17 A. Yes, I did.

18 Q. Okay. Going back to Buckeye Exhibit 13,  
19 what, if any, experience have you had with wind  
20 turbine noise since February 2008?

21 A. Quite extensive. I've learned quite a  
22 bit. Much of my understanding at that time was, what  
23 you would say academic, was based upon research, but  
24 after 2008 I started getting out in the field more  
25 doing more background studies, and during late-2008

1 and 2009 I've almost focused entirely on doing  
2 studies of operating wind farms, many times in  
3 association with medical doctors like Nissenbaum and  
4 McMurtry and others who are also looking at the  
5 patients in those areas.

6 Sometimes I get to do the studies, other  
7 times the studies are sent to me by other  
8 consultants.

9 Q. Approximately how many wind farms have  
10 you evaluated the noise effects of or the anticipated  
11 noise effect of?

12 A. How many days have I been on the road?  
13 Probably about five of them in Iowa, four in  
14 Illinois, three in Wisconsin, six in New York, and  
15 three major ones actually in Ontario; it's three  
16 major wind farms but I think they count as six if you  
17 take them by separate names and operators.

18 Q. Okay. Is there any necessity that you  
19 model all of the turbines in an entire wind farm to  
20 evaluate the noise effects of some of them?

21 A. Actually, modeling is what you do before  
22 the wind farm is built. Measurement is what you do  
23 after. And so if you have an operating wind farm,  
24 there's no need to do modeling. And as such I have  
25 focused on measuring real wind turbine noise, not



1 modeling it.

2 Q. I'm referencing a question you were asked  
3 about a wind farm where you testified that you  
4 modeled some of the turbines but not all of them in  
5 that wind farm. Do you recall that testimony?

6 A. Yes. That was McLean County, Invenergy's  
7 I think White Oak project.

8 Q. Why did you model some but not all of the  
9 turbines in that project?

10 A. Because in order to answer the question  
11 of what kind of impact the turbines would have on my  
12 clients, this was a project that had turbines spread  
13 across the whole county, and so we only looked at the  
14 turbines that were near the clients. And after you  
15 get more than a mile away -- basically it would be  
16 the turbines that were within a mile of each one of  
17 these projects. Once you get more than a mile away,  
18 the turbines that are closest are the controlling  
19 turbines for the noise.

20 Q. You were asked some questions about  
21 verification or validation of models predicting wind  
22 turbine noise and in performing a validation after  
23 those turbines were in operation; do you recall that  
24 testimony?

25 A. Yes.

1           Q.    I believe that you were asked to make a  
2 series of assumptions concerning the details of those  
3 farms or those models. Do you recall what  
4 assumptions you were asked to assume?

5           A.    I can -- I know what my assumptions would  
6 be, and that is if you are validating a model, then  
7 the tests that you're doing for that validation have  
8 to be conducted under the same conditions that the  
9 model was assuming, which means you have to be there  
10 on a day when the wind is from the right direction at  
11 the right speed, the turbines are at the right power  
12 output, and you have to know all those details  
13 turbine by turbine in order to say that any deviation  
14 that you find between the model and the measurement  
15 is due to the model's inadequacy and not to changing  
16 conditions, and this is a very difficult task.

17                   It's a research task. It's not something  
18 you can walk out into a field, take a few  
19 measurements, and come back and say your model's  
20 accurate.

21                   The best example of that was a study done  
22 by Ken Kaliski of RSG in which he built four  
23 different models of a wind project that was I believe  
24 on flat farmland in Iowa, when he went to test -- to  
25 validate, to test the wind project, he found that all

1 four of his models gave different answers and none of  
2 them met the measurement conditions. That is what I  
3 would expect an honest answer to be.

4 The idea that you can walk in on any  
5 given day, take a measurement and say, "Well, that's  
6 what my model predicted" is really one of wishful  
7 thinking.

8 For example, in Mars Hill the models  
9 predicted that the sound levels would be under 40 to  
10 43 dB(A) at all homes at the base of the ridge, yet  
11 the one yearlong post -- the one yearlong study of  
12 the turbines when they were operating resulted in a  
13 chart showing that on any given day the turbines  
14 could have been 35 decibels to 52 decibels. So what  
15 good is a model that says 43, for example, or 42, if  
16 on any given day you can go out there and get another  
17 number?

18 If you're validating it, unless you're  
19 very careful, you may have picked a day when the wind  
20 wasn't from the right direction, other conditions  
21 weren't right. Wind turbines are very difficult to  
22 tack down particularly for an outsider because we're  
23 very seldom privy to the turbine's power output on a  
24 minute-by-minute basis, and if I'm conducting a test  
25 of a turbine at a point, I need to know is that

1 particular turbine at 8 meters per second wind speed  
2 at the hub, and how much power is being generated,  
3 and I can't get that data to validate it; that's  
4 considered trade secret.

5 Q. Let me ask you a question that I think  
6 may illustrate the point that I believe you're making  
7 with regard to verifying or validating models. In  
8 this particular case I'd like to ask you about one of  
9 the wind farms that David Hessler mentioned, the one  
10 that was not confidential with regard to his client,  
11 and that is the Noble Bliss New York wind farm. Are  
12 you familiar with that wind farm?

13 A. Yes, I am.

14 Q. How are you familiar with that wind farm?

15 A. I was hired by one of the residents that  
16 lives just about 1,500 feet north of three of the  
17 turbines because of noise problems from the turbines,  
18 and we found that the sound levels in -- and this is  
19 1,500 feet downwind. We found that the sound levels  
20 inside his home from the turbines exceeded 40  
21 decibels, were clearly audible at night, and these --  
22 the values that I came up with were far higher than  
23 what the model showed they would be.

24 Q. Okay. Was that the Hessler Associates  
25 model?

1           A.     That was Hessler & Associates. I don't  
2 know whether it was Dave or whether it was George.

3           Q.     All right. Are you speaking of another  
4 example -- let me ask you to take a look at an  
5 exhibit that was marked previously in this hearing  
6 which is Exhibit 63. This is a report by Clifford  
7 Schneider. And I'd like to ask you a few questions  
8 concerning the verification or validation of the  
9 model discussed in this paper.

10           MR. SETTINERI: Your Honor, may I take a  
11 moment first to have a second to get that exhibit,  
12 please?

13           MR. VAN KLEY: Yes.

14           MR. SETTINERI: That will be followed, I  
15 think, by an objection.

16           ALJ STENMAN: Okay. Go ahead.

17           MR. SETTINERI: Your Honor, we'll object  
18 to any cross-examination on this exhibit. This is  
19 definitely outside the scope of redirect. This, in  
20 fact, I believe was attempted to be moved into  
21 evidence and it was not allowed into evidence.

22           ALJ STENMAN: Response.

23           MR. VAN KLEY: Yes, your Honor, I have  
24 three of them. First of all, the reason it was not  
25 moved into evidence, we chose not to move it into

1 evidence, when Mr. Hessler was testifying is because  
2 Mr. Hessler didn't recognize it. I will ask this  
3 witness whether he recognizes it and whether he  
4 recognizes Mr. Schneider as authoritative in  
5 acoustical engineering and that will provide the  
6 basis for this document if he answers the questions  
7 the correct way.

8           With regard to whether this is within the  
9 scope of cross-examination, it is within the scope of  
10 cross-examination three ways: First of all, it is  
11 directly responsive to the questions that were asked  
12 about validation of models because this document  
13 talks extensively about whether the model that was  
14 used in this paper proved to be valid given the exact  
15 same kind of exercise that Mr. Schneider performed  
16 with regard to validation of the model in this case  
17 that Mr. Settineri asked questions about.

18           Secondly, on two occasions there were  
19 questions or there was another issue brought up in  
20 the cross-examination, for example, the Leventhall  
21 paper has a statement in it which talks about the  
22 stable conditions, which is another topic of this  
23 paper that we will get into shortly here.

24           On question -- paragraph 12 of the  
25 Leventhall paper Mr. Leventhall says that "Low

1 frequency noise . . . may increase to a problem level  
2 under unusual conditions, for example, high wind  
3 speeds which might bring highly turbulent inflow  
4 air." That is also addressed in this paper.

5 And also when Mr. Settineri asked  
6 questions about -- asked Mr. James to make some  
7 assumptions concerning whether or not you could  
8 verify or validate a model based on field  
9 measurements, one of the things that Mr. James  
10 mentioned was that you would have to choose the right  
11 wind speeds; this is yet another issue addressed by  
12 this paper.

13 So there are three ways in which this is  
14 directly within the scope of cross-examination which  
15 addresses his second objection, and his first  
16 objection I believe will be addressed by Mr. James  
17 testifying that he knows and respects the paper and  
18 the author.

