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1
               BEFORE THE OHIO POWER SITING BOARD
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     In the Matter of the :
    Application of Champaign:
    Wind LLC for a
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    Certificate to Construct : Case No. 12-0160-EL-BGN
    a Wind-Powered Electric :
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    Generating Facility in
    Champaign County, Ohio. :
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                          PROCEEDINGS
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    before Ms. Mandy Willey Chiles and Mr. Jonathan
    Tauber, Administrative Law Judges, at the Public
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    Utilities Commission of Ohio, 180 East Broad Street,
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    Room 11-A, Columbus, Ohio, called at 9:00 a.m. on
13
    Friday, November 16, 2012.
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                           VOLUME VI
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1 Friday Morning Session, 2 November 16, 2012. 3 4 ALJ CHILES: Go on the record. 5 The Ohio Power Siting Board has set for 6 hearing at this time and place, Case No. 12-0160-EL-BGN, being In the Matter of the 7 8 Application of Champaign Wind LLC for a Certificate 9 to Construct a Wind-Powered Electric Generating Facility in Champaign County, Ohio. 10 11 We will take appearances beginning with 12 the company. 13 MR. PETRICOFF: Your Honor, on behalf of 14 Champaign Wind, Howard Petricoff, Mike Settineri, 15 Stephen Howard, and Miranda Leppla from the law firm 16 of Vorys Sater. 17 MR. VAN KLEY: Good morning. My name is Jack Van Kley. Chris Walker is my co-counsel. We 18 19 represent Union Neighbors United, Bob and Diane 20 McConnell, and Julia Johnson. 21 ALJ CHILES: Thank you. 22 MS. NAPIER: My name is Jane Napier. 23 am assistant prosecutor representing Champaign County 24 and the townships of Goshen, Union, and Urbana, along 25 with Nick Selvaggio, the Champaign County Prosecuting

1 Attorney.

2 ALJ CHILES: Thank you.

MS. PARCELS: For the city of Urbana,

Breanne Parcels, with Law Director Gil Weithman of Urbana.

ALJ CHILES: Mr. Margard.

MR. MARGARD: Good morning, your Honor.

On behalf of the Power Siting Board Staff, Mike

DeWine, Attorney General, by Stephen Reilly, Werner

10 Margard, Devin Parram, and Summer Plantz and Sarah

11 Anderson.

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ALJ CHILES: Before we begin with testimony this morning, I understand the county would like to put something on the record.

MR. SELVAGGIO: Judge, let me first say the Court has been very good to the county and, I think, all the parties addressing earlier through conference telephone calls scheduling issues, and we very much appreciated that, and the Court indicated they wanted to abide by the scheduling process.

And my comments are not intended to critique the Board's decision yesterday with regard to Witness Shokouhi, rather the county wants to put on record more the lack of the position of the Applicant in taking a position on the county's

request.

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And by that I mean this. The record should reflect that Engineer Shokouhi was scheduled to come in either on the 14th or 15th, certain through the course of discussion, the night before the 15th, the county indicated that Engineer Shokouhi would be here sometime after 10:45, and we believed that his testimony would be relatively brief. He did appear at the conclusion of Witness McCann yesterday at about 1:15, 1:30.

The county had indicated off the record that we wanted to place Mr. Shokouhi, who was in the audience, we wanted to place him out of the witness order, so we spent about seven to ten minutes off record discussing the issue, and then the Court granted the staff's request to have another attorney present, so the Court took a 10- to 15-minute recess, at which time it was my position, although I never expressed it to the Court, that I felt we could have put Engineer Shokouhi in.

The reason I want to make this a matter of record is because in the Staff's Report of Investigation, it indicates on page 47 that "The Applicant further indicated its intention to work with the Champaign County engineer to develop a road

use agreement or other similar document."

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And so what that sentence does, it places as a matter of record the Applicant's willingness to accommodate the engineer, and it sets the tone, at least publicly, that the Applicant will do what it can do to assist this county official.

We had an incident occur yesterday where the Applicant was silent on the county's position to take a witness out of order. It was an agreement that we believe that we had with Union Neighbors United. Mr. Shokouhi, as an elected official, came from out of town to testify.

I'm not critiquing the Court's position, but I do believe it's relevant to the position of the tone of the staff report that this indication of willingness to work, when put to the test in a matter of a procedural hearing, wasn't done. That's why the county wanted to make that of record

ALJ TAUBER: Does anyone wish to respond?

MR. PETRICOFF: Yes, your Honor. On

behalf of the Applicant, first of all, Witness

Shokouhi was taken out of order when we did the

original schedule because this was the day he was

available. He was given a date certain, and

basically the Court was going to put him on that day.

That date was reserved for him.

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When the company asked to basically not only have a date certain but a time certain to put him in a slot between 10:30 when he could get here and 5:30 when he wanted to leave, I would note, for the record, the Applicant did not object. It would be fine to us. Last night we went to 7:30. We could have gone longer, I assume, if he wanted to be on that day.

ALJ TAUBER: Any other parties wish to respond?

MR. SELVAGGIO: May I say one other thing that I forgot?

ALJ TAUBER: Very briefly.

MR. SELVAGGIO: The reason I didn't raise it yesterday at the conclusion of the recess, there were a number of citizens here, and I didn't want to bring attention to it at that point so that's why we waited until today.

ALJ TAUBER: Thank you.

On Wednesday evening, November 14, we determined the witness order for the 15th. We established Julia Johnson, Mike McCann, and Rick James as date-certain witnesses would go first, and then we would get Witness Shokouhi following that.

That's what was emphasized to all the parties.

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Yesterday afternoon we were informed at 1:00 o'clock, right before Mr. James was going to go on, the parties decided to unilaterally change the witness order. The Bench was not informed of this.

Let me go back and clarify that. The parties -- I'm not accusing the parties of unilaterally making any decision, but the Bench was not aware of any change in the witness schedule. And further, we kept in order, as has been consistent throughout this entire proceeding, date-certain witnesses.

Parties may not agree with what the Bench does, but all parties were on notice of what witness order we were going in, and all parties were informed before the start of this proceeding that date-certain witnesses would go first, and there was a possibility that we would be going late into some evenings if we needed to accommodate all the witnesses

With that, we will take your comments into the record, but we will move on this morning MR. SELVAGGIO: Thank you.

ALJ TAUBER: Thank you, Mr. Selvaggio.

ALJ CHILES: Thank you. Let's begin with testimony. I believe we have Milo Schaffner first.

MR. VAN KLEY: Yes, your Honor. We call
Milo Schaffner to the stand.

(EXHIBIT MARKED FOR IDENTIFICATION.)

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MILO SCHAFFNER

being first duly sworn, as hereinafter certified, deposes and says as follows:

DIRECT EXAMINATION

9 By Mr. Van Kley:

- Q. Would you state your name for the record, please?
 - A. Milo Schaffner.
 - Q. All right. Mr. Schaffner, I have handed you what has been marked as UNU Exhibit 21. Do you recognize that as a copy of your direct testimony?
 - A. Yes, I do.
 - Q. Okay. Do you have any changes that you would like to make to that testimony?
 - A. No, I do not.
 - Q. All right. If I were going to ask you the same questions today as are contained in your direct testimony, would your answers be the same?
 - A. Yes, they would.
 - Q. Okay. Thank you.
 - MR. VAN KLEY: At this time, your Honor,

Mr. Schaffner is available to answer questions.

2.2

ALJ CHILES: Thank you, Mr. Van Kley.

We do have two outstanding motions to strike that we will handle at this time. The first motion to strike is on page 1 of Mr. Schaffner's testimony. It involves answer 4, and it involves everything after the word "yes" in answer 4, so that would extend onto page 2, the first two lines of page 2. I will let the parties briefly summarize their arguments on the motion to strike.

Ms. Leppla.

MS. LEPPLA: Champaign Wind believes this is hearsay. We are only requesting that the Court strike the parts of the testimony that are hearsay, which discuss complaints of individuals who are unnamed, and so we would ask the Court strike that portion of his testimony.

ALJ CHILES: Thank you.

Mr. Van Kley.

MR. VAN KLEY: Thank you, your Honor.

Certainly the information in

Mr. Schaffner's testimony is more specific and is no less hearsay than most of the stuff we're seeing in the Applicant's application, as well as the testimony of Michael Speerschneider and Jerry Poore, and

Mr. Shears, Chris Shears.

2.2

Much of the testimony is based on the complaints they have heard, Mr. Hessler's too, for that matter. They are all basing their testimony on complaints they have heard or relative lack of complaints they might not have heard, and this is the same type of evidence, except this is more specific because this witness has actually heard the complaints himself as opposed to all those other witnesses who may have heard or not heard of complaints through the grapevine somehow. It's just as valid and has just as much validity as all the other testimony that's been admitted so far.

ALJ CHILES: Thank you, Mr. Van Kley.

The motion to strike will be granted in the entirety of answer 4, which extends from page 1 onto the first two lines of page 2.

The next motion we have to strike is on page 3. It involves answer 10, and it is only the last sentence of answer 10, so it's the sentence beginning "A relative" and ending with "that house."

Ms. Leppla, would you like to summarize any argument on that?

MS. LEPPLA: Yes, your Honor. We believe this statement is further hearsay and is asserted for

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the truth of the matter. There is no exception that
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    would allow it in, your Honor.
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                 ALJ CHILES: Mr. Van Kley.
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                 MR. VAN KLEY: Your Honor, the same
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    argument pretty much.
                 ALJ CHILES: Thank you. I appreciate
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    that.
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                 The motion to strike is granted as to the
    very last sentence of answer 10 that falls on
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    page 3 of Mr. Schaffner's testimony. It's the
    sentence beginning with "A relative" and ends with
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12
     "that house." The remainder of the answer is
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    stricken.
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                 We will begin with cross-examination.
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                 Ms. Parcels.
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                 MS. PARCELS: Thank you, your Honors.
    will pass out what is marked City Exhibit 7.
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                 ALJ CHILES: It will be so marked.
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19
                 (EXHIBIT MARKED FOR IDENTIFICATION.)
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                 MR. VAN KLEY: While she's doing this,
21
    your Honor, for clarification, did you also strike
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    the word "yes" in answer 4, or did you leave that in
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    there?
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                 ALJ CHILES: Give me a moment here.
25
                 Just to clarify, I did not intend to
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- 1 strike the word "yes" in answer 4 on page 1 of
- 2 Mr. Schaffner's testimony.
- MR. VAN KLEY: Okay. Thank you, your
- 4 Honor.

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5 ALJ CHILES: Ms. Parcels.

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CROSS-EXAMINATION

By Ms. Parcels:

- 9 Q. Mr. Schaffner, have you ever had an occasion to visit Champaign County, Ohio?
 - A. Yes, I have.
- 12 Q. How recently?
- A. I believe that's probably been this spring, so six months ago.
- Q. Okay. How far apart would you estimate

 Van Wert County from where you are a resident and

 Champaign County where you are in terms of geographic

 distance?
- A. Say about 90 miles, 80-some to 90 mile.
 - Q. How long does it take to drive from Van Wert to get to Champaign County?
 - A. There's no direct route that was good, so
 I think it took about an hour and a half, an hour and
 45 minutes, something like that.
 - Q. Would you describe Van Wert County as

northwest of Champaign County?

A. Yes.

- Q. And you indicate that you are a township trustee. I want to go into that briefly. As a township trustee, are you responsible for any sort of firefighting, for emergency medical service to the town?
 - A. Yes, they are.
- Q. How is that funded, through a levy or income tax?
 - A. That's funded through a levy.
- Q. Do you have a township fire department or a contract with nearby municipality?
 - A. We contract with municipalities.
 - Q. And what municipalities are those?
- A. We have Scott Village, we have Grover Hill Village, and then Middle Point Village.
- Q. Okay. And those villages, if you know, are those volunteer departments, or are they paid professional departments?
- A. They're paid professionals -- no, well, they're volunteer. And I left out we do have a contract with Van Wert City where they are professionals. They are a full-time firefighting unit.

Q. Okay. Just wanted to clarify that. You note that you have received complaints -- I'm not going to go into the specifics of what was said during those complaints, but I do have a question.

In your capacity as a township trustee, have people made any complaints to you about interference with cell phone communications since the turbines started operating in October?

A. Yes.

2.2

MS. LEPPLA: Objection, your Honor. I think details of the complaints have been stricken.

ALJ TAUBER: Ms. Parcels.

MS. PARCELS: The question actually refers to those types of complaints.

ALJ CHILES: Please read the question back to me, please.

(Record read.)

ALJ CHILES: The objection is overruled. We did not strike the word "yes" about the answer receiving complaints so we will allow limited questions.

- Q. (By Ms. Parcels) Again, I'm not going into details of who said what. What I want to know, was that a topic of complaint?
 - A. Yes.

- Q. You indicated you had received complaints about cell phone reception?
 - A. Yes.

- Q. How about citizen band or CB communications, any complaints?
 - A. No.
- Q. What about any other sort of radio communications, any sort of complaints since the turbines started operating?
 - A. No radio, but TV.
- Q. In your response to question 5, you talk a little bit about some of the road damage you have observed in Hoaglin Township in Van Wert County. You indicate that potholes and soft shoulders and that sort of thing create an unpleasant bumpy ride; is that correct?
 - A. Yes, it does.
- Q. As a township trustee, are you responsible for maintenance of township roads?
 - A. Yes, we are.
- Q. Can you explain to me from a safety perspective, as a township trustee, why roads need to be maintained, other than general discomfort when driving? Is it a safety issue?
 - A. Definitely. I smile because even our

county engineer complained about the bumps on the roads from the wind turbine. They had patched the roads where they laid cables through the roads and then put patches on them.

What happens is we have wagons that have a lot of grain on them. Those axles can break, and if you get those wagons to bouncing, once they start bouncing, you've got to slow way down to stop the bounce. It's just like a basketball, and as that continues, that gets very dangerous. You could lose control.

You know, combines, the rear wheels, they steer in the rear. The rear wheels hit these types of things, the front of the combine is heavy because of the grain head or the corn head. When those wheels hit something and bounce, they actually come up in the air. That means you've lost control of that vehicle. It's very dangerous, yes.

- Q. Okay. So have you observed those types of occasions before with the grain wagon?
 - A. Yes.
 - Q. Is it almost losing control, so to speak?
- A. Yes.

2.2

- Q. As it's being towed?
- A. Yes. The worst is with my combine. I

almost hit the top of the cab with my head when I hit one. So, you know, I have firsthand experience of that.

2.2

- Q. Now, what about you were speaking of agricultural equipment, traffic on those roads. What about, I guess, what I would term normal passenger vehicular traffic, cars, trucks, that sort of thing?
- A. Yes, it can be hazardous to them, too, if they do not slow down for them. They wind up hitting them. And my fear is the younger drivers. Us older people, we drive slow anyways, but the younger ones don't, or don't normally pay attention to that, and that can happen.

If we do not maintain our roads, Hoaglin Township has paid for repair of vehicles, front end, things like that when they hit a pothole. We're responsible, and we have to pay for it.

- Q. So your experience as trustee has been that the township -- is the township insured to pay for things like that, for vehicular damage caused on township roads?
- A. Yeah. But so far I'm not sure we've turned any of it in to insurance because 5, 6 hundred dollars fixes it.
 - Q. You just pay it?

- A. Yes.
- Q. As a township board?
- A. Yes.

2.2

- Q. Are there three members on the township board?
 - A. Yes, there are.
- Q. The three of you agree to just pay it when there is damage to a vehicle created by a certain road condition?
- A. Yes, if it is not too expensive. If it causes an accident or something, we definitely use our insurance.
- Q. I think in your testimony you've indicated you've been a township trustee. How long have you been a township trustee?
- A. Ten years. This will be starting -- finishing my 11th year.
- Q. And you indicated if there was an accident or something more serious than a couple hundred dollars in damage, you would then submit that to insurance if it was caused by a road condition?
 - A. Yes.
- Q. Can you estimate in your ten years as a trustee how many times that's happened?
 - A. With me, it hasn't happened any. The

vehicles that they had repaired were before I came on the board.

Q. Okay. I want to direct your attention to your direct testimony, questions 8 and 9, about your observations there at the turbine that had a blade failure in Paulding County which you traveled to and observed.

Directing your attention to City Exhibit 7, what does that appear to be to you, the entire exhibit?

- A. It appears to be the turbine that I went and observed up -- it's close to Payne.
- Q. I'm not talking about that section of that exhibit. I'm talking about the entire document there. Is that the front page of the Urbana Daily Citizen?
 - A. Oh, yes.
 - Q. Can you tell me the date on that?
- A. June 2, 2012.

2.2

- Q. Okay. Was that before or after you traveled to Paulding County?
 - A. That was after.
- Q. Okay. And what is the headline on an article there related to the turbine in Paulding County that you opened?

- A. "Ohio wind turbine blade found to be defective."
- Q. Okay. Now, is that photo there with the headline an accurate representation of what you observed in Paulding County in April of this year?
 - A. Yes, it is.

- Q. And down at the bottom there's another photo. How would you describe that photo?
- A. That photo is what I call the debris field.
- Q. Okay. In answer to question 11 of your direct testimony, you indicate that you observed debris out close to the public road at a distance of 1,561 feet.
 - A. Correct.
- Q. Okay. Let me back up.
 - Did you say you went to the Paulding

 County wind farm a couple days after the incident happened?
 - A. Yes.
 - Q. Okay. So do you know if there was actually any debris in the road when you went and observed, or was it along the roadside?
 - A. It was along the roadside.
 - Q. You don't know if it had been moved since

the --

2.2

- A. No, I do not.
- Q. As a township trustee, are you responsible for keeping the township roadways clear of obstructions?
 - A. Yes, we are.
- Q. How do you generally learn about obstructions?
- A. Normally after a storm, the three of us trustees will divide the township up and drive the roads, but if we haven't been there yet, normally citizens will call us or the sheriff's department or the highway patrol will contact us.
- Q. Is that true with things like trees, or do you also get calls about wildlife, broken mailboxes, that sort of thing?
- A. We haven't hit any mailboxes lately, so no mailboxes, but trees, stop signs. We had quite a few stop signs that the wind turbine people knocked down and didn't tell us, so we had to put them back up. Highway patrol will call us if a stop sign is down.
- Q. Okay. When you went to observe the Paulding wind farm, again, I want to be clear, you didn't observe any debris in the roadway, but you did

observe debris alongside the roadway?

A. Correct.

- Q. And you calculated the distance from the turbine, but could you tell me from what you observed how close to the road the debris was?
- A. Approximately 30 feet off the edge of the roadway.
- Q. Did it appear to you that it had been moved off the roadway as you would do as a trustee if you were clearing an obstruction?
- A. Yes. It was all picked up off what I would call the road right-of-way. It was all gone.
- Q. So when you calculated that distance, just based on your observation that it had been moved, it could have landed in the roadway?
- A. Pardon, would you state that again, please?
- Q. You observed that the debris had been moved?
 - A. No, I do not know that it had been moved.
- Q. Okay. But you said it was approximately 30 feet in from the roadway when you arrived?
- A. Correct.
 - Q. In Paulding County?
- 25 A. Yes.

1304 1 MS. PARCELS: Nothing further, your 2 Honors. Thank you. 3 ALJ CHILES: Thank you. 4 Ms. Napier. 5 6 CROSS-EXAMINATION 7 By Ms. Napier: 8 Q. Mr. Schaffner, my name is Jane Napier. I 9 met you just before the meeting. I represent 10 Champaign County and the townships of Goshen, Union, and Urbana, which are in the footprint of this 11 proposed project. 12 13 Just a few questions that I have. are a resident of Hoaglin Township? 14 15 Α. Correct. 16 Ο. Do you know the population of Hoaglin 17 Township? I believe we have something like 548, 18 Α. 19 550, families, so our population is probably, oh, 12, 14 hundred, somewhere in there. 20 21 Is that a good guess? Ο. 2.2 Α. That's a guess. I'm trying to remember 23 how much we were assessed from our health department. 24 We were assessed so much for each individual, and I

believe it was 13, 14 hundred individuals we were

1305 assessed for. 1 2 Q. Great, thank you. 3 How far away are you from the city of Van 4 Wert? 5 Α. 7-1/2 to 8 mile. 6 So you're not, in essence, on the outskirts of the city of Van Wert? 7 8 Α. Correct. 9 Would you characterize Hoaglin Township as being rural? 10 11 Yes, I would. Α. 12 Q. Did I hear in response to Ms. Parcels' 13 question that you are a farmer also? 14 Α. Yes. 15 How many acres do you farm? Q. 16 1,100. Α. 17 Q. Are those your acreage, or do you rent from somewhere else? 18 19 I have two landowners I farm for that own Α. 20 480 acres of it. My wife and I own the rest. 21 Do you live on a farm? Q. 2.2 Α. Yes. 23 And do you have any wind turbines near Q.

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your home?

Α.

They're a mile away from my house.

Q. Do you have any issues with that turbine in the closest proximity to you?

A. Yes.

- Q. Okay. Can you tell the Board what some of those issues are you have personally with the turbine?
- A. The noise, the shadow flicker, sometimes you can feel them. I've had my -- when we sit out front, my wife and I, on the front porch and drink coffee, I felt just like when young people play loud music and like a bass drum is beating on my chest. My wife, her ears, that got to her ears. I felt like my skin crawls sometimes.

So those are -- we even had shadow flicker and we're a mile away. I was foolish and believed what I was told, that after 1,000 meters, 3,200 feet, that the light dissipates so that you don't see shadow flicker.

Well, I can tell you, my house is a mile away, and thank God our garage is to that side, and you can see the shadow flicker on our garage. When I approached the developer about it, he said, "Well, Milo, if you really want, we will sign a good neighbor agreement for you and buy you some shades." not an option for my wife and I. We just won't do

that.

- Q. And you had talked about the township roads in response to question 5. Are those actual township roads, or are they county roads in your township?
 - A. No; those are township roads.
- Q. Okay. And you're going to think since I represent townships I should know this, but I will ask you a question. Who has the responsibility of caring and maintaining township roads?
 - A. The township trustees.
- Q. Okay. What responsibility does the county engineer have for the care and maintenance of township roads?
- A. Under the Revised Code, as far as I know, none on township roads.
- Q. I don't want you to give me a legal conclusion but at least what you know.
 - A. Correct. They have no say on our roads.
- Q. So you had indicated that the owner of the wind farm refused to resurface some roads, in your opinion, that needed to be done, correct?
 - A. Correct.
- Q. Now, was your township involved in the bonding process of getting a road bond from the

developer?

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- A. No. That was handled by the engineer and the commissioners.
- Q. Did you have any say in how or whether the bond was used?
- A. The only say we had was we told them it wasn't enough, but the county engineer, commissioners said it was. We had asked that the bonding be similar to an Iberdrola project.
 - Q. And Iberdrola is your developer?
- A. Yes, Iberdrola is the developer. But they refused to bond for that much.
- Q. And so the township did not have a bond from which to take if they were unhappy with the condition of the roads?
- A. No. The county engineer has a bond and the commissioners.
- Q. Okay. Just for the Board's knowledge, does the township have any say over the county engineer or the county commissioners in Van Wert County?
 - A. No. I wish we did, but no, we don't.
 - Q. That is a common response.
- Did you have any other issues with your roads, other than what you stated in --

A. Yes. We have a drainage issue on Fife Road where the interconnection site is. I might add that our county engineer wrote a letter to Iberdrola telling them they needed to resurface our roads. He agreed with the township trustees, as well as take care of the surface drainage where there's a possibility they elevated the interconnection site so that now water may flood onto our roads, and, of course, as a trustee we cannot permit that.

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The county engineer agreed with us, they need to resurface the roads. They needed to take care of that ditch. As a matter of fact, he sent a letter to the Ohio Power Siting Board stating that.

But then, just recently, due to political pressures, he sent a letter saying everything had been taken care of, and nothing had been changed from the time he wrote the first letter.

- Q. Do you know if your board of township trustees still feels as though there's an issue?
- A. Yes, we still do. We even wrote a letter to the Ohio Department of Development asking that they stop the energy zone because the conditions 41 and 42, I believe, were not met. But since our engineer caved in to not wanting to fight the system, we're pretty much done.

- Q. And I see that you have indicated in Hoaglin Township there are 38 turbines.
 - A. Correct.

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- Q. How many are in the total project area; do you know?
 - A. 152, I believe.
- Q. So you only have a percentage. That isn't the total project, 38?
 - A. Correct.
- Q. And I know that some of your testimony has been about complaints. I note Ms. Parcels had also asked you about complaints. Do you know -- do you have any personal knowledge as to the time frame that your developer responded to the complaints that you had heard of?
- A. Some he responds within a few days; others, to put it frankly, they give him the runaround. So one lady that I was talking to just last night, it took them a week and a half, two weeks to get the response they wanted, although they had been working on it since September.
- Q. You have been asked some questions about the blade, the blade throw. Do you have an opinion being that you are in an area where there are operational wind turbines, do you have an opinion

that you would recommend to the Board as a setback to an occupied structure?

- A. Yes. I'm two kilometer, one and a quarter mile, because my house is just a hair over a mile, and we still have the noise and the shadow flicker. So I'm not sure that one and a quarter mile is far enough, but a lot of the other countries are going for the two kilometer.
- Q. I know I have asked you on your personal knowledge. Is that the basis you are going on, because you have a wind turbine a mile from your home?
 - A. Yes, it is.
- MS. NAPIER: Thank you. I have no further questions.
- 16 ALJ CHILES: Ms. Leppla.
- MS. LEPPLA: Thank you.

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19 CROSS-EXAMINATION

20 By Ms. Leppla:

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- Q. Hello. How are you?
- 22 A. Fine.
- Q. So we already covered most of this, but you live near the Blue Creek Wind Farm project?
- 25 A. Yes.

- Q. You are about a mile from the turbine?
- A. Correct.
 - Q. You farm 1,100 acres?
- 4 A. Yes.

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- 5 Q. You own Schaffner Tool & Die?
- A. Yes.
- Q. And you intervened in the Blue Creek Wind 8 Farm case?
- 9 A. As township trustees, Hoaglin Township 10 tried to, but they would not let us.
- Q. And you also wrote a letter to the Power
 Siting Board in opposition to the project for that
 Blue Creek Wind Farm case?
- A. What are you referring to?
- 15 Q. I believe it was June 30, 2011.
- A. Okay. That letter was written because of the --
- 18 Q. Mr. Schaffner, did you write a letter?
- 19 That's all I asked. Did you write a letter?
- 20 A. The ambient noise level --
- 21 Q. But in opposition --
- A. -- that's at the project, I was in opposition to raising the ambient noise level, yes.
- Q. And that was on your own behalf?
- 25 A. Yes.

- Q. And you testified that the company offered to remedy some of your issues. Iberdrola offered to buy blinds for your house?
 - A. Yes.
 - Q. And you declined, you said.
 - A. Yes.

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- Q. Okay. Also in your testimony you complained about road damage, correct?
 - A. Correct.
- Q. And you know the county has a road use agreement with the company?
 - A. Yes, the county does.
 - Q. And you're a farmer. You have a combine, correct?
 - A. Yes.
- Q. And those are pretty heavy, aren't they?
- 17 A. Yes.
- 18 Q. Do you know how much they weigh?
- A. I would guess mine probably weighs somewhere around 16 or 18 thousand pounds.
- Q. And other farm equipment is similarly pretty heavy?
- A. Depends on the size of tractor, anywhere from 8 to 20-some thousand, depending on the size.
 - Q. And how long have you lived in Hoaglin

1 Township?

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- 2 A. 63 years out of 65.
- Q. And let's say 60 years ago, 50 years ago,
 let's say, do you remember if there were potholes in
 the roads in Hoaglin Township?
 - A. No.
 - Q. You don't remember any?
- A. No. Basically because you go back then,
 most of them were stone roads.
- Q. That's fair, okay. So those combines and farmer equipment are pretty heavy?
- A. But they're well within the load or load limits.
- Q. Oh, sure. They have a tendency to break down roads, too, right?
 - A. No, combine or tractor wouldn't.
- 17 Q. 16,000 pounds?
- 18 A. No; not on an asphalt road.
- Q. Okay. And you testified that the wind company knocked down a sign.
- 21 A. Yes.
- Q. Did you see that personally?
- 23 A. No.
- 24 Q. Okay.
- 25 A. I can tell you they used their own stakes

to prop it back up, and you could see the tire marks from the truck where it turned.

- Q. Did you see it personally, Mr. Schaffner?
- A. No, I did not.
- Q. And I know you have been asked some questions already about the blade failure incident that happened on April 24.
 - A. I'm not sure of that date.
- Q. And you drove over to see it with some other people?
 - A. Yes.

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- Q. And you said that was about four to five days later?
- A. When I drove over to see it, it was probably two or three days. When I drove back and took the measurements, it was four or five.
- Q. On a property that the turbine is located on was not secured when you were there?
- A. There was no tape completely around that probably 60-acre field, but there was tape across the drive that goes back to the turbine.
 - Q. Okay. So just tape across the driveway?
- 23 A. Yes.
- Q. So there was nothing stopping a person from walking onto that farm property?

- A. Except for trespassing.
- Q. Fair enough. And you didn't go -- you said you did some measurements, correct?
 - A. Correct.
 - Q. You didn't go onto the property?
 - A. No.

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- Q. You testified that you used a measuring wheel; is that right?
 - A. Correct.
- Q. You said you had that measuring wheel about eight years?
- 12 A. Yes.
 - Q. And you haven't recently had that calibrated?
- A. Yes, I did. Since you asked me that
 question in my testimony, I went and calibrated it,
 and it's right on the money.
 - Q. When you measured that distance, had you recently had it calibrated?
 - A. No.
- Q. So when you went out four to five days
 later after this incident, you had not recently had
 that calibrated?
- 24 A. No.
- 25 Q. And you wind up your measurement to get a

1317 straight line based off the crossroads from the 1 field? 2 3 The one measurement, yes. Α. 4 Mr. Schaffner, you're a farmer. Do you Q. 5 use any GPS to ensure your crops are planted in a 6 straight row? 7 Α. I do not. 8 Q. You're not a civil engineer? 9 No. Α. You're not an expert on setbacks? 10 Q. 11 Well, depends on what you mean by Α. 12 "expert." We have the Zoning --13 Mr. Schaffner, are you --Q. 14 -- Board that we have to abide by. Α. have zoning ordinances that we are --15 16 Q. Let me be a little more specific. 17 Are you an expert on setbacks for wind turbines? 18 19 Α. No. 20 You're not any type of engineer? Q. 21 Well --Α. 2.2 Q. Are you trained in engineering? 23 Pardon? Α. 24 Are you trained in engineering? Ο. 25

Α.

No.

MS. LEPPLA: I have no further questions,
your Honor.

ALJ CHILES: Thank you.

Mr. Margard.

MR. MARGARD: Thank you, your Honor.

CROSS-EXAMINATION

By Mr. Margard:

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- Q. Mr. Schaffner, I want to ask you a couple questions about the Timber Road incident. You indicated you traveled to the farm, the wind farm, after the incident. Can you tell me how many days after the incident it was before you first saw the damage?
 - A. No, I can't tell you exactly.
- Q. Was it more than a day?
- A. It may have been -- the first time two or three days is all.
 - Q. Two or three days?
 - A. We went up with some friends that wanted to see it as well.
 - Q. And I believe you testified earlier that you have no knowledge whether any of the pieces that you observed were moved at any time?
 - A. No.