19 ALJ STENMAN: Do you have a response?

20 MR. SETTINERI: I think the simple answer  
21 here is that he was not crossed on the contents of  
22 this document. This is simply an attempt to buffer  
23 the record. It was proposed to be admitted into the  
24 record. It was withdrawn after we objected to the  
25 motion to admit it into evidence.

1           The simple answer is he was not crossed  
2 on the contents of this document. It is not a proper  
3 topic for redirect of the witness. This is simply an  
4 attempt to supplement direct testimony in matters  
5 that were not crossed on.

6           MR. VAN KLEY: Your Honor --

7           ALJ STENMAN: Give the Bench a moment.

8           MR. VAN KLEY: Yeah. Sure.

9           ALJ STENMAN: The objection's sustained.  
10 Let's move on.

11           Q. (By Mr. Van Kley) Mr. James, are you  
12 aware of a validation study that was performed on the  
13 Cape Vincent wind farm?

14           A. I am --

15           MR. SETTINERI: Object, your Honor. Same  
16 objection, outside the scope of redirect. The  
17 witness has had the document, has read the document,  
18 now he's being crossed or redirected on the contents  
19 of the document.

20           MR. VAN KLEY: Well, your Honor, again,  
21 I'm not using the document at this point due to the  
22 ruling from the Bench, however, Mr. Settineri spent a  
23 lot of time trying to establish that wind farm models  
24 can be validated by measurements done after the  
25 operation of the wind farm, and I suspect that we



1 may, in fact, hear back from Mr. Hessler, as we did  
2 during his testimony earlier, that he does it all the  
3 time, he did it on five of his wind farms and they  
4 matched perfectly. That's what he said. And that's  
5 obviously what Mr. Settineri's talking about with  
6 respect to his cross-examination.

7 This is an example of an instance  
8 involving the Hessler Associates farm where they  
9 supposedly validated or supposedly modeled the noise  
10 that was supposed to come from this farm and it  
11 turned out that it wasn't --

12 MR. SETTINERI: Your Honor.

13 MR. VAN KLEY: -- very accurate at all.

14 ALJ STENMAN: Let's just stop for a  
15 second. Give the Bench a moment.

16 The objection is sustained.

17 MR. VAN KLEY: Your Honor, in light of  
18 the last two objections that are sustained I would  
19 like to make a proffer of this evidence which I  
20 believe I'm entitled to do to protect the record. I  
21 would like to ask the witness several questions under  
22 proffer to develop the -- to show what information it  
23 was that we were trying to develop.

24 ALJ STENMAN: Go ahead.

25 MR. VAN KLEY: This will begin my

1 proffer, then.

2 - - -

3 PROFFER

4 By Mr. Van Kley:

5 Q. Mr. James, referring you to Exhibit 63,  
6 are you familiar with that document?

7 A. Yes, I am.

8 Q. Is this document a document that is  
9 commonly used by acoustic engineers?

10 A. Well, this document was first presented  
11 this summer, Cliff Schneider's work on this was  
12 prompted by Dr. Paul Schomer who was doing a study at  
13 the same time and Cliff Schneider basically followed  
14 up on that study.

15 The study was peer reviewed by both  
16 Schomer and by George Kamperman prior to being  
17 submitted, and I think in that sense it is an  
18 authoritative paper on its particular topic.

19 Q. Do you know who Clifford Schneider is?

20 A. Yes, I do.

21 Q. And is he a respected member of the  
22 acoustic engineering field?

23 A. Cliff Schneider worked with the New York  
24 Fish and Wildlife group as an acoustical expert and  
25 dealt with both land-based acoustics and wilderness

1 areas and also in underwater acoustics.

2 MR. SETTINERI: Your Honors, we would  
3 just like to note that rather than taking up hearing  
4 time to do an oral examination here, that the proffer  
5 could simply be submitted in writing.

6 MR. VAN KLEY: Your Honor, these are  
7 questions and answers that are being asked of the  
8 witness. I suppose that we could write out some more  
9 essentially what's direct, but that seems to be a  
10 rather cumbersome way to do it.

11 MR. SETTINERI: Your Honor, obviously we  
12 won't have cross on that, so . . .

13 ALJ SEE: Go ahead. Continue with your  
14 proffer.

15 MR. VAN KLEY: Thank you, your Honor.

16 Q. (By Mr. Van Kley) Mr. James, are you  
17 familiar with the Cape Vincent, New York, wind farms  
18 or wind farm that is referenced in this study?

19 A. I'm familiar after reading the papers  
20 that have been written about it, yes.

21 Q. Now, going back to the question that  
22 Mr. Settineri was asking concerning validation of  
23 modeling that is done prior to the operation of a  
24 wind farm with the modeling being done before the  
25 wind farm operates, the validation being done after

1 the wind farm is in operation, is there anything in  
2 this paper that you would take note of that would  
3 illustrate whether or not models such as those  
4 performed by Mr. Hessler have been shown by  
5 validations to be accurate?

6 A. Well, the big problem with validating  
7 wind turbine models is that they -- the models tend  
8 to be, and that's not true with Dave Hessler's model,  
9 but as a general rule models are done for wind speeds  
10 of 8 meters per second at a 10-meter anemometer,  
11 which would give you about a 10- to 12-meter per  
12 second wind speed at the hub so that the wind turbine  
13 is at the highest noise output.

14 That condition can't be tested on the  
15 ground except during a temperature inversion. If we  
16 have unstable air, typical daytime conditions, you  
17 cannot take valid acoustic data if the wind speed at  
18 the microphone is over 5 meters per second or roughly  
19 11 miles an hour, and to get an 8-meter per second  
20 condition which represents the model means that  
21 you're going to be over that at the microphone and  
22 can't take data.

23 The work-around for that in outdoor  
24 testing is that there are numerous times when during  
25 the evening after the sun quits heating the ground we

1 have a temperature inversion, essentially a cool  
2 layer of air forms right at the surface of the ground  
3 allowing the high level jet streams to move along at  
4 a high rate while we have calm air at the surface of  
5 the ground. It also is an ideal condition for  
6 background testing.

7 And so what he identifies in this paper  
8 is that when a person's trying to test a wind  
9 turbine, the proper time to do it is under these  
10 inversion conditions we found occurs 67 percent of  
11 the time during the summer season.

12 This is something that I found very  
13 common and I also try to do my testing late evening  
14 and nighttime because it's the -- it is the period  
15 where there is no ambient sounds from the local  
16 community to mask wind turbines, there's no leaf  
17 rustle, and yet the turbines are operating at or  
18 above their nominal power point. And so that is --  
19 so what he identified here are the conditions under  
20 which those validations need to be done.

21 MR. VAN KLEY: Thank you. Your Honor  
22 that's the end of my proffer.

23 ALJ STENMAN: Okay.

24 - - -

25 FURTHER REDIRECT EXAMINATION

1 By Mr. Van Kley:

2 Q. In Mr. Settineri's questions asking you  
3 to make some assumptions concerning the model that  
4 has been performed and the results of that model he  
5 asked you to assume that all of the Buckeye Wind  
6 turbines are point sources. Do you recall that?

7 A. I remember that, yes.

8 Q. Now, do you believe that would be an  
9 accurate assumption in this case?

10 A. This is a layout that has mixed point and  
11 line source modes, and based upon the statements in  
12 the report, and I believe also in Mr. Hessler's  
13 testimony, he modeled all of them as point sources  
14 which would lead to an underestimate of the sounds  
15 around the areas that have line sources.

16 Q. What's the basis of your statement that  
17 you believe some of the turbines are line sources?

18 A. Well, this is Acoustics 101. Like I  
19 said, when I wrote my first model back in the  
20 early-1970s, I was working off of a textbook by Leo  
21 Beranek that clearly identified what the conditions  
22 are for point source modeling versus line source  
23 modeling, so this isn't new rocket science or  
24 anything.

25 In the NASA study, both the 1990 study

1 and in the 1988 study, they focus on how to do  
2 modeling of wind turbines, and they make it very  
3 clear that when the wind turbines are in a row, that  
4 they need to be modeled as line sources where the  
5 sound decays at 3 decibels per doubling of distance  
6 from the sites of the turbines rather than point  
7 sources, which would have the sound decaying at 6  
8 decibels per doubling of distance, which means by the  
9 time we get out to a thousand feet or so there's a  
10 major difference, a very significant difference  
11 between the two models' predictions.

12 Q. Are you familiar with a paper by NASA  
13 concerning the subject area?

14 A. Yes, I am. I consider the NASA study to  
15 be a, I would call it an authoritative reference.  
16 Authoritative in that Hubbard and Shepherd both were  
17 highly respected acoustical engineers, but more in  
18 the sense that NASA funded their studies for over ten  
19 years on wind turbines to such an extent that they  
20 were able to construct for their tests turbines that  
21 are only now becoming commercially available.

22 So their test -- their documents back  
23 from 1990 actually are very applicable to the types  
24 of turbines that are now known as the modern  
25 industrial upwind turbine.

1           Q.    And does that include turbines that are  
2 as large as ones being proposed by Buckeye Wind?

3           A.    I believe that they had turbines as high  
4 as 3 megawatts, possibly higher.

5           Q.    Moving on to a different topic, you were  
6 asked some questions about your background noise  
7 measurements, and on one occasion I believe you  
8 mentioned that your measurement at one point was  
9 about 11 minutes; is that right?

10          A.    Yes.

11          Q.    Is there a requirement to obtain a valid  
12 background noise measurement that you measure for  
13 long periods of time?

14          A.    No.   Actually, the requirement is the  
15 reverse.   The requirement is that you pick a time  
16 using your experience and instruments where you can  
17 identify no local sounds, no wind rustle, no insects,  
18 no other things that are seasonal or that would not  
19 be present in other conditions, and that typically  
20 means you're limited to very short samples where you  
21 can get that kind of quiet background.

22          Q.    You were asked some questions about some  
23 bird noise that was --

24          A.    Yes.

25          Q.    -- detected at one of your microphones.



1           A.    Morning chorus.

2           Q.    Yes.  Did that affect the validity of  
3 your test?

4           A.    I didn't use that part of the data.  ANSI  
5 standards basically are written around the  
6 acknowledgement that there are contaminating factors  
7 and require that you remove insect noise, wind, leaf  
8 rustle, and things like morning chorus from data when  
9 doing a background test.

10          Q.    How do you know that it was the birds  
11 that were to blame?

12          A.    Experience.  I've watched that graph many  
13 times and you know when dawn happens if you have a  
14 sound level meter out at night.

15          Q.    You were asked some questions about grain  
16 dryers.

17          A.    Yes.

18          Q.    How does the noise from grain dryers  
19 compare to the noise from wind turbines?

20          A.    As a general rule, grain dryers are large  
21 blowers, large fans, they tend to have a different  
22 acoustical characteristic and nowhere near as much  
23 low frequency sound.  But at the same time they're  
24 seasonal and they -- in this particular case I'm not  
25 aware of any grain dryers that were near any of the

1 residents for whom I was working.

2 Q. Are you familiar with the term "amplitude  
3 modelation"?

4 A. Modulation, yes.

5 Q. Modulation.

6 A. Sorry about that.

7 Q. Would you tell me what that is?

8 A. Amplitude modulation is when a sound that  
9 you're listening to varies in loudness. Amplitude,  
10 being just a technical term for loudness, and  
11 modulation means varying.

12 For a wind turbine amplitude modulation  
13 has two different aspects, one is the audible  
14 amplitude modulation that we refer to as blade swish,  
15 and in the older downwind style turbines there used  
16 to be two forms of audible amplitude modulation, one  
17 was caused by the slow wind at the base of the tower  
18 as the blade would go by, we'd get a thump, but even  
19 with a modern upwind turbines we have amplitude  
20 modulation, which is referred to as blade swish, and  
21 that occurs on a typical turbine rotating about 20  
22 rpm at the hub, you get a swish about once a second.

23 Now, Vandenberg studies in 2004, he  
24 identifies it as an Oh, wow, here's a new noise  
25 source. But if you read the NASA paper by Shepherd

1 and Hubbard, they identify in 1990 that that is going  
2 to be one of the problems with nighttime noise is  
3 that blade swish will increase the likelihood of  
4 sleep disturbance, so it shouldn't come as a surprise  
5 to anyone.

6           However, due to the, let's say  
7 less-than-clear wording of Dr. Leventhall, again, I  
8 don't want to say "doctor," but Professor Leventhall,  
9 he made a statement in 2005 I believe which I trace  
10 back to being a verbal statement to someone with the  
11 British Wind Energy Association in which he said wind  
12 turbines do not produce significant low  
13 frequency noise.

14           A lot of people have interpreted this to  
15 mean that wind turbines don't produce low frequency  
16 noise when the real meaning of it is that, in his  
17 opinion, the low frequency noise that is produced is  
18 not high enough in the amplitude to cause an adverse  
19 health effect. It's his position that if a sound  
20 cannot be heard, if it can't be perceived through  
21 your auditory mechanism, that it can't hurt you. And  
22 this is something a lot of us grew up in acoustics  
23 believing.

24           I talked to George Kamperman, and he got  
25 his degree in acoustics in 1948, and he said that was

1 being taught to him at that time. I remember it from  
2 my classes in the 1970s. And I've heard it since  
3 then by a lot of other people.

4 But the truth of the matter is that in  
5 the 1980s when Leventhall was hired by Chuck Ebbing  
6 and Warren Blazier to work on behalf of ASHRAE, the  
7 American Society of Heating, Refrigeration, and  
8 Air-conditioning Engineers, to investigate sick  
9 buildings, the buildings where low frequency sounds  
10 were causing problems, that it became very clear that  
11 even though the low frequencies were not audible, the  
12 people in those buildings did not hear a low  
13 frequency sound, but when exposed to dynamically  
14 modulated low frequency sound, they had effects of  
15 cognitive dysfunction, increased anger between  
16 members, reduced work output, et cetera.

17 And of course the focus of these studies  
18 was on why is work output reduced. They never went  
19 into looking at the health effects.

20 Since those low frequency sounds were  
21 amplitude modulated, Dr. Leventhall has tried to make  
22 statements that confuse the amplitude modulation of  
23 the audible blade swish with the amplitude modulation  
24 of the low frequency sounds, which we will argue  
25 whether they're audible or not.

1           There is about 10 percent of the people  
2 for whom those sounds are audible, and Leventhall  
3 focuses on the median, and we're looking at the  
4 10 percent most vulnerable in the Kamperman-James  
5 paper.

6           Q.    Okay.  Now with regard to amplitude  
7 modulation, does the -- is the noise from grain bins  
8 characterized by a substantial amount of amplitude  
9 modulation?

10          A.    As a general rule, no.  It's a steady  
11 sound very similar to the blowers you have in this  
12 room.

13          Q.    Does that make a difference with respect  
14 to how a person notices the noise?

15          A.    Well, anytime you have sound that is  
16 modulated, it rises and falls, it becomes more  
17 annoying, more likely to wake you up.  Probably the  
18 best example of this is the dripping water faucet at  
19 night where you have a water faucet that may drip all  
20 day long, you don't notice it, but when you're laying  
21 in bed at night the drip, drip, drip sounds much more  
22 annoying because of the quiet of the bedroom.

23                The studies have indicated that people --  
24 that the worst-case situation for nighttime  
25 disturbance is amplitude modulated sound where the

1 amplitude modulations happen anywhere from one to  
2 four times a second, and wind turbine blade swish is  
3 right in that modulation area.

4           One of the studies that I recently did,  
5 when you plot the low frequency sounds from 5 hertz  
6 up to 50 hertz on a spectrogram, which is a way of  
7 looking at a colored picture of the sound, you see  
8 sharp vertical stripes in the lowest frequencies from  
9 5 to 50 hertz that are 20 to 25 decibels higher than  
10 the quiet periods in between each of those happening  
11 anywhere from once a second to up to eight times a  
12 second.

13           And it is believed by some of the cycle  
14 statisticians that what is happening is that the  
15 brain is hearing the amplitude modulation and  
16 thinking it's speech, and that makes that sound more  
17 likely to wake you.

18           There is something about that particular  
19 characteristic of the sound that even though it may  
20 be audible only to 10 percent of the people, for  
21 those people who do hear it or feel it, it is very  
22 much a nighttime sleep disturber, and that is in  
23 character with other examples I've had of the  
24 amplitude modulated sound at night.

25           People live near a forging shop or near a

1 stamping shop or near any other place where you have  
2 periodic loud noise find that more disturbing than  
3 living near a place that has a large cooling system  
4 outside that's steady.

5 MR. SETTINERI: Your Honors, we would  
6 move to strike that entire answer. It was a monology  
7 that morphed into health effects, I think vibro  
8 impact, health effects, et cetera. These answers are  
9 not responsive to the questions that are posed.