- Q. By anyone or anything?
- A. The knowledge of the moved pieces, if you want that, came from the lady who her son and daughter-in-law lived there, and she told me their children were out picking up pieces in their yard, so they had done that right after the turbine blades failed.
- Q. Do you have any knowledge of what the weather conditions were on the day of the failure?
- A. According to the TV, the wind was 35 miles per hour.
- Q. You don't have any personal knowledge, that's just what you remember hearing?
 - A. No.

MR. MARGARD: I think that's all I have.

Thank you, your Honor.

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EXAMINATION

19 By ALJ Chiles:

Q. I have a couple questions before we go to redirect. I want to follow up on a question and answer in your testimony about blade pieces you observed. I know you stated you observed the pieces, and then you went back several days later to take some measurements; is that correct?

A. Yes.

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- Q. Did the pieces look like they were in the same spot that you first observed them, from what you recall?
 - A. Yes.
- Q. I want to ask you some more specific questions about how those pieces appeared. In your testimony you have stated some of the blade pieces appeared to be about one foot by one foot?
 - A. Correct.
- Q. Were many of the pieces that size, or about how big were some of the other pieces?
- A. That was the largest piece that far away from the turbine. As I went farther, the pieces got smaller, 3 by 6, and I assume because the wind blew the smaller pieces farther.

ALJ CHILES: Okay. Thank you. I appreciate that.

Mr. Van Kley.

MR. VAN KLEY: Thank you, your Honor.

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REDIRECT EXAMINATION

- 23 By Mr. Van Kley:
- Q. Why don't we take your questions and answers in the same order as they were addressed to

you in your cross-examination.

So we'll start with the letter to the Power Siting Board that Ms. Leppla asked you about. And you weren't given the opportunity to finish your answer with regard to what the nature of the letter was, so I'm going to give you that opportunity now.

A. What appeared in the Van Wert Times
Bulletin, other newspapers, according to what
Iberdrola was required to do, they had printed that
they were going to ask to have the decibels raised at
a resident nonparticipant a mile away.

Most people did not know anything about this or understand. A lot of people didn't take the newspaper. But Sally Bloomfield of Icolt and whatever, Bertram, or something, law firm, said in the article that you could object to this and you could ask for a public hearing.

So that letter was asking for that public hearing so that the public could hear what they were wanting to do, that the ambient noise level at your house a mile away was going to be raised. I felt that was very significant because if you only live 1,600 feet from it, they're going to raise it over 5 decibels at my house, what is it like at 1,600 feet, and I just thought it was the proper

thing to do.

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The article in the paper that was a legal document said all you had to do is write the Ohio Power Siting Board and ask for a hearing, and that's what that June 30, 2011, letter was about.

- Q. Okay. At that time had the wind farm already been constructed?
- A. No. It had -- I don't believe it had. June 30, they had already started. A lot of it already up, but it wasn't turning over Union, I believe.
- Q. Okay. By this time the Board had already issued a certificate authorizing the company to build the wind farm?
 - A. Correct, yes.
- Q. And the notice that you are referring to came out after the certificate had been issued?
 - A. Correct, yes.
- Q. And did that notice notify you that the company was requesting permission to the noise levels that had been authorized in the certificate?
 - A. Yes. As I read it, yes.
- Q. Okay. Did you participate in the original hearing for the certificate?
 - A. No, I did not.

Q. Okay. Did you intervene or ask for permission to intervene?

- A. Hoaglin asked for permission to intervene, but we were stopped. They would not let us because the public really doesn't know how this process works, and we had no legal advice from our prosecutor and so forth, and by the time -- I was the only one that was working on it and investigating it. It took a lot of time, and we just learned of the intervention process, and so we tried to do that, and they would not permit us to do that.
 - Q. Who is "they" that did not permit you?
- A. The Ohio Power Siting Board did not permit us to become an intervenor.
- Q. Okay. You were asked about Iberdrola's offer to pay for blinds. Let me elaborate on that a little bit. Why did you turn down the offer to pay for blinds?
- A. When you accept their blinds, you're going to have to sign a little paper that says nonlitigation clause. It's called a good neighbor policy, and in that you give up all your rights. You cannot you have no legal recourse for anything else that may happen, which includes dust damage, whatever. And I'm not willing to sell out for a pair

of blinds.

- Q. Then you were also asked some questions about the farm machinery that use the roads. Before the wind farm was constructed, were the roads in the township paved?
 - A. Yes, the roads they used were, yes.
- Q. How long had the roads been paved prior to the time that the wind company started to install the turbines?
- A. Some. Roads had been paved for probably, specifically, we're talking about eight or nine years. We used Issue 2 money, and we had also put chip and seal on them to preserve them. A couple of the roads may have been -- well, part of Fife was just within five or six years paved.
 - Q. What is chip and seal?
- A. When you lay down asphalt, there's little pores in the asphalt, and over time water will -- can get into those. So what you do to preserve that road is you come back in -- we normally like to come back within two years after it's been paved and lay down tar, and then you put in -- we put in No. 8 stone into that tar that adheres to the top of the asphalt, and then that preserves the asphalt underneath.
 - Q. Before the wind developer started to

construct the turbines, had the township had problems with potholes or other damage to the roads?

A. No, we did not.

- Q. And what happened when the wind company started to and then continued to construct the turbines? What happened to the roads?
- A. What happened when they started, we did not reach a road agreement with them. Hoaglin Township did not sign the road agreement, so we told them just go ahead and destroy them and then rebuild them.

Well, they started to do that, and they said we can't do that because we have destroyed them too much already, they're getting too rough. So we said if they done certain things, we would let them use them, but then they would have to put them back in the original condition.

But they've had answers to that question. They did resurface one. They ground one up and impregnated concrete. That did not hold. Their resurfacing did not hold. They literally tore the roads up even after they told us what they had done would hold the loads.

Q. When you say that you told them to go ahead and destroy the roads, what do you mean by

that?

A. Well, the issue was we told Iberdrola our roads have no potholes, that roads they were using were good asphalt roads that been chipped and sealed. They had no patches on them. We said when you're done, we don't want any patches.

They would not agree to that. They came and said we can do patches this long and that long. We said no. We would permit a small patch but not what they were talking about.

Well, the county engineer went ahead and signed an agreement with them, but Hoaglin Township would not because we felt that Senate Bill 232 and the Ohio Revised Code says as well as the compliance strategy in a Stipulation agreement says they have to put those roads back in as good or better than the condition was preconstruction, and they did not do that.

- Q. Okay. When you say that they patched the roads, what was the -- what is the resulting condition to the roads when one just patches them?
- A. Well, what happens is, number one, you have to make sure you dig down deep enough to get rid of the soft. You've actually ruined the base underneath that asphalt. One of the roads they done

that with, we can already see a pothole developing and there was never one there before. That's the John Yoh Road. That happens to be one they ground and impregnated with concrete.

What happens, you get a soft spot. The soft spot just continues to sink, and then you have a big patch. Once you start patching a road, up in Northwest Ohio the freeze and thaw, the water gets into those seals if they're not sealed properly, and then sometimes, did they seal them good enough? So even the patches can present problems, which is what we're concerned with now.

- Q. Earlier in your testimony you talked about how bumpy the roads had been made by the wind developer.
 - A. Yes.

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- Q. Is that as a result of the patches?
- A. Yes.
- Q. You also tried to explain how you knew that the wind company had knocked down the mailbox. Let me -- I'll give you the opportunity to finish answering that question.
- A. They hauled turbine components down.

 This was Feasby Wisener Road -- sometime people

 pronounce it Wisener -- but they had hauled component

parts down those roads. When they do, they make some pretty wide turns, and the traffic, they try not to have them meet, but sometimes they meet, trucks going one way and trucks going the other.

And what they done was cut the corner short, and the trailer behind tipped the stop signs over, and we could tell it was them because of the trailer marks, and they was out using a lot of stakes, and it was their stakes that had the signs propped back up.

The one that really upset me was on a Sunday I happened to drive, and this was on Fife Road. They had knocked over the stop sign, and it was laying down. Fife Road comes up to a state highway, and if you weren't familiar with that road, it could have been awful.

I right away called the state highway patrol and sheriff's department, and the state highway garage came out immediately and reinstalled that sign.

Q. You were asked some questions designed to test your measurements that you made of the distance between the blade debris and the turbine tower, so let me follow up on those questions.

First of all, with regard to the rows of

- crops in the field, that particular field where the debris had been landing, can you tell me how straight the rows were?
- A. They were very straight. The farmer had started, looked like, next to what was County Road 11, and so he started straight with that road.
- Q. Okay. When you were looking at the blade debris from the road, did you look down the row of -- the crop row to look at the blade debris?
 - A. Yes, you could.
- Q. Okay. What did that tell you about how straight the rows were?
 - A. They were very straight.
- 14 Q. Okay.

- A. I don't know if he used GPS, but if he didn't, he's a very good farmer. He can drive straight.
- Q. Okay. And just for clarifying purposes, at the time you were there, was there a growing crop in field, or were you looking at the rows from the previous year field?
 - A. Looking at a cornfield that was harvested.
- Q. So corn was all down to the ground. It wasn't standing up?

- A. Right. All that was there was the stubble.
- Q. And could you look down the space between the row and see the debris?
 - A. Yes, you could.

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- Q. There were no curves in the rows that were obscuring the debris?
 - A. No, there were not.
- Q. With regard to the measuring wheel that you used, have you had quite a bit of experience using that measuring wheel?
- A. Yeah. I measured a few ponds and things like that with it. So, yeah, it's very simple to use. It's just a wheel with a handle on it and just walk with it. As it rolls, it measures the footage.
- Q. And you were asked some questions about whether you had calibrated the wheel, and I believe you indicated that you had not calibrated just before making the measurements near the turbine, but that you have since that time, since your deposition, checked the calibration; is that right?
 - A. That's correct.
 - Q. Okay.
- A. And it had not measured anything since I measured that turbine.

Q. Okay.

- A. So there would be nothing to change that I know of.
- Q. All right. Just to be sure, did you do anything else after your deposition to confirm the accuracy of your measurements?
- A. Yes. What I done was I went to Google
 Earth. Now, I don't have Google Pro or anything, but
 I was able to call up a satellite photo of the area.
 When I started to call it up, my son says, "You know,
 dad, the photo may not be old enough to show the wind
 turbine -- or new enough to show the wind turbine.

And lo and behold, there it was, the wind turbine under construction. They had two towers, two of the sections of the tower left, and the shaft and all three blades were there, and so you can see the three sections standing up. Of course, you can see the house.

What I done was take an engineering scale, if you are familiar with them, and I just scaled the picture on my computer, and those -- excuse me a second. The distance as I come up with using an engineer's scale was 1,580 feet. I calculated 1,561. On the other with the wheel, I calculated 1,158. The engineer scale said

1332 1 approximately 1,200. 2 Then I also -- since I don't have Google 3 Pro, I could not get a current map, but I asked 4 Google to print out what it would for me so it 5 printed out the intersection. I had been questioned using Pythagoras' theorem, how do I know it's a right 6 7 angle. Well, in our Northwest Ohio, most roads are 8 90 degrees. 9 So I took this Google map that they gave 10 me and taking the engineer's scale, done the old 3, 11 4, 5, if you're familiar with that, carpenter's 3 12 inches this way, 3 foot, and it came out to be a 13 90-degree angle. 14 MR. VAN KLEY: All right. I have no 15 further questions. 16 ALJ CHILES: Thank you. 17 Ms. Parcels. MS. PARCELS: Nothing further. 18 19 ALJ TAUBER: Cross-examination. 20 21 RECROSS-EXAMINATION 22 By Ms. Napier: 23 Just a couple of questions. 0. 24 You had testified about the road

conditions in response to Mr. Van Kley's questions on

- redirect. And I thought I hadn't asked you a question previously. How familiar are the roads in your township to you?
- A. Well, I've been born and raised 63 years out of 65 I've lived in Hoaglin Township, so they're very familiar. I was riding those roads when they were stone roads.
- Q. And as a trustee -- and I'm not sure if you know what I'll mean, are you what you would call a working trustee?
 - A. Yes, we are.
 - Q. Do you know what means?
- 13 A. Yes.

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- Q. Can you explain that?
 - A. We go out and plow roads. We go out and put stone on roads. We chip and seal our own roads. We dig holes if we have to. I mean, any of the things that we're responsible that we can do, we do.
 - Q. How many employees do you have in your township?
 - A. Pardon?
- Q. How many employees do you have in the township?
- A. No full-time employees. We have two, three, part time. We have a person that takes care

- of the cemetery lots. We have a person that mows our 1 2 cemeteries. Then we have a person that mows our 3 roads.
 - So when you're testifying you have some Q. familiarity with the condition of your roads --
 - Α. Correct.
 - Q. -- personally.

8 MS. NAPIER: Thank you. No further 9 questions.

10 ALJ TAUBER: Ms. Leppla.

MS. LEPPLA: Just a few, your Honor.

12

RECROSS-EXAMINATION

By Ms. Leppla:

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- Mr. Schaffner, you discussed the good Q. neighbor that Iberdrola wanted you to sign if you got blinds.
 - A. Would I discuss it?
- 19 No. You did discuss it earlier in your Q. 20 testimony.
 - Here today, yes. Α.
- Q. Yes. And did you retain a lawyer to look 23 over that good neighbor agreement?
 - Α. I was never given one.
- 25 You did not retain one on your own, did Q.

rrocccarngo

1335

you?

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- 2 A. Pardon, say again?
 - Q. Did you retain a lawyer for that --
 - A. No.
- 5 Q. -- negotiation at all?
 - A. Are you talking about me personally?
- 7 Q. Yes.
- A. No, I have not.
 - Q. And you're not a lawyer?
- 10 A. No. But I am smart enough to read when
 11 it says that I give up all my rights. The company
 12 has more rights to my farm than I do. I don't need
 13 an attorney to tell me that's not a good deal.
- Q. Did you see an agreement?
- 15 A. Yes, I have seen an agreement.
- 16 Q. Okay.
 - A. Not a good neighbor agreement but a lease agreement to lease my farms to Iberdrola.
- And I might add, I did make them an
 offer. It was a very fair offer. I said, here's
 what we'll do. You buy my farms, put your turbines
 up for 50 years. I'll farm it, and at the end of the
 50 years, I'll buy the farms back.
- They said that's not a good deal for us.
- 25 I said, if it's not a good deal for you, what makes

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1336
 1
     you think it's a good deal for me?
 2
                 MS. LEPPLA: Your Honor, I'd just like
 3
     the rest of that after he responded to the question
 4
     stricken from the record as unresponsive.
 5
                 MR. VAN KLEY: I think it's responsive,
 6
     your Honor. When you ask a question and you get an
    answer to that question, I think that's unfair to ask
 7
 8
    to strike an answer just because you don't like it.
 9
                 ALJ TAUBER: Would you read back the
     first portion of his answer to me.
10
11
                 (Record read.)
12
                 ALJ CHILES: The motion to strike is
     granted as to everything after "and I might add,"
13
     including the section "and I might add."
14
15
                 (By Ms. Leppla) Mr. Schaffner, you have
            Q.
16
     said you had this measuring wheel for eight years?
17
            Α.
                 Yes.
                 You measured about six to eight times?
18
            0.
19
                 Yes.
            Α.
20
                 And you're not an engineer?
            Q.
21
            Α.
                 No.
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                 MS. LEPPLA: No further questions.
23
                 ALJ CHILES: Mr. Margard.
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Thank you,

MR. MARGARD: No questions.

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your Honor.

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 1
                 ALJ CHILES: I have no further questions.
 2
                 Thank you, Mr. Schaffner. You're
 3
     excused.
 4
                 Mr. Van Kley.
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                 MR. VAN KLEY: Yes, we would move into
 6
     admission UNU Exhibit No. 21, your Honor.
 7
                 ALJ CHILES: Are there any objections to
 8
    the admission of UNU Exhibit 21, the direct testimony
 9
    of Milo Schaffner?
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                 MS. LEPPLA: Your Honor, I want to note
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     for the record, as revised with the motions to
12
     strike.
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                 ALJ CHILES: Thank you.
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                 MS. LEPPLA: Thank you.
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                 ALJ CHILES: UNU Exhibit 21 will be
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     admitted, subject to the portions that were already
17
     stricken by the Bench.
                 (EXHIBIT ADMITTED INTO EVIDENCE.)
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19
                 ALJ CHILES: Ms. Parcels.
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                 MS. PARCELS: Yes. The city would move
21
     for the admission of City Exhibit 7.
2.2
                 ALJ CHILES: Any objections to the
23
    admission of City Exhibit 7?
24
                 MS. LEPPLA: Yes, your Honor. Champaign
25
    would object. It is not relevant to the proceeding
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here. Also it's confusing. It's very small. The pictures are very small. She asked some questions about whether it was representative, and I think it's a little bit too confusing to enter into evidence.

MS. PARCELS: I think it is absolutely relevant because he testified that that is what he observed, and the document is a newspaper and it's self-authenticating under Rule 902.

MR. VAN KLEY: Your Honor, since this also affects our testimony, I would like to weigh in on this subject, if I could.

ALJ CHILES: Go ahead.

MR. VAN KLEY: Mr. Schaffner testified that the two photographs in the articles accurately reflected what he saw when he went to the site. And therefore, at least with respect to the two photographs in the article, those have been authenticated, identified, established as accurate, and that is admissible information.

ALJ CHILES: Thank you, Mr. Van Kley.

Ms. Leppla, do you have any response?

MS. LEPPLA: Yes, your Honor. First of all, the articles contain much more than just the pictures that Mr. Schaffner referred to. And, further, Mr. Schaffner testified he didn't go on the

property, and from the vantage point these were taken from, I'm just not -- I don't see that he testified to that.

ALJ CHILES: Thank you. We are going to

2.2

admit a portion of the exhibit, part of Exhibit 7.

That would be the two photographs that are on the far right-hand side. All the other portions will not be admitted; however, the two photographs will be admitted into the record.

(EXHIBIT ADMITTED INTO EVIDENCE.)

ALJ CHILES: Mr. Van Kley, whenever you are ready.

MR. VAN KLEY: Thank you. We would call William Palmer to the stand.

(Witness sworn.)

MR. VAN KLEY: Your Honors, at this time we would mark Mr. Palmer's direct testimony, including the attached exhibits, and we will mark this as Exhibit UNU 22.

ALJ CHILES: It will be so marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- - -

WILLIAM PALMER

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

DIRECT EXAMINATION

2 By Mr. Van Kley:

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- Q. All right. Would you state your name for the record, please?
 - A. My name is William Palmer.
 - Q. And, Mr. Palmer, I have placed before you UNU Exhibit No. 22. Is that a copy of your direct testimony and its exhibits?
 - A. I believe it is, sir.
 - Q. Okay. Do you have any corrections you would like to make to your testimony?
 - A. Yes, sir. Following the deposition that we made on April the 6th and 7th, I did go back and recheck the numbers on Exhibit M, which comes from Exhibit L in the exhibits, and I would like to correct an error there.
 - Q. Please just give everyone a moment to find Exhibit M. Then you will be allowed to make those corrections.
 - All right, why don't you proceed with the corrections. You have on Exhibit M to -- Exhibit M to UNU Exhibit 22.
- A. Thank you, sir. Specifically on Exhibit
 M, about the middle of the page going down, you see
 it says "Failures Fire." When I went through

Exhibit L, what I did, I went through Exhibit L and counted out the failures to make sure that my number on Exhibit M was correct.

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What I found was that the End 2011 column, so if you go across the top, it's the third last column -- actually, the second last column. You go down and see under Failures Fire, the number shows an 8. What I found was that when I had prepared this table, I actually had neglected that I had in Exhibit L highlighted two of the failures in blue because they were not really determined that they resulted in burning pieces on the ground, so that number instead of 8 should have read 6.

The same material that's on Exhibit M is also on page 14 of my amended direct testimony.

- Q. Okay. Hold on. Give everybody a moment to get to page 14 of your testimony.
- A. If you could keep your finger in both places.
- Q. All right. Proceed with your change on page 14 of UNU Exhibit 22.
- A. On page 14, if you look at the number of fires under 2011, I had shown the number as 6, which is the number I'm correcting Exhibit M to. So I had it correct on Exhibit 14 in the direct testimony --

sorry, page 14 of my direct testimony, but I did have an error on Exhibit M.

Q. Okay.

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A. Actually, in the course of looking through it, I did see, you know, actually the number of fires that I show in 2012, I show on page 14 as 7. There in Exhibit M I only showed it as 6. One number went down two, and the next year went up one in 2012.

Also in the course of looking at it, I did look and see, if you look at the first or top row on page 14, you see I discuss what is called "Numbers of Failures of Blades dropping 1 blade to ground at a distance from turbine," 9-8-9-6-11, which is the same as the numbers on Exhibit M.

- Q. Before you go there, Mr. Palmer, are you making another change to fires on either page 14 of your testimony of Exhibit M?
- A. I'm making -- what I would do on Exhibit M, the last number which says 6 should really say 7 to be consistent with what is on page 14.
- Q. So you are looking at the column that is labeled End June 2012 on Exhibit M; is that right?
 - A. Yes, sir, that's correct.
- Q. And if you go down to Failures Fire, you will see a number 6, right?

- A. It should have said 7, sir.
- Q. Okay.

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- A. As does the table on page 14.
- Q. Okay. Does that change the number 36, which is your total?
- MR. SETTINERI: I'm sorry, I'm lost at this point. Are we still talking about the first revision?

The number 36 would then change to 35.

- MR. VAN KLEY: No; we are talking about the second revision.
- MR. SETTINERI: Okay. Will you give me a reference again?
 - MR. VAN KLEY: Yes. On Exhibit M, if you look at the failures for fire and go across, you will see under 2008 there's a number 8. Under 2009 there's 7. Under 2010 there's 7. Under 2011 there was 8. He has changed that to 6, and under 2012, it was 6, and he has changed it to 7. And under the heading 4.75, your average, the number was 36, and he
 - MR. SETTINERI: Thank you.

has changed that to 35.

Q. (Mr. Van Kley) Now, do those changes on
Exhibit M that I just summarized result in any
changes for fires on page 14 of your direct

testimony?

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- A. No, sir, there's no change in page 14 of my direct testimony. It was an error in the table in Exhibit M.
- Q. Okay. Would you proceed to your next correction, please.
- A. Okay. In the course of making this review, I did notice where I had shown -- sorry. If I look at page 14 where I say, "Numbers of Failures of Blades dropping 1 blade at a distance to ground at a distance from the turbine," where it goes across 9-8-9-6-11 -- follow where I am on page 14?
 - Q. Yes, sir.
- A. What I did see as I went through checking back from Exhibit 11, which was the table of the failures, I noticed what I had not done, is I had not counted failures which related from where the blades had oversped, resulting in a tower collapse and blades being thrown a distance.

So what I should have done -- if I were to be perfectly accurate, I should say that the number of failures of blades at a distance from the turbine in 2008, instead of saying 9, I should have added one more, which was actually blades on the ground resulting from a turbine collapse. So that

first number 9 should become 10. The second column, 1 which is the End 2009, where I show Failures of 2 Blades a distance from the turbine as 8, I should 3 have actually included three more failures of blade 4 5 at a distance from the turbine which came from 6 collapse. That should have been 8 plus 3, so 11. Those two numbers would have resulted if you went 7 8 across to the right hand the total being 43, that 9 total 43 would have become 47.

- Q. Have you now switched to Exhibit M?
- A. Yes.

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- Q. To be clear, staying on page 14 of your written testimony for a moment --
- A. Page 14 of my written testimony, the first 9 properly should have said 10. The Year 2009 where it says 8 properly should have, would have, said 11.
- Q. Okay. Does that complete the changes on page 14 of your direct testimony?
- A. Those are the only changes of page 14 of my direct testimony, sir.
 - Q. Now go back to Exhibit M.
- A. On Exhibit M, failure blade a distance from the turbine, where it says 9 for 2008, that number should really say 10. Where it says 8 for

2009, it should really say 11. And on the right-hand side where it says 43, the number really should say 47.

- Q. Okay. Do you have any other changes on Exhibit M?
- A. The result of these changes, I don't -the result of the changes, the numbers at the bottom
 that give a failure rate per million years, if you
 look at Exhibit M across, you read it says, 156, 125,
 121, 99, 158, 129. There is a small adjustment in
 those numbers so the 156 should have read 165 because
 there's actually another failure that's counted.

The second column, the 125 should actually have read 150. The third column doesn't change. The fourth column where it says 99 would go down to 85. The fifth column which says 158 would have gown up to 167. And the last column, which is the average, would have gone up from 129 to 134.

Q. Okay.

ALJ CHILES: Could you cover that last row again? If you would repeat just that last portion of changes on that last row, I missed some of those.

THE WITNESS: If you look where it says, "failure Rate per Million Years" on Exhibit M, your

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Honor, the corrected numbers should say 165, 150, 2 121, which is unchanged, 85, 167, and lastly, 134.
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ALJ CHILES: Thank you.

THE WITNESS: I would comment, sir,
that -- or, your Honors, that on page 14 where I said
I calculated a rough blade failure in Exhibit M, the
failure rate can be seen to be very similar over the
last five years. It really does not change that
statement.

MR. VAN KLEY: Okay.

THE WITNESS: It is a matter -- I wish to be correct in what I presented. I don't wish to be in error, sorry.

ALJ CHILES: We appreciate that. Thank you.

- Q. (By Mr. Van Kley) Do you have any other corrections to your testimony or the exhibits to your testimony?
 - A. No, sir, I have no other corrections.
- Q. Okay, very good. Now, having made those corrections, if I were going to ask you the same questions today as you answered in writing in your direct testimony, would your answers to those questions be the same?
 - A. Yes, sir, there's no change.

MR. VAN KLEY: Your Honor, at this time the witness is available to answer questions.

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ALJ CHILES: Thank you, Mr. Van Kley.

We do have extensive motions to strike this testimony, so we will go through those at this time. You have to bear with me as we go through them one at the time.

The first item we have is on page 9. It begins with line 27 starting with "one of the best," and it extends through page 10, line 7, ending with "Exhibit L."

I'm just going to -- we have this list where the objections are grouped together. If I could just have the parties summarize their arguments. This is just the first group of motions to strike within the motions to strike.

MS. NAPIER: Could you repeat those lines? I'm sorry.

The first set on page 9, line 27 beginning with "one of the best" and ending on page 10, line 7, with "Exhibit L.."

MS. NAPIER: Thank you.

ALJ CHILES: I will read through all these. The next item is page 11, line 25 through line 31.

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We have page 12, line 5. It's only the
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    portion of the sentence that says, "Caithness Wind
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    Farm Information Forum," just that portion of the.
3
    Line 5.
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                 Page 12, line 18, starts at the "Thus"
6
    and ends with "papers."
7
                 Page 13, line 25, beginning with "To
8
     illustrate" and extending through page 14, line 7.
    believe that includes the graph; is that correct?
9
10
                 MR. SETTINERI: Yes, your Honors.
                 ALJ CHILES: Next item we have is on
11
12
    page 14, lines 15 through lines 25.
                 Page 18, beginning with line 3 through
13
    page 19, ending with line 4.
14
                 Page 20, line 6, beginning with "The
15
    Caithness summary" extending through page 22,
16
17
     line 16.
                 Page 22, line 25 beginning with
18
19
     "Question" through line 31 ending with "gearbox."
20
                 Page 28, line 11, beginning with "The
    Caithness" and ending with line 14, "Philippines."
21
22
                 Page 29, line 2, with "However" through
     line 4.
23
24
                 And also on page 29, line 18, beginning
25
    with "A number" and extending through line 22.
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MS. NAPIER: What was the last one?

2 ALJ CHILES: Page 29 beginning with "A

number," written out phonetically, and ending with

4 "failed" on line 22.

Also in with this group in the motion to strike are Palmer Exhibit G, Palmer Exhibit L, and Palmer Exhibit M.

Mr. Settineri, do you want to summarize the company's position?

MR. SETTINERI: Yes, very briefly, your Honor. The genesis of what we just covered arises from Exhibit G, that is a spreadsheet compilation that is from the Caithness Wind Farm Information Forum on the Internet.

That website, there's no identification as to the individuals, the names of individuals who are sponsoring that website, but it is obvious from the website page that it is a website geared towards stopping, as quoted, "onward march of turbines," clearly an anti-wind farm website.

As well, there are disclaimers on that forum as to the accuracy of third-party material. However, this exhibit is being used, the details in this exhibit, particularly the details column, more so all the information, is genesis for the bulk of

Mr. Palmer's testimony, what we just covered.

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He uses the details to be able to develop, to analyze what type of failure occurred, and he put that into his formula to come up with blade failure rates. The details, he did not create these details. These are paraphrased by someone, we don't know who paraphrased, it is clearly hearsay.

And there are many examples in here, and we heard some examples the other day about being narrowly missed and adjectives of that nature, clearly hearsay. There's many details missing from the information. Model numbers are missing, not a reliable source of the information. There are no distances. This is not a reliable source. It is hearsay as well.

For that basis we move first, Exhibit G should not be admitted. It should be stricken, and all the use of that document throughout his entire testimony, including cut and paste from the details they are pasted into his testimony. That is clearly hearsay.

So because this is the genesis that flows through his testimony, he used it to create

Exhibit L, that clearly says the source is from the

Caithness database and that carries over to his

calculations on Exhibit M.

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ALJ CHILES: Thank you, Mr. Settineri.

Mr. Van Kley.

MR. VAN KLEY: Yes, your Honor. I can't blame Champaign Wind for wanting to conceal the information or to prevent the information in the database from being used in this proceeding because it's the only accurate and reliable information that so far has been sought to be introduced in this proceeding with regard to wind turbine safety.

We have heard volumes of testimony now, from Champaign Wind's experts that is based on no more than what they have not heard in the industry about blade accidents. If that's not hearsay, I don't know what is.

Yet the Application, volumes in exhibits of the Application, also relies purely on that type of information to claim that the wind turbine industry's record shows that blade throws rarely occur and that blade failures are unlikely to occur at this facility because the people who wrote the Application, and now the people who have testified for Champaign Wind in this proceeding, have not heard about blade failures to any significant extent.

Well, we have a database that shows how

extensive those blade failures have been.

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Mr. Palmer, in his direct testimony, testifies about how reliable that database is. He testifies he has throughout the years that he's been working on these issues has checked information on a spot basis on the database and found it reliable. Mr. Palmer, himself, is a contributor, on occasion, to the database, and he has found this database to be a reliable source of information.

Notwithstanding the fact that this information is obtained from other persons, an expert, under the rules of evidence, has the option and has the right to consider evidence such as this in formulating an opinion.

And, in fact, if the Applicant's view of the law, considering what experts can consider or cannot consider, were accepted by the court system, there would be few experts what could testify about anything in the court system because an expert has to rely on information from other people, rather than having firsthand information by that expert's own observations.

Then I would also add that in this proceeding we have attempted to subpoena information directly from wind companies, two manufacturers, and

two wind developers who have been operating facilities in order to force them to provide us with direct information in the possession of the industry about public safety, about blade throw and other instances, and those subpoenas have been revoked.

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So I would observe that in the Champaign Wind motion to quash those subpoenas, they said to the Board that based on the information attached to our opposition to the motion to quash, there's plenty of public information that can be used in this proceeding to evaluate the issues we're bringing up on blade throw and other safety issues.