10 MR. VAN KLEY: Your Honor, I find it -- I  
11 find this objection ironic given how long we sat  
12 through Dr. Mundt's by-and-large nonresponsive  
13 answers which we had the courtesy of listening to. I  
14 think that his answer was responsive to the question  
15 in this case.

16 ALJ STENMAN: Objection's overruled.

17 Q. Mr. James, does the World Health  
18 Organization have anything to say in its publication  
19 concerning how to handle amplitude modulation?

20 A. They don't address it in the publication.  
21 They assume that it's an average level, but as a  
22 general rule we know that amplitude modulation  
23 increases the sleep -- the likelihood of sleep  
24 disturbance.

25 Q. Have you personally done any measurements

1 of wind turbine noise to determine whether it  
2 included low frequency noise?

3 A. Yes, I have.

4 Q. And would you explain the results of  
5 those studies?

6 A. The results of the studies show that wind  
7 turbines in the wild, if I can use that term, are  
8 very similar to wind turbines under test laboratory  
9 conditions like IEC 61400, and that is that the bulk  
10 of the energy is in the lowest frequencies.

11 You have to understand that a wind  
12 turbine is essentially a large fan. It is like a fan  
13 in reverse. Instead of putting electricity in to  
14 move air, we're taking energy out of the air and  
15 generating electricity. But the fundamental  
16 aerodynamics of the blades is that they follow the  
17 same rules as a fan, and we know from studying fans  
18 of all types that the dominant energy for any fan is  
19 at what is known as the blade passage frequency.

20 For a wind turbine the blade passage  
21 frequency is -- for a wind turbine rotating at 20 rpm  
22 with three blades the blade passage frequency is 1  
23 hertz, and if we look at -- there are very few  
24 studies that show that lower spectrum for wind  
25 turbines because it is very, very difficult to



1 measure.

2           We're beginning to come into areas where  
3 the microphones have to be physically hundreds of  
4 meters long. What they do is set up microphones  
5 built out of rubber hoses around machines like  
6 turbines, but when they are properly tested, they  
7 show that the concentration of energy begins at the  
8 blade passage frequency and drops off at somewhere  
9 between 4 and 5 decibels per octave as we increase.

10           So it is safe to say that by their very  
11 nature wind turbines are low frequency generating  
12 machines, although they do have that audible blade  
13 swish and aerodynamic noise that comes in between 200  
14 and 800 hertz.

15           Q. Do you have Exhibit Buckeye Wind 16 in  
16 front of you? This is the Geoff Leventhall paper or  
17 comments.

18           A. Yes.

19           Q. Look at the first page of that document,  
20 please, paragraph 2 where it talks about  
21 Mr. Leventhall's statement that your figure 1  
22 provides the basis of your paper and it appears to  
23 use a maximum wind turbine sound from a large  
24 2.5-megawatt turbine at some setbacks and background  
25 levels. Do you see that?

1           A.    Yes, I do.

2           Q.    Okay.  Do you have a response to that  
3           allegation?

4           A.    Well, I don't understand why he would  
5           find that unusual.  Delta, one of the consulting  
6           firms in The Netherlands, did a study of 41 different  
7           modern turbines and plotted their data from all the  
8           different turbines normalized so that you could see  
9           whether they were similar in spectrum, and the  
10          results of that study showed that there's only about  
11          a 6-decibel difference between the low frequency in  
12          any given make and model of turbine once you account  
13          for differences in power generation and other things  
14          that would modify that.

15                We find a striking similarity between all  
16          of the modern upwind turbines primarily because the  
17          blade designs are very similar on many of them, and  
18          right now the blades are the primary cause of both  
19          low frequency sounds and the amplitude modulated  
20          audible sounds.

21          Q.    I'd like to refer you to paragraph 12 in  
22          the same document, specifically the second sentence  
23          which reads "Low frequency noise from wind turbines  
24          is not normally a problem, but may increase to  
25          problem level under unusual conditions, for example,

1 for high wind speeds which might bring highly  
2 turbulent inflow air." Do you see that?

3 A. Yes, I do.

4 Q. Do you have a response to that?

5 A. Yes. He's trying to make little of a  
6 problem that is routine. One of the things they  
7 point out in the NASA paper is there are essentially  
8 three different modes of noise generation from blade  
9 turbines, one of them, inflow turbulence, is  
10 responsible for the lowest frequency sounds, and in  
11 the NASA paper they state that that is the -- one  
12 problem that can cause -- I'll call it that is the  
13 one type of noise that can cause the problems inside  
14 homes because those low frequencies will resonate  
15 inside the home and actually be louder inside than  
16 outside.

17 So his statement that low frequency noise  
18 is not normally a problem I take serious issue with.  
19 Normally -- it normally is a problem. And under  
20 unusual conditions, and I have been present in homes  
21 when unusual conditions happen, the low frequency  
22 becomes such a problem that you can feel your own  
23 chest cavity beating with the low frequency sounds as  
24 your body resonates.

25 Q. What are those unusual conditions that

1 you are referencing?

2           A.    High winds.   Anytime you have turbulence,  
3 high winds will increase the likelihood of  
4 turbulence, but the example I think that can explain  
5 it is when you have a storm front moving in, a lot of  
6 times you'll see the ground winds begin to not be  
7 let's say from the southwest to the northwest, you  
8 begin to get swirls that move in other directions.

9                   During inflow turbulences the wind that  
10 is coming into the turbine, that isn't coming in a  
11 nice smooth area, so when you have a storm and you  
12 have vertical flow difference, you have horizontal  
13 flow differences, that is a worst case for the  
14 blades.

15                   There's no way they can -- the blades  
16 could be adjusted to be at the right angle for  
17 minimum noise and absolute power -- and maximum power  
18 generation that addresses the, you know, the entire  
19 plane of rotation.

20                   Under that condition the blades begin to  
21 produce not swishes, but thumps.   And this can  
22 proceed to the point where the thumps actually become  
23 physically palpable.   Some experience it in the chest  
24 as I did, others have experienced it as eyeball  
25 wiggle, ocular resonance.   Some people say it feels

1 like the inside of their head is vibrating.

2 But in all cases it's the low frequencies  
3 under the worst-case conditions of usually a winter  
4 storm, a summer storm, or something else that has the  
5 wind moving in anything other than a nice even flow  
6 over the wind turbines that causes it.

7 Q. Do these unusual conditions include  
8 those -- well, let me strike that.

9 Referring you to paragraphs 13 through 20  
10 of that same document, which is headed up by the  
11 title "Undue Emphasis on Difference Between C- and  
12 A-Weighting." Do you see that?

13 A. Yes, I do.

14 Q. Okay. Now, was there anything that you  
15 recall in your direct testimony in the Buckeye Wind  
16 case, that is this proceeding, in which you raised  
17 that issue?

18 A. I don't think we were looking at that  
19 issue here.

20 Q. Okay.

21 A. We were focused on the audible sounds.

22 Q. All right. In the same vein I'd like you  
23 to go to the exhibit that has your letter that you  
24 sent to the Ohio Power Siting Board which is marked  
25 as Exhibit 17, that is Buckeye Wind Exhibit 17.

1           A.    Okay.

2           Q.    Did you recommend any or all of the  
3 recommendations of Exhibit 17 in your direct  
4 testimony in the Buckeye Wind case?

5           A.    I don't think we looked at the qualifier  
6 for low frequency sound limit.

7           Q.    And where do you find that in the  
8 document?

9           A.    That's item No. 2 under the Proposed Wind  
10 Turbine Siting Sound Limits attached to the letter to  
11 the Public Utility Commission.

12          Q.    All right.  Is there anything else in  
13 this document that you did not recommend in the  
14 Buckeye Wind power case?

15          A.    Well, by, I guess by reference or  
16 similarity to the other problems, we did not state  
17 that there should be a not-to-exceed limit of 35, but  
18 it happens that the background levels plus the 5 dB  
19 comes up to numbers just below that, so that would be  
20 something that would have been met and I would --

21               THE REPORTER:  I'm sorry, "and I would"?

22               THE WITNESS:  I would have talked about  
23 it had the background levels plus 5 been higher than  
24 35.  The 35 decibels is an absolute not-to-exceed  
25 even if the background levels were higher.

1           Q.    Let's go to that WHO paper that was  
2 discussed in your cross as Buckeye Wind Exhibit 18.

3           A.    Okay.

4           Q.    Let's go to the page that has the Roman  
5 numeral XVII in the upper right-hand corner.

6           A.    Okay.

7           Q.    All right.  You had some discussion with  
8 Mr. Settineri concerning levels below 30 decibels,  
9 levels between 30 and 40 decibels, and levels of  
10 noise over 40 decibels.  I believe that you have  
11 explained the noise levels under 30 and the noise  
12 levels over 40 sufficiently for my purposes, so let  
13 me talk to you briefly about those noise levels  
14 between 30 and 40 decibels.