The information that we attached primarily was the Caithness database we are now using. So having defeated our motions, our subpoenas, by arguing that we already have enough information at our disposal in order to present our case, now they are trying to prevent us from using that very same information they said was available to us and that which showed that we didn't need those subpoenas.

So if at this point the Board is going to strike that information, it would be a grossly -- it would be grossly unfair to us since we made attempts to get this information directly from the wind

1 | industry and we were not allowed to do so.

ALJ CHILES: Thank you, Mr. Van Kley.

Mr. Settineri, do you want to respond?

MR. SETTINERI: Yes. I'll work my way

5 backwards.

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The problems with the subpoenas, as we all know, they were extremely overbroad. They were not written tailored. And so the discovery is meant to find evidence that is reasonably calculated to lead to the admission of evidence, but in that case those subpoenas were written overly broad, and that was the main basis for many of the companies' objections.

I will note that Champaign Wind did file a motion to quash, but other companies did as well, and I disagree with the contention that Champaign has conceded the information in this document can be used. If I do recall the motion for subpoenas, or at least maybe it was a memorandum in opposition, attached articles, I believe, or cites to other journals -- not journals but other websites. I don't recall seeing those in this database.

As to Champaign Wind's alleged use of hearsay, Mr. Speerschneider sponsored the Application. We have been through that. We provided

witnesses as to the studies in the Application.

As to Mr. Poore, he referenced two presentations that he said were very authoritative. I should say he knew who gave those presentations. He was at those presentations, as well. That certainly is not hearsay. In forming his opinion, that is certainly permitted under the rules of evidence.

This is much different. Mr. Palmer is actually taking information here, cutting it and pasting it into his document, which he has no personal knowledge of these incidents, and he's using that then to come up with these numbers.

This is clearly hearsay. It's not a learned treatise. We don't know who the authors are. We know it comes from a website that is an anti-wind website, which actually says on the website there's no guarantee as to the validity of this material.

So it's not an attempt to hide anything. It's an attempt to have accurate information, and I think to admit this into the record is not only hearsay, but also should not be admitted on the basis of being prejudicial and confusing.

ALJ CHILES: Thank you, Mr. Settineri.
Ms. Parcels.

MS. PARCELS: The city would like to weigh in because the city has developed some questions related to Mr. Palmer's direct testimony that has been moved to strike.

I would direct your Honors to the Ohio courts clearly rejecting the standard in Frye, which requires scientific opinions from expert witnesses only admissible if the theory is -- enjoys general acceptance within the relevant scientific community, and that's a reference to the Williams case and the Pierce case. I can get the citations if your Honors need them.

But the biggest thing is in federal court. The Daubert standard allows a witness to introduce just about anything they use as the basis for developing their testimony or their opinion, and that's frequently cited in patent matters.

ALJ CHILES: Thank you.

Mr. Van Kley, did you have something to add?

MR. VAN KLEY: Yes, I sure do, your Honor.

With regard to Mr. Settineri's remarks, several things. First of all, with regard to the other documents attached to our opposition to the

motions to quash that provided blade throw information and other accident information, primarily all of those were developed from the Caithness database with some additions by Mr. Palmer himself.

When I submitted the opposition to the motions to quash, I didn't even know Mr. Palmer, and I accidentally came across some of these compilations, which turned out to be Mr. Palmer's that I found on the website, and that is what eventually led me to him.

But that information is Mr. Palmer's information which he developed from the Caithness database, in addition to other blade throw incidents that he has personally compiled from other sources of information. So to throw out the Caithness database is to essentially throw out all public information about blade throw incidents and/or accidents at wind farms.

The second thing is with regard to the information upon which the Applicant is relying. First of all, Mr. Settineri says that the Caithness database is combined by a group that is opposed to wind turbines. Well, I would point out that all of the information they are relying on, including the PowerPoints from the presentations that Mr. Poore

bases much of his opinions on, are based on compilations by pro-wind industry sources.

Those were wind industry presentations. So if the Caithness information is invalid because of the opposition of that group to wind turbines, that their information is invalid because it's provided by pro-wind people.

Secondly, with regard to the hearsay content of the data that's being relied on, the Caithness database is no more hearsay than the information that Mr. Poore relied on. Everything Mr. Poore relied on, as he clearly said in his testimony, he obtained from word of mouth either within his own industry, that is, the wind industry, or from presentations like this, which were all hearsay, and he did not see those questionnaires that provided the basis for those PowerPoints.

as the information that Mr. Palmer is relying on, and I would reiterate that if this is going to be the standard, that is, Champaign Wind's proposed standard for evidence in this case, is going to be the rule of the case, then that Application is gone because it is almost exclusively based on the same kind of hearsay.

ALJ CHILES: Thank you, Mr. Van Kley.

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                 The Bench is granting the motion to
     strike in part based on the basis that it is
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     inadmissible hearsay. That includes page 9, line 27,
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    beginning with "One of the best."
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5
                 MR. VAN KLEY: If you could hold on a
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    minute, your Honor, while I get there.
7
                 ALJ CHILES: Page 9, line 27, beginning
8
    with "One of the best" and ending on page 10, line 7.
9
                 Page 11, lines 25 through 31.
                 Page 12, a portion of line 5 that states
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11
     "by the Caithness Wind Farm International Forum."
12
                 Page 12, line 18, beginning with "Thus"
13
     and extending to line 22, ending with the word
     "papers."
14
15
                 Page 3, line 25, beginning with the
16
    phrase "To illustrate" and extending through page 14,
17
     line 7. Also on page 14, lines 15 through lines 25.
                 Moving to page 18, lines 3 through
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19
    page 19, line 4.
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                 MR. VAN KLEY: What was the last line
    again, please?
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                 ALJ CHILES: Page 19, line 4.
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                 The next portion is page 20, line 6
24
     through page 22, line 16.
25
                 Also on page 22, lines 25 through lines
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1 31.
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MR. SETTINERI: Your Honor, if I may, on page 20 is the footnote stricken as well, page 20?

ALJ CHILES: Yes, it is. As the footnote is referencing a portion that was stricken, the footnote will also be stricken.

Turning to page 28, line 11, beginning at "The Caithness," through line 14 ending with Philippines."

MR. VAN KLEY: I'm sorry, your Honor,
would you give that to us again, please?

ALJ CHILES: Sure. Page 28, line 11, beginning with "The Caithness" extending to line 14 ending with the Philippines."

Page 29, line 2, beginning with "However" to line 4.

Also on page 29, line 18, beginning with "A number" to the end of the sentence, extending through line 22 ending with "failed."

 $\label{eq:And also Palmer Exhibit G, Palmer Exhibit L, and Palmer Exhibit M.$

The next item we have in the motion to strike is page 11, lines 5 through lines 11. For this portion the motion to strike is denied on the basis the Board finds it relevant.

Also on page 11, lines 14 through 23, the motion to streak is denied.

On page 12, line 22, there has been a motion to strike the line beginning with line -- 22, beginning with "One of my experiences" through line 28. We have struck line 27 beginning with "These events" through lines 28, beginning with -- ending with "public media." To that extent that portion remains stricken. But the other of line 22, beginning with "One of" ending with "Canada," the motion is denied.

Turning to page 19, line 15, beginning with "Have the utility" through line 19 ending with "demonstrates," the motion to strike is denied. The Board will attribute the appropriate weight to this testimony in light of Mr. Palmers' qualifications.

Palmer Exhibit K, there has been a motion to strike that exhibit. The Board is willing to accept this document as a learned treatise. It may not be received as an exhibit; however, Mr. Palmer may refer to it.

Turning to Palmer Exhibit P, I'm going to have the parties previously summarize their positions on the motion to strike Exhibit P, which is a photograph with some text.

MR. SETTINERI: Thank you, your Honor.

Number one, Exhibit P contains a picture from a website, obviously is not from Mr. Palmer, as well it quotes the caption from that website, apparently appears to be a news website. Based on lack of authentication, as well as hearsay, we would move to have this exhibit stricken.

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Yes, your Honor. First of all, the photograph was not taken by Mr. Palmer but the text on that page was written by Mr. Palmer, and it illustrates the relevance of that photograph.

That photograph is provided as evidence of what can happen if an object of 3 kilograms in size hits somebody's windshield.

Now, granted, the picture is not a picture of a car that's been hit by a piece of wind turbine blade, but it has been hit by an object of 3 kilograms in size, and that shows you what kind of damage can occur to a car windshield if it's hit by an object that is 3 kilograms in size, such as a piece of wind turbine that is 3 kilograms in size.

This is directly relevant to this case because one of the issues is what's going to happen on the roadways if we have another incident such as

we had at Timber Road, and somebody is in the wrong place at the wrong time driving the roadway when debris the size of 3 kilograms comes flying through.

We've already shown through

Mr. Schaffner's testimony that blade pieces can fly
that far, can fly to a distance that will reach the
roads that are closer to the turbines. In some cases
under the Buckeye II Application the roads that we
had at Timber Road were at the location of this
incident.

So some of Ms. Palmer's testimony pertains to the protection of motorists on the road, and whether larger setbacks are necessary from the turbines that are being proposed by Buckeye Wind to protect those motorists from such an object as blade pieces that may be 3 kilograms in size or larger and which will create the sort of damage that we see here shown in this photograph.

Mr. Palmer has the expertise to calculate the amount of harm that will be caused by flying debris from turbine blade. He has found this photograph to be an accurate representation to a car's windshield if you have a piece of debris that is this size hit the windshield, and so it is directly relevant to this proceeding.

ALJ CHILES: Mr. Settineri.

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MR. SETTINERI: Your Honor, I would note a picture of a car being hit by, apparently, per Mr. Palmer's notation, a brick size piece of concrete when there is no picture of anything in here, there is no relevancy. A piece of concrete hitting a car is not relevant to this proceeding, as well as in terms of the corollary relevancy, it is also very confusing. Exhibit P is entitled "The impact of an object falling from a wind turbine." I see the result of a car being hit by something in this picture. There's no other information on it.

ALJ CHILES: Thank you. The Board is going to strike Exhibit P; however, the Board is not striking Mr. Palmer's testimony discussing his assessment about the facts of falling turbines. This is on page 15. The Board is only going to strike the reference to this specific exhibit. That would be line 15 beginning with "As illustrated," and ending on line 17 with "about." That is the only portion we are striking.

Next we will turn to Palmer Exhibit T.

ALJ CHILES: I have a question.

Mr. Palmer, did you take this photograph?

THE WITNESS: I did not take the

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ALJ CHILES: How did you obtain the photograph?

THE WITNESS: The photograph came from either of two Wind Power Notes from the United States. I can't tell which one.

ALJ CHILES: It was from the publication?

THE WITNESS: It's from a web-based

listing related to -- that lists items related to

10 | wind turbines.

ALJ CHILES: Okay.

THE WITNESS: They referred to a news broadcast from Kansas which included with it that picture. So that's the picture from the news broadcast. The reporter said this is a piece of turbine blade found here, which is one mile form the turbines.

ALJ CHILES: Thank you for that explanation. I will take brief argument on Exhibit T, which is the photograph.

Mr. Settineri.

MR. SETTINERI: Thank you, your Honor.

Again, the witness did not take the picture. I don't think he can identify where he got the picture specifically as well; therefore it cannot

be authenticated. We don't know what this picture is of, frankly. With that said, we would move to strike.

ALJ CHILES: Thank you.

Mr. Van Kley.

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MR. VAN KLEY: I think Mr. Palmer knows what it is. He said what it is. It's a piece of turbine blade, and he obtained the information from a news service, and it has the same level or more credibility that -- as much as any evidence that Champaign has used, Champaign Wind used in this Application. We believe that it's pertinent, and we believe it is credible evidence.

ALJ CHILES: Thank you, Mr. Van Kley.

The Board is going to strike Palmer Exhibit T; however, I don't believe there was a corresponding reference to that exhibit within the testimony so we are not striking anything further within the testimony.

I believe that resolves all the outstanding motions to strike. At this time we will proceed with cross.

MS. NAPIER: Your Honor, may we take a brief recess? You have stricken out a lot of the testimony, so at least for me, to organize my

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     cross-examination.
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                 ALJ CHILES: Mr. Parcels.
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                 MS. PARCELS: That's my assessment as
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    well. I need some time to organize my cross. Maybe
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    we can go to lunch early.
                 ALJ CHILES: Anyone opposed to taking a
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    very early lunch break? Mr. Settineri?
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                 MR. SETTINERI: No, your Honor, I'm not.
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     The reason I'm standing, I just want to when we are
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    done -- I'm not opposed to taking a lunch break, but
     there was a reference to Exhibit T in the record. I
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    want to make sure to catch that.
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                 ALJ CHILES: Let's handle that at this
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     time. Could you refer me to that reference?
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                 MR. SETTINERI: Yes, your Honor, page 24,
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     line 9.
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                 ALJ CHILES: As the Board has stricken
    Exhibit T, we will strike the portion of line 9 that
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19
     says "See Exhibit T." We will not strike anything
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    else on page 9.
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                 MR. SETTINERI: Your Honor, did we say we
22
    are going to lunch?
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                 ALJ CHILES: Let's go off the record.
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                 (Discussion off record.)
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ALJ TAUBER: Ms. Napier.

MS. NAPIER: Thank you. The county and townships would call Mr. Jonathan P. Knauth.

(EXHIBIT MARKED FOR IDENTIFICATION.)

JONATHAN P. KNAUTH

being first duly sworn, as hereinafter certified, deposes and says as follows:

DIRECT EXAMINATION

8 By Ms. Napier:

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- Q. Please state your name and address for the record.
- A. Certainly. It's Jonathan P. Knauth, and my address is 10273 Roberts Road, Sauquoit, New York, and the zip code is 13456.
 - Q. And you are here today to present evidence for Champaign County and the townships of Urbana, Union, and Goshen, correct?
 - A. Yes.
 - Q. Do you have before you what has been marked as County and Townships Exhibit 3?
 - A. Yes, I do.
- Q. Is this your direct testimony?
 - A. Yes, it is.
- Q. Have you reviewed the testimony?
- A. Yes, I have.
- 25 Q. Do you have any additions or corrections

to the written direct testimony?

- A. You know, I think I can expand on some of these items that will probably come up in the course of questioning. Is that the best way to do it?
 - Q. There are no corrections?
- A. There's one little misspelling in the question on decommissioning cost per turbine. It says "during one construction phrase." It should be "phase."

ALJ TAUBER: Could you point out where this is, please?

THE WITNESS: Certainly. Page 3 towards the middle of the page, "phrase" should say "phase."

- Q. Thank you. If I were to ask you these same questions today and you were testifying as to the questions set forth herein, would your answers to these questions change, or would they be the same?
 - A. They would be the same.

MS. NAPIER: Thank you. I believe he's ready for cross-examination.

ALJ TAUBER: Thank you.

Ms. Parcels.

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25 CROSS-EXAMINATION

By Ms. Parcels:

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- Q. In your direct testimony you indicate that you are currently a councilman for the town of Litchfield, New York, and serving since last year?
 - A. That's correct.
- Q. You are elected last year. When did you take office?
 - A. June.
 - Q. Since the early part of this year then?
- A. Yes.
- Q. Can you describe to me, if you know, what the difference between a town and a city is? In Ohio we don't have a government known as a town. We have townships.
- A. I would say that's probably comparable. We have counties and then we have towns. Some towns also have villages, and there are some cities that exist as separate entities to towns. There is no city that is part of a town that I'm aware of.
- Q. You wouldn't characterize a town as a subdivision of a government as a city or a village, but you would equate it more closely with a township?
 - A. Correct.
- Q. Okay. In your role as a councilman for the town of Litchfield, are you responsible for

providing emergency medical and firefighting service to the residents of the town of Litchfield?

- A. We have a -- we have a fire district which serves two towns, our town and the adjoining town and Columbia.
- Q. And is that fire district funded with a real property levy or through an income tax?
 - A. Real property levy.

- Q. How would you characterize the nature of your town? Would you consider it suburban or rural?
- A. It is decidedly rural. It abuts suburban towns. The town next to us has a population, I think, of about 50,000. But our town is quite small, it's about 1,500 people.
 - Q. In the entire town?
 - A. That's correct.
- Q. If you know, you said the fire department there is sort of a combined operation with the adjacent town. Do you know how many employees that fire department has to serve the town of Litchfield?
- A. It's a volunteer department, and I believe they have 21 volunteers.
- Q. Okay. Does the town of Litchfield, in your experience, have an air ambulance that services the area there?

1373 1 No, there is no air ambulance in our Α. 2 area. 3 MS. PARCELS: Nothing further, your 4 Honors. 5 MR. PETRICOFF: Thank you. 6 Mr. Van Kley. 7 MR. VAN KLEY: Nothing from us, your 8 Honor. 9 ALJ TAUBER: Mr. Petricoff. 10 MR. PETRICOFF: Yes, your Honor. Thank 11 you. 12 13 CROSS-EXAMINATION By Mr. Petricoff: 14 15 Q. Mr. Knauth. 16 Α. Knauth. 17 Q. My name is Howard Petricoff, so I am used to having my name mispronounced, so I will do my best 18 19 to say yours correctly. 20 Now, Mr. Knauth, you're currently the 21 technical director for Critical Imaging? 2.2 Α. That's correct. 23 What kind of company is Critical Imaging? 24 Α. It's a small development and 25 manufacturing company that develops principally

- imaging systems for many applications, including military, industrial applications, security.
- Q. So you're no longer in large construction then?
 - A. That is correct.

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structures?

- Q. But you were in large construction for a period of time with Rome Iron Group?
 - A. That is correct.
- Q. What years were you involved in large construction?
 - A. Approximately 1990 through 1995.
 - Q. About five years then?
- A. About four-and-a-half years.
- Q. And during that time period, I see on page 2 of your testimony you were involved with distillation columns and other large steel
- Yes, some very large projects. As an 18 Α. 19 example, there was a 4,000-ton power plant. 20 were prisons, Pentagon heating and cooling facility, 21 the Holocaust Memorial Museum in Washington, D.C., 2.2 distillation columns at the GE silicon plant, which 23 are quite tall. We provided erection services as well as structural steel or miscellaneous metals for 24 25 those projects, for the distillation columns

specifically.

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- Q. So this work was all in construction as opposed to decommission?
- A. That was in construction. But I also was involved in decommission for -- we would take on jobs for the local industry and, in particular, there was a steel mill that we would maintain all of their annealing bells and some of their furnaces. They were large, and when they were done with them, we would decommission them. We would have to cut them apart, you know, and scrap them and so forth and we would charge for those services.
- Q. On distillation columns that you put up, did the industry have to post a decommissioning bond?
- A. I was not involved in that portion of product. It's a major GE facility, so I would presume they would have the financial security to be able to do that.
- Q. You're not aware of any bond and you think it's possible they were just self-insured?
 - A. I would think that's possible.
- Q. Now, I take it you have no direct experience in the wind industry?
- A. I've been studying wind for the past
 three years as part of our Wind Law Committee in our

local town, providing counsel to other towns in our area. So I have had about three years experience specifically with wind.

But I'd also like to say one of the first wind farms, the Maple Ridge Wind Farm in Tug Hill,
New York, actually a portion of that went up on
property owned by my family. It's currently in my
uncle's name, but we were involved in that very
early.

- Q. But you personally have never been involved in either constructing wind turbines or wind towers or decommissioning wind turbines or wind towers?
- A. That's correct. I've studied it, but I haven't personally constructed or deconstructed.
- Q. And as part of your studying, did you look at what the market was for turbines, the secondary mark for turbines?
- A. I could not find a secondary market for turbines. It may exist, but I could not find one, despite diligent search.
- Q. But, once again, you're not in the business.
- A. No. But I did, you know, put significant hours in trying to find such a secondary market and I

could not.

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- Q. If a secondary market exists, is it your advice here not to include scrap in a decommissioning calculation, cost calculation, would that extend to turbines or turbine parts?
- A. I guess my concern with including any scrap value or salvage value is that it is too much of an unknown. You are looking for -- you are looking at a product if it is going to be reused that will be probably 20 years old or 25 years old. It's probably old technology, and I just don't know of a comparable example that you could use to say there's a viable market or that there will be one in 20 years.

So I would think that would certainly be the first thing. I would try to sell the parts of the turbine if I could, but looking ahead 20 years, I'm finding it difficult to believe that I could rely on it as a security vehicle.

- Q. Now, you say in 20 years, and you'll agree with me because that's the anticipated life for a wind turbine?
 - A. It's typically given as 20 or 25 years.
- Q. Won't the decommissioning bond have to be in place year one?

A. Potentially.

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- Q. So in terms of looking at what is a proper bond, shouldn't the decommissioning value year one apply to the bond that would be posted year one?
- A. I'm not sure what you mean by "decommissioning value."
- Q. Let's start again. Let's see if we can go back a step.

Would you agree with me the purpose of a decommissioning bond is to make sure if the owner of the wind turbine is insolvent, there would still be monies to bring the turbine down when it's time to bring the turbine down?

- A. I would agree with that.
- Q. And you would agree with me the time to bring the turbine down would be either the end of its commercial life or if there was a catastrophic event that required it to be taken down for safety?

MS. NAPIER: Objection. Objection. I think he's testifying. I don't think he's laid a foundation that is the only time in which a wind facility would be taken down.

23 ALJ TAUBER: Mr. Petricoff.

MR. PETRICOFF: I'll rephrase the

25 question.

- Q. When do you anticipate would be the proper time to decommission a wind turbine?
- A. When it can no longer be operated given the legal climate, given the market climate, given the state of the equipment, when it's no longer viable to operate for any of those reasons, and there are probably a few more.
- Q. The decommissioning bond has to be in place because those could occur at any time.
 - A. I would think so.

- Q. And the goal in setting a decommissioning bond is to make sure that there is a sufficient amount of money that's available to bring the turbine down using good industry or best industry practices.
- A. Yeah. I'm not sure what a best industry practice would be because I don't know of any comparable examples of modern turbines being decommissioned. I think one of the issues that we have is I haven't seen what any best industry practice would be specific to decommissioning.

Certainly there are so far as some of the subcomponent aspects of that or the subtasks, like erecting cranes and things like that. But so far as your turbine itself, I'm not aware of a best practice.

- Q. Theoretically, we certainly might have enough money to decommission a turbine and bring it down at whatever is the best practice at that time.
- A. Yeah, I would think so. And, of course, it extends far beyond just bringing it down. There's remediation of the site, bringing it back to its previous use, typically would be agricultural, monitoring the site afterwards and so forth.
- Q. Have you had an opportunity in preparing for this to review the testimony of Mr. Speerschneider?
 - A. No, I have not.
- Q. How about the Application in this case, the portions on decommissioning?
 - A. I have.
- Q. And have you see the Staff Report, condition, I think it's, 55?
 - A. Yes.

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- Q. Let's go back and see what items we can agree on. We agree we have to have a decommissioning bond in place at the time that we have the wind turbine constructed.
- A. Yeah. You know, a bond is one form of security. There are others, as I'm sure you're aware, and, I guess, that would be -- you know, some

security vehicle, and a bond is one method of doing it.

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- Q. Right. And you're not expressing any opinion as to what the financial vehicle should be, only that have funds available when needed for the decommissioning?
- A. Yeah. Typically it's a bond, but, you know, there are other ways.
- Q. I think you mentioned in GE, it may have been a parent guarantee.
- A. You know, I never got involved in that so it would be pure speculation on my part.
- Q. So we agree it's a financial instrument, and at this point we are not opining on what that should look like. And I think we have an agreement that the amount of the decommissioning bond has to be commensurate with what the expenses for the decommissioning are.
- A. Yes. Specifically, I think to have the -- not just the expenses, but the cost of contracting for that. I think that is critical, rather than just, as an example, adding up the cost. It's the cost, in my view, or should be, to hire a general contractor to do that work, as well as the engineering effort required to figure out what to do

to plan it, the safety planning, the training, all of the things that are necessary before you start a heavy industrial project like that.

- Q. Now, in the Application it indicates there's going to be -- studies are going to be done at that time by an engineer that would lay out the decommissioning plans, including restoration of the site. Is that your understanding of the Application?
- A. The Application had I think two paragraphs on the subject, and, frankly, I can't quite remember the detail on that.
- Q. Do you have a copy -- you did indicate you did review the Staff Report?
 - A. Yes.

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- Q. And, in particular, condition 55.
- A. Yes, I do have that with me.
- Q. Okay. And if you would take that out and focus your attention on it.
 - A. Uh-huh.
- Q. 55 sub (a) says, "The Applicant facility owner and facility operator shall provide the final decommissioning plan to the Staff and the County Engineer for review and confirmation of compliance with this condition at least 30 days prior to the preconstruction conference."

And in your mind, is that a good time to have it, before we start construction, 30 days before to look at the plan?

- A. Well, if I were planning -- if I were planning the sequence of events, I guess I would rather have it earlier because it would provide more time to make any modifications to it, for it to be analyzed. So I would think that 30 days, maybe it needs to be more than that. It might be okay.
- Q. Then if you look at A, we have a description of A, the subparts, as a description of the level of detail, and that will have to have the engineering techniques, and that every major step of the plan would have to be set out. Is that generally the kind of structure you think would be necessary to have a competent plan?
- A. Well, I think that this is fairly open-ended as to what sort of plan would be produced, you know, as a result of these requirements.

 Basically they're asking for a plan. So, you know, a good plan would include many aspects of engineering judgment, knowledge of the site, and so forth, and I would expect to include a lot of detail, and I'm not sure that this is -- was intended to lay out all of the detail that would be in the plan, but it seems

like a good framework for a task description to create a plan.

- Q. Okay. Now, earlier you indicated your concern was trying to set a plan that would have to most likely go into effect or may go into effect 20 or 25 years from now. Is that fair assessment?
- A. Yes. One of the risks, we simply don't know what is going to happen in 20 or 25 years.

 There's risks of what the market conditions are, what the available labor pool is, what support contractors are available at that time, as well as what the regulatory climate is. As an example, you know, the notion here, as I understand it, is to leave the collection system in the ground, leave the cables in the ground. That might be fine or it might be considered a landfill. So there could be some issue that increases costs in the future based on all of these unknowns.
 - Q. Wouldn't you agree with me that under the proposal and under 55 that these costs would be revisited periodically to make sure that -- that the plan would be revisited periodically to make sure that it meets current standards?
 - A. Yeah. The first part of that where you mentioned the Application, those two paragraphs that

I did read, but I don't have them in front of me, I don't know if that called for it, but this calls for a five-year review.

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- Q. And doesn't that take care of the problem that the costs or the salvage values or the regulations are not only -- may change between now and 20 years when the plan goes into effect?
- A. I am not sure a five-year resolution on salvage value is an adequate resolution. The market -- if we just went and completely scrapped everything, the market for scrap varies, you know, on a daily basis, so one day you might have a different value for scrap than you do the next, based on what the current demand is.

So I'm not sure that five years is an adequate resolution to capture those differences. If you look at the long-term scrap values, for example, I looked at them for steel, they are extremely volatile, and one year to the next it could be twice or double -- half or double, I should say, than it was the previous year. I'm not sure five years is an adequate resolution to handle that aspect of it.

But so far as handling some of the other things, labor costs, you know, oftentimes there is significant inflation within a five-year period, so

that needs -- that risk, I think, needs to be weighed against the risk of having too much regulatory -- need for regulatory oversight. So if I were to come up with a number, I'd probably be closer to three years or two years rather than five. Five seems to be on the outside limit.

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- Q. You said there may be excessive regulation. Would the requirement that posting a bond greatly in excess of the costs of decommissioning, would that be an example of over-regulation?
- A. I'm not saying over-regulation. What I'm saying is that the review of that -- let's say it was done monthly. It would be ridiculous. If it were done monthly, let's say, we would have certainly a greater accuracy of the numbers, but it would be a regulatory burden, clearly, on whoever -- I presume the state or the local board who is reviewing.

So, obviously, you want to avoid that.

So there is some happy medium there, and I would tend towards the two- and three-year range versus the five.

Q. Would you agree with me doing it every two or three years as opposed to five would increase the cost?

- A. Increase the cost of what? I'm not sure.
- Q. Maintaining the decommissioning plan.
- A. Not necessarily. I wouldn't jump to that conclusion.
- Q. Won't those engineers have to be paid to do the studies?
- A. Yeah. But if you have a greater -- if you reduce the uncertainty, then it's possible that you can reduce the required security. So, I mean, there's balancing.
- Q. And as part of that balancing, would that include maybe the salvage value for turbines and turbine parts?
- A. Well, I still don't think that even a two-year time frame is adequate resolution to determine what the scrap value is going to be. It's too volatile. It's a commodity that's extremely volatile.
- Q. You indicated that scrap metal -- first of all, do you have any idea of the volume of scrap metal that would be created by taking a turbine down?
 - A. Yes.

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- Q. Okay. Could you share that with us?
- A. Sure. Let me see if I have a piece of paper here. I've looked at a number of

- decommissioning plans and reviewed one of my own, and, as an example -- let's see. There's one example for a Vestas 3 megawatt turbine that was 190 metric tons. This to get something in the ballpark.
- Q. And at the current price of scrap steel, what's the value of 190 metric tons?
- A. I can't tell you what it is today. Last year when I did this particular estimate that I'm looking at, it was \$350 per metric turn as delivered to the mill in a size sufficient to fit into the furnace itself. So that was a size of 60 inches by 18 inches. That was a No. 2 scrap steel.
- Q. I'm sorry. Would you mind repeating that number? What was the price per metric ton?
- A. At the time I looked at this, it was 16 \$350.
 - Q. And that was 190 million?
 - A. That was 190 metric tons.
- 19 Q. Oh, 190.

A. Now, that value, of course, is the value cut into the size to fit into the furnace charge box delivered to the mill for use. That's wherein the problem lies. In addition to volatility of the price of scrap steel or any other scrap metal, is that you need to size reduce it and put it into a form that's

suitable to the mill in order to get that best price. So it would be considerably less than if it were in any other form.

But if you want to get the best price, cutting it to that size in this particular case, 60 inches by 18 inches, would be necessary and delivered to the mill.

- Q. If a decommission plan called for both estimates of decommissioning without salvage and with salvage, and basically the details on the market valuing of the salvage was supplied, along with some adjustment for market volatility, would that be sufficient?
- A. The adjustment for market volatility I think is the problem. There's a lot of volatility. You know, I looked at -- as an example, I looked at -- there are quite a number of turbines that are standing that were erected in the 1980 time frame. But if you go 20 years forward, it just so happened that the price of steel dropped in half during that period.

So you know, but there were other points where it was even higher or lower than dropping in half. So I'm not exactly certain how you would allow for that volatility. I mean, I would think you would

probably take a low number, perhaps a ten-year rolling average of a low value would probably be a reasonable thing.

Q. Okay.

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- A. But I don't think there's a straightforward way of doing that, and that's one of problems.
- Q. And one of the solutions for that problem is to meet periodically and review both what the cost is going to be as well as the amount that has to be set aside in assurance.
- A. Yeah, I think that is one approach. But as I said, you know, a five-year or even a two-year or three-year is inadequate -- it's an inadequate, you know, kind of sample period because, you know, the day after you met and came up with those values, the price could go down 20 percent.
 - Q. As well as go up 20 percent?
 - A. It could. It could.
- Q. Should there be a concentrated effort, though, to make sure that the bond is not too large so that excess capital will be wasted?
- A. I think that you always want to estimate as close to the mark as you can get, but these are always estimates, and there are certainly -- there

1 are uncertainties, there are risks. And the question 2 becomes who bears those risks. Does the developer 3 bear the risk or the owner of the site at that time 4 bear that risk, or does the community bear the risk? 5 So, you know, that has to be weighed, I 6 don't see why the community should bear that risk. 7 If there's some uncertainty, I would tend towards --8 I would tend towards having the, you know, owner of the turbines and developer, whoever that would be at 9 the time, you know, bear that risk as opposed to the 10 11 community. 12 Q. Under this plan, who eventually has to accept what these projections and bond amounts are? 13 MR. REILLY: Objection. I'm not clear on 14 what "this plan" means. 15 16 MR. PETRICOFF: The decommissioning plan. 17 MR. REILLY: Any decommissioning plan? MR. PETRICOFF: The one in 55. Actually, 18 19 we are still talking about paragraph 55 of the Staff 20 Report. 21 Thank you. MR. REILLY: 22

A. You know, I'm not sure based on the wording here. I mean it could be the staff. It could be -- I'm not sure.

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Q. Let's see if I can come to some summation

here. The idea, we want to set aside some type of surety to make sure that money will be available to decommission the turbines if the company is unable to do so financially. Would you agree with that?

A. Yes.

- Q. And I think we want to get as good estimates as we can what the costs are and what the money we set aside is.
- A. Yeah. I'm not sure, you know, about the money you set aside. I presume you would know that. But you're saying what the value of the bond would be to cover that?
- Q. The value of bond or the value of assurance. Let's talk about the value of the assurance versus the cost of decommissioning.
 - A. Right.
- Q. We want to get it as close as possible, but we want to minimize the risks, that we may be a bit on the conservative side?
- A. You could potentially be a bit on the conservative side. And the argument I made is that the scrap value is a -- could be used as a hedge against those uncertainties. You know, all the uncertainties we talked about, the regulatory climate, the labor availability and cost, all of

those different things.

You know, there you have -- it certainly is worth something. Scrap is worth something. We just don't know how much it is. I think oftentimes decommissioning estimates are overvalued because the -- because values of the, you know, price quotes for material delivered to the mill are oftentimes used, you know, as though -- as a representation for -- you know, a turbine is standing up, so you would say this standing turbine is 190 metric tones; therefore, it is worth that much.

But the value you are comparing it to is the value delivered to the mill in small pieces.

Obviously, there are labor costs involved and transportation in getting from one point to the other. So the scrap value, the salvage value, in my view, could be used as a hedge against all of those unknowns, and that would probably be the way of doing it.

- Q. One last question. In your experience working on large decommissioning projects, the ones we discussed earlier in your testimony, how good have cost estimates been on the decommission?
- A. Well, my experience is on decommissioning, but it's also on the initial

construction, and so I don't want -- you know, most of it is on the initial construction side.

Now, I've seen some examples that the cost of decommissioning is analogous to the cost of erection. One example I saw it was within 10 percent, decommissioning study I've seen from another project.

So I think that an understanding of how the costs of erecting, you know, a large territory like this, the cost of, you know, field crews, and those sorts of activities. I think it is relevant if, you know, you look at the construction or if you look at demolition portions of it.

- Q. I was asking a much simpler question. I asked in your experience in the decommissioning you've done, have your estimates come out pretty close to the costs at the end of day, just in your experience?
- A. No. Actually, it came out more costly, and I had to go back and explain myself as to why I didn't account for all of the costs.

MR. PETRICOFF: I have no further questions. Thank you.

ALJ TAUBER: Thank you, Mr. Petricoff.
Mr. Reilly.

MR. REILLY: Thank you, your Honor.

CROSS-EXAMINATION

By Mr. Reilly:

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- Q. Good afternoon, Mr. Knauth.
- A. Knauth.
- Q. My name is Steve Reilly. I'm here on behalf of the staff of the Ohio Power Siting Board.

 I just have a couple of questions for you.

I'd like you to take a look at page 3 of your testimony, and the last sentence of the second -- the last sentence of the answer to the second question on that page, it begins, "If a turbine amount were set." Do you see that?

- A. Right.
- Q. Would you take a look at that for me. I mean you don't have to repeat it. Just take a look at it.
 - A. Right. Okay, I see it.
- Q. Okay. And your concern is that there might be differing amounts to decommission different turbines, correct?
- A. Yeah. And as I thought about this a
 little bit further, I agree with that statement that
 I made, but as I thought about this a little bit

further, I also came to the realization there's a mobilization cost of getting the crane on the site, erecting the crane.

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And if you were to do this on a per-turbine basis, you would have to include those mobilization costs for every turbine. So that would be -- that would increase the value, I would think, or the cost.

- Q. Well, my question really is, though, that if the costs of decommissioning whatever they might be -- and there may be disagreement here over what they are -- but whatever they may be, if the costs of decommissioning were spread evenly among the turbines, that satisfies your concern in that last sentence of the second full question, correct?
- A. No, it doesn't. I'm sorry. I mean, I'll just read the sentence.
 - Q. Fine, please read it into the record.
- A. Sure. "If a per turbine amount were set I would expect individual turbines would have different decommissioning costs reflecting the differing amounts of infrastructure involved, as well as adjustments for distance to rows and other factors."

So if you were to take the total project

and divide it by the number of turbines, I would think there would be some cases, I would believe, you wouldn't adequately -- for some turbines it would be too much, for some turbines it would be too much, and for others, not enough.

- Q. And that's based on your understanding of what the decommissioning would involve, correct?
 - A. Right.

- Q. Okay. Earlier in your testimony you stated that removal of cabling was not included in decommissioning, as described in the Staff Report; is that correct? I'm talking about your oral testimony, your discussion with Mr. Petricoff.
- A. Right. If I -- my first read on that, it was included, but, frankly, I was a little confused when the question was asked.
- Q. Am I correct you're not sure of what is included in the decommissioning -- what is required in decommissioning as it is described in the Staff Report? Am I correct on that?
- A. Well, this is asking for a detailed estimate, and so this isn't, in and of itself, a detailed estimate or, necessarily, a detailed set of requirements. This is asking for that.
 - Q. Let me back up again. Are you aware of

what is involved with decommissioning as described in the Staff Report?

- A. Yes. I've read it several times.
- Q. And you're aware the cabling is to be removed as described in that -- in the Staff Report? I direct your attention to paragraph 55 (d), second sentence.
 - A. Yep, I agree with that.
- Q. Okay. So when you were speaking earlier, you are in error what would be included, correct?
 - A. In that regard, yes.
- Q. Okay. Are you aware that the Staff Report does not recommend using salvage values?
 - A. I am aware of that.
- Q. And as I understand your testimony, you agree with that approach?
 - A. Absolutely.

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- Q. Okay. And as I understand your testimony, you also agree with a shorter planning time frame than 20 to 25 years?
 - A. Yes.
- Q. Okay. Am I correct you would agree with using a single amount rather than variable amount for determining the amount to decommission turbines?
 - A. Could you please just repeat that.

Q. I'm sure I didn't say it very well.

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Would you agree it is better to have a single amount for each turbine and that amount be the same and include all, if you will, indirect costs, not directly involved with the turbine but associated with all turbines than to have a variable amount between turbines?

A. Well, I'm not quite sure how to answer your question so I'm going to do my best here. My concern about a single value is that, one, I think that it would -- that if properly estimated, would end up being high. So I would be concerned about that because you have to put mobilization costs in each and every turbine, presuming it was going to be done individually.

The next thing is there are varying amounts of infrastructure. You know, you could just average them out, and that is an approach, and maybe it's an okay approach, but I think it just needs to be recognized there's varying amounts of infrastructure, that every individual turbine won't be the same in cost.

Q. And then am I correct, did I understand your testimony in responding to Mr. Petricoff's questions, that you see the answer to all of this

decommissioning being biannual estimates?

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- A. I guess I think that five years is probably too much. Biannual is probably okay. Three years might be okay, too. I would think more frequently than five, but I don't have a specific recommendation as to two or three. That's it.
- Q. Just so I understand your answer to the concern that you express in the last sentence of the second question on page 3, is an estimate every three years?
- A. I think that would be reasonable, but I don't have a specific recommendation for three versus two.
- Q. And that solves the problem that you're raising there.
- MS. NAPIER: I'm sorry, which what is raising?
 - MR. REILLY: Well, he is raising -- let me back up.
 - Q. What is the problem you're raising in that sentence?
 - A. Well, I guess I'm not sure that changing the estimating, you know, interval addresses my concern here. My concern is that every turbine will have differing amounts of infrastructure associated

with it, and that if it's considered on a per-turbine basis, it is logical to provide enough value, enough security to decommission a turbine as a result.

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Then you would -- in a situation whereby you would overly burden an individual turbine with mobilization costs that could better be spread over a larger number of turbines. So I think in one sense it would logically result in higher costs per turbine than, you know, doing it on a project basis or some other grouping of turbines.

- Q. And what is your solution of that problem that you're espousing?
- A. My solution is do it on a whole-project basis, or if it has to be done on a per-turbine basis, calculate it separately based on that being a specific project.
- Q. So your preferred answer there would be an estimate of the amount to decommission the entire project?
- A. That would be -- I would think that would be preferable to doing each individual turbine as a separate project, and I think if you added all of those up, logically that would be a higher number than the project as a whole.
 - Q. That is the method that you would -- that

- you're advocating?
- A. I would think the whole project would be a better method.
- 4 MR. REILLY: We have nothing further.
- 5 ALJ CHILES: Thank you.
 - Ms. Napier, redirect?
- 7 MS. NAPIER: Yes.

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REDIRECT EXAMINATION

10 By Ms. Napier:

- Q. You had indicated you had reviewed the
 Application regarding the protocol from Applicant for
 decommissioning.
- A. Yeah. I believe there were two programs,
 but there may be three. I don't have that in front
 of me.
- Q. Can you look, there are a few binders in front of you, and there is Volume I. Do you see it?

 Do you see Volume I?
- A. Volume I.
- Q. On page 159, do you see it at the bottom of the page?
- 23 A. Yes.
- Q. Is that the section that you had reviewed in response to Mr. Petricoff's question?

A. Yes.

Q. Do you see in the first sentence of that paragraph titled "Financial Assurance, Champaign Wind proposes to post a financial assurance in the amount of \$5,000 per each turbine prior to construction until the facility has been operational for a year."

In your opinion, is that an adequate amount for financial assurance?

MR. PETRICOFF: Objection, your Honor. Your Honor, that was not part of cross.

ALJ TAUBER: The objection is sustained. It was not part of cross-examination.

MS. NAPIER: I believe he mentioned to him if he reviewed it. He opened the door. Although he didn't get far in, he opened the door.

ALJ TAUBER: I think we exceeded the scope of cross-examination.

- Q. (By Ms. Napier) You indicate that you had reviewed the Staff Report and given testimony here, correct?
- A. Yes. And, you know, I just want to emphasize I think that's pretty good.
- Q. Okay. Did you believe in your review that the decommissioning cost issue was an issue in this project?

- A. I'm sorry, I don't quite understand the question.
- Q. Did you believe that all the parties are agreeing on this decommissioning cost, to your knowledge?
 - A. You know, I don't know if they've agreed.
 - Q. Now, you had talked about knowing the purpose of a decommissioning bond. Do you know who basically, in essence, takes that decommissioning bond, if necessary?
- A. Who takes it to execute the decommissioning?
 - O. Uh-huh.

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- A. I'm not sure who has this responsibility under this.
 - Q. Would it be the Applicant?
- A. I'm just -- I'm sorry, I just don't know how that's been structured here.
- Q. Well, who would do the decommissioning?

 Do you know that?
 - A. Well, the decommissioning, I would presume that would be done by a general contractor that had been hired out of the proceeds of the bond.
 - Q. And you had indicated in response to a question that you thought there was missing kind of

the cost of hiring a general contractor. Can you explain that?

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A. Well, looking at the staff recommendation, I'm not sure that I would go that far. But I think that the way that it's worded, it doesn't specifically say "general contractor," but it does talk about RS Means. There are certainly standard formulas for how one calculates, you know, the cost of any project, and certainly there's judgment calls involved. And you change, you know, overheads and profits and these sorts of things.

But I would think that a logical way of doing that, reading the Staff Report, would be to do it on the basis of a general contractor performing the work. I mean, that it is how construction projects are done.

- Q. And you had responded regarding salvage value being a hedge or a cushion -- I'm not sure I'm phrasing that correctly -- for any costs that may arise from decommissioning.
- A. Sure. You know, all of these things are called estimates for a reason. The actual cost in the end is something different. It's never exactly the same as the estimate. They're all estimates.

 There's risk involved. The scrap value I think could

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serve as a -- I did use the word "hedge," but a contingency, if you will, against those unforeseen costs.
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- Q. In your experience have you dealt with a project that has been financed or secured by a third party?
 - A. Oh, yes.

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- Q. And how does salvage value come into play if there's some financing involved?
- A. I was thinking in terms of construction to the deconstruction when I answered the question. So, you know, in my personal experience in the construction industry, we've never used a bond to deconstruct. But we have used -- we have called on surety to -- we've exercised performance bond on subcontractors that default, and we had to go and use surety to finance the remainder of the project.

MS. NAPIER: Thank you. I appreciate it.

ALJ TAUBER: Thank you, Ms. Napier.

Ms. Parcels.

MR. VAN KLEY: Nothing from the city.

ALJ TAUBER: Mr. Van Kley.

MR. VAN KLEY: Nothing from us.

ALJ TAUBER: Mr. Petricoff.

MR. PETRICOFF: No recross.

1407 1 ALJ TAUBER: Mr. Reilly. 2 MR. REILLY: Nothing, your Honor, thank 3 you. 4 ALJ TAUBER: Thank you, Mr. Knauth. 5 You're excused. 6 MS. NAPIER: At this time the county and 7 townships would move into evidence their Exhibit 3. 8 ALJ TAUBER: Any objections to County and 9 Township Exhibit 3? 10 MR. PETRICOFF: No objection. 11 ALJ TAUBER: Hearing none, it will be 12 admitted into the record. 13 (EXHIBIT ADMITTED INTO EVIDENCE.) 14 ALJ TAUBER: Let's go off the record. 15 (A luncheon recess was taken.) 16 17 ALJ CHILES: Back on the record. 18 Mr. Van Kley. 19 MR. VAN KLEY: Your Honor, before we call 20 Mr. Palmer back to the stand, I wanted to make a 21 motion to the Bench with respect to the testimony and 2.2 the exhibits from Mr. Palmer that have been struck. 23 We have, of course, offered them for

purposes of providing factual information for Mr. Palmer's testimony and have clearly offered them

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for that purpose.

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However, at this point, I believe that we would supplement our request that they be considered and would move that they be considered for this purpose, which is for the purpose of showing that the testimony and the Application of Champaign Wind in this case are not credible because the witnesses for Champaign Wind and the Application both contend that based on things they have heard or things that have not been heard in the wind industry about public safety, this Application protects public safety; that is, they have been arguing that the lack of information that they have heard about public safety, such as blade throws and blade failures, ice throws and other accidents, shows that wind turbines are going to be safe, and, therefore, you need not worry about setbacks

So at this point, without waiving our request that the information also be considered for the truth of the matter therein, we would also offer them for purposes of establishing that the evidence being offered so far, and, in some cases, introduced into evidence, is not credible.

So to that extent we would request this information be considered not for the truth of the

matters therein, but for purposes of impeaching and showing the lack of credibility of the evidence that Champaign Wind has provided to support his Application.

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Just to be clear, we are offering this information both for the truth of the matters therein, which you already decided we can't, and we will respect that.

ALJ CHILES: I understand.

MR. VAN KLEY: But at this point we are also asking you to consider the information not for the truth of the matters asserted therein, but for purposes of impeaching prior testimony that has been submitted to the Board.

ALJ CHILES: Thank you.

Mr. Settineri.

MR. SETTINERI: Your Honor, I don't know if there is a motion there. To the extent this is a motion to reconsider the various decisions you made as to the Champaign Wind witnesses and the evidentiary issues, our objection stands as of the time we made those.

The witnesses are off the stand. The time to impeach the witnesses was at that time.

Mr. Van Kley and others had every opportunity to do

so. I also note that Mr. Van Kley stated at the beginning of his request that these are statements of fact and that you have already decided it is hearsay, should not submitted, should not be carried into the record and, therefore, cannot be considered.

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MR. VAN KLEY: Your Honor, to be clear, I am making a motion to reconsider.

ALJ CHILES: Motion to reconsider.

MR. VAN KLEY: And Mr. Settineri is correct, we had the opportunity to impeach the witnesses that have been on the stand, and we have rather vigorously done so. However, at this point we are offering this evidence as further — to further indicate that those witnesses' testimony was not credible.

And information that is in the Application that relies on the lack, or the supposed lack, of public record about the hazards of these facilities, we are offering this information for purposes of showing that that information in the Application is not credible, as well as the testimony from Champaign Wind's experts and lay witnesses is not credible.

ALJ CHILES: Thank you, Mr. Van Kley.
Your motion to reconsider is duly noted for the

record, but the motion is denied at this time.

Thank you.

MR. VAN KLEY: Thank you, your Honor.

We are ready to call Mr. Palmer back to

5 the stand.

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And, your Honor, I would like to ask

Mr. Palmer to make one more correction to his

8 testimony.

ALJ CHILES: Of course.

Mr. Palmer, I want to remind you, you are still under oath.

12 Thank you

12 Thank you.

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14 WILLIAM PALMER

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

DIRECT EXAMINATION (Continued)

18 | By Mr. Van Kley:

Q. Mr. Palmer, would you go to the exhibits in your testimony, and I would like to specifically direct you to Exhibit R, which constitutes three pages, R-1, R-2 and R-3. And I see that under the column that is labeled "Nearest Home" towards the middle of the page has some references to some of the roads using OV and then the number of road.

A. Yes, sir.

- Q. Do you have a correction to make with regard to the designation OV?
- A. Yes, sir. I took those designations off the map. The roads there -- do you all have Exhibit R in front of you?
 - Q. Yes, we have the exhibits.
- A. If you look at "Nearest Home," the top one that shows SH36, that was my designation of the highway number within the shield, which is US Highway No. 36, so SH36 should refer to US Highway 36.

Now, the ones referring to TR157 and so on or county roads, there's no change to those. The ones that show as OV29, as an example, which is about two inches down in a line there, it would be easier understood if that was considered as State Road 29. The maps shows them as 29 in an oval, and that was my short script.

- Q. Okay. Were you referring to how the roads are marked on the map, with an oval?
- A. I was referring to the designation -where I said "nearest home," sir, what I was looking
 at, I was looking at the road that -- if we go down
 to what is called OV29 there, what I was referring to
 there is to say turbine 78, the nearest home to it is

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accessed from road, it should be called State Road
2 29. I called it OV29, but it should have said State
Road 29. The distance in the next column where it
says 29 feet, that's the distance to that nearest
home.
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And the TWHY are the township roads, some of which actually have names, commonly known names. Actually, looking at the roadside, they have township highway number in very small print at the bottom and sometimes have a name on the top. But, again, I was just using the nomenclature.

Wherever it says "OV," I ask you to change that to "STRD," state road. Where it says "SH" should be changed to "US highway number."

Does the court need me to go through it individually?

ALJ CHILES: You mean R-1, R-2, and R-3, all three of those pages?

THE WITNESS: Yes, ma'am. Sorry, that was my short script.

ALJ CHILES: That's quite all right.

MR. VAN KLEY: At this point, your Honor, the witness is available to answer questions.

ALJ TAUBER: Thank you, Mr. Van Kley.

Ms. Parcels.

MS. PARCELS: Thank you.

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CROSS-EXAMINATION

Parcels representing the city of Urbana. I just have

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By Ms. Parcels:

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Q. Good afternoon, Mr. Palmer. I'm Breanne

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7 a few questions.

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In your answer to your educational background, you said you completed courses in public safety and risk assessment.

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A. Yes, that's correct.

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Q. Does that include any particular medical emergency service training?

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A. I have standard first aid, but that is the limit of my education. Those two courses did not refer to emergency medical training, no.

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Q. Okay. In those courses did you ever reference the concept known as the golden hour?

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A. I'm not familiar with that term.

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public safety and risk assessment, does that mean you

I guess when it comes to the terminology,

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look at all the possible things that can go wrong

I'm looking at what is there in a system, you know,

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with something?

Q.

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A. Yes. Basically when I say public safety,

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in this case a wind or wind turbine system, which --
can a failure of that system impact public safety.

That's what I'm really trying to say.
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- Q. Okay. So once you identify what can go wrong, what you termed a failure of the system, then what would be your responsibility to, I guess, communicate with the local community about the public safety risks?
- A. As a professional engineer, I am obliged, if I determine that the health and welfare of a member of the public is impacted --

THE WITNESS: My microphone, or just tell me if it's me.

ALJ CHILES: I think you're fine.

- Q. I can hear you just fine.
- A. I have an obligation to identify if there is a risk to the health and safety. I have a responsibility as an engineer to present that information to the responsible authorities.

Part of the reason why I am here today, the responsible authorities are the Court and Ohio Power Siting Board, so I am presenting that information. Does that answer your question?

Q. That does answer my question.
On page 2 of your testimony it indicates

your experience with occupational safety issues and specifically you reference working for mines as an electrical project engineer.

Did you, in your capacity working for the mines, have occasion to report to anyone outside the mine company, such as you noted, the local authorities, when you identified a safety issue?

- A. When working for the mine company, I dealt only with the mining company.
 - Q. Okay.

- A. Different when working with Ontario Hydro, Ontario Power Generation, Bruce Power.
- Q. Okay. What about working with nuclear, did you have occasion to report to anyone outside of your own company in terms of public officials?
- A. Yes, certainly. Because one of the major -- one of the major groups that I had to deal with personally was I was charged with responsibility of dealing with the Canadian regulator, currently it's called the Canadian Nuclear Safety Commission.

 In the days I was doing it, it was called the Atomic Energy Cohort. I was the person who interacted with the person who talked to them.

If there was an issue, I was the one that went to them to tell them there was an issue. I was

involved because I was a member of the Municipal Control Group, where I was the one as part of the plant staff that would go to emergency simulations, exercises fortunately, never real things, with the group that would take control of that accident.

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So there we are dealing with municipal authorities who would take control, including the medical officer of health, the county, including, you know, who the designated person might be, the reeve --

THE COURT REPORTER: Excuse me?

ALJ CHILES: Off the record.

(Discussion off record.)

THE WITNESS: The reeve, R-E-E-V-E. The reeve is the head of a township. We discussed earlier townships, towns, counties. The reeve is the head of a township. So the wind power -- nuclear power plant at that time was in the township, so the reeve of the township would be on the council.

There may be -- the reeve of the township would be there. It may be mayors of municipalities. It may be the warden of the county, which is the head person in the county, the different names of the officials.

So, yes, I did have occasion to deal with

people on those sort of cases, both the regulators and the local municipalities.

- Q. (By Ms. Parcels) I just wanted to clarify you did work with the emergency responder then on the local level in terms of communication?
 - A. Yes. I actually -- I'm sorry.
- Q. Actually, let me back up. You're from Ontario, Canada, correct?
 - A. That's correct.
- Q. And would you characterize that as an international neighbor of the State of Ohio to the north with Lake Erie separating those two geographic entities?
- A. Yes. We are -- we are your -- we are your northern neighbor, yes.
 - Q. Okay.

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- A. Ontario is the -- Ontario is the province directly the other side of Lake Erie, so we are the reciprocal.
- Q. Okay. Did you drive down to Ohio or fly down?
 - A. I drove to Ohio.
 - Q. How long did it take you approximately?
- A. Driving, total driving time is about eight hours.

Q. Eight hours, do you often have occasion to travel to the United States, in particular Ohio?

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- A. The only other occasions I've been in Ohio has been going through Ohio. I hate to say it, but going south to Tennessee, going south, through the south. So I have been through Ohio State before. I have never had occasion to be spending time in Ohio previously.
- Q. I just wanted to establish this is not your first visit, even if it's been, as you termed it, driving through?
- A. No. This not the first time I've been in Ohio. I've been through Ohio a number of times before.
- Q. I want to direct you to I believe it's page 14 of your testimony -- no, not page 14. Oh, it's page 15 of your testimony. There at the top, line 4, you make a reference to a Ford Crown Victoria. Could you read that sentence for me?
- A. "If the outer 10% of a wind turbine blade falls to the ground, it hits with the same impact as a Ford Crown Victoria falls over two and a half times the height of Niagara Falls." Reading it again, it should say "falling, hits with the same impact of a Ford Crown Victoria falling."

- Q. I was going to ask you to clarify that sentence because falling makes more sense.
 - A. Sorry.

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- Q. I'm curious, why did you select that particular model of vehicle for your analogy?
- A. It was the biggest motor vehicle I could conveniently think of doing an analogy with.
- Q. Would you describe that? Is that a full-sized four-door sedan --
- A. Yes, it is -- it is a -- it was -- at the time there are many police cars which are Ford Crown Victorias because they are the largest -- they are the largest, heaviest-built motor vehicle on the road, other than getting into things like Hummers and the like. They are certainly the largest automobile motor vehicle.
- Q. And you indicated you drove down here from Ontario.
 - A. I did, yes.
- Q. And you indicated in your answer to a question just a moment ago that many police cruisers are Ford Crown Victorias. Did you observe any Ford Crown Victorias on your trip from Ontario south that were marked as police cruisers?
 - A. I did notice there were police cruisers

that were unmarked.

0.

- Q. Just wanted to clear that up.
- A. Yes.
- Q. Your reference to the Ford Crown Victoria now makes more sense.
 - A. Yes, I did.
- Q. Do you personally know the height of Niagara Falls?
- A. I have visited Niagara Falls many times. It is 166 feet, basically, 167 feet.

Okay. Thanks for clearing that up.

- Would you characterize -- you said it took about eight hours to drive it. Would you characterize the climate in Ontario and Ohio as being geographically similar, just based on your personal knowledge as a resident and driving through Ohio?
- A. They're geographically similar in that they are both in the central part of North America, and for that reason, they're subject to very similar conditions of atmospheric highs and lows that will —that will move across the border. The same the same weather patterns travel both side of the lakes, so the weather is very similar.
- Ontario, the further north you go in Ontario, it will be a little cooler in the winter,

- but fundamentally they're very similar. Ohio and Ontario are very similar.
- Q. Does Ontario have spring or summer season where thunderstorms and possibly even tornadoes are prevalent?
- A. Certainly thunderstorms are prevalent in the spring. Tornadoes do happen. We had a rather significant tornado in the town of Gotridge, which is the town second furthest south from me, which caused severe damage to the town about a year and a half ago.
 - Q. Did you observe any of that damage --
 - A. Yes.

2.2

- Q. -- just being a resident of the area?
- A. Yes, I -- yes, I did. I was in the area and did see it. I also have friends who were physically there at the time and, you know, came back with -- came back with their evidence. I then went down and saw the evidence with my own eyes.
- Q. So you indicated in your direct testimony that lightning strikes, from your perspective, are one reason for blade failure.
- A. Lightning strike is a very common cause for blade failure, yes.
 - Q. Okay. And you indicated in your question

just a moment ago that Ontario is subject to thunderstorm activity. Do you know if Ohio, being subject to the same sorts of weather conditions, is also prone to thunderstorm activity in the spring and summer?

- A. I have -- I have done some investigation of the United States National Weather Services to be able to convince myself that in -- you know, in a very similar pattern. So, yes, it's a very similar -- it's a very similar sort of climate type thing. I don't -- I don't see Ohio, for example, being in tornado alley, as some of the midwestern states are in quite the same level.
- Q. Would you -- you said midwestern states. What states in particular are you thinking of that may have a notorious reputation for tornado activity?
- A. If one goes to Kansas or Montana, you get more tornadoes.
- Q. Also on page 15 of your direct testimony, you answered a question with regard to falling pieces from burning blades.
 - A. Yes.

2.2

Q. Now, what do you base your assessment on with regard to the risk of burn blade fall? Why do you exclude like transformer fires and arc fires from

your sorts of analyses?

A. What I was specifically looking at, I was looking at hazards that can impact the ground. If the -- when the nacelle of a turbine is on fire, the nacelle contains lubricating oil. The nacelle, depending a little bit on the manufacturer, some of them have a great deal of fiber-type enclosure material which can catch fire. It's not uncommon for the fire to progress from the turbine to the blades.

And what you end up then, you end up with burning pieces falling on the ground. Those can be carried by the wind a distance from a turbine. A transformer fire on an arc in the switchgear is generally confined to the transformer at the base of turbine. It's generally confined to the transformer at the base or the electrical equipment at the top. It is less likely to propagate, to be a hazard away from the turbine.

I was really trying to sort of give examples of something which causes a public hazard as opposed to being a hazard to an employee. There have been employees killed by arc and transformer issues, but I was more concerned of the burning pieces falling from the air and being carried a distance.

MS. PARCELS: It's the Altoona, New York

fire photo?

2.2

ALJ CHILES: Yes, that is correct.

- Q. Mr. Palmer, directing your attention to Exhibit Q, it's titled "And fires do occur."
 - A. Yes.
- Q. It has a caption, "This is a photo of GE 1.5 megawatt wind turbine in Altoona, New York." The fire date was January 29, 2012.
 - A. Yes.
- Q. To your observation, does that fire appear to be in a nacelle or the blade of that turbine?
- A. In that particular case, what you're looking -- the ball of fire, if you're looking there, is on the blade of the turbine. That is not in the nacelle. That is a fire which propagated onto the blade.
- Q. Did you do any investigation of this fire yourself?
- A. When I learned of that fire, I did search out what was actually a television news broadcast of the fire from the -- from the local television station. This is a picture from the local television news broadcast of the fire.
 - Q. Would you characterize that as a screen

capture of a video, then?

2.2

- A. This was -- this was the picture which was posted by the TV station as basically the link to the screen video.
 - Q. Okay.
- A. This is not a capture from the video, as such. It was -- it was a still picture.
 - O. From the video?
- A. If you watched for the video, yes, this picture was in it. It would have been their screen capture, which I suppose --
- Q. I just wanted to make sure we knew where it came, and you didn't observe the fire personally on January 19; you saw a media report over --
- A. I have not, nor have I personally observed any nuclear accidents, but I am certainly very interested in them. Was my career for 30 years.
- Q. In that media report, did it indicate what had caused that fire, the source of it?
- A. It did not. It only said that there was a fire that had occurred, and the source of fire was not reported in that report.
- Q. Did the media report indicate whether fire crews had to fight the fire or just evacuate the area and let it burn out?

A. I can't tell specifically for that fire.

In general -- may I answer your question in general?

Q. Sure.

A. In general, no fire crew will fight the fire on a turbine. What they do is they -- I am aware of no fire crew anywhere in the world that has the capability of fighting a fire that is 120 meters in the air. Even access to the fire, it is often one of the worst things that can happen because if a fire crew should for some reason open the hatch at the bottom of the turbine and there is a fire at the top, what they do is create a chimney effect and make the fire worse.

There are instructions from the manufacturers of those turbines to stand back, evacuate to a safe area, and keep people away from the turbine and let it burn itself out.

- Q. You actually indicate in your direct testimony that the preferred method for firefighters is to let turbine fires burn themselves out?
 - A. Yes.
- Q. And but you also indicate, I believe it's on -- again, back on page 16, that they have to let it burn itself out while evacuating the zone, and, therefore, the firefighters are in that evacuation

zone or the exclusion zone, as you term it.