15                Now, I think that we need to clarify what  
16 the status of this noise is according to the WHO  
17 publications that you have reviewed and are familiar  
18 with including Buckeye Wind Exhibit 18.  So could you  
19 explain that for us, please?

20           A.    Let me see, 18.

21                Essentially, what the World Health  
22 Organization is saying is that based upon the new  
23 medical studies that they'd done between I believe  
24 2003 and 2007, is that they were able to identify an  
25 absolute safe level and a level at which they knew

1 adverse health effects would occur. But in this  
2 interim --

3 Q. What level was that, please?

4 A. Anything over 40 is adverse health  
5 effects.

6 Q. Okay.

7 A. In the middle range, between 30 and 40,  
8 they talk about that there are noticeable effects on  
9 sleep and more vulnerable people may be more  
10 susceptible, but what they don't talk about in here  
11 is the nature of the -- the very quiet nature of the  
12 rural communities and the sound levels that fluctuate  
13 over time, the blade swish amplitude modulation which  
14 leads to a high level of annoyance and also to sleep  
15 disturbance.

16 Most of the rural communities are homes  
17 where people sleep with the windows open, and there's  
18 very little difference in the noise level outside  
19 their homes and inside.

20 Q. According to the WHO are the noise levels  
21 between 30 and 40 dB established to not have health  
22 effects?

23 A. No. No. It's indeterminate as to what  
24 the health effects are and which groups will have  
25 those health effects. The only level that we know is



1 safe is 30 and under.

2 Q. You were asked a series of questions  
3 about the health effects listed on one of the pages  
4 of Buckeye Wind Exhibit 18.

5 A. That's page XII, Executive Summary.

6 Q. Right, Roman numeral XII, Executive  
7 Summary.

8 A. Correct.

9 Q. And you were asked to compare what was  
10 said in this executive summary in the 2009 WHO  
11 document to health effects you listed in answer 25 of  
12 your direct testimony which you took from the 2007  
13 WHO document. If you could get answer 25 in front of  
14 you and keep your finger on page XII of Buckeye Wind  
15 Exhibit 18, I want to ask you a series of questions  
16 about that.

17 A. Okay.

18 Q. All right. In answer 25 of your direct  
19 testimony you stated that "Sleep is a biological  
20 necessity, and disturbed sleep is associated with a  
21 number of adverse impacts on health." Do you see  
22 that?

23 A. That is correct.

24 Q. Now, was that statement -- did that  
25 statement also appear in the 2009 WHO summary?

1           A.    Yes, it did.

2           Q.    Then you also said that -- I think we  
3 already dealt with your second bullet point. The  
4 third bullet point in answer 25 says "There's  
5 sufficient evidence that night noise exposure causes  
6 self-reported sleep disturbance, increase in medicine  
7 use, increase in body movements, and (environmental)  
8 insomnia." Was that statement also included in the  
9 2009 WHO summary?

10          A.    I believe it is. It appears to be the  
11 same.

12          Q.    In your answer you stated that "While  
13 noise-induced sleep disturbance is viewed as a health  
14 problem in itself (environmental insomnia) it also  
15 leads to further consequences for health and  
16 well-being." Was that statement also included in the  
17 2009 WHO summary?

18          A.    Yes, it is.

19          Q.    And then you said that "There is limited  
20 evidence that disturbed sleep causes fatigue,  
21 accidents and reduced performance." Was that  
22 included in the 2009 summary?

23          A.    Yes, it is.

24          Q.    And then, lastly, you said "There is  
25 little evidence that noise at night causes clinical

1 conditions such as cardiovascular illness, depression  
2 and other mental illness." Was that also repeated in  
3 the 2009 summary?

4 A. In 2009 they added the words "causes  
5 hormone level changes."

6 Q. All right. Very good.

7 MR. VAN KLEY: I have no further  
8 questions, your Honor.

9 ALJ STENMAN: Okay. Recross,  
10 Mr. Weithman, anything?

11 MR. WEITHMAN: No.

12 ALJ STENMAN: Ms. Napier.

13 MS. NAPIER: No.

14 ALJ STENMAN: Mr. Brown.

15 MR. BROWN: No.

16 ALJ STENMAN: Mr. Margard.

17 MR. MARGARD: No thank you, your Honor.

18 ALJ STENMAN: Mr. Settineri.

19 MR. SETTINERI: Just a few.

20 ALJ STENMAN: Okay.

21 - - -

22 RE CROSS-EXAMINATION

23 By Mr. Settineri:

24 Q. Mr. James, on redirect you testified, if  
25 I recall, that -- you discussed the difficulty of

1 field verifying modeling and one of the reasons that  
2 you said it's difficult to be out there is a certain  
3 condition happening, correct?

4 A. That's correct.

5 Q. Isn't it true that you have no clients  
6 that are willing to pay for you to stay out in the  
7 field waiting for that occurrence of those  
8 conditions?

9 A. I'm sure that's true of most consultants,  
10 including the people who validated the models.

11 Q. Well, I guess my question was --

12 A. I said it's true, yes.

13 Q. Okay. Thank you.

14 A. Clients always have limited resources.  
15 That's why I said it would be a research project with  
16 the proper funding for doing it.

17 Q. You also testified on redirect regarding  
18 I believe some recent experience in Ontario.

19 A. Yes.

20 Q. Did part of that experience involve  
21 submitting a report just recently, in July of 2009,  
22 to the Ministry of the Environment in Ontario?

23 A. That was one of the aspects of it.

24 Q. Okay. And isn't it true that the  
25 recommendations in that report were not adopted by

1 the --

2 A. They didn't say anything about my report.  
3 They adopted the recommendations they originally  
4 wanted in spite of numerous papers showing they  
5 should change them.

6 ALJ STENMAN: Please try not to talk over  
7 each other.

8 Q. And isn't it true that you believe that  
9 the decision by that body was political to not accept  
10 your report and recommendations?

11 MR. VAN KLEY: Objection. He just  
12 testified that they did not reject his report and  
13 recommendations.

14 ALJ STENMAN: Just hold on.

15 The objection's sustained. Let's move  
16 on.

17 Q. (By Mr. Settineri) You were also asked a  
18 series of questions regarding the document prepared  
19 by Professor Leventhall critiquing your wind siting  
20 guidelines, correct?

21 A. That's correct.

22 Q. And part of those questions related to  
23 paragraphs 13 and 20, correct?

24 A. That is correct.

25 Q. And if I recall, you stated that your

1 direct testimony did not address the difference  
2 between C- and A-weighting, and that your testimony  
3 today focused on audible noise, correct?

4 A. The direct testimony focused on the  
5 audible aspects of wind turbine noise, yes.

6 Q. Okay. So to make sure we're clear on  
7 this, then, your direct testimony submitted today  
8 relates solely to the audible noise from turbines.

9 A. That -- well, I haven't looked at my  
10 transcript, but we did talk about C minus A,  
11 et cetera. I think it was you that brought it up in  
12 the question, and I said that Professor Leventhall's  
13 interpretation of our C minus A criteria was based on  
14 a flawed understanding. So we're not using C minus A  
15 in the context that he thinks we're using it.

16 MR. SETTINERI: No further questions,  
17 your Honors.

18 ALJ STENMAN: All right. Mr. James,  
19 you're excused.

20 MR. VAN KLEY: Thank you, your Honor. We  
21 would move into evidence Exhibits 63, 31A, 31, and  
22 32. Exhibit 33 is a partial copy of the NASA  
23 document which in its entirety has already been  
24 admitted into evidence, so we won't offer that  
25 partial document.

1           ALJ STENMAN:   Okay.   Are there any  
2   objections to UNU Exhibit 63, 31A, 31, or 32?

3           MR. SETTINERI:   Your Honors, I'm sorry,  
4   but could I have those exhibits read back again,  
5   please?

6           ALJ STENMAN:   It was 63, 31A, 31, and 32.

7           MS. NAPIER:   Just for clarification, can  
8   you say what those documents are?

9           MR. VAN KLEY:   Yeah, sure.   Sixty-three  
10   is the Clifford Schneider paper; 31A is Mr. James's  
11   written direct testimony; 31 is Mr. James' résumé;  
12   and 32 is Mr. James' article entitled "'How To' Guide  
13   to Siting Wind Turbines to Prevent Health Risks from  
14   Sound."

15          MR. SETTINERI:   Your Honors, obviously  
16   we'll object to UNU Exhibit 63.   That had previously  
17   been rejected, it was subject to redirect on proffer,  
18   I think a ruling from the Bench sustained our  
19   objection as to the use of that document.   So beyond  
20   the witness -- there's been no foundation laid to  
21   that, the witness has not identified it, it is  
22   simply, again -- and also highly prejudicial.

23          ALJ SEE:   Is the only objection from the  
24   company as to UNU Exhibit 63?

25          MR. SETTINERI:   Yes, that is correct,

1 your Honor.

2 ALJ SEE: Okay.

3 MR. SETTINERI: And also subject to the  
4 Bench's ruling regarding the striking of the  
5 testimony in Exhibit 31A.

6 ALJ STENMAN: We've already ruled on  
7 that.

8 MR. SETTINERI: Yes.

9 ALJ STENMAN: With respect to the  
10 admission of Exhibit 63, 31A, 31, and 32, the Bench  
11 will rule on those in the morning.

12 At this point let's go off the record  
13 briefly. We're going to go right back on.

14 (Discussion off the record.)

15 ALJ STENMAN: Let's go back on the  
16 record.

17 Mr. Weithman, go ahead and call a  
18 witness.

19 MR. SETTINERI: Your Honor, I'm sorry to  
20 interrupt, but I believe we didn't get a chance to  
21 move our exhibits.

22 ALJ STENMAN: That's right, you also have  
23 exhibits.

24 MR. SETTINERI: Your Honors, at this time  
25 we would move to admit Buckeye Exhibits 13, 15, I'm



1 sorry, 14 and 15, Buckeye 16, Buckeye Exhibit 17, and  
2 Buckeye Exhibit 18.

3 ALJ STENMAN: Are there any objections to  
4 the admission of those exhibits at this time?

5 MR. VAN KLEY: Yes, your Honor. The only  
6 exhibit that we would object to is Exhibit 16. For a  
7 document of this nature to be admissible it has to be  
8 qualified under one of two scenarios. First, the  
9 document has to be -- either has to be offered by  
10 somebody who has been testified -- by the witness  
11 who's questioned about that document, as somebody who  
12 is authoritative in that field of expertise, or, in  
13 the alternative, the witness who is being questioned  
14 about the document has to acknowledge that the paper  
15 itself is authoritative.

16 In this particular case Mr. James  
17 emphatically stated that neither one was the case, so  
18 this document lacks any foundation for admission at  
19 this point in time.

20 ALJ STENMAN: All right. Ruling on the  
21 admission of Buckeye's exhibits will also be taken up  
22 first thing in the morning.

23 Mr. Weithman.

24 MR. WEITHMAN: Ms. Kendrick.

25 ALJ STENMAN: Please raise your right

1 hand.

2 (Witness sworn.)

3 ALJ STENMAN: Thank you.

4 (EXHIBIT MARKED FOR IDENTIFICATION.)

5 - - -

6 MELANIE KENDRICK

7 being first duly sworn, as prescribed by law, was  
8 examined and testified as follows:

9 DIRECT EXAMINATION

10 By Mr. Weithman:

11 Q. Ms. Kendrick, I just handed you what's  
12 numbered Exhibit 1 for the city of Urbana. Do you  
13 have that in front of you?

14 A. Yes.

15 Q. And is that your direct testimony that  
16 was taken and answers to the same?

17 A. Yes, it is.

18 Q. Have you reviewed that?

19 A. Yes, I have.

20 Q. And are those the same answers you would  
21 give today if you were asked these same questions?

22 A. Yes.

23 Q. And, Ms. Kendrick, is there any additions  
24 you want to add to this or changes that you want to  
25 make to this?

1           A.    On question 10, I have come across a  
2 study done by the Ohio Department of Transportation  
3 Office of Aviation dated January 2006 --

4           Q.    Is that since your -- since this?

5           A.    Yes.

6                   -- that does have some dollar figures  
7 attached to economic impacts in the state of Ohio  
8 with Grimes Municipal Airfield delineated with  
9 specific dollar numbers. If anybody would care for  
10 me to expand on that, I will.

11          Q.    Other than that.

12          A.    No.

13          Q.    Thank you.

14               MR. WEITHMAN: Your Honor, she is open  
15 for cross.

16               ALJ STENMAN: All right. Before we go  
17 forward just try to use the microphone and speak up  
18 so everybody can hear you.

19               THE WITNESS: Sure.

20               ALJ STENMAN: Ms. Napier.

21               MS. NAPIER: Just a couple of questions  
22 and, unfortunately, our mic has died. I have a  
23 pretty loud voice.

24               ALJ SEE: Okay.

25                   - - -

CROSS-EXAMINATION

By Ms. Napier:

Q. Ms. Kendrick, in your question, question 7, there's been some recent development at Grimes Field for its future, and you answered that. Is that where the growth of Urbana is occurring at this time?

A. Which type of growth? If you're referring to residential, our residential growth is heading east. We have manufacturing growth to the west, we have retail to the east, and we have some industrial as well I'm going to say northwest, and also recreational to the north and to the west.

MS. NAPIER: Thank you. I have no further questions.

ALJ STENMAN: Mr. Brown.

MR. BROWN: No questions, your Honor.

ALJ STENMAN: Mr. Walker.

MR. WALKER: Thank you, your Honor.

- - -

CROSS-EXAMINATION

By Mr. Walker:

Q. Good evening, Ms. Kendrick.

A. Hello.

Q. Do your job responsibilities include planning for the city of Urbana?

1           A.    Yes.

2           Q.    Okay.  Are you working on some sort of  
3 new master plan or other plan relating to the growth  
4 of Urbana?

5           A.    Yes, we're currently working on a  
6 comprehensive land use plan that includes an economic  
7 development strategy, hopefully we'll have that done  
8 in the next year --

9           Q.    Okay.

10          A.    -- and adopted by council.

11          Q.    You just mentioned a minute ago that  
12 there is some development occurring to the east of  
13 Urbana.  Does the plan that you just mentioned  
14 contemplate future development to the east of Urbana?

15          A.    Yes.  The existing plan that we are  
16 working under, which is the 1993 Urbana and Champaign  
17 County Comprehensive Plan, predicted that growth.  We  
18 are still seeing an influx of residents from Delaware  
19 County and Franklin County trying to get out of the  
20 big city life but still have half an hour commute to  
21 the big city for their professional positions.  And  
22 we are still seeing that happen and we still are  
23 predicting that to continue to grow.

24          Q.    Okay.  What kind of development do you  
25 contemplate to the east of Urbana in the future?

1           A.    The majority of it will be low density or  
2 medium density residential.

3           Q.    Does the plan as it exists now, and I  
4 understand it's in a draft phase --

5           A.    Yes.

6           Q.    -- does it contemplate future residential  
7 development into the area proposed for the Buckeye  
8 Wind Project?

9           A.    We are looking at a growth ring to end  
10 around Three Mile Road which I believe is close to  
11 the Union Township line.

12          Q.    Okay.

13               MR. WALKER:   Your Honor, I'd like to mark  
14 Exhibit UNU Exhibit 66.

15               (EXHIBIT MARKED FOR IDENTIFICATION.)

16          Q.    Ms. Kendrick, I've just handed you a  
17 document that's been labeled UNU Exhibit 66. I'll  
18 represent to you that this is a map that came out of  
19 Exhibit I from the Buckeye Wind application, but I'm  
20 providing it to you really for purposes of  
21 illustration.

22          A.    Sure.

23          Q.    A minute ago I believe you said that you  
24 contemplate residential development out to Three Mile  
25 Road?

1           A.    Yes.

2           Q.    Are you able to identify Three Mile Road  
3 on that map?

4           A.    Yes, I am.

5           Q.    Do you have a pen up where you are?

6           A.    Yeah.  I can actually give you the  
7 turbines that are closest if you would like me to do  
8 it that way.

9           Q.    I was wondering if you would mark the  
10 anticipated boundary of future residential  
11 development as currently contemplated in the draft  
12 plan.

13                   (Discussion off the record.)

14           MR. WALKER:  Beg your pardon.  We will  
15 have to remark this as Exhibit 67.

16                   (EXHIBIT RE-MARKED FOR IDENTIFICATION.)

17           MR. WALKER:  Your Honor, we have  
18 relabeled this exhibit Exhibit 67.  For the benefit  
19 of the Bench and other counsel I'd like to bring it  
20 around so that everybody can see what Ms. Kendrick  
21 has marked.

22           ALJ STENMAN:  Please do.

23                   For clarification of the record, while  
24 he's showing counsel, can I get the witness to  
25 verbally describe what's been marked if possible?