Can you describe to me more what you mean in the event of what you term a blowing fire? What does a blowing fire mean?

A. What I'm referring to there is a fire as that picture in Altoona shows. The flame is being propagated by wind. The fire is not straight up. It is being propagated -- the burning -- the burning material is being blown by the wind, so it is going preferentially in the downstream wind direction.

In that case, the firefighters would try to make an assessment how far the burning piece is going. They would try and go and make sure that the roadways are blocked to prevent people from getting into that area. If they perceive there are homes in that area, they would knock on the doors and say please leave immediately until we can tell you it is safe. They basically set up a cordoned-off area and say don't go into the area until we let you back in.

Q. Okay. You indicate some of the acreage that you have investigated, some of these fires with the debris being spread by a blowing fire that has burned a substantial amount of acreage, and that's line 9 to line 15. And you talked briefly at opening of your cross about your municipal unit of government

- being akin to a township here in Ohio.
- A. Yes.

2.2

- Q. How many acres would you say your geographic there in Canada, Ontario, Canada, covers what I think you referred to --
 - A. In a township, you mean?
 - Q. In your township.
- A. They're not all nice squares, but typically a township will be -- I have to convert metric to English -- about 12 kilometers by 12 kilometers, so we are getting down to being about 8 miles by 8 miles square which is -- sorry.
- Q. Do you know how many acres that is approximately?
- A. Well, it's 64 square miles times 46, 60 times 4,000, 240,000 acres.
- Q. Okay. So with your reference to, in line 14, fires from turbines have burned up to 950 acres, would you say that's a pretty substantial portion of, in your case, an estimated area for one of your townships?
- A. 950 acres is not totally dissimilar to Ohio. We generally have our townships plotted out on a mile and a quarter grid.
 - Q. Okay.

A. That mile and a quarter grid is approximately 1,000 acres. So when we're talking about a mile and a quarter by a mile and a quarter, that's a fairly substantial chunk of land. It's not all of the township, but --

- Q. But would your local emergency department in a township have to call for backup from adjacent fire?
- A. Yes. Yes. In a case like that, they have a mutual aid program, so this is a fairly extensive fire where they would be calling for backup from outside people.

Mostly, for example, they would be needing to block access from a number of different routes, and that would probably involve more vehicles, you know, a township fire department may have access to three fire trucks plus a rescue vehicle, so four vehicles.

They would be trying to block more roads than that, so they would be looking for backup from that. They would be looking for backup from more water pumping trucks because they would be looking to put out fires, grass fires in the ground that would be propagating. They would be looking for pumper trucks to be able to -- yes, they would call for

backup.

2.2

Q. Okay. Also on page 16, the question starts on line 24 and your answer starts on line 27, it talks about the impact of blades and blade pieces that fall or are thrown. I guess I should back up.

Does Ontario have an issue with wildlife roadkills in your personal experience? I mean, do you observe like a dead deer or dead coyote on the side of the road?

- A. Yes.
- Q. Have you ever personally hit an animal in the roadway?
 - A. No, I have not.
- Q. Okay. Do you know if Ohio has problems with what we'll term roadkill?
- A. I do not know, but certainly in driving around Ohio yesterday afternoon and evening, we had several occasions of deer crossing the road in front us, so I suspect it is very similar in Ohio as to what it is in our part of Ontario, so my guess is it is an issue here.
- Q. Would you, based on your driving experience around Ohio and having to avoid animals crossing the road, would you characterize that as some sort of surprise occurrence that could pose a

threat to the safety of drivers?

A. Yes.

2.2

Q. Okay. Would you equate the risk of blade debris being thrown from a turbine into a roadway as being less dangerous, about the same risk, or more dangerous than the risk of hitting wildlife that abruptly enters the roadway?

MR. SETTINERI: Object to the form of the question. Part of the question referred to comparing risk. The same part of the question referred to comparing the danger. Those are two different things.

ALJ CHILES: Would you rephrase the question, please.

MS. PARCELS: I will rephrase that to comparing the risk then.

ALJ CHILES: Thank you.

A. I haven't done specific studies of, you know, the number of road accidents. What I have to give you here, I have to give you -- I have to give you more a nonprofessional answer than a calculated.

It is more common to see cars that have hit wildlife than cars that have been hit by wind turbine pieces. But that doesn't say that we should then put wind turbines in places where they can add

an additional source of hazard.

- Q. When you say we shouldn't put them where they can add an additional source of hazard, are you referencing your recommended setback of 1,500 feet or more --
 - A. What I'm doing there --
 - Q. -- from a roadway?
- A. What I'm doing there is I'm using actual experience of known pieces of blades that have been thrown from turbines. An example this morning, the first witness this morning spoke of measuring pieces of blades a foot square at a distance from the turbine. That's -- that's a stated example right there.

You know, I have read newspaper reports and media record of pieces going further. I am aware of reports of turbines in Denmark that have had pieces go 500 meters, which is 1,700 feet.

I have had occasion to be in Denmark and talk to a man named Mr. Jesper Mortensen of the Danish Environmental Ministry -- I don't know what the exact title is -- I specifically talked to him about that event which I had seen reported. He did not say, "Oh, no, that is hearsay. That event did not happen." He acknowledged, yes, that was an

event.

2.2

So I have discussed specific events with the regulators in the countries where they have been, and they agreed that, yes, this is a real event.

Q. On page 19 and 20 of your direct testimony, starting on line 31 and carrying over into the next page, you indicate that it's no doubt likelier that somebody would be killed in an automobile accident than from any sort of turbine-related accident.

But you also say, "If we place wind turbines close enough to roads and homes, that there is a potential to kill or injure someone. Not only will most people know someone killed by a car accident, but they will know persons or families who lost someone or had someone injured or killed by a turbine accident.".

Have you personally known anyone who has died in an automobile accident?

- A. Yes.
- Q. Can you tell me how many people you know who died in an automobile accidents?
- A. Close relatives, two; friends who I personally knew, I can think of -- I can think of -- I can think of -- I can think of --

Q. Okay.

- A. I can't --
- Q. Again, I just asked you for an estimate.
- A. One tends to want to erase those things. Sorry.
- Q. Okay. Would you characterize automobile and vehicular traffic as ubiquitous in both Ontario and Ohio?
- A. I should ask you to explain "ubiquitous" to me.
- Q. I mean pretty common; you see vehicles on the roadways everywhere.
 - A. Yes.
- Q. Okay. I know that your experience as a risk assessor is in occupational safety, but do you know approximately how many vehicles there are registered in Ontario?
- A. Yes. May I just sort of -- you did say my risk was mostly in the order of --
 - Q. Occupational safety?
- A. Occupational safety. It's really more -occupational safety is part of my background and
 training as safety superintendent at a nuclear power
 station where I was responsible for the occupational
 safety of workers, but more so public safety is where

you're dealing with the safety of the public from what your plant can do, so they're two different areas.

Am I aware of how many vehicles are registered in Ontario? Ontario has a population of about 12,000 people, and Ontario has about that many vehicles registered actually. I think there's actually more vehicles registered than people living in the province.

- Q. It's possible for one person to have more than one vehicle, correct?
 - A. Yes.

- Q. Do you know the population of Ohio off the top of your head?
 - A. I'm going to say no.
- Q. Do you know the population of the project area in the six townships in Champaign County where Buckeye Wind is proposed to be sited?
- A. I have driven the area and sort of, you know -- if I look -- am I looking specifically at sort of the project profile or looking at Champaign County in total?
- Q. Six townships where the projects are supposed to be sited, so the eastern half of the county.

- A. I have only -- I have only a rough estimate of it.
 - Q. Again, based on your observation.
- A. My observation would be that because that includes a couple small, what I'm going to call, hamlets, like Mutual, that the population, I would consider looking at it. I would consider the population as probably in the order of somewhere between 15 and 25 thousand people.
 - Q. Okay.

2.2

- A. That would be -- that would be my off the top of my head guess.
 - Q. Again, that's based on your observation driving through the project area?
 - A. Yes.
 - Q. Okay. Did you travel to Paulding County, Ohio, in the spring this year?
 - A. I did not, no.
 - Q. You indicate you've conducted risk assessments for turbine-related incidents, such as ice throw, blade failure, fires, and that sort of thing. Have you also done risk assessments for the risk of falls?
- MR. SELVAGGIO: I will object,

 mischaracterizes his testimony. I don't believe he

went into detail of the types of risk assessments he's done.

ALJ CHILES: Can you refer to a page number, perhaps?

MS. PARCELS: Page 6, line 15, his answer is on line 16, "I reviewed the Application and Staff Report to determine whether they contain safety precautions adequate to protect the public from the dangers of blade shear and ice throw."

ALJ CHILES: Would you rephrase the question based on the words in that testimony?

MS. PARCELS: Sure.

- Q. Mr. Palmer, you indicated you reviewed the Application and Staff Report to determine if it contained safety precautions for two specific dangers, blade shear and ice throw.
 - A. Yes.

2.2

- Q. Given your occupational -- occupational safety and public health risk assessment background, why would you not conduct any sort of assessment for the risk or dangers of falls from turbines or other sorts of accidents at turbine sites during construction or operational maintenance?
- A. I was -- in the course of this presentation, I was specifically looking at risk to

the public as opposed to risk to employees.

Q. Okay.

2.2

A. There are many employees of wind projects that have been killed or injured. Specifically, that's an occupational hazard that those workers have accepted as part of this employment. It's different than the public safety risk which is imposed on members of the public outside.

So what I did, I basically did, is I did what is basically called a deterministic assessment where you say, I know that people can be injured by a falling blade part or by a falling piece of ice at a distance which -- which I'm aware of, and I've documented elsewhere in the testimony.

So a deterministic statement says, I know that this is the envelope of safety. Does the Staff Report protect people within that envelope of safety?

- Q. That brings up a good point. On page 8 of your testimony, go down to line 16, you talk about risks accepted by firefighters. As part of this occupational safety, is that what you are implying?
 - A. Yes.
- Q. You say "within acceptable limits of workplace safety."
 - A. Yes. Okay. What I mean, by example,

there is a firefighter as part of his occupation will accept going into an building which has an oxygen-deficient atmosphere to rescue someone.

The Occupational Health and Safety Act will not let them do that without self-contained breathing apparatus. So within the limits of workplace safety, with the appropriate workplace safety -- with the -- with the appropriate self-contained breathing apparatus, the firefighters will go in and do that rescue.

He will not run into the building to try the save the person and hold his breath to pull the person out. It would not be an expectation for a firefighter, and they would not sign on then.

- Q. Do you understand that firefighters have to undergo a certain amount of training annually --
 - A. Yes.

- Q. -- in order to remain certified as firefighters?
 - A. Yes, very clear of that.
- Q. Do you know if in that annual training that they have to undergo -- it includes high-angle rescues for fighting fires at wind turbines?
- A. Specifically, I do not know in the Ohio case. I can answer you for Ontario.

Q. That's fine.

2.2

A. In the Ontario case, what a municipality is able to do, a municipality is able to say, we will protect you against -- our fire -- our fire department is controlled by the municipality. The municipality will, where appropriate, designate and say, it is our expectation that we will do fire rescue from a building up to whatever the level that they can get to. It may be a three-story ladder truck that they have.

I can give you the example of local municipalities where wind turbines are coming in, they specifically make it clear, we do not have the ability to do high-angle rescues, and municipalities have actually as part of their signing on are going back to the developer and saying, you must have a high-angle rescue capability because we cannot provide it.

- Q. In that case, then, the developer's employees would assume the occupational risk of a high-angle rescue of fighting a fire in a nacelle or a blade that is so far above ground?
- A. That's what would have to happen in that case, yes.
 - Q. As you said, you specifically looked at

the risk of blade shear and ice throw. With the
blade shear or blade failure, as you termed it, risk
and debris being either dropped or thrown from a
tower site, was there any reason that you
specifically did not include risks to aircraft flying
in proximity to turbines from any sort of debris
being spun off of the turbine?

MR. SETTINERI: I object to the form of the question. To keep the record clear, the witness did not say he was testifying as to the risk of blade shear or blade throw and ice throw.

ALJ CHILES: Would you rephrase your question?

MS. PARCELS: Sure.

2.2

ALJ CHILES: Thank you.

- Q. (By Ms. Parcels) Mr. Palmer, when you analyzed the danger of the risk of blade throw or ice throw being thrown from turbine, is there any reason you did not include the danger of aircraft flying anywhere in proximity to a turbine that would drop or throw ice or throw part of a blade?
- A. The reason I do not consider aircraft, in previous discussions with pilots, pilots have assured me they are obliged to fly at an elevation at least 500 feet above the nearest -- the height of the top

obstruction of the ground. It has to be 500 feet. I do not believe it is possible to throw ice vertically upward 500 feet.

Q. Okay.

A. Ice is, you know -- I have no information of ice going up that distance. I'm trying to give -- what I was trying to do, because I did not do a calculation of how far blades or ice can throw, I did not do a calculation of that.

What I did is I took evidence of blade or ice throw which is known, and said, I know it can go that far, and, therefore, perhaps it would go further. I've seen calculations where people have done calculations and shown in the optimum case depending on where the object is spun off the blade.

For example, the blade is going around. If a piece comes off as the blade is just coming down, it will tend to be projected up. If it is going up, it will tend to be projected, you know, the maximum distance that way. So rather than trying --

- Q. Let me stop you right there. You are making a lot of hand motions that the court reporter can't record.
 - A. I'm sorry.
 - Q. But I want to specify when you just made

that hand motion, you are describing what is a geographic shape of a parabola if the blade is on a an upswing?

A. Yes. If the blade is on an upswing, the object will be projected up and will follow a parabolic pattern to the ground.

I have not done a calculation in that manner because someone can come back and question my calculation and say, prove to me that that's true. What I have done instead is used actual known blade throws, actual known ice throws because they're not debatable, in my impression.

- Q. That's fair. Now, you indicated you have spoken to pilots who indicated what their requirements are?
 - A. Yes.

2.2

Q. Do those pilots in Canada follow the jurisdiction of the Federal Aviation Administration of the United States, or is it that Ontario, a Commonwealth country, have its own guideline, or do they follow the UK fly rules?

MR. SETTINERI: Your Honor, I object to this line of questioning as to relevancy.

ALJ CHILES: I'll allow the question.

Q. If you know.

A. If a pilot is flying over the United States, they would have to be adhering to FAA regulations. If they're flying over Canada, then they are flying under the Canada Department of Transport air regulations.

MS. PARCELS: That's all I have.

ALJ CHILES: Thank you.

Ms. Napier.

MS. NAPIER: Thank you.

CROSS-EXAMINATION

By Ms. Napier:

Q. Mr. Palmer, my name is Jane Napier. I represent Champaign County and the townships of Goshen, Urbana, and Union, along with our prosecuting attorney, Nick Selvaggio.

I have just few questions. You indicated on page 9 of your testimony you started creating your own list of accidents. Do you know how long you have been creating that list or maintaining that list?

- A. It's at least six years.
- Q. And in that, have you found safety, or, I guess, accidents that have been due to blade throw?
- A. Yes.

MR. SETTINERI: Your Honor, I object at

this time as to friendly cross. This list,

Exhibit L, is just an end run around the motion to

strike from earlier, to rehabilitate this witness

through friendly cross.

2.2

- ALJ CHILES: I'm going to allow a limited amount of cross on this topic.
- Q. And as such, did you look at the Timber Road II development in Ohio?
- A. Yes. Yes, I did look at the Timber Road
 II Development. I have looked at the documents on
 the Ohio Power Siting Board website of those
 failures.
- Q. Okay. One of your statements on page 10 at the bottom, you said, "It was incredible to read of the casual restart of the machine after failure, and I see how the control system failed to take appropriate actions to protect the public." I'm trying to -- I guess I'm not really understanding what you're meaning in that section.
- A. It's a rather long sentence, which is a failing I have. But the sentence started out as one who has been responsible for preparing and assessing many reports of equipment malfunction over my career in the nuclear power industry, it was incredible to read of the casual restart of the machine after

failure and to see how the control system failed to take appropriate action.

2.2

What I was trying to say, that from my experience of dealing with accident procedures in operating power plants, if something goes wrong, one of the first things that you impress upon an operator, if something bad happens while you're following normal procedures, stop and do not continue until you've gone back and fully ascertained what caused the issue to happen. You don't just simply say, "Oh, well," and restart.

So it was -- it was surprising to me to read that the machine had been remotely restarted. They had a vibration alarm. They remotely restarted it to see what could happen. A vibration alarm is brought in because something has gone wrong with that machine. To do a casual restart with even a visual inspection to me was very unusual.

- Q. I guess my confusion was you had talked about equipment malfunctions, so I wasn't sure if you were of the opinion that Timber Road was an equipment malfunction or an operator malfunction or something else?
- A. Timber Road is typical of the sort of the accident that any accident is, where any accident is

a combination something happens to equipment and/or process. Then there are more contributing factors.

In the Timber Road II case there was an equipment malfunction. There was blade failure.

There was a process that is supposed to deal with a blade failure, which was an alarm. The alarm came in. There's then a procedure how you deal with that that gets into the operator dealing with it.

The operator, if he has an alarm in that, say you have a vibration alarm in, you know, which has tripped the turbine. Then the procedures would normally say find out what happened, because this is not a trivial event. A vibration alarm is generally brought in because your blades are out of balance. You are dealing with something of ten-ton blades well up in the air. If they're out of balance, there's something wrong.

So what I was trying -- I hope I'm explaining, but it's -- there's very few accidents that are simple accidents. If you do -- when you look at accidents as a professional, the time at MIT I spent time sitting in the research library looking through different accidents, not just nuclear accidents, but looking at accidents where different things have happened. The process failed, the

operator did something, you know, and then and so on.

And you find that every -- it's one thing and then another thing and another thing causes the problem. It's usually not a single event. I was surprised to see that the industry didn't address that, perhaps because they don't have, you know, the sharing of experience to know that's happening.

- Q. And you had indicated also that you had reviewed manufacturers' safety manuals, correct?
 - A. Yes.

2.2

- Q. Did you find in those manuals that there were either setbacks or distances for cordoning off for emergencies that are set forth in those manuals?
 - A. In some cases yes. An example.
 - Q. Go ahead.
- A. I'm sorry, I run on at times. Vestas, for example, Vestas has a manual where they-- you know, the maintenance manual for a Vestas V90 turbine, which is one specific I'll refer to. They tell the operator if there -- if there is ice on the blade, the operator must not approach within 400 meters of the turbine, so that's about 400 times 3.2, so 1,350, 1,400 feet.

The operator must not approach within 1,400 feet of that turbine without remotely shutting

it off, even in a vehicle. That's what Vestas tells their maintenance staff, do not come closer than within 1,400 feet of turbine that has ice on the blade without shutting it down.

- Q. In your opinion, then, would manufacturers' safety manuals have some weight in setting setbacks for this type of process?
- A. Certain manufacturers don't want to have a reputation of having workers on their turbines injured, so yes, they should bear some weight.
- Q. And if you could look at Exhibit R, just a couple of questions. Exhibit R-1, 2 and 4, just generally you have some distances in the sixth column on the distance.
 - A. Yes.

2.2

- Q. Can you tell me how you calculated those distances?
- A. What I did to calculate those distances, is I took the maps that are provided, and I referred to it in the text of the document. I can't remember off the top of my head. I believe it's Figure 5-04, but I have to go back and look in the text.
 - Q. Is that of the Application?
 - A. Of the Application.
 - Q. From --

A. Sorry.

- Q. Okay. Go ahead.
- A. I need someone to kick me.

What I did, I took the maps, applying my very best kindergarten/grade one skills, and I pasted them together into one map. I then took a circle template from the same scale of what the maps were, where you can draw scales on the map.

I then put the circle template, in this particular case, on the turbine. You can fairly rapidly say -- I'm waving my hands again -- what was the closest road. It's very easy to go around the circle and say what is the first contact point I get to a road, which is what the first column numbers 2 and 3 show.

The column nearest home, column 5 and 6, again, what I'm doing there, I was looking on the map, I was saying the map is showing a building, and so the nearest building to the turbine was then that distance.

And I then looked and said that building -- because you can look at the map, because basically it's Google maps, you could then look and say that building is accessed from what road.

So column 5 and 6, what I did, I said, if

I take the very first example, turbine No. 71 there,
I said the nearest home is at 1,600 feet at a bearing
of 10 degrees from the turbine, and that is accessed
from what we are now going to call US highway No. 36.

The next thing I did for information, I then said, now, within 3,000 feet of the turbine there are seven homes. That's just an additional bit of information.

- Q. And I think you've answered my question and maybe a couple I had after that. But you did not calculate the distance to someone's property line, correct?
- A. No. That is -- that is -- because the maps in Figure 5-4 don't actually show the property lines. I was not able to do property lines for this specific figure. There is -- there is an Exhibit S. I did have some additional information for specific people in the UNU group as to what their property lines were.

I was able to look at distance to property lines in Exhibit S, but only for those -- they were the only case where I knew where the property lines were. The other I could only go the distance to a building.

Q. Perhaps I missed it. You had indicated,

- I believe -- I don't want to put words in your mouth -- that your recommendation is at least 640 feet to a structure and 1,000 feet to a road; is that correct?
 - A. 1,640 feet to a structure, not 640.
 - Q. I'm sorry. 1,600, but that's all right.
- A. Yes. And I do want to make it clear, that is only -- that is only a public safety setback. That is not by any other criteria. It's not based on noise. It's not based on anything else. That's based on public safety, excluding noise and so on.
- Q. Okay. What would you deem to be public safety factors?
- A. The issues that I've discussed here of people being hit by blade pieces and ice pieces and burning bits and pieces.
 - Q. So basically blade throw, ice throw?
 - A. And fireballs.

- Q. Do you have an opinion as to a property line setback?
- A. My consideration is that under what justification does anybody who is outside your property have the right to restrict your freedom and unencumbered access to your property? So my 1,640 feet should be to a property line because a

1454 person, I believe, has every perfect right to be 1 2 anywhere on their property. 3 MS. NAPIER: Thank you. I have no 4 further questions. 5 ALJ CHILES: Thank you. Mr. Settineri. 6 7 MR. SETTINERI: Thank you, your Honor. 8 9 CROSS-EXAMINATION By Mr. Settineri: 10 11 Good afternoon, Mr. Palmer. Ο. 12 Α. Good afternoon, Mr. Settineri. 13 Staying with Exhibit R briefly, I see 0. there the distance measured was 1,600 foot. Is that 14 15 correct? 16 That's correct, sir. 17 Q. And that was the standard you applied to your Exhibit R work? 18 19 I'm sorry, standard? Α. 20 When I say "standard," that is the metric Q. 21 you used in determining where properties were 2.2 located; is that correct? Let me try again. When 23 you did your circle template, that was a 1,600 feet

radius?

Α.

No, sir.

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Q. What was it?

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Α. I did a circle template, which was a 500-foot circle, a 1,000-foot circle, 1500-foot circle, you know, and with lighters in between, looking so I could assess the distance. basically a target.

Think of -- put my hand down. If you look, if you consider a dartboard or a target, same thing with a template where there's a scale on it, so you match the scale on the figure so you can scale off.

- Q. Thank you. I'm just trying to understand in your testimony, go to page 15, line 22, you reference the number 1,640 feet. Do you see that, line 22?
 - Yes, sir. Α.
- Q. That's your recommendation for public safety?
- I'm saying from purely from a Α. Yes. public safety point of view. It says they're 21 unprotected as mowing the lawn, whatever, working on 2.2 a fence line. I am aware of blade parts and pieces having traveled that distance and, therefore, from a deterministic point of view, that is my recommendation.

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Q. Okay. We will come back to that question.
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Well, then go to the bottom of Exhibit R-3. What I am trying to reconcile, at least at the bottom of R-3, it states buildings of concern at less that 1,600 foot. That number -- it doesn't match with 1,640; is that correct?

- A. In part, sir, that's because, as I explained, what I said on Exhibit R, the distances that are measured there, I'm only able to by the method I was doing, because I'm not doing a pure calculated GPS, I'm only able to calculate plus or minus 100 feet, so I rounded 1,640 to 1,600.
- Q. So your measurements were plus or minus 100 foot?
 - A. Basically.
 - Q. All right. While we are on that --
 - A. I'm --
- 19 Q. Let me ask the questions.

20 THE WITNESS: May I just --

21 ALJ CHILES: Were you finished with your

22 answer?

THE WITNESS: I don't think I was. I said, yes, they were plus or minus 100 feet. What I said in the text was my degree of precision is

100 feet, so something which is 1,649 feet I would call 1,600. Something which is 1,508 feet, I would call 1,600. So it's not plus or minus 100 feet. It is a total span of 100 feet, with the 1,600 in the center.

Again, I'm using my finger so the court reporter can't understand. What I'm trying to say is the 100-foot spread is the total span that would be encompassed by my estimate.

- Q. So you used your circular template, I will call it. It measures in increments of 100 feet; is that correct?
 - A. Yes, sir.

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- Q. So when you laid that on the map, if the structure or the road was closer to the higher number, you would just round it up. If it appeared to be less, you would just round down using the standard rounding rules?
 - A. Yes, which is just eyeballing it.
- Q. Meaning when you looked at it, you eyeballed it?
- A. No, sir. No, sir. I read it as a scale.

 It's a scale. You know, you're reading a scale.

 You're reading an engineer scale. That's not

 eyeballing it, sort of saying, well, it's in this

area.

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I read the scale as being, it is -- you know, the closest value identified as a 100-foot circle that I can match it to is 1,600, not 1,500, not 1,700.

- Q. It measures in increments of 100-foot?
- A. The scale is in measurements of 100 feet, but it doesn't mean that I can't look at the values in between and say, oh, yes, that's a little over 1,600 but not as much as 17, so it's going to be called 1,600.
- Q. Thank you. You have a copy of the Application up there. Could you, just for the record, identify the figures you used in Exhibit R, please?
- A. There were two sets of figures I used.

 One was identified as Buckeye II Wind Farm figures,

 05-4 site layout, which goes from sheet 1 to sheet

 11. That was the principal one that was used.
- Q. Mr. Palmer, did you say figure 5-4 site layout?
 - A. Figure 05-4 site layout.
- Q. Thank you, sir. Was that the only figure you used? I'm sorry, you made reference to --
 - A. I had to refer to another one of the

- figures because I found on figure 05 -- I used 05-04 for the measurements. I found in some cases some of the road designations were missing. There was one road designation was missing on it, so I had to use one of the other figures to get a road designation. I have to look to see which one didn't have a road designation.
 - Q. Thank you, Mr. Palmer. Going back then to Exhibit R, so we understand for the record, you have a legend at the bottom of R-3, and the legend that says "25 more turbines" in pink, that relates to a location that would raise, in your opinion, a safety concern due to proximity to roadways or buildings?
 - A. Yes.

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- Q. And that would correlate to, for instance, if we look at 122 on the same page, the row that starts with 122, I see that is in pink. The second column there is red number 1,000, and that would indicate then that that would fall under what you call a roadway concern at less than 1,000 feet, correct?
- A. Yes, that is correct. And, similarly, I show the nearest residence I see to that -- to that specific turbine is at 2,500 feet accessed off County

Road No. 9.

- Q. And that would be as to that residence, and only to public safety you would not have a concern with that. When I say "that," I'm speaking of the 2,500 foot.
- A. From a purely public safety point of view, I would consider that would be acceptable.
- Q. All right. Then just dropping right below the 2,500, we see next to the name Dolly Varden, 1,500 foot, that would fall -- strike that. Let me back up.

Going back then to the legend, we have 10 turbines in red. That would indicate a location that you believe would raise public safety issues as to both the distance to the road and to the nearest building, correct?

- A. That's correct. It's meeting both criteria of being too close to a road and too close to people. Either one is sufficient to be a concern, but this is actually a double hitter.
- Q. And an example what you are saying there is line 130, we have the 130 highlighted in red. We have the number 850 in red. That would designate the proximity to the road.
 - A. Yes.

- Q. And 1,000 would be the proximity to the nearest house, correct?
- A. Which is accessed off the same State Route 161, yes.

- Q. Now, when you developed this spreadsheet and reviewed the maps, did you know which houses were participating in the project versus which houses were not participating?
- A. At the time I prepared this map, I did not know, sir. At the time I prepared Exhibit S, I did know, but I did not know when I prepared Exhibit R.
- Q. And when you did your review, were you able to discern from the map -- we will call them structures -- which structures were residences versus barns, garages?
- A. I was making this best judgment I could, sir, from the aerial photography. What I'm primarily trying to do here is to flag for the Ohio Power Siting Board, really, please go back and look really carefully because it is certainly an indication this is an issue. At the point I did this, I did this before I was able to field-check the information. I later came and field-checked it. That was done after.

Q. All right. When you field-checked this information, did you go out and verify every house?

A. Not every house, sir. I did go out, and I was able to be driven actually up and down the roads by the local person who was able to help me, you know, more easily.

I said, okay, I'd like to go look at this particular area. So we specifically went out and looked at, you know, all the double hitters, if you'd like. I could certainly say that, yes, I'm very aware of the situation for those, you know, and I was able to in the course of doing that also see where the other houses were. But I did not have time to go to every house on every road. No, I did not have that time.

- Q. To be clear for the record, when we say "nearest home," you're not certain if all of these are actually residences?
- A. I cannot swear that every one of those are residences. It is my belief from the map they are -- they do not appear to be barns. They do not appear to be garages. One can generally tell a barn because it's physically a bigger structure. One can generally tell a garage because it's a smaller structure with a roadway up to it. One can then see

- a bigger building adjacent to it, which is the house.

 It is a best judgment. They're very good
- 3 photographs.

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- Q. Going back looking at your direct testimony, just a couple questions for you. On page 1 of your direct testimony ---
 - A. Sorry, sir, what number, sir?
 - Q. Page 1, line 29.
 - A. Yes.
- Q. You reference that you performed thesis work. That thesis work was done as part of your undergraduate electrical and electronic engineering degree, correct?
 - A. That's correct.
 - Q. In regard to the courses you took in 1995 and 2000 at MIT, that's referenced in line 31 and 32, those are courses you go to MIT to attend, correct?
 - A. That is correct.
 - Q. And the 1995 course at MIT consisted of a nuclear power safety course; is that correct?
 - A. The course was titled Reactor Power Safety Part 1 and Reactor Power Safety Part 2.
- Q. And that was approximately a 12-day course?

A. That's correct.

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- Q. And you also took a course in 2000 at MIT in operations risk evaluation?
- A. That's correct. The actual name of course was Operational Decision Management, which included risk management.
 - Q. And that was a two-week course, correct?
 - A. That's correct.
- Q. And those are the courses you reference in your testimony there?
- A. That's correct, sir, on line 32. That did complement the work I was doing, you know, in that field.
- Q. Just for the record, I believe you stated earlier, you have 30 years approximately in the nuclear industry, correct?
- A. Yes, sir.
- Q. Speaking of experience, do you have any training in meteorology?
- A. I have taken no formal course in meteorology. I certainly have read a lot of material on meteorology. I have -- I know people who are climate specialists who I have spent time talking to, but I have no formal training in meteorology.
 - Q. Are you a firefighter?

A. I have, actually, as part of being training superintendent at the Bruce Nuclear Station, I did take part in fire training. I was responsible for the crew. I had some firefighter training, but I suggest if your house is on fire, don't call me.