1           THE WITNESS: Sure. If I can see a map  
2 again, please.

3           Based upon an annexation survey that I  
4 personally sent out back in 2005 asking landowners at  
5 the time what they would be -- whether or not they'd  
6 be interested in annexing into the community, and  
7 also based upon the, I want to call it a sewer study  
8 that was done by the county for our sanitary sewer  
9 needs and for future EPA issues that we might see the  
10 soil and the types of leaching fields that are going  
11 to be needed to accommodate residential growth, we  
12 developed a growth ring that basically encompasses  
13 the city and extends to State Route 296. There is a  
14 small development off of Three Mile Road, and the  
15 name is escaping me, I want to say Adell Drive, but  
16 I'm not certain.

17          ALJ STENMAN: You might be able, for  
18 clarity, just be able to describe where it goes along  
19 the turbines even.

20          THE WITNESS: Sure. You'll see a cluster  
21 off Dugan Road between, would be on the east side of  
22 Dugan, the west side of 814, turbine numbers 19, 24,  
23 26, 30, 35, 40, 43, 27, 31, 36, 29, 34, 38, 42, 45,  
24 and 46. And as you head south crossing Route 36,  
25 crossing 29, to the west side of the turbines



1 numbered 50, 58, 60, 61. It looks like it goes  
2 through the access road for turbine 57 and would be  
3 on the east side of turbine 62, 63, 66.

4 ALJ STENMAN: Thank you.

5 THE WITNESS: Okay.

6 Q. (By Mr. Walker) Ms. Kendrick, on Exhibit  
7 67 that you marked up, if I recall, there are some  
8 notations on there as well and, if I recall, they're  
9 B-2, R-1, and R-2; is that correct?

10 A. Yes. Yes, those are zoning  
11 classifications.

12 Q. Would you please explain what each of  
13 those are?

14 A. Sure. B-2 is a general business district  
15 which usually contains retail commercial office, not  
16 necessarily industrial; R-2 is medium density  
17 residential, it allows for duplexes, and I believe  
18 it's eight units per acre on the residential density;  
19 R-1 -- I've got to get my densities right here. R-1  
20 is our low density residential, I believe it's four  
21 or six units an acre, I can't remember a zoning code  
22 off the top of my head, but the lot sizes on R-1 I  
23 believe are around 10,000 square feet to give you a  
24 general idea of the lot sizes.

25 Q. Okay. Thank you.

1 MR. WALKER: No further questions.

2 ALJ STENMAN: All right. Mr. Margard.

3 MR. MARGARD: I don't have any questions,  
4 thank you, your Honor.

5 ALJ STENMAN: Mr. Petricoff.

6 MR. PETRICOFF: Yes, thank you.

7 - - -

8 CROSS-EXAMINATION

9 By Mr. Petricoff:

10 Q. Good afternoon.

11 A. Hello.

12 Q. In looking at this map and, obviously,  
13 I'm looking at it for the first time, there's a gray  
14 shaded area that is labeled "Urbana." Is that the  
15 current city corporate limits?

16 A. The small square that you see right  
17 underneath the letter "b," that's changed shape, and  
18 the intersection at Dugan Road, all of the  
19 right-of-way is annexed into the city at this time.  
20 Other than that it looks pretty accurate.

21 Q. So, basically, when we talk about Dugan  
22 Road, I see where the word "Urbana" is written.

23 A. Yes.

24 Q. Then there's a road that's right past the  
25 "a."

1           A.    Yes.   That's Dugan.

2           Q.    That's Dugan Road.

3           A.    Yes.

4           Q.    Basically, if I just sort of hatched in  
5 the area between what is gray now and Dugan Road, I'd  
6 have a pretty good view of what is now currently the  
7 city of Urbana.

8           A.    Yes.

9           Q.    So for this plan to go into effect Urbana  
10 would have to basically annex all of the property out  
11 to the B-2 and then out to the R-1 lines.

12          A.    Uh-huh, yes.

13          Q.    Okay.   That would be roughly doubling or  
14 tripling the size of Urbana, or more?

15          A.    I've not done a land calculation to know  
16 how much area is in there.

17          Q.    But visually we're talking about a  
18 many-fold increase, not just a percentage increase.

19          A.    Probably, yes.

20          Q.    And would the people in this area, would  
21 they have to vote to agree to this annexation?

22          A.    It depends on the situation.   There are  
23 several types of annexations that are legal in the  
24 state of Ohio, one of them is a 51 percent or more  
25 ownership in the area.   If 51 percent or more of the

1 owners between the existing corporation line and the  
2 end of the annexation territory agree to sign a  
3 petition to come into the city, the owners that are  
4 not on the petition are going to be forced into the  
5 city.

6 Q. So at a minimum we can say that the  
7 majority of the people out here would have to agree  
8 to it before this annexation would take place.

9 A. Yes.

10 Q. All right. You called this a draft plan.  
11 I assume this has not been approved.

12 A. Not at this time. Not the one I'm  
13 working on.

14 Q. Okay. And the one you're looking at is  
15 the one where you drew the B-2 and R-1 axes.

16 A. Yes.

17 Q. Or I guess radii.

18 And who would have to approve that plan?

19 A. The city council would adopt it.

20 Q. Okay. Now, is it fair to say that the  
21 purpose of your testimony today was to inform the  
22 Power Siting Board of the importance of the Grimes  
23 airfield?

24 A. That was one of the reasons why I was  
25 asked to testify, yes.

1           Q.    You're not here as an aviation expert to  
2 talk about --

3           A.    Oh, no.  I'm a nonpilot.

4           Q.    And, likewise, you're not here to tell  
5 the Power Siting Board where to place their turbines.

6           A.    No.  That's out in the township; it's  
7 under state governance.

8           Q.    Does the city own Grimes Field at this  
9 time?

10          A.    Yes.

11          Q.    And is there an airport manager for the  
12 Grimes Field?

13          A.    Yes.

14          Q.    Is he or she a city employee?

15          A.    She is a contract employee.

16          Q.    And she is paid by the city?

17          A.    Yes.

18          Q.    Are there other employees on the field  
19 that are paid by the city?

20          A.    There's a few part-time.

21          Q.    And does the city also do operation and  
22 maintenance for the field?

23          A.    Are you talking about like the grass  
24 mowing and the --

25          Q.    Grass mowing, snow removal --

1 A. Yes.

2 Q. -- fence painting.

3 A. Yes.

4 Q. Leaf raking.

5 A. No leaves.

6 Q. Okay. They do that as well. What's the  
7 budget to the city for all of these services?

8 A. I can tell you what's been spent.

9 Q. Okay.

10 A. And it's in my testimony. If you'll  
11 refer back to question 10.

12 Q. Well, in 10 it says, and maybe you can  
13 clarify this, are you referring to the part where it  
14 says "In the past three years alone, approximately  
15 765,000 in public money has been invested onsite"?

16 A. No, I'm referring to the \$550,000 in fuel  
17 sale revenues and \$180,000 in rents.

18 Q. Those are revenues, right?

19 A. Yes.

20 Q. We were talking about costs, and it's  
21 late, and I apologize if I misspoke, but what do we  
22 have in the way of costs for the contract --

23 A. I'm sorry. I would have to refer you  
24 back to the financial report at the city building. I  
25 don't have that in front of me.

1 Q. Order of magnitude, though.

2 A. It makes the -- the airport does make  
3 money with those revenues.

4 Q. Now, when you say "makes money," we have  
5 \$550,000 in fuel sales revenue.

6 A. Yes.

7 Q. Now, I assume you have to pay for the  
8 fuel.

9 A. Yes.

10 Q. So the city has a margin on the fuel that  
11 it sells.

12 A. Yes.

13 Q. Do you know roughly what that margin is?  
14 Of the 550,000, how much is the city taking?

15 A. No, I don't know. I know it fluctuates  
16 with the market.

17 Q. And 180,000, I assume that's for like  
18 renting out the restaurant?

19 A. No; the T-hangars and the restaurant.

20 Q. The T-hangars and the restaurant. So all  
21 together that --

22 A. Yes.

23 Q. So basically you've got -- your testimony  
24 is that roughly the airport, more or less, keeps up  
25 with its own expenses.

1           A.    Yes.

2           Q.    You mention in here that there are, you  
3 know, we talk about you mentioned that you had  
4 rentals for the hangars. Are there any take-off or  
5 landing fees?

6           A.    I don't think so, but I'm not sure.

7           Q.    Any museum fees?

8           A.    Not to my knowledge. It's free.

9           Q.    Is CareFlight charged anything to be  
10 located there?

11          A.    They do have a leasing fee, but I don't  
12 know what that is.

13          Q.    And when you have the balloon festival or  
14 the MERFI, is the city paid for that?

15          A.    No, those are self-operating or  
16 self-supporting operations there. They are -- MERFI  
17 is a nonprofit recognized by the IRS. The balloon  
18 fest is a community group that about four or five  
19 years ago got together and decide to have one and  
20 they pay for the advertisements, they pay for the  
21 security, they pay for all their expenses. It's  
22 not --

23          Q.    But they're not charged a rental for the  
24 use of the --

25          A.    No.



1           Q.    -- airport property.  And the same is  
2 true for the MERFI.

3           A.    Correct.

4           Q.    Are there any regularly scheduled  
5 business flights in and out of Grimes Field?

6           A.    They happen, to my knowledge, on a daily  
7 basis.

8           Q.    But they're not regularly scheduled.

9           A.    It's not a controlled airfield,  
10 therefore, you do not have to file a flight pattern  
11 as far as I know -- what I understand as a layperson,  
12 as a nonpilot, but it is used on a daily basis by our  
13 local businesses.

14          Q.    I'd like to refer you to question 8.  You  
15 say "Approximately 2 flights per hour during normal  
16 operations."  What are normal operations?

17          A.    I would say outside of having an event  
18 like the MERFI fly-in would be an example of a normal  
19 operation, but the MERFI fly-in, we had approximately  
20 400 aircraft in a matter of two days on the field.

21          Q.    Now, I see later down in the answer you  
22 say "Approximately 80 to 90 percent of the pilots are  
23 visual pilots and recreational users."

24          A.    Yes.

25          Q.    Do they have weather limits on flying?

1           A.    I don't know.  I'm not a pilot.

2           Q.    So in your answer before when you said  
3 "normal operation," you weren't considering days when  
4 like clouds have socked in under 700 feet.

5           A.    No; outside of special events that we do  
6 host.

7           Q.    Let's talk about some of the special  
8 events.  Continuing on 8, if you turn to the next  
9 page we see the Ohio Hi-Point Career Center --

10          A.    Yes.

11          Q.    -- you talked about that.  Do the  
12 students take their lessons at the field?

13          A.    Yes.

14          Q.    And then you talked about the balloon  
15 festival, you've had that four years in a row now.  
16 Are the balloons tethered?

17          A.    Tethered meaning tied down?

18          Q.    Well, right, a rope that would keep them  
19 in place.

20          A.    Until they're launched.  It's a three-day  
21 event.  It's a competition.  They have launchings  
22 that -- they go up and they shoot for targets out in  
23 the fields.

24          Q.    Have the balloons been able to fly all  
25 four years or did you have some weather problems?

1           A.    We had some weather problems the past two  
2 years.

3           Q.    So the balloons --

4           A.    Not for all three days, but I do believe  
5 one day in each year in the past two years.

6           Q.    So one day each year of the last two  
7 years you weren't able to fly.

8           A.    Yes.

9           Q.    Or you were able to fly?

10          A.    Were not able to fly, if I remember the  
11 weather right.

12          Q.    Okay. And the last thing on question 10,  
13 you talked about you got federal grants. Were the  
14 federal grants just for the runway expansion?

15          A.    They've also been for the purchase of  
16 avigation easements and additional land.

17          Q.    So land, navigation equipment, and --

18          A.    No. Avigation easements. Not  
19 navigation, but avigation easements.

20          Q.    Avigation. Thank you.

21          A.    There might have been -- prior to me  
22 coming onto the city there might have been some money  
23 from the federal government for the AWA system. I'm  
24 not sure how the GPS system was funded either.

25          Q.    Okay. And today the expansion to 4,400

1 feet is complete?

2 A. Yes.

3 Q. And you're planning on another  
4 1,100 feet?

5 A. Yes.

6 Q. Okay. And at this point, your knowledge,  
7 would the construction of any of these turbines  
8 prohibit those 1,100 feet from being added?

9 A. It would not prohibit the 1,100 feet from  
10 being added. It might change our approaches and  
11 might shut down the field.

12 Q. Just the 1,100 feet, as far as you know,  
13 that wouldn't be affected by these turbines.

14 A. I just answered that, I thought.

15 Q. I believe you have.

16 MR. PETRICOFF: I have no further  
17 questions. Thank you.

18 ALJ STENMAN: Redirect, Mr. Weithman?

19 - - -

20 REDIRECT EXAMINATION

21 By Mr. Weithman:

22 Q. Just one basic question. The document  
23 that was handed to you that says UNU 67, do you see  
24 that document?

25 A. Yes.

1           Q.    Down in the left hand corner, do you see,  
2 what does it say down there as to whose map this is?

3           A.    Buckeye Wind.

4           Q.    Buckeye Wind Project?

5           A.    Yes.

6           Q.    And that's the map that you were asked to  
7 describe where Urbana was from.

8           A.    Yes.

9           MR. WEITHMAN:  Thank you.  I have no  
10 further questions.

11           ALJ STENMAN:  Just for clarity of the  
12 record, that was UNU Exhibit 67 and the figure is  
13 Buckeye Wind Project Figure 2:  Proposed Project  
14 Layout.

15           Based on Mr. Weithman's redirect, any  
16 recross, Ms. Napier?

17           MS. NAPIER:  I just had a clarification.  
18 Just a question.  It probably isn't anything that has  
19 to do with him, but on Mr. Petricoff's cross.  And if  
20 I may ask it.

21                               - - -

22                               RE CROSS-EXAMINATION

23           By Ms. Napier:

24           Q.    You had mentioned CareFlight and I just  
25 want to, you know, that seemed to be used as a

1 generic term, but they're a company that's based at  
2 Grimes airport, correct?

3 A. Yes.

4 Q. They're not like Life Flight. That is a  
5 generic term for that, Life Flight, correct?

6 A. No; they have a hangar and they are based  
7 there. We're their northern base for Miami Valley  
8 Hospital.

9 Q. And they don't solely fly within  
10 Champaign County; is that correct?

11 A. No. To my knowledge, they have a minimum  
12 of a 150-mile radius and they also travel up to  
13 Detroit on some emergency runs as well, as far as  
14 Detroit.

15 MS. NAPIER: That's all the  
16 clarification.

17 ALJ STENMAN: Mr. Brown.

18 MR. BROWN: No questions.

19 ALJ STENMAN: Mr. Walker.

20 MR. WALKER: Nothing further, your Honor.

21 ALJ STENMAN: Mr. Margard.

22 MR. MARGARD: No thank you, your Honor.

23 ALJ STENMAN: Mr. Petricoff.

24 MR. PETRICOFF: No further questions,  
25 your Honor.

1           ALJ STENMAN: I have a clarification  
2 question. You mentioned easements that were not  
3 navigation easements, they were --

4           THE WITNESS: Avigation easements.

5           ALJ STENMAN: Avigation easements. What  
6 is that?

7           THE WITNESS: It's the purchase of the  
8 airspace for a runway protection zone or to make sure  
9 that you have a clear fly zone for landings and  
10 take-offs. Mr. Petricoff was asking me about  
11 navigation equipment. It was for easements.

12          ALJ SEE: CareFlight --

13          THE WITNESS: Yes.

14          ALJ SEE: -- is different from MedFlight?

15          THE WITNESS: Yes.

16          ALJ STENMAN: Now you can go.

17          MR. WEITHMAN: Your Honor, I would now  
18 move her testimony into evidence.

19          ALJ STENMAN: Any objections?

20          MR. PETRICOFF: No objection, your Honor.

21          ALJ STENMAN: In that case, city of  
22 Urbana Exhibit 1 will be entered onto the record.

23               (EXHIBIT ADMITTED INTO EVIDENCE.)

24          MR. WALKER: Your Honor, we also move UNU  
25 Exhibit 67 into evidence.

1 ALJ STENMAN: Any objections?

2 MR. RESNIK: No objection, your Honor.

3 ALJ STENMAN: In that case, UNU Exhibit  
4 67 will also be admitted to the record.

5 (EXHIBIT ADMITTED INTO EVIDENCE.)

6 ALJ STENMAN: With that I believe we are  
7 finished for the evening, and we will reconvene  
8 tomorrow morning at 9 o'clock. Let's go off the  
9 record.

10 (The hearing adjourned at 5:43 p.m.)

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CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Tuesday, November 17, 2009, and carefully compared with my original stenographic notes.

Maria DiPaolo Jones, Registered  
Diplomate Reporter and CRR and  
Notary Public in and for the  
State of Ohio.

My commission expires June 19, 2011.

(MDJ-3470)

- - -

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