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- Q. Let me ask you questions. Have you ever been employed by a company in the wind industry?
- A. The only company in the wind industry

 I've been employed by was Ontario Hydro who actually

 put up a turbine, a demonstration turbine, which was

 close to my workplace, so you know, my company put up

 a turbine.
- Q. Is that the turbine referenced in your testimony?
- A. That is the Tack AW 600 turbine which is referenced in various places in my testimony, yes. They subsequently, as part of Ontario Hydro Generation, after a name change, put out five more Vestas V80 turbines at the same site. I drove by those turbines every day. I spoke to people who were involved in commissioning them and operating them.
- Q. Do you have any experience in manufacturing wind turbine blades?
 - A. Specifically manufacturing, no.
 - Q. Okay. Have you ever operated a

1 | commercial wind farm?

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- A. I have never operated a commercial wind farm.
 - Q. Do you live by a wind farm?
 - A. I live within five kilometers/three miles of the nearest wind turbine, which is part of the Enbridge Ontario Wind Power development.
 - Q. How many turbines at that facility; do you know?
- 10 A. There were two phases in the development.

 11 It has 110 turbines in one phase and five turbines in

 12 the second phase.
- Q. And what type of turbines are used at the facility, if you know?
 - A. Vestas V82 turbines.
- Q. Are you aware of blade incidents at that wind farm?
 - A. No, sir.
- Q. Are you aware of anyone being hit by a blade or ice throw from that wind farm?
- A. No, sir; nor am I aware of anyone killed at a nuclear power accident.
- Q. And that facility has been operating since 2009?
- 25 A. That's correct, sir.

- Q. Approximately how close -- let's see here. How close is a road to the nearest turbine for that facility, if you know?
- A. I believe the closest road to a turbine in that facility is 110 meters. There's one case where a road is at 110 meters. It's a gravel road, which is closed in the wintertime.
- Q. And you drive down that road occasionally, don't you?
- A. I have driven down other roads, you know, that -- yes, I've driven down that road, yes. I have been in one other case that the road is 110 feet from the turbines -- meters. Did I say feet? It was 110 meters. If I said feet, I'm correcting myself.

THE WITNESS: I'm sorry, your Honor. My translation is not always instantaneous from metrics to English.

ALJ CHILES: I understand.

THE WITNESS: Once upon a time I learned English, but I've been converted.

- Q. Let me ask you, your testimony is based on what you call a deterministic safety analysis.
 - A. Yes.

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Q. And I believe you explained that earlier as to what that is. But essentially is that --

approaching that in a very simplistic way, is that where you say, okay, if this event can happen, we need to put barriers in place to prevent it from happening again, and you work your way backwards to put those barriers in place; is that correct?

- A. Specifically it is -- what I did here is more than that, sir, because rather than saying if this event, I said if known events which have happened, happen, so I was a bit more specific than if this event would happen. In a nuclear power plant business you have to do this event.
- Q. Nuclear power plant, while we are on that, am I right when you look at risk for a nuclear power plant, it's in realm one times 10 to minus 7?
- A. Your operating license is generally based on a criteria 1 times 10 to minus 6. As you are going through probabilistic risk assessment, if individual contributors come in as less than 1 times 10 to the minus 7, you would say, I won't go further on this particular contributor.
- Q. Going back again to deterministic assessment, to understand it, essentially the way you approach the Buckeye II project and, again, simplistic as a deterministic assignment is, do you assume a person would be injured by a falling blade

or throw; is that correct?

A. What I did, sir, is I said I know the blades can go this far. I know the pieces of blade can go this far of this size. I did in my assessment show that if a piece of blade of that size falling from a turbine hit someone, they could do sufficient injury.

But by converting it into very simplistic terms of concrete blocks from building heights, I converted it and diverted and said, if I drop from this building, from the eighth story or tenth story, a standard concrete building block, when it hits somebody on the street below, that was the same impact as it would be getting from the turbine. So I was trying to put it in a simplistic term people would understand, sir.

- Q. Before I forget, you mentioned you reviewed a figure in the Application. What else did you review from the Application prior to preparing your testimony?
- A. I did read through the Application in -I was specifically looking at the area of public
 safety, sir, so I was looking at that. I also, you
 know, with interest looked at -- I looked at the
 index.

ALJ CHILES: Mr. Palmer, I know it's difficult to juggle the microphone. If you can keep your voice up when you're doing that.

- Q. Mr. Palmer, to rephrase the question, if you could describe for me generally what you reviewed in the Application.
- A. I reviewed the entire section called Health and Safety. I looked at -- I reviewed the areas which is Section A of the beginning from page 66 going through page 89, so I specifically looked at the Health and Safety section.

I did read through the Project Summary and General Overview, which is also Section A. I guess I would say the first part is Health and Safety, which is a subset of Section 4906-17-08, Social and Ecological Data, Section A of that subsection.

I also went through the Project Summary, 4906-1-02, and following from it the general Section A and Section B, which is Project Summary, Facility Recovery View, and General Recovery View.

I did go down and as more at a lesser degree of precision, I looked at Section 4906-17-13, Project Description and Schedule, where I looked at the detailed project description, Part A of that.

Q. Thank you, Mr. Palmer.

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A. I looked at some of the technical data in 4906-17-05 where I looked at the site geography and topography and certain aerial photographs that I referred to. I looked at the layout construction, Section B. That was also part of it. I didn't look at the financial data section. I didn't look at the expenses.

I did look to some degree at the environmental data, 4906-17-07, to be able to look at the sort of, you know, make sure the weather issues were -- I looked at 4906-17-077, environmental data, to see that I had a general understanding of the environmental data of the project to know that it was applicable to the experience.

- Q. Thank you.
- A. I think I can probably stop there.
- Q. Thank you, Mr. Palmer.
- A. I need better pages.
- Q. Did you review the Staff Report of Investigation that was issued in this proceeding?
 - A. Yes, sir, I did.
- Q. Did you review all of the conditions that were in that Staff Report?
 - A. I did read those, yes, sir.

Q. A couple questions for you. Isn't it true that with regard to blade throw, you have not conducted any calculations for the proceeding as to the risk that a person will be hit by a piece of falling blade?

- A. I have not specifically calculated a risk, no, sir. I did a deterministic assessment, which says if it can happen, is the person protected?
- Q. Okay. It's also true then that you didn't attempt to calculate the risk that person would be hit by ice from the turbines, correct?
- A. That is correct, sir, for this specific Application. Again, I did a deterministic assessment. If it can happen, are they protected?
- Q. And as a result of that assessment, that is how you came up with the 1,640 recommendation for public safety, correct?
- A. Because I am aware of blade pieces going that distance of a sufficient size that can do injury to someone, yes.
- Q. And the 1,640 matches up with your testimony, I believe, at page 24. In fact, if I ask you to turn to page 24 of your testimony, I direct your attention to lines 3 and 4. I note there that your statement, "and in Denmark where parts traveled

- up 1,640 feet." That is the basis then for your recommendation of 1,640 feet for public safety reasons?
 - A. Yes, sir. I gave three examples. I gave pieces in Ohio at 1,561, pieces at Prince Edward Island at 1,607, pieces in Denmark up to 1,640.

I do know, sir, the testimony this morning was, you know, one of very carefully calculated measurements. Often they're, you know, slightly more general.

- Q. The 1,561 came from the testimony you heard this morning, correct?
- A. Yes, sir -- no, no -- well, yes. Yes, that is correct, sir, yes. I was going to say in the Newport News.
 - Q. You also referenced line 9, severe weather in Kansas.
 - A. Yes, sir.

- Q. Was that a tornado, to the extent you're aware?
 - A. I believe it was a tornado, sir. I'm sorry, at this instant I can't remember exactly if it was a tornado. I believe it was some form of cyclonic windstorm.
- Q. Now, for events that occur or may occur

over 1,640 feet, do you consider those to be unusual circumstances or unusual events?

A. Yes, they are. They are unusual, but they would -- it's -- yes. The answer is yes.

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- Q. Just to understand, the 1,640 that applies to the -- you applied that to the residence of the structure?
- A. I would -- I have suggested elsewhere in the text of my report, sir, that -- or my testimony that I suggest that should be applying anywhere within the property boundary of any nonparticipant.

I've specifically in the tabular data referred to those distances for residences because, as I said earlier, I did not have the property line data for every person. But if you were to ask me how far should they be, I say they should be that far from the property line.

- Q. I want to talk about your Denmark trip, which is referenced in your testimony. I believe that is at page 19, Mr. Palmer.
 - A. Yes, sir.
 - Q. Now, was that a vacation, that trip?
- A. It's a chicken or egg question, sir. I
 was going to Denmark specifically because I was
 presenting a paper at the Wind Turbine Conference in

Aalborg, Denmark. There is a family rule if I am going to do something like that, I dog-gone well better take my wife along as vacation, so we both went.

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- Q. You reference there on page 19 you traveled the length of Denmark to Copenhagen to Aalborg. That was on a train, correct?
- A. Yes, sir. We arrived in Copenhagen. We stayed there a number of days, we took the train to Aalborg. We stayed there a number of days. We then took the train back to Copenhagen and stayed again a day and then left. So we went twice to Copenhagen and Aalborg.
- Q. And as you rode the train, isn't it true you took pictures of turbines as you traveled on the train?
 - A. That is correct, sir.
- Q. You didn't take pictures of all the turbines you saw, correct?
- A. I probably did not take a picture of every turbine I saw, sir, no.
- Q. You didn't perform any measurements on that trip, did you?
- A. I have performed only first order
 measurements, sir because I look at a turbine and

determine the size of the turbines I was seeing, and it's fairly quick from the picture to be able to say, okay, this is turbine to a 40 meter hub height, 21 -- 26-meter blades, so I know that total overall height is in the order of 65 meters.

It's fairly quick to sort of say, okay, I can across from there a distance and say that there's no houses. That's why I said I didn't see any houses within the vicinity of turbines, sir, certainly not within the distance that is being proposed here.

- Q. If you can go to your direct testimony starting at page 32 and turn over to page 33 -- are you there?
 - A. Yes, sir.

- Q. You reference on top of page 33, you list various roads, highways.
 - A. Yes, sir.
- Q. You did not conduct a traffic flow analysis on any of the roads listed here, did you?
- A. At the time I had prepared this, I did not, sir. I was only reading them as public travel roads on the map. Subsequent to that, I have a bit more information from having driven on all of those roads to have a rough idea what they are, but, no, I haven't done a measured traffic flow analysis.

- Q. And you drove on those roads when you were being driven around the project area, correct?
- A. Well, in some cases because as I was driving to the site and then being driven around the area, I took out my map and said, "Let's go here, please."
 - Q. How long did you drive around the area?
 - A. Two hours.

- Q. Let's turn to Exhibit B, the back of your testimony, please. Actually, I'm sorry, let's turn to Exhibit Q. Are you there sir?
 - A. Yes, sir.
- Q. Did I hear, am I correct earlier you mentioned this was a screen shot you took off a website?
- A. No, sir. This is website of the television station serving Altoona, New York, had their news broadcast showing this event or with the reporter's voice behind that. They had with that, AEJE 8, this picture.
 - O. And then turn to Exhibit F?
 - A. F as in Frank, sir?
 - Q. Yes, sir.
- 24 A. Yes, sir.
- Q. Did you take that picture?

- A. Yes, sir.
- Q. When did you take that picture?
- A. I took that picture in, I believe, March of 2009, sir.
 - Q. Is this near your home?
- A. This particular turbine is approximately
- 7 | 25 kilometers from my home, sir.
- 8 MR. SETTINERI: Thank you very much,
- 9 Mr. Palmer.

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- No further questions, your Honors.
- 11 ALJ CHILES: Thank you.
- Mr. Margard.
- MR. MARGARD: I have no questions.
- 14 Thank you, your Honor.
- 15 ALJ CHILES: Thank you.
- Mr. Van Kley.
- 17 MR. VAN KLEY: Thank you, your Honor.
- 18
- 19 REDIRECT EXAMINATION
- 20 | By Mr. Van Kley:
- 21 Q. With respect to the blade throw incidents
- 22 | that you have mentioned on -- I forget what page --
- 23 | page 24 of your direct testimony, would you take a
- 24 | look at that, please?
- 25 A. Yes, sir, I'm on page 24.

- Q. All right. You were asked about some of the specific incidents of blade throw in which parts of blade were known to have flown at least 500 meters.
 - A. Yes, sir.
 - Q. Is that right?
 - A. Yes, sir.

- Q. Those incidents that you specifically cited on this page consist of three incidents or more than three incidents?
- A. Cited on that page are three incidents.

 I had referred to other incidents, sir, but they are material which has been struck from the record. I had -- I had seen -- they were struck even though I had them in my own individually developed database.

 I had seen them in other news broadcasts. I had gone to the source of the media and documented them from there, so there are other cases where I've, you know, heard of blades traveling that sort of distance, sir.
- Q. Okay. Are there yet additional blade throws that you are aware of in which the blade pieces have flown close to 500 meters?
- MR. SETTINERI: I object, outside the scope of cross. I didn't ask any questions on that.
- MR. VAN KLEY: I think we're getting a

little picky there, your Honor. If there is
distinction between a blade throw that's gone

500 meters and one that is close to 500 meters and
thus still justifies a 500-meter setback, I think we
are on the same topic there.

ALJ CHILES: Mr. Settineri.

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MR. SETTINERI: The only questions I asked, I asked was, number one, was the 1,561 related to Mr. Schaffner's testimony. And then I asked him whether the 1,640 feet reference to Denmark, was that the number he used down below. Those are the only two questions I asked.

ALJ CHILES: I will allow limited redirect on the topic.

Do you need the question reread?

THE WITNESS: No, that's okay. I'm

thinking through to where I can say this is something specifically that I -- I'm going to have to say, sir, the other incidents of blade throw at that distance, I would have to go back to struck evidence.

I am aware of other blade throws in the order of 500 meters, but I believe they are being struck because -- I'm aware of them. I have gone back and looked -- gone back where possible and confirmed from the source documentation that the

information is true. But they're rather -- there's not a lot of cases where the distances are given in detail as being, you know, whether they are 500 meters or 400 meters. And many of those cases are information that was documented in information that had to be struck.

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I am aware of other failures, for example. At the Kent Breeze Tribunal, which I have referred to in my work and which I attached as a reference to my work, I referred there to two known blade throw incidents where in one case I took photographs from the news broadcast showing blade pieces a distance from the turbine.

At the Tribunal, the chief engineer of General Electric acknowledged those two blade throw incidents and actually reported that there were two additional blade throw incidents, but he didn't give the distances specifically.

I don't know whether I'm answering your question, sir.

MR. SETTINERI: Your Honors, at this time I would like to move to strike the answer after the first use of the word "Tribunal."

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Your Honor, I think part

of it did and part of it did not. Part of it was based on his own personal knowledge, including his reference to the admission by the GE Energy engineer about two blade throws that were not on the Caithness database.

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So I think the witness actually has shown restraint in not going beyond his own knowledge and being frank about the fact he can't testify further about the information responsive to my question because of the motion to strike.

ALJ CHILES: What we will do is grant the motion to strike the witness' answer. If you can rephrase your question so you're very specifically referring to information that has not been struck, that would be appreciated so we don't have to worry about that issue.

MR. VAN KLEY: Okay. I will do that, your Honor.

ALJ CHILES: Thank you.

Q. (By Mr. Van Kley) Mr. Palmer, based on personal knowledge, not from the Caithness database, can you tell me if there are any other incidents that you know where blade throws were known to go 500 meters or close to 500 meters?

MR. SETTINERI: I'm going to object. He

just referred to the Caithness database.

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MR. VAN KLEY: I specifically asked him to refrain from referencing the Caithness database.

MR. SETTINERI: I'm sorry.

ALJ CHILES: Overruled.

MR. SETTINERI: I apologize.

A. Specifically the incidents that I'm aware of a blade going 500 meters that are not where my information is -- was primarily not sourced -- the unspoken reference are the testimony that was given this morning; secondly, the testimony I referred to earlier of having spoken in Denmark to Jesper Mortensen from the Danish Environmental Review about a specific Danish turbine where blade pieces are reported to have traveled 500 meters. I discussed that incident with him. He acknowledged that the incident had occurred.

I can't say we specifically talked and said, sir, do you concur these were 500 meters or not 500 meters? We talked about the event that was reported, and he said, yes, that was accurate, referring to the report.

I'm trying to find in my report -- the incident at Prince Edward Island, I did look back at the original source material for that and confirmed

that as an example.

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I'm aware, sir -- I sort of identify further down on page 24 of my testimony correspondence I had with Ontario Hydro Networks where Ontario Hydro Networks, which is basically the company that's charged with operating the electric power distribution system independently, did a review of blade failures and came back and said that they were putting in place a technical directive preferring that wind turbines be separated 500 meters from their 500 kV power porters, and that's included in Exhibit No. U, where they independently determined 500 meters as a number to use.

Somewhere in here I talked of -- I'm aware of other failures, but I'm not able to say they were specifically 500 meters, sir.

- Q. Okay. How prevalent is it to see references to blade throws that don't give the distances?
- A. It's -- it is often the case, sir,
 because the industry doesn't report the information
 in detail, other than, for example, the report, you
 know, that was filed with the Ohio Power Siting Board
 for Timber II, for example. There the industry has
 come back and given the distances which are smaller

distances than the distances testified to this morning.

2.2

But because many of the others are things that have been documented in the press, they don't get out with measurement wheels, sir. They sort of say, oh, a turbine blade went a long way across the highway and landed over here, but it's hard to know exactly where "here" is, sir.

- Q. I have a question with regard to your other reference on page 24 of your testimony where you talked about the blade pieces found over a mile from turbines damaged during severe weather in Kansas in May 2012. You're not recommending a setback of a mile, are you?
- A. No, sir. I don't think I could, you know -- I don't think I could reasonably suggest that would be a prudent step.
- Q. Okay. Let's move on to page 28 of your testimony, please. I'd like to refer you to lines 15 through 20 of that testimony.
 - A. Yes, sir.
- Q. And I believe that Mr. Settineri asked you whether the nuclear industry accepts a risk of 1 times 10 to minus 7, and I provided him with an answer that I believe had two elements to it.

Let me ask you this so that we are on the same page with regard to the language you are using for comparison purposes. Can you tell me in that same kind of formula what a failure rate in the order of 125 failures per million turbine years would be?

MR. SETTINERI: Object, outside the scope of cross. The only question was nuclear industry's 1 times 10 to the minus 7. This language clearly is an attempt to bring in Exhibit M, which was previously struck, which related to failures per turbine years, and, in fact at this time I would move that the entire second-to-last sentence be struck as it relates to Exhibit M.

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Well, with regard to the first argument, your Honor, since it was

Mr. Settineri that opened up the topic as to how a number of failures per million years translates into the language of a times 10 to the minus -- whatever number he chose, I believe in fairness, we also need to relate that to turbine years so that everybody understands the comparison that he's trying to make.

With regard to the motion to strike, obviously, if there was any merit to that motion, they would have raised it already in their written

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motion. This information is based on the witness'
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    knowledge about the industry, and his evaluation of
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    the information before him, which as an expert he has
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     the right to consider, and it's admissible.
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                 ALJ CHILES: Thank you, Mr. Van Kley.
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                 As to the objection to the question, the
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    objection is sustained. I believe we have gone
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    beyond the scope of redirect.
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                 However, the motion to strike any
    additional testimony of Mr. Palmer is denied.
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                 MR. VAN KLEY: All right. I believe I
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    have no further questions, your Honor.
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                 ALJ CHILES: Thank you, Mr. Van Kley.
                 Before we go into recross, do you need a
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15
    break, Mr. Palmer?
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                 THE WITNESS: I know you have busy
17
     schedule. Carry on.
18
                 ALJ CHILES: Thank you. I appreciate it.
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                 Ms. Parcels.
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21
                      RECROSS-EXAMINATION
22
    By Ms. Parcels:
23
                 Mr. Palmer, you did have a situation on
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    redirect that said that you are opining that a
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     setback of 1,640 feet or 500 meters is the best way
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- 1 | to protect against blade failure and ice throw.
- 2 You're not recommending a setback of a mile; is that correct?
- 4 A. That is correct.

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- Q. You described yourself as a resident of
 Ontario on my initial cross-examination, and I'm
 sorry, I can't remember, did I ask you what county
 you're a resident of?
 - A. I'm a resident of Bruce County.
 - Q. Bruce County. And that correlates to the Bruce Nuclear Plant you worked at?
 - A. They actually are in the same, yes.
 - Q. Okay. Can you tell me what the difference is between a mile and a nautical mile, if you know?
 - MR. SETTINERI: I have to object this time, outside the scope of the redirect.
- 18 ALJ CHILES: Ms. Parcels.
- MS. PARCELS: Yes. This relates to his redirect where he said, You're not recommending a setback of a mile, are you? And he said, No. This is foundation for the question I'm going to be asking.
- 24 ALJ CHILES: I'll allow the question.
- A. A nautical mile is somewhat bigger than a

- statute mile, but I can't remember exactly.
- Q. I wanted to know the difference, if you
- 3 knew.

- 4 A. It's bigger.
- 5 Q. A nautical mile is bigger than a mile?
- A. Yes.
- 7 Q. And you're a resident of Bruce County?
- 8 A. Yes.
- 9 Q. Are you familiar with the Multi-Municipal
- 10 | Wind Turbine Working Group?
- 11 A. Yes.
- 12 Q. Are you member of that group?
- 13 A. I am technical adviser of that group.
- Q. Are you aware that that working group
- 15 | that you are a technical advisor for recommended a
- 16 turbine-free corridor of five nautical miles for air
- 17 | ambulances, such as air helicopters?
- 18 A. I am aware there was a letter sent, yes.
- 19 I have seen the letter.
- 20 MS. PARCELS: Nothing further, your
- 21 Honor.
- 22 ALJ TAUBER: Ms. Napier.
- MS. NAPIER: The county and townships
- 24 have no recross. Thank you.
- 25 ALJ CHILES: Mr. Settineri.

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2 RECROSS-EXAMINATION

3 By Mr. Settineri:

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- Q. Mr. Palmer, one question. Page 20 of your testimony --
- A. Yes, sir.
 - Q. -- look at the second-to-last sentence, line starting -- sentence starts at line 15 and runs down to line 19.
- 10 A. That was struck, sir.
- MR. VAN KLEY: What's the page number?
- MR. SETTINERI: Page 28.
- 13 MR. VAN KLEY: 28.
- 14 Q. Page 28, line 15 through line 19?
- 15 A. Yes, sir.
- 16 O. That sentence references 125 failures.
- 17 Is that information taken from Exhibit M that was
- 18 | previously struck today?
- 19 MR. VAN KLEY: Objection, your Honor.
- 20 | Outside the scope of redirect because I was not
- 21 allowed to ask that question so he has nothing to
- 22 follow up on.
- 23 ALJ CHILES: Sustained.
- 24 MR. SETTINERI: No further questions,
- 25 | your Honors. Thank you.

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                 ALJ CHILES: Thank you.
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                 Mr. Margard.
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                 MR. MARGARD: No, thank you, your Honor.
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                 ALJ CHILES: I have no questions for you
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    Mr. Palmer. Thank you. You are excused.
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                 Mr. Van Kley.
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                 MR. VAN KLEY: Yes, your Honor. We would
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    move the admission of Exhibits 22 and 22A through 22Z
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     for those that are struck. We would proffer those.
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                 ALJ CHILES: Thank you. Are there any
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    objections to the admission of UNU Exhibit 22,
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     including Exhibit A through Z?
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                 MR. SETTINERI: Yes, your Honors. It may
    be helpful to walk through some of the exhibits.
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                 The first one, there are a number of
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    articles attached to Mr. Palmer's testimony, and
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    those should be stricken as hearsay.
                 Exhibit B-1, the Sandia Report referenced
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     in his testimony, but also attached as an exhibit.
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                 Exhibit C-1, "Blade Failure and Load
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    Monitoring."
                 Exhibit D-1, "Evaluation of Wind Shear
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    Patterns."
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                 Exhibit K-1, another Sandia Report on
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     reliability.
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                 And I believe that captures all of the
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    articles that were attached to the back of his
 3
     testimony.
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                 ALJ CHILES: Are those the only
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    attachments you are objecting to?
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                 MR. SETTINERI: No. That's the first
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    set.
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                 ALJ CHILES: Let's go through these in
     sets to make it a little bit easier.
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                 Any other objections to attachments B-1,
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    C-1, or K-1?
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                 MR. VAN KLEY: Your Honor, for
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    clarification, the exhibit numbers are A, B, C, et
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    cetera. The dash and the number refers to the page
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    of that exhibit, to help you more easily find
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    different pages on the exhibit.
17
                 ALJ CHILES: I understand. So for
    clarity, we're talking about Attachments B, C, D and
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    Κ.
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                 MR. VAN KLEY: Correct.
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                 ALJ CHILES: Mr. Van Kley, do you want to
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    respond?
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                 MR. VAN KLEY: Yes, your Honor.
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    before when we stated that learned treatises fall
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    within an exception of the hearsay rule, these
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treatises are learned treatises and they fall within exception of the hearsay rule.

The written direct testimony specifically identifies, authenticates, and documents reliability of these documents. The documents contain relevant information that is related to the direct testimony, and they should be admitted.

ALJ CHILES: Thank you, Mr. Van Kley.

The tradition we have been following throughout this hearing, we are going to accept Exhibits B, C, D, and K as learned treatises. It will not be received as exhibits; however, no references to these documents will be stricken from the witness' testimony.

MR. SETTINERI: Thank you, your Honors.

The next set would be Exhibit A, Exhibit H,

Exhibit I, exhibit -- I want to back up. Let's just start with Exhibit A first. I think that's cleaner, if I may.

Exhibit A, this is a correspondence and a report to the Board for a wind project that is not this project. It is for the EDP renewables project for turbines made by a different manufacturer and provides significant detail.

As to relevancy, number one, simple

relevancy, you have already found that in the motion to quash there was a relevancy issue, as well I think it is both prejudicial and confusing, which is another basis for not admitting it.

This turbine, the Vestas turbine, is not being considered in the Application, and to include this in the docket I believe -- in the record I believe would be both prejudicial and confusing, not relevant.

ALJ CHILES: Thank you.

Mr. Van Kley.

MR. VAN KLEY: Yes, your Honor. First of all, with regard to the rules of evidence that apply here, Mr. Palmer's direct testimony establishes that he obtained this document from the Board's website, that is, it is clearly a public record. It is admissible on those grounds.

Secondly, even if it weren't admissible on that ground, this report constitutes admissions against interest by the company that's submitting the report. It is very clearly and obviously admissions against interest because they are reporting that their blades broke and that their operator messed up and that those blades went flying. So there are two independent grounds, each one of which justifies its

admission under the rules of evidence.

with regard to the Applicant's relevancy objection, I would again point out that is flatly contradictory to what they have been arguing for the last two days about their own evidence. And, in fact, I have made the same objection to the Application and to all the testimony of Mr. Poore and to most of the testimony of Mr. Speerschneider and to much of the testimony of Mr. Shears on exactly the same grounds that he just raised, which it doesn't involve the same turbine model listed in the Application.

Well, now he's flipping that argument over again. He's using my argument, which you have overruled in all those instances, and admitted the evidence. So for consistency's sakes, you should deny his motion. It's the same as mine.

I would also point out there has been ample testimony from Champaign Wind's own experts with regard to blade throw in which they have said repeatedly in answers to my questions that as long as you're dealing with turbines that are in the same class, that is, the class of turbines manufactured since 2000, and as long as they are essentially the same in dimensions, then the evidence that they're

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    relying on with regard to --
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2 ALJ CHILES: Thank you, Mr. Van Kley.

That is sufficient.

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The Bench is in agreement with your argument. This piece of evidence is relevant. To that extent, the objection to the admission of Exhibit A is denied and Exhibit A will be admitted.

MR. SETTINERI: Thank you, your Honors. The next set will be Exhibit H and I. Exhibit H is a file from another docket in another case. contains correspondence, as well as components of the Application filed in that proceeding, as well as the Staff Report of Investigation, that is Exhibit I, components from that proceeding as well.

Again, this is a separate proceeding from this proceeding. It does not relate to this proceeding, and, again, we think it is confusing, prejudicial, and not relevant.

MR. VAN KLEY: Again, your Honors --ALJ CHILES: Just to clarify, that was H and I?

> MR. SETTINERI: Yes, your Honor, H and I. ALJ CHILES: Thank you.

Mr. Van Kley.

MR. VAN KLEY: Yes. Thank you, your

Honor. Again, here we have information about the Timber Road wind farm that is relevant to the issue of blade throw at that wind farm.

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Mr. Palmer has authenticated these records as public records that he obtained off of the Board's website so they're admissible. They contain information that is germane to the blade throw incident with regard to both of those exhibits.

Those exhibits provide information concerning what the safety precautions were in the certificate for Timber Road, which proved not to be effective, which are identical to those being proposed for Buckeye Wind II. That information is germane to show that this Board should recommend some different, more effective precautions to prevent blade throw in this instance.

ALJ CHILES: Thank you, Mr. Van Kley.

Mr. Settineri, did you have a response?

MR. SETTINERI: Briefly, your Honor. The difference here, especially with Exhibit H, that it is comparing what one company wrote in an application compared to this Application that has no bearing on the Timber Road incident. It is not relevant.

Also, again, it will be confusing in the record. The Staff Report of Investigation does not

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list any conditions. Again, this is an analysis of
that project, and it's an analysis of what the
Applicant in that other proceeding wrote in their
Application. It has no relevance here.
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I have not moved to strike Exhibit J-1, which is the Opinion and Order and Certificate of the Board in that case, which does contain the conditions. I'm only moving to strike Exhibit I and H.

MR. VAN KLEY: Your Honor, if I could.

ALJ CHILES: Thank you, Mr. Van Kley.

ALJ CHILES: Briefly.

MR. VAN KLEY: First of all, it is from a decision in the Board's certificates, and there's no exception here with regard to Timber Road, that the information in the Application is incorporated into the certificate by reference, and Applicant is required to follow it.

The objection to admission of Exhibits H and I is denied. The Board will attribute these exhibits their appropriate relevance.

Mr. Settineri.

MR. SETTINERI: The last item, your Honor, Exhibit Q.

ALJ CHILES: Do you want to make an

argument?

you.

MR. SETTINERI: Yes, thank you, your Honor. This picture of a turbine on fire, we simply note that Mr. Palmer did not take the picture, was not present, and this was taken off a website. We would move to strike this.

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Yes, your Honor. I think Mr. Palmer provided ample information concerning the source of this photograph, and there have been no doubts that have been thrown on its authenticity or the fact that it is genuinely a picture of a fire in a turbine which has been submitted for purposes of illustrating his testimony as opposed to any other purpose.

ALJ CHILES: Thank you, Mr. Van Kley.

The objection to exclude Exhibit Q is

overruled. The Board will attribute the exhibit the

appropriate weight in light of Mr. Palmer's

testimony.

Mr. Settineri, anything further?

MR. SETTINERI: No, your Honor. Thank

ALJ CHILES: Thank you, I appreciate it.

Are there any objections to the

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admission -- these are part of UNU Exhibit 22,
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    Exhibit E, Exhibit F, Exhibit J, Exhibit N, Exhibits
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    O, R, S, U, V, W, X, Y and Z.
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                 Hearing none, UNU Exhibit 22, including
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    Exhibit A, E, F, H, I, J, N, O, Q, R, S, U, V, W, X,
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    Y, and Z will be admitted subject to the portions
 7
    that were previously stricken by the Bench.
 8
                 (EXHIBIT ADMITTED INTO EVIDENCE.)
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                 I believe we have Mr. Bauer next.
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                 MR. SETTINERI: Yes, your Honor. I defer
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    to my colleague, Mr. Howard.
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                 Could we have Mr. Westfall first, or do
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     you want to do Mr. Bauer?
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                 ALJ TAUBER: If the parties are okay with
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    Mr. Westfall next.
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                 MS. PARCELS: That's fine.
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                 (Recess taken.)
                 ALJ TAUBER: Let's go back on the record.
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                 Mr. Howard.
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                 MR. HOWARD: Thank you, Your Honor.
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    Applicant would call Mark Westfall to the stand,
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    please.
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                 (Witness sworn.)
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                 MR. HOWARD: Your Honor, before I proceed
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     I'd like the multipage document, Direct Testimony of
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- 1 Mark R. Westfall, marked Company Exhibit 17 for 2 identification purposes.
- 3 ALJ TAUBER: The exhibit is so marked.
- 4 (EXHIBIT MARKED FOR IDENTIFICATION.)

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MARK. R. WESTFALL

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

DIRECT EXAMINATION

- 10 By Mr. Howard:
- 11 Q. Please give us your name and address.
- A. Mark R. Westfall, 644 South State Route 559, Woodstock, Ohio.
- Q. Mr. Westfall, you have in front of you a
- document marked the Direct Testimony of Mark R.
- 16 Westfall.
- 17 A. Yes.
- 18 Q. Is that your direct testimony?
- 19 A. Yes, it is.
- Q. Do you have any additions or corrections to make to that testimony?
 - A. No, I do not.
- Q. Mr. Westfall, if I were to ask you the
 same questions contained in Company Exhibit 17, would
 your answers be the same as therein set forth?

1 Yes, they would. Α. 2 MR. HOWARD: I would move the admission of Company Exhibit 17, subject to cross-examination 3 4 and make the witness available for cross-examination. 5 ALJ TAUBER: Thank you, Mr. Howard. 6 Ms. Parcels. 7 8 CROSS-EXAMINATION 9 By Ms. Parcels: 10 Good afternoon, Mr. Westfall. Ο. 11 indicate in your direct testimony you have lived in 12 Rush Township your entire life in Champaign County 13 and I wanted to ask, you're a landowner, correct? 14 Yes I am. Α. 15 And you pay property taxes? Q. 16 Yes, I do. Α. 17 Q. Okay. MS. PARCELS: At this time I would like 18 19 to approach the witness with what I have marked City 20 Exhibit 9 and pass that out. 21 ALJ TAUBER: You may approach. 2.2 The exhibit is so marked. 23 (EXHIBIT MARKED FOR IDENTIFICATION.)

exhibit appear to be the tax bills on the parcels of

Mr. Westfall, does the entirety of that

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Ο.

- property that you either own or co-own?
- A. I would assume so.
 - Q. Have you seen these documents before as a taxpayer then?
 - A. Yes, I have.
 - Q. Okay. And I want to direct your attention -- and I highlighted it on your copy, there's a little yellow mark -- under the middle section of the page it's marked "Tax Distribution."
 - A. Yes.

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- Q. Is that a breakdown what you pay for by dollar figure for taxes on your properties?
- 13 MR. REILLY: Objection, lack of
 14 foundation. There's no -- nothing in the record to
 15 suggest he knows how the taxes are broken down.
- ALJ TAUBER: Do you have a response,
- 17 Ms. Parcels?
- MS. PARCELS: I can break it down. It will take longer.
- 20 ALJ TAUBER: Go ahead, please.
- Q. (By Ms. Parcels) Mr. Westfall, as a taxpayer you know there are multiple levels that you pay taxes for rather than going in one big pool?
- A. Correct.
 - Q. Just off the top of your head, what sort

- 1 of services do your property taxes go to pay for?
- A. Schools, fire and emergency, libraries, county commission.
 - Q. Is 911 one of those services?
- 5 A. Yes.

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- Q. Funded by a levy on property taxes?
- 7 A. Yes.
 - Q. If you look there at your tax bill, does that appear to be a breakdown of the individual levies that are assessed on your properties?
 - A. Yes.
- Q. And is the one that I have color-coded for you marked 911?
- 14 A. You have 911 and fire.
- 15 Q. Okay. The top one, is that 911?
- 16 A. The top one is 911.
- Q. I will not ask you to add it all up.
- 18 A. Okay.
- Q. But if you can, a rough estimate do you know how much you pay for 911 services based on your property tax levies?
- A. No, I do not.
- Q. But does that exhibit there, which you said is an accurate copy of your tax bills, if you tallied all those up, would it provide the figure?

- A. If this is all the tax bills, yes.
- Q. I would ask the same questions where it says "Fire." You noted you pay for fire and EMS services. Do you know if the EMS is taxed separately through the township, or if that is all taxed through one fire levy?
- A. There are two levies for fire and emergency.
- Q. Do they both go to that total; do you know?
- A. Both of that portions, yes, is fire and emergency.
- Q. Now, living there in Rush Township, what fire district are you served by?
 - A. Northeast Champaign County Fire District.
- Q. Do they provide both firefighting and emergency service, emergency transport?
 - A. Yes, they do.
- Q. Being a farmer in Rush Township, have you ever had a occasion to have an ambulance respond to your residence or one of your farms?
- A. We have had an ambulance at our house once.
- Q. I don't need you to go into detail.
- 25 A. Yes.

- Q. From the time you called -- I don't know how long ago this was -- from the time you called for an ambulance, approximately how long did it take for that ambulance to get there, about?

 A. 10 to 15 minutes, approximately.
 - Q. Okay. Have you, yourself, in driving around Champaign County and Rush Township ever been involved in a vehicular accident?
 - A. No.
 - Q. Okay. Have you or any member of your family ever had to be transported by CareFlight after an accident?
 - A. My immediate family?
- 14 Q. Sure.
- 15 A. No.

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- MS. PARCELS: I have nothing further,
- 17 | your Honor. Thank you.
- 18 ALJ CHILES: Thank you.
- 19 Ms. Napier.
- 20
- 21 CROSS-EXAMINATION
- 22 By Ms. Napier:
- Q. Mr. Westfall, I know you know me, but my name is Jane Napier. I am assistant prosecutor in
- 25 | Champaign County.

You indicated in your direct testimony that you live in Rush Township?

- A. That's correct.
- Q. And is Rush Township or any part thereof in the footprint of the Buckeye II wind project?
 - A. Yes.

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- Q. Has your property been leased for either the Buckeye I or Buckeye II wind project?
 - A. No.
- Q. In reviewing your direct testimony, would it be a fair statement to say that you're, in essence, in favor of the Power Siting Board approving the certificate for this project?
 - A. Yes.
- Q. And have you read the Application for this project?
- A. Not this one. I read most of the first one.
- Q. Have you read the Staff Report of Investigation?
 - A. Not in its entirety, no.
- Q. You're aware that the staff had filed a report in this project?
- 24 A. Yes.
- Q. Okay. And would it be a fair statement,

in your opinion, that that report lists recommended conditions that would become a part of the certificate if it's approved?

A. Yes.

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- Q. You are also a Rush Township trustee, correct?
 - A. That's correct.
 - Q. And as a trustee, is it fair statement to say the township is responsible for maintenance of township roads in your township?
 - A. Correct.
- Q. And would it be a fair statement to say the cost of maintaining roads is a major issue for the townships?
 - A. That's correct.
- Q. And would it be a fair statement from time to time townships need to put on the ballot road levies to pay for roads?
 - A. Correct.
- Q. So I'm not sure if you read this in your -- in the Staff Report of Investigation, but are you aware that one of the conditions has to do with a requirement that the Applicant repair the roads in the project if they're damaged?
 - A. Yes.

- Q. As a trustee, do you believe that the Applicant should be required to repair the roads if they're damaged?
 - A. Yes.

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- Q. As a trustee, do you believe that the Applicant should be required to decommission the project or individual turbines at the end of their useful life or if they become in some state of disrepair?
 - A. Yes.
- Q. So would it be a fair statement that although you're in favor of the project, that some conditions may be placed on that project?
 - A. Yes.
- Q. Okay. Any other conditions that you believe need to be set forth in the certificate?
 - A. You're asking for other conditions?
- Q. Yes. Do you have any other recommendation as to conditions?
- A. Well, there are setbacks we are aware of that needs to be entered.
 - Q. Any other things that you can recall?
- 23 A. No.
- MS. NAPIER: Thank you. I have no further questions.

1510 1 ALJ CHILES: Thank you. 2 Mr. Van Kley. 3 MR. VAN KLEY: Thank you, your Honor. 4 5 CROSS-EXAMINATION 6 By Mr. Van Kley: 7 Good afternoon, Mr. Westfall. I know it Q. 8 is implied in your testimony, but just to make sure 9 that it's on the record, you're a resident of 10 Champaign County, right? 11 Α. Yes. 12 Q. Okay. And do you also do your farming in 13 Champaign County? 14 Α. Yes. 15 Okay. What kind of farming do you do? Q. 16 Grain farming. Α. 17 Q. Okay. What kind of grain do you grow? Corn and soybeans, some wheat. 18 Α. 19 How are you doing on your harvest this Q. 20 year? 21 I'm done. Α. 2.2 Q. When did you finish? 23 Three weeks ago today, I believe. Α. 24 Okay. So just before the end of October? 0. 25 Α. Yes.

- Q. Okay. What's the latest that your harvesting has gone in the year in the past?
- A. December. I don't think we've ever harvested in January.
- Q. It varies year by year, depending on the weather conditions?
 - A. Definitely.
- Q. Some years you do well and get it earlier, other years it takes a lot longer?
- 10 A. Correct.

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- Q. And it's not unusual to harvest your crops during November?
- A. Not unusual, no.
- Q. Okay. Do you have a grain dryer or dryers to dry your produce -- I mean dry your grain?
 - A. Yes.
- Q. How many do you have?
- A. How many acres?
- 19 Q. No. How many grain dryers do you have?
- 20 A. One.
 - Q. One, okay. During what time of the year do you operate that grain dryer?
- A. During harvest, from the end of October
 until the end of harvest, which can be as late as

 November/December.

1 Okay. Does the temperature go below Ο. freezing in Champaign County during the winter? 2 3 Α. Yes. 4 Obvious question, I know, but sometimes Q. 5 lawyers have to ask obvious questions. During what 6 period of the year does it get below freezing? 7 Through the winter months. Α. 8 Ο. Can you tell me what months you 9 experience freezing conditions in Champaign County? 10 Α. Probably October, November, December, 11 January, February, maybe March. 12 Q. Okay. All right. Is it unusual during those months to have ice conditions on roads and 13 14 other things? 15 Α. No. 16 MR. VAN KLEY: I have no further 17 questions. ALJ TAUBER: Thank you. 18 19 Mr. Reilly. 20 MR. REILLY: Thank you, your Honor. 21 2.2 CROSS-EXAMINATION 23 By Mr. Reilly: 24 Ο. Good afternoon, Mr. Westfall. I am here 25 on behalf of the Ohio Power Siting Board staff.

just have really one question for you.

If you would turn to page 2 of your testimony, in the next-to-the-last sentence of your answer to question 8, you say, "Also, having wind power in the area helps preserve the agricultural and rural character of our community." Do you see that?

A. Yes.

- Q. Can you elaborate on that? How does it do that, in your opinion?
- A. The next statement says, "In my view, this is preferable" -- wind turbines would be preferable to subdividing parcels of land into smaller lots for houses.
 - Q. And how do the two relate to each other?
- A. Well, you have setbacks on turbines. Obviously, if you have a turbine built, you won't have the houses built in close proximity to them.

18 MR. REILLY: Thank you, Mr. Westfall.

ALJ TAUBER: Mr. Howard, redirect.

MR. HOWARD: Just a couple.

REDIRECT EXAMINATION

23 By Mr. Howard:

Q. Mr. Westfall, do your farm operations take place year round?

1514 1 Yes. Α. 2 Q. Do you plow fields in the winter months? We do not plow, no plowing. Primarily in 3 Α. 4 the fall. 5 MR. HOWARD: Nothing further. 6 Thank you, your Honors. 7 ALJ TAUBER: Ms. Parcels. 8 MS. PARCELS: None, your Honor. 9 ALJ TAUBER: Ms. Nappier. 10 MS. NAPIER: None, your Honors. 11 ALJ TAUBER: Mr. Van Kley. 12 MR. VAN KLEY: Not for us. 13 ALJ TAUBER: Mr. Reilly. 14 MR. REILLY: None for us. 15 MR. HOWARD: We renew our motion to move 16 into evidence Company Exhibit 17 at this time. 17 ALJ TAUBER: Any objection to Company 17? Hearing none, it will be admitted. 18 19 (EXHIBIT ADMITTED INTO EVIDENCE.) 20 ALJ TAUBER: Ms. Parcels. 21 MS. PARCELS: We move for the admission 22 of Exhibit 9, copies of tax bills on his property. 23 ALJ TAUBER: Objection to City 24 Exhibit No. 9? 25 Hearing none, it shall be admitted.

1515 1 (EXHIBIT ADMITTED INTO EVIDENCE.) ALJ TAUBER: Mr. Howard. 2 3 MR. HOWARD: The Applicant will call 4 Mr. Don Bauer to the witness stand, please. 5 (Witness sworn.) MR. HOWARD: Your Honor, I have 6 7 distributed to the Bench and to the reporter a 8 multipage document entitled Direct Testimony of Don 9 Bauer. I would ask that it be marked for identification purposes as Company Exhibit 18, 10 11 please. 12 ALJ CHILES: So marked. 13 (EXHIBIT MARKED FOR IDENTIFICATION.) 14 15 DON BAUER 16 being first duly sworn, as prescribed by law, was 17 examined and testified as follows: DIRECT EXAMINATION 18 19 By Mr. Howard: 20 Mr. Bauer, please state your name and Q. 21 address for the record, please? Don Bauer, address 3548 State Route 54, 2.2 Α. 23 Urbana, Ohio. 24 Ο. Mr. Bauer, did you cause to have testimony prepared in this proceeding? 25

- A. I did.
- Q. I'm going to direct your attention to what has been marked as Company Exhibit 18 and ask you if you recognize that?
 - A. I do.
 - Q. Is that your direct testimony?
- A. It is.

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- Q. Mr. Bauer, do you have any additions or corrections to make to that document?
- A. I do.
- Q. Could you tell us the particular question or answer you would like to modify?
 - A. It's on answer No. 4. I would like to add that we actually have a meteorological tower on the farm also.
 - Q. So in answer 4, in addition to the schedule of one turbine for Buckeye Wind I and a second turbine as part of Buckeye II, you would like your testimony to reflect you have a meteorological tower on your property currently?
 - A. Correct.
 - Q. Do you have any other additions or corrections to make?
- A. I do not.
- Q. Mr. Bauer, if I were to ask you the same

questions today under oath, would your answers be the same with the exception you have modified 4?

A. They would.

MR. HOWARD: Your Honor, I have nothing further. I move the admission of Company Exhibit 18 and would make Mr. Bauer available for cross-examination.

ALJ CHILES: Thank you. We will reserve ruling on the motion until we finished the testimony.

Ms. Parcels.

MS. PARCELS: May I approach the witness with City Exhibit 10?

ALJ CHILES: You may.

(EXHIBIT MARKED FOR IDENTIFICATION.)

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16 CROSS-EXAMINATION

17 | By Ms. Parcels:

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Q. Good afternoon, Mr. Bauer. Looking at that document I just handed you, does that appear to be a copy your tax bill as a property owner even though it is marked Hearthstone Farm?

I guess I should back up. Mr. Bauer, you are the owner of Hearthstone Farm?

- A. I am one of the stockholders.
- Q. Okay. In your answer to question 3 of

your direct testimony, you say your farm is located south and east of Urbana Township and has been in the family for 70 years and you have 325 acres.

A. Correct.

- Q. Is that land titled in your name or in the name of Hearthstone Farm?
- A. Its title is in the name of Hearthstone Farm, Incorporated.
- Q. I just wanted to clarify that, so thank you. Looking at that tax bill, there's a yellow mark on there. Do you know if Hearthstone Farm, as one of the shareholders in that corporation, whether it pays real property taxes on the land that it owns?
 - A. I can attest we do.
- Q. Do you know what sorts of things those taxes pay for, what sorts of services?
- A. Schools, hospitals -- not hospitals.
 Senior citizens, Lawnview, library, 911.
- Q. Okay. Does the center of that tax bill have a general approximation of the dollar amounts broken down for what you noted were the various services that are taxed by the property tax levy?
- 23 A. Yes.
- Q. Okay. And do you see where it's highlighted, yellow marked 911?

A. Yes.

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- Q. Okay. Now, there are four pages to that tax bill, and you only have two parcel numbers there. Do you know approximately how much Hearthstone pays for 911 services based on that tax levy annually, adding up all those four pages, approximately?
 - A. \$200 plus.
- Q. Mr. Bauer, have you had occasion as a property owner and resident of the community to dial 911 for an emergency?
 - A. Personally?
- 12 Q. Yes.
- 13 A. No.
- Q. What about family?
- 15 A. Yes.
- Q. Your residence is on State Route 54,
 Urbana. How far outside the city of Urbana would you
 say you live?
- A. From the city limits, about four and a half miles.
- Q. Do you know what department is your emergency first responder in the event of an emergency?
- 24 A. City of Urbana.
- Q. Would it be the Urbana Fire Division?

A. Correct.

- Q. Have you ever had occasion to have an ambulance respond to either your residence or the farm out there?
 - A. We have.
- Q. Okay. And approximately how long did it take to get out there from the city of Urbana?
 - A. Seven to eight minutes.
- Q. Okay. Have you, yourself, or any member of your family been involved in a vehicular accident driving through Urbana Township or the six townships in the project area?
 - A. No.
- Q. Okay. Do you know anyone who has had to be transported by air flight after an auto accident in the project area?
- A. No.
 - Q. Now, you indicate in your direct testimony you visited Vinton County, Indiana, near the town of Fowler. Do you know how close the town of Fowler is to the project area out there is Benton County?
 - A. Yes.
- Q. How far would you say, from your observation?

- A. Well, from my observation, when you're in the center of Fowler, there are probably turbines within a half of mile.
- Q. And how big of a town is Fowler from your observation? How many residents would you say?
 - A. Less than 3,000.
- Q. And how many residents would you say are in the city of Urbana?
 - A. 12,000.

- Q. Okay. So your observation is that Fowler is a substantially smaller community than the city of Urbana?
 - A. Correct.
- Q. Okay. And you indicated you drove through the project area and around the town of Fowler. Do you know how close that project area out in Indiana is to a city the approximate size of the city of Urbana, 12,000 residents or more?
 - A. No, I don't.
- Q. Okay. In your amendment to your direct testimony, you indicated you have a meteorological tower there on your property on Route 54. Is that operated by the Applicant in this case, Champaign Wind, or the earlier Applicant, Buckeye Wind?
 - A. Yes.

- Q. I guess I should clarify. When did that meteorological tower go in?
- A. I think approximately two years ago, maybe a year and a half, two years.
- Q. So was it after the Buckeye Wind project was approved by the Power Siting Board?
 - A. Yes.

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- Q. Okay. But before the leases started to be signed for Champaign Wind, to your knowledge?
 - A. Probably.
- Q. Okay. Now, how tall is that tower from your observation, or do you know exactly?
 - A. As I understand, it is 196 feet.
- Q. Okay. Do you know if the company had to obtain Federal Aviation Administration approval to put that tower in?
 - A. As I understand it, anything under 200 feet you do not.
 - Q. Okay. Is that tower lighted at night?
 - A. It is not.
- MS. PARCELS: I have nothing further,
- 22 your Honor.
- 23 ALJ CHILES: Mr. Selvaggio.
- 24 THE WITNESS: Here we go again, Nick.
- MR. SELVAGGIO: Almost three years to the

1 date.

THE WITNESS: Yes.

CROSS-EXAMINATION

5 | THE WITNESS: By Mr. Selvaggio:

- Q. Mr. Bauer, to begin, I notice in question 2 your testimony is that you were nominated for 2009 Champaign County Farmer of the Year. In actuality, you were actually named. That was an award you received; is that correct?
 - A. Correct.
- Q. So nominated, would you agree that nominated should be replaced by named or awarded or something?
 - A. Yes, counselor.
- Q. Okay. And your work on the Barn Quilt Project was something that was initiated to highlight this landscape of the community; is that right?
 - A. Correct.
- Q. And the Freedom Grove Project is a patriotism-driven project that has a number of visual exhibitions that improved a piece of county property in Urbana; is that correct?
 - A. Correct.
 - Q. And so through the Barn Quilt Project and

the Freedom Grove Project, would you agree with me those are visual enhancements to our community?

A. Yes.

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- Q. And when you saw the turbines in Benton County, Indiana, you indicated that you were blown away by the beauty and number of wind turbines alongside I-65 and State Route 18. Again, highlighting your appreciation for visual beauty; is that correct?
 - A. Correct.
- Q. Okay. It's fair to say then one of your supports for wind energy is what you would term the visual enhancement to the community?
 - A. One of others.
 - Q. Yes, one of them.
- A. Yes.
- Q. Okay. Now, you've indicated in question 6 in the answer, "The Ohio Power Siting Board is faced with a very important decision that will affect our children, grandchildren, their children, and the next several generations." Do you see that?
 - A. Yes.
- Q. Would you share with me how you believe that the next generation of Champaign County residents will be able to visually discern the

- difference between the Buckeye I project and the Buckeye II project?
 - A. Well, visually they may look exactly the same. I don't think you can discern them.
 - Q. The turbines, to your knowledge, are not going to be hand stamped "Buckeye "I and "Buckeye II," are they?
 - A. No.

- Q. I, mean from what you understand.
- A. As I understand.
- Q. The hundreds of turbines that you saw outside of Fowler, would you agree with me they are lined up almost like dominoes, from a broad-based perspective?
- A. No. They're not in line to me. To me, dominoes have to be in a line, and they're not in a line.
- Q. Do you believe that -- okay. You indicated in your direct testimony, question 4, you're scheduled for one turbine as part of Buckeye Wind I project and the second turbine as part of the Buckeye II project. When were you contacted about Buckeye II?
 - A. I don't know exactly.
 - Q. Was it before July of 2009?

A. Honestly, I don't know today.

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Q. Was it before the Power Siting Board approved the certificate for Buckeye I?

MR. HOWARD: Objection. He testified he didn't know.

MR. SELVAGGIO: So I am helping him with further dates that might jog his memory.

ALJ TAUBER: I think you asked the same question, so I ask that you at least ask a different question.

MR. SELVAGGIO: Okay. Let me rephrase this.

- Q. (By Mr. Selvaggio) Can you share with me what considerations you had in your mind when you and your wife signed on as leaseholders for Buckeye Wind I? By considerations, I mean what factors persuade you to believe this was the right thing to do?
- A. I would say that, you know, we are -- we have been for 35 years in the renewable energy field in that we are selling wood stoves and pellet stoves and fireplaces. And a lot of people that we deal with a lot are into renewables somehow. We look at wind as a clean energy, renewable energy. I thought it would be fantastic to be able to farm the wind above our windy prairie.

You know, I mean that people that come to our store and farm always remark about the amount of wind that's on the prairie on that. So we thought it would not solve all the energy problems of the United States, but it was a baby step forward.

- Q. Did you consider in making your decision anything different when you signed on for Buckeye II?
 - A. No. I would say no.
- Q. Were Buckeye I and Buckeye II signed at the same time?
 - A. No.

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- Q. When you signed on for Buckeye II, were you given any kind of indication what kind of turbine would be used?
 - A. No.
- Q. Were you given any information as to some of the incidents that have been problematic for the wind turbine industry?
 - A. No.
- Q. And by incidents, I mean things like blade throw and ice throw and that kind of stuff, blade failure.
 - A. No.
- Q. When you described wind energy as clean energy, are you taking into account the aftereffects

- or consequences that occur from lightning strikes that set turbines on fire?
- A. Can you repeat the question? I really don't understand it.
- Q. Actually, let me step back for a second.

 Do you have lightning rods out on your barns out on your farm?
 - A. No.

- Q. Do you have any lightning strikes in that area?
- A. I think we all have lightning strikes in an area. Depends on what you mean by an area.
- Q. Okay. One of the safety manuals that the company has offered in support of its Application has a page in which it discusses what to do in case of a fire. And the recommendation of the safety company is that in order to address the fire that a radius of 100 feet be cordoned off.

Do you believe, as a leaseholder, that the company should follow the safety manual?

- A. I don't really have an opinion on it. I didn't hear anything about fire until today.
- Q. Now that you've heard something about fire, does that cause you to want to learn more?
- 25 A. No.

Why is it that you don't have an opinion 1 Q. as to whether a safety manual should be followed? 2 MR. HOWARD: Object. 3 ALJ CHILES: Sustained. The witness 4 5 stated he doesn't have an opinion. 6 MR. SELVAGGIO: I'm asking the basis for 7 the opinion. 8 ALJ CHILES: Sustained. 9 MR. HOWARD: Thank you, your Honor. 10 In working on the Freedom Grove Project, Q. 11 did you utilize Internet sources? 12 Α. Yes. 13 And did you rely on those Internet Ο. sources? 14 15 For downloading pictures. Α. 16 And did those Internet sources help to 17 form the basis for your decision-making as to how you wanted to carry out your project? 18 19 It might have been a small part. Α. 20 But a part, nonetheless? Q. 21 Or I wouldn't have downloaded the Α. 22 pictures. 23 Okay. So in your direct testimony when 0.

in question 6 you remark about Champaign County

residents who have received their information from

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the Internet, newspapers or gossip, it appears to me that's a negative toned statement. Would you care to modify that based on your other-than-personal experience with the Internet?

- A. And what question was this?
- O. Ouestion 6.
- A. Would I like to modify it?
- Q. Yes.

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- A. No.
- Q. You indicate at the end of question 6 that you support the project, in addition, for the future and the growth of our county. Would you describe for me what you mean by "the growth of our county"?
- A. Well, I would say at the time when I gave this, would be the growth of more jobs during construction, the amount of jobs in the area, the amount of local participation from contractors, from people needing food, housing, that are building the project, hauling gravel, concrete, local entities going in.

So I think it would be a big influx of dollars into the county, economic dollars, and I think there will be economic dollars generated by the permanent jobs that are left after construction. And

I think there's a tremendous economic benefit to the schools and to the county through the proposed PILOT tax. Also I think there's a tremendous benefit to the landowners that are receiving lease payments.

- Q. With regard to what I'm going to group together as construction jobs, would you agree with me that is not a sustainable economic benefit, in other words, it's rather short-lived compared to the longevity that the turbines are expected to operate?
- A. I guess it depends on what you mean by short term. It's probably a two-year project.
- Q. And going back to my question, do you believe it's short term compared to the long-term operability expected of turbines?
 - A. Sure, yes.

Q. You indicated you expected permanent jobs to result. I noticed in the Staff Report of Investigation that it says the Applicant -- this is page 46, second full paragraph, last sentence. "The Applicant also indicated that it maintains an informational website for the project."

Does that appear to you that residents are able to use the Internet to gain information about the wind energy as it pertains to what is going on in Champaign County?

- A. You mean their website?
- 2 Q. Yes.

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- A. I don't know. I haven't looked at their website so I can't make an observation.
 - Q. As a leaseholder, were you made aware that there was Internet information presented?
 - A. Yes.
 - Q. Okay. The Staff Report also indicates in that same sentence, "An office has been established in Bellefontaine, Ohio." What county is that in?
 - A. Logan County.
- Q. And so the people who are working in that Logan County office would presumably pay Logan County income tax?
- MR. HOWARD: Object. There's no foundation for that.
 - MR. SELVAGGIO: He testified that it has economic benefit for the county.
- MR. HOWARD: People can live in Champaign
 County and work in Logan.
- MR. SELVAGGIO: I appreciate the tax
 lesson, but my question to him is, are people who
 work in Logan County going to be paying local Logan
 County income tax?
- 25 ALJ CHILES: Sustained. I think you need

to lay a better foundation.

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- Q. (By Mr. Selvaggio) You spoke of the permanent jobs that will be created as a result of this project. Where are those permanent jobs going to be located?
- A. I would assume in Champaign County doing maintenance and upkeep, whatever they have to do for the turbine project.
- Q. As a leaseholder, who is your liaison with the company?
 - A. I have most contact with Mike Pullins.
- Q. Where is his office located?
- A. I'm not sure where Mike's office is located. I don't go to his office.
- Q. Well, you see him probably at the Rotary
 Club?
- 17 A. Right.
- 18 Q. You might see him in other parts of the community?
- 20 A. Right.
- Q. And you know him well enough you could probably call him up on the phone?
- A. Absolutely.
- Q. For leaseholders who don't have that kind of relationship, where would they contact Mike

Pullins?

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- A. I don't know.
- Q. Did you know that the Applicant has an office in Logan County?
 - A. Yes. I've already said they do.
 - Q. And would those individuals who work in Logan County pay Logan County income tax?
- A. I'm not sure there is a Logan County income tax.
- 10 Q. How about the city of Bellefontaine
 11 income tax?
- 12 A. I don't know if there's a Bellfontaine
 13 income tax.
 - Q. Really?
- A. I don't. I live in the country. We
 don't have income tax locally. Now, that person that
 works in Bellefontaine could live in Champaign
 County, couldn't they?
- 19 Q. I'm sure some of them do.
- 20 A. Yeah.
- Q. If you're a leaseholder and you have a difficulty with the project of some sort, what do you know about the complaint resolution process that has been proposed?
- A. Would you be speaking after it's built?

- Q. Yes. Well, let's start off during the construction period.
- A. I don't have any idea, Nick. I haven't looked at that. I'm not concerned.
- Q. If you are a leaseholder and you had a complaint, would you want a condition that the company will work to mitigate/resolve the issue, or would you want a condition to say they would make a good-faith effort to mitigate the issue?

MR. HOWARD: I'm going to object.

11 ALJ CHILES: Basis?

MR. HOWARD: There's no foundation that he's established about that condition, that the witness is even aware of that condition if there is such a condition.

16 ALJ CHILES: I'll allow the question.

The witness may answer.

18 THE WITNESS: Can you repeat the

19 question?

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20 ALJ CHILES: Would you read that

21 question, please.

22 (Record read.)

23 THE WITNESS: A good-faith effort would be fine for me.

Q. (By Mr. Selvaggio) As a Champaign County

taxpayer, do you want your county engineer or a predetermined other appropriate public authority to control the terms of road use agreements regarding the roads and their repairs in our county?

- A. I don't have an opinion on that.
- Q. Have you had any discussions as a leaseholder with regard to any -- I mean with anyone with regard to what happens if there are not sufficient funds to decommission a turbine on your plot?
 - A. No.
- Q. Was that something that you considered when you entered into your contract for phase 2?
 - A. Decommissioning?
- 15 Q. Yes.

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- 16 A. No.
 - Q. Do you know the number of the turbines on your property are referred to in the Application?
 - A. No.
 - Q. Do you know, like, there are a number of turbines, through 133, I think?
 - A. No, I don't.
- Q. Do you know, are your turbines located near Dolly Varden and State Route 54?
 - A. There's one that is, yes.

- Q. Okay. And which one is that, the one near Dolly Varden or near State Route 54?
- A. Well, counselor, actually there's only one turbine that would be located in those two parameters, Dolly Varden on one side and State Route 54 on the other.
 - Q. Do you have a copy of the Staff Report up there? It's a purple document.
 - A. I know there's a lot of stuff up here,
 Nick. I'm not sure where it is. I'd be glad to look
 at it if somebody would show me what it is.
- MR. SELVAGGIO: May I show him my copy?

 ALJ CHILES: You may.
 - Q. I am turning to the diagram, page 4 in the Staff Report. It took me awhile to orient where that is. I will give you time to look at it.
 - A. I know where it is, yeah.
- Q. So as you look at that document then, do you see turbine 123?
 - A. Correct.
 - Q. Is that one of your turbines --
- 22 A. Correct.
- Q. -- that's proposed?
- 24 A. Yes.

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25 Q. Okay. There was a witness who testified

earlier today that he thought that turbine had a professional safety concern due to the proximity to the roadway and buildings. As a leaseholder, does it cause you any concern that the proximity to the roadway and buildings is an issue?

- A. I guess it would depend how far you're talking about. Well, I mean, if it was 50 feet, it would be probably more concern than if it was 1,000 feet.
- Q. Okay. Let's assume a couple of facts for my question. The state of Ohio has indicated that there's a certain level of setback figure, the length being 941 feet has been often cited as the standard. If something is below 941 feet, would that cause you a concern?
- A. If it was below the standard the state set, I guess it would be of some concern.
- Q. Okay. If a safety manual indicates that in fighting a fire you must observe a radius of 1,300 feet and if your turbine was located in a location under that 1,300-feet figure to a nearest house, would that cause you concern?
 - A. No.

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Q. And so is it your testimony that you don't believe the safety manual should be followed?

- A. Well, I'm not sure whose safety manual we are talking about.
- Q. If you look at Volume III of the binder, Exhibit R, page 42.
 - A. Volume III; is that correct?
 - Q. Yes, sir.
 - A. Now, what do we need to look at?
- Q. Exhibit R, page 42, and you will see page 42 marked up in the right-hand corner.
- A. 42 we're looking for?
- 11 Q. Yes, sir.
- 12 A. Okay.

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- Q. At the very bottom it says, "Section 7.2, Procedure in the Event of Fire." Do you see the last sentence where it says, "The area must be cleared and cordoned off in a radius of 400 meters, 1,300 feet, from the turbine"?
- 18 A. Yes.
- Q. So if your turbine was under that
 1,300 feet figure, would you take the position that
 the safety manual should not be followed?
- A. No. I think the safety manual should be followed. All I asked, whose manual is it?
- Q. Gamesa Turbine.
- 25 A. What?

Q. This is a Gamesa, G-A-M-E-S-A.

- A. I'm not sure who that is, but if that's what they say in theirs, fine.
- Q. You also spoke about the tax benefit that would come to the county, and by that do you mean the county general fund?
- A. I'm sure there is some money that may go to the general fund. I'm not sure of all the monies involved, but I would think so.
- Q. In the Staff Report, the staff has cited a figure that if PILOT taxation was followed, that annual payment would be approximately \$1,045,000. Would it surprise you to learn of that \$1 million collected that approximately \$47,000 would go to the county commission -- well, go to the general fund?

 MR. HOWARD: I'm going to object. He's

stating it as if it is a fact. He can ask if the witness is aware of it, but the way the question is developed, it's assuming that to be a fact.

MR. SELVAGGIO: I'll rephrase.

ALJ CHILES: Thank you.

Q. (By Mr. Selvaggio) Are you aware that it's estimated that only \$47,000 of that \$1,045,000 figure would go to the county general fund in the form of taxes?

- A. Is that for Buckeye II only?
- Q. Well, yes, it's for Buckeye II only because we are only dealing with Buckeye II in the question.
 - A. No, I was not familiar with that.
- Q. Do you think there's a perception in our county among county residents that there's an expectation that there's more tax revenue that's going to be produced than the figure I just cited?
- A. You cited two figures. Are you talking about the million or the 47,000?
 - Q. I'm talking about the \$47,000.
- A. I really -- I'd say \$47,000 to the general fund sounds a little bit low to me.
- Q. Okay. Last, is it fair to say that your business relies on people traveling the county and township roads to get to it?
 - A. No.

- Q. How else do they get to it?
- A. State road. We don't live on a county road.
 - Q. So someone who lives on a township road would have to use a township road to get to the state road to get to your place, wouldn't they?
 - A. Right. But your question was do they

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rely on county and township roads. You can't get to my business on a county or township road. You have to go to a state road to get there.
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- Q. All right. You live off a state road and that's where your business is located?
 - A. Correct.

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Q. For your customers that may live off township roads, do you believe that township roads should be returned to the same state -- let me back up.

Do you understand that as a result of the construction process, county and township roads will most likely be damaged in some part?

MR. HOWARD: Object.

ALJ CHILES: Basis?

MR. HOWARD: No foundation.

ALJ CHILES: Mr. Selvaggio, would you

like to try to --

MR. SELVAGGIO: I believe common sense --

ALJ CHILES: Mr. Selvaggio, don't speak

21 over me. Would you like to try and lay a foundation?

MR. SELVAGGIO: Sure.

Q. (By Mr. Selvaggio) Mr. Bauer, during the construction phase there's been testimony that heavy loads of equipment will be repetitively driven on

county and township roads. Given the nature of that testimony, would you expect there to be damage to county and township roads?

- A. Well, if they stay within the legal limits of the loading for the road, I would say there would be minimal damage.
 - Q. And what do you base that on?
- A. Legal loads, I would assume, means that somebody in the county or the township -- the county, has determined that this is a legal load for that particular road, and you will not have damage to it if you stay within the legal limits of that vehicle. So there may be some damage on it. You know, I don't know how much. I don't think you do either.

MR. SELVAGGIO: That's all the questions

16 I have.

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Thank you, your Honor.

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20 CROSS-EXAMINATION

21 By Mr. Van Kley:

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- Q. Good afternoon, Mr. Bauer.
- A. Good afternoon.
- Q. I see from your testimony that you lease at least a part of your farmland to other people; is

that right?

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- 2 A. Correct.
 - Q. Do you farm any of it yourself?
- 4 A. No.
- Q. Do you have a tenant on your farmland that grows potatoes?
 - A. Amongst other crops, correct.
 - Q. And how long has that tenant been growing potatoes on your land?
 - A. Probably 12 to 15 years.
- Q. Are these potatoes being grown in any of the fields that will now have turbines in them?
 - A. A turbine, yes.
- Q. So he's growing potatoes in a field that will have a tenant in it?
- 16 A. Correct.
 - Q. Does this tenant use irrigation to support his potato-growing operation?
- 19 A. Yes.
- Q. Can you describe the irrigation system,
 what it looks like?
- A. Well, they're circular irrigation

 systems. There are two in the front field, what they

 call a pivot system. It goes round and a long arm

 comes and sprinkles the crops with water.

- Q. And how does that irrigation system travel across the field to do its job?
 - A. On rubber tires.

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- Q. Okay. And it travels throughout the field spreading water as it goes?
 - A. In a circle, correct.
- Q. Okay. Will the turbine block this irrigation system from making its rounds in that field?
- A. No. It will block it, but it will reverse and go the other way and make up the difference.
 - Q. Okay. Will it be able to cover the entire field that way?
 - A. There probably will be two to three acres that may not be able to cover that it's covering today.
 - Q. Now, I see from your testimony that you own a wood stove and fireplace retail business?
 - A. Correct.
 - Q. So you actually sell stoves?
- 22 A. Yes.
- Q. Before you signed up for leasing your land for these turbines, did the wind developer inform you that blades can be thrown off the

turbines?

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- A. I don't remember.
- Q. Well, if they had, do you think that would be an important enough fact you would remember it?
 - A. I would guess so, yeah.
 - Q. Do you recall whether the wind developer informed you that ice can be thrown off of the turbines during icing conditions?
 - A. I don't remember that.
- Q. Do you recall whether the developer informed you that turbines can create shadow flicker?
 - A. No, they did not say that.
- Q. Before you signed the lease, did the wind developer show you any safety manuals, such as the one that you and Mr. Selvaggio were talking about?
 - A. No.
- Q. Did they inform you that they had safety manuals that provided safety precautions and recommended setbacks before you signed your lease?
 - A. No.
- Q. When you sell your stoves, do those stoves come with safety recommendations from the manufacturer?
- 25 A. Yes.

- Q. Do you tell the buyers of those stoves to disregard the manufacturer's recommendations?
 - A. No.
 - Q. Why not?
 - A. Why would I?
 - Q. Well, why wouldn't you?
 - A. To disregard?
- 8 O. Pardon?
- 9 A. You know, I don't tell the customer to disregard the safety manuals.
- 11 O. Uh-huh.
- 12 A. I don't.
- Q. Okay. Because the safety manuals have a purpose, right?
- 15 A. Correct.
- Q. To keep the consumer safe, right?
- 17 A. Uh-huh.
- 18 Q. Okay. That's just common sense, isn't
- 19 it?

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- A. Absolutely.
- Q. Okay. How close is your home going to be located to the turbines that are being leased for
- 23 your property or being put on your property?
- A. My home?
- Q. Yes. Maybe I better ask a different

- question. Do you live on a farm that is leasing the turbines?
- 3 A. Yes, right.
- 4 Q. How close is your home to the location 5 for those turbines?
 - A. Probably 2,000 feet, my house.
 - Q. Did the wind developer give you choice as to how close the turbines would be placed to your house?
- 10 A. No.
- MR. VAN KLEY: I have no further
- 12 questions.

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- 13 ALJ CHILES: Thank you.
- Mr. Reilly.
- MR. REILLY: Thank you, your Honor. We
- 16 have no questions.
- 17 ALJ TAUBER: Mr. Howard?
- MR. HOWARD: No redirect. Thank you very
- 19 much.
- 20 ALJ CHILES: We have no questions for
- 21 | you. Thank you. You are excused.
- 22 THE WITNESS: Good, thank you.
- MR. HOWARD: Your Honor, we renew the
- 24 | motion for admission of Company Exhibit 18.
- 25 ALJ CHILES: Any objection to Company 18?

1549 Hearing none, Company Exhibit 18 will be 1 2 admitted. 3 (EXHIBIT ADMITTED INTO EVIDENCE.) 4 ALJ CHILES: Ms. Parcels. 5 MS. PARCELS: The company would move for 6 the admission of City Exhibit 10, as Mr. Bauer recognized those to be tax forms for his properties. 7 8 ALJ CHILES: Any objection to Exhibit 10? 9 MR. HOWARD: No, your Honor. 10 ALJ CHILES: Company Exhibit 10 is 11 admitted. 12 (EXHIBIT ADMITTED INTO EVIDENCE.) 13 ALJ CHILES: Let's go off the record. 14 (Discussion off record.) 15 ALJ CHILES: On the record. 16 MR. ENDSLEY: Your Honors, the Ohio Farm 17 Bureau calls Dale Arnold. ALJ CHILES: Mr. Selvaggio, do you have 18 19 something to say? 20 MR. SELVAGGIO: May I retrieve the Staff 21 Report and ask the Bench to take judicial notice of 2.2 it? 23 ALJ CHILES: There is no need to take 24 judicial notice. It is already in the docket, but

you can certainly retrieve it.

1550 Off the record. 1 (Discussion off record.) 2 3 ALJ TAUBER: Back on the record. 4 (Witness sworn.) 5 MR. ENDSLEY: I have distributed a 6 document entitled Direct Testimony of Dale Arnold. I 7 ask it be marked as Farm Bureau 1, FB-1. 8 ALJ TAUBER: The exhibit is so marked. 9 (EXHIBIT MARKED FOR IDENTIFICATION.) 10 11 DALE ARNOLD 12 being first duly sworn, as prescribed by law, was examined and testified as follows: 13 DIRECT EXAMINATION 14 15 By Mr. Endsley: 16 Mr. Arnold, state your name and business 0. 17 address. My name is Dale Arnold. My address is 18 Α. 19 the Ohio Farm Bureau Federation, 280 North High 20 Street, PO Box 182383, Columbus, Ohio. 21 Please identify the exhibit in front of 22 you marked FB-1. 23 Yes. This is my direct testimony filed Α. 24 in this case with the Ohio Power Siting Board. 25 Q. Do you have any revisions or additions to

your testimony?

- A. No, I do not.
- Q. If I were to ask you these same questions today, would your answers be the same?
 - A. Yes they would.

MR. ENDSLEY: Your Honor, at this time I move for admission of FB-1, subject to cross-examination, and make the witness available for cross-examination.

ALJ TAUBER: Thank you.

Ms. Parcels.

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CROSS-EXAMINATION

By Ms. Parcels:

- Q. Good afternoon, Mr. Arnold. You indicate in your answer to I believe it's question 3 that you have a very long history with the Ohio Farm Bureau Federation, and you became director of energy services in 1995. Prior to that, did you do any work with the Farm Bureau in the context of safety on the farm?
- A. As an organization director, we basically have a safety committee to look at things, and I work in coordinating with education outreach and those

programs as part of my work.

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- Q. Did you have any involvement with coordination outreach as you termed it for prevention of grain bin accidents?
 - A. Yes, we did.
- Q. Can you describe to me when a grain bin accident would happen, what kind of rescue, or what the technical terminology is for that kind of rescue, say, if the farmer has a heart attack while on the top of a grain bin?
- A. From my knowledge, from what I worked with regard to that, we worked on a grain bin rescue, how to rescue a farmer if he was stuck or sinking into grain. If a farmer was on top of a grain bin, on top of a silo, we worked with a number of firehouses and different things with regard to training and different things on how to retrieve that particular person, put him basically in a stretcher and brace and bring him down safely.
- Q. And in your experience, how high are the highest grain bins, from your observation, with your many years of experience with the Farm Bureau?
- A. Some of the cooperatives. Some of the larger ones could go up to 150 to 200 feet and some silos could go about that high.

Q. Okay. Did you have any involvement when you were doing coordinating outreach, as you termed it, with getting local farmers coordinated with air ambulance services, such as CareFlight, to respond to farms directly in the event of an ag accident?

A. No, I did not.

MS. PARCELS: No further questions, your Honor. Thank you.

ALJ CHILES: Thank you.

Ms. Nappier.

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CROSS-EXAMINATION

15 By Ms. Napier:

Q. Thank you. I am Jane Napier. I represent the county and townships within the project area. I want to direct you to your testimony, written testimony. I had a question about one of the items in response to question 2.

You indicate that your task includes helping farmers and rural residents work with local government leaders and energy service providers as a project is developed. Is this project that we're here on that type of project?

- A. Yes. I do that work not only with wind initiative development, but in the eastern part of the state with oil and gas pipelines, also with transmission line capacity, solar, biomass, and a number of others.
- Q. And so have you helped farmers and rural residents work with local government leaders for this Buckeye II wind project?
- A. Not with Buckeye II, no, but with Buckeye I helped basically one of our employees at the time.
 - Q. Who was that?

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- A. One of our employees, who was the organization director for the Champaign County Farm Bureau who was on your wind task force. I helped basically get him information and material at his request with regard to that.
 - Q. And who was that?
- A. I think that he's now working for

 EverPower. I think that -- I can't remember his

 name.
 - Q. Would that be Mike Pullins?
 - A. No, that would not be Mike Pullins.
 - Q. Would it be Jason Dagger?
- 25 A. It would be Jason Dagger.

Q. In looking at your response to question No. 6, the second sentence there states, "As consumers energy is second only to labor as a cost for production of crops and livestock." Energy is a big word. What kind of energy is second only to labor as a cost for production of crops and livestock?

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A. When you take a look at energy -- this is something I have done after taking over this capacity with our central energy programs -- when you take a look at their costs for fuel, be it a liquid fuel as well as electric generation, when you combine those together, next to labor, it is the largest single output or the largest expense on many farm operations.

And it's been my responsibility to help them find ways to control those energy costs as an individual farm, as a neighborhood, community, groups of counties, state, groups of states.

- Q. Okay. I see also next you said "Agriculture is being called upon to produce a variety of feed stocks"?
 - A. That's correct.
 - O. I'm not sure what that means.
 - A. In the area of biomass development, you

are taking a basic look with regard to biofuel. You are being asked to grow a number of crops, switch grass, it could be corn stock, it could be any one of a number of feed stocks basically on the farm that can be used and has a hydrocarbon chain that can be created into a biofuel, solid to replace or augment coal. Liquid to replace liquid fuels, such as diesel fuel, gasoline or even natural gas.

In the area of electric generation, we are helping a number of farmers take a look at electric generation projects both on farm, wind, solar, possibly biomass. And also taking a look at on the megawatt level, the utility scale. Farmers are being asked to work with a number of service providers and units, take a look at an effective coal and nuclear fire generation capacity, and also other tyes of generation that will be working with them.

We have a policy basically called the diversified energy portfolio, where a number of technologies are going together.

Q. Okay. I think you are far outside that, and if you can answer my question only, and just for time's sake. I don't know we want to be here until Saturday.

A. Sure.

- Q. If you could maybe just respond to my question.
 - A. Okay.

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- Q. So after your answer to the last question, would it be a fair statement for the foreseeable future on industrial wind turbines on a farm would not reduce the cost of energy used in farming? I'm only asking for the foreseeable future.
- A. With the next year or so, probably not, but when you take a look at in the distant future, you take a look at general regulation capacity on a utility scale. When you take a look at diversified energy portfolio, which I described in my last question, the answer is yes.
- Q. I see in response to questioning, in the first sentence you put in there twice, thought it might be important. You kept talking about properly constructed wind towers.
 - A. Yes.
- Q. Is there an improperly constructed wind tower?
- A. Yes. That's the reason I couldn't have the Ohio Power Siting Board here. In Ohio you need to take a look at a number of rules, regulations.

 You need to take a look at environmental, economic,

aesthetic and other factors to create basically a process and the requirements and the environment to create those types of farms to put them in rural areas and on farm ground.

- Q. So, I don't mean to speak for you, but in the context you that said the Ohio Power Siting
 Board, you're saying that you want the projects
 approved that have reasonable conditions on them?
 - A. That is correct.

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- Q. Okay. So at least the Ohio Farm Bureau is not basically pushing for approval of any certificate, no matter what the conditions are?
 - A. That is correct.
- Q. Now, you stated that urban sprawl and industrial development is a major threat to farmland, correct?
 - A. In many areas, yes.
- Q. I believe that was in response to one of your questions. I don't want to put words in your mouth. I think later in response to question 8, you said in Ohio a major threat to prime farmland is urban sprawl and industrial development.
 - A. That's correct.
- Q. Do you not consider an industrial wind turbine as an industrial development?

A. No. Many farmers who talk about this and our policy process take a look at this. If you are going to take a look at other ways basically for generating income, other ways for taxes, other ways for generating power that we're talking about in our diversified energy portfolio, being able to have, yes, a utility scale wind turbine on a piece of ground is an available option.

A number of people have discussed that you are talking about a two-acre footprint on the farm. An effectively developed one, with regard to the Ohio Power Siting Board's rules, regulations, and goals, and the ground is going to be reclaimed, the farmer will still be able to farm that ground around a particular turbine and still utilize it for agricultural purposes.

- Q. Are you saying it's reclaimed while it's being used, while the wind turbine is being operated?
- A. Yes. If you take a look, basically, at the rules and some of the conditions, within nine months, weather permitting, all the field tile, all the underground infrastructure that makes that farm operational with regard to separation of soils, protection basically of the topsoil, remediation, repair, those particular types of things, protection

of streambeds and stream crossings, across waterways and gabions, if those basically are done, that ground can be back to viable agricultural production.

- Q. So are you saying that even though it's industrial development, that it at least can be reverted back to agricultural development?
- A. That's right. You've created a balance because you have done something there, basically, to help with regard to industry and power generation, but you have also left a large majority of the ground around that in agriculture.
- Q. Okay. And you indicate in question and answer to question 12, and the very last statement, start with "similarly," you said that the "project has the potential to provide additional economic resources to local schools, county and township governments with payment in lieu of taxes, PILOT payments, created under SB 232."
 - A. That's correct.
- Q. Are you aware that 232 allows the county commissioners to decide whether they want to, in essence, take a PILOT, take a payment in lieu of taxes or take taxes?
- A. That's correct. Because the final decision will be made at county level. They have

actually have two options. Number one, they can proclaim the county as a renewable energy development area, and any project which meets those goals, basically with the director of the Ohio Department of Development, can be placed there, or they can do each one individually.

And consequently you now see the need for tremendous amount of cooperation and work between a number of entities in bringing in the project going forward.

- Q. And so you had said this is a plus to the local community, local government, correct?
 - A. That's correct.

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- Q. Now, the payment in lieu of taxes is a reduced payment; am I correct? Are you aware of that?
- A. If I understand, this is payment in -their payment basically is going directly to
 counties, townships, and local governments. The
 other alternative takes a look at the taxing
 principle with regard to utility size infrastructure.
- Q. But, at least, are you aware whether or not to the developer it is less money or more money for a PILOT?
 - A. If I understand correctly, the PILOT

payment program is designed in reference to these types of projects, especially renewable energy or smaller scale energy, not necessarily a large centralized coal or nuclear, fire-generated. We have seen places, but, basically, with smaller systems.

- Q. I'm not sure you're answering my question.
 - A. Okay.

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- Q. Is it your understanding that the PILOT program is going to be more or less than the taxes that would be paid by the utility to the developer?
- A. If I understand, the PILOT program is those taxes will be paid by this utility.
- Q. Do you believe it's less or more than if it was not a payment in lieu structure?
 - A. Can you repeat that again?
- Q. I will rephrase because I think I may have confused myself.

Do you believe that payment in lieu of tax payment under Senate Bill 232, the amount of that would be more or less than the taxes paid through the regular public utility tax?

- A. From what I understand, it would be less.
- Q. So if it would be more financially advantageous to the county to receive the taxes as

opposed to a PILOT payment, and you said you believe that one of the pluses is economic resources to the county. Wouldn't it be better to not have a PILOT and have the taxes paid instead?

A. Not necessarily. This an option that will have to be discussed at the county level. If I understand your question correctly, getting back to the theme you have, with regard to the county commissioners and others, basically making that decision, yes, you have a number of groups working together with regard to that.

I think one of decisions that county government is going to have to take a look at is this. You have a facility here that wants to locate here. You have the ability basically to collect tax revenues with a PILOT program, or you have no facility and no opportunity for the additional income.

- Q. Okay. Is it your assumption if they pay taxes, the project will not be built?
- A. I do not know. That will have to be discussed between the county government, utility service provider, project developer, which community.
- Q. So at least is it your testimony that you don't have any knowledge that the project being built

is contingent upon PILOT versus tax; is that correct?

A. That's correct.

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

ALJ CHILES: Mr. Van Kley.

MR. VAN KLEY: Thank you, your Honor.

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CROSS-EXAMINATION

By Mr. Van Kley:

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- Q. Good morning. It's not even afternoon, probably evening, I guess. Good evening, Mr. Arnold.
 - A. Hello.
- Q. Approximately how many Ohio Farm Bureau households have leased their land for the Buckeye II project?
 - A. I do not know.
- Q. Do you know whether all of the Ohio Farm Bureau members living near the area where the project is going to be built are in favor of the project?
- A. I do not know. We have a policy development process that the county follows. You vote for the policy at your annual meeting. The members are invited there. Along with other democratic rules and different things, the majority vote and create the policy.

- Q. Are you aware of a minority of Farm

 Bureau members not in favor of the Buckeye Wind II

 facility?
- A. Yes. There are Farm Bureau members all over the state that also question other types of energy development.
- Q. Okay. You were present at the public hearing in the case?
 - A. That's correct.
 - Q. Okay. Did you hear Joan Statler testify?
 - A. Yes, I did.
 - Q. And she testified against the project?
 - A. She has the right to do so.
- 14 Q. Uh-huh. She did, right?
- 15 A. Yes.

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- Q. Okay. And her husband is the past president of the Ohio Farm Bureau?
- A. I don't know the Ohio Farm Bureau in my tenure, but may be the Champaign County Farm Bureau.
- Q. Okay. All right. Let me ask you some technical questions that I think were raised by your testimony on page 4. Would you go to your answer to question 9, please.
- A. Okay.
- 25 Q. In the first paragraph of that answer,

you discussed some deliberations that occurred with the Ohio Farm Bureau and the Ohio Land Improvement Contractors Association and the Ohio Federation Of Soil and Water Conservation Districts to put together a set of best management practices for utility-type construction projects.

A. That's correct.

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- Q. How long ago did this occur?
- A. That occurred probably about 10 to 12 years ago.
- Q. Okay. And were wind turbines specifically discussed during those deliberations?
 - A. Not during the early ones, no.
- Q. What kind of best management practices came out of these deliberations? Were they all practices related to the protection of soil and water?
- A. That's correct. And that particular guidebook has been updated about every two years. In the area of wind energy development, they take a look at -- basically you're looking at transmission lines and number of things going through the soil.

It's consequently the principles with regard to separation of the soils, protecting basically on one side the topsoil, and the B-horizon

on other. Also repair and maintenance of tile, how grass waterways and gabions and other conservation practices are that you rebuild, and also how stream crossings are to be done.

We've always shared that information materials with those particular developers, and they've looked at those, and they have become part basically of the staff reports and the stipulations you see going forward.

- Q. Okay. Thank you. With regard to the third paragraph of answer 9 --
- MR. ENDSLEY: Your Honor, I only see two paragraphs.
 - MR. VAN KLEY: Looked like three to me, but I might be wrong. Starts the words "When the Ohio General Assembly." I guess you're right, that looks like thea second paragraph instead of the third.
 - Q. See the paragraph I'm talking about?
 - A. Yes. I can see that, the last paragraph in that answer, yes.
 - Q. Okay. Were you involved with any wind industry representatives in the discussions that surrounded House Bill 562?
 - A. No, I was not.

- Q. Okay. Did you receive any information that either came directly from the wind industry or indirectly from the wind industry during these deliberations that provided you with safety information about wind turbines?
 - A. No, I did not receive any.
- Q. Okay. So you didn't receive any copies of any safety manuals for wind turbines during that process?
 - A. No.

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- Q. The wind industry didn't provide you with any information about blade throw or ice throw or shadow flicker or noise concerning -- that was related to a wind turbine?
- A. They didn't, but I was aware of those issues.
- Q. Did anybody provide you with any information concerning blade throw incidents that have been reported around the country and around the world?
 - A. We had heard and seen those, yes.
- Q. Okay. Has the wind industry ever shared any data with the Ohio Farm Bureau concerning how many accidents that industry has had with regard to blade throws or ice throws or fires?

1569 1 They haven't, but we are aware of those Α. 2 issues. 3 MR. VAN KLEY: I have no further 4 questions. 5 ALJ TAUBER: Thank you. 6 Mr. Howard. 7 MR. HOWARD: No questions, your Honor. 8 Thank you 9 ALJ CHILES: Mr. Reilly. 10 MR. REILLY: Thank you, your Honor. 11 12 13 14 CROSS-EXAMINATION 15 By Mr. Reilly: 16 Q. Good evening, Mr. Arnold. 17 Α. Hello. Staying with your answer to question 9 18 19 that Mr. Van Kley was talking to you about, the 20 answer you mentioned that Ohio Farm Bureau supported 21 House Bill 562. 2.2 Α. That's correct. 23 Can you tell us why? Q. 24 Α. We took a look at the need for basically 25 a process to put together wind siting guidelines in

Ohio. Talked to number of folks, a number of government officials, a number of Farm Bureau members, a number of others, and the focus was here in the state the need for collaboration and for balance and for a number of folks basically to work together.

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Many folks wanted basically wanted if you were going to put together a renewable energy project, 5 megawatts or more wind project or even a solar or biomass, that you had a one-stop place where you can go in the state. You would have uniform standards basically across all 88 counties. You would have the ability to work with a number of key state agencies to take a look at the environmental, aesthetic, and economic considerations that have to be taken a look at in creating basically an energy project.

And we also saw the need and the balance basically for a collaborative approach where county, township, and state government could work together in this particular process to create projects going forward.

And consequently, taking a look at the work of the Ohio Power Siting Board since 1973 for coal and nuclear fire capacity, it was a logical and

just fit to take a look at doing that for renewable energy development in this state.

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- Q. You mentioned that you saw House Bill 562 as a road to a balance. Could you elaborate on that a little bit? What kind of criteria would go into determining what is an appropriate balance?
- A. You would see a number of key state agencies to do a number of things. Again, as I said, with environmental, economic, aesthetic and others, with staff members to take a look at a number of things that had to be evaluated for strategic placement of turbines and other things on farm ground and in rural areas.

You also had a number of concerns, especially from township folks, saying, you know, I wanted to be a part of this particular process. I have a real concern, because if you take a look at hearings and different things, and judgment and different things, and zoning operations and also taking a look at, you know, my responsibility with regard to governance by statute, not necessarily by charter, I need help with regard to this.

Yes, I want to work with a number of folks, basically, and have access to those particular agencies who can help us through this particular

process. I also understand it is my responsibility
at that level to get people involved in the local
public hearings and planning at the particular time,
to also get involved possibly with the judicial
process, to be at local public hearings. So working
those things basically together, that's why I talk
about a balance and logical fit.

- Q. Thank you. If I can direct your attention to your answer to question 8 in your direct testimony.
 - A. Yes.

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- Q. And therein you will notice that you talk about that wind farming can provide what you call a significant source of revenue for hosting farms. Do you see that?
 - A. I see that.
- Q. Is a significant source of revenue for farmers an important matter?

MS. NAPIER: Objection. I believe this is really friendly cross. He's, in essence, trying to supplement the direct testimony and not give cross-examination. I mean, it's very strange that staff would be doing that, but, I mean, in essence, he's asking him to confirm basically something that's already in the direct testimony.

1 MR. REILLY: Actually, what I'm doing is 2 setting up the next question.

ALJ TAUBER: I'll allow the question.

THE WITNESS: Could you repeat the question, please?

(Record read.)

THE WITNESS: Yes, it is.

- Q. (By Mr. Reilly) Let me direct your attention to answer number 5 where you reference quality of life of farmers.
 - A. Yes.

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- Q. Are you involved with the quality of life of farmers?
 - A. Yes. When you talk about significant amount of income or income opportunities, that also impacts quality of life.
 - Q. Okay. Going back to your answer to question 8, you reference urban sprawl?
- 19 A. Yes.
- Q. Does urban sprawl include residential development, in your opinion?
 - A. It does.
 - Q. Finally, do you believe that commercial wind farming is compatible with preserving farmland, is compatible with the rural nature of the area in

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     this case?
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                 MS. NAPIER: Objection, your Honor.
    We're still back friend to friendly cross.
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                 MR. REILLY: I think that's a legitimate
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               It's been raised in the case.
     question.
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                 ALJ TAUBER: I'll allow the question.
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            Α.
                 Could you repeat the question?
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            Q.
                 In your opinion, is commercial wind
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     farming compatible with preserving farmland and the
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    rural nature of this area of Champaign County?
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                 Given my discussion of this testimony
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    with the questions being asked, the answer is yes.
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                 MR. REILLY: Thank you. We have nothing
     further.
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                 ALJ TAUBER: Mr. Endsley, redirect?
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                 MR. ENDSLEY: No redirect.
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                 ALJ TAUBER: Mr. Arnold, you may be
18
     excused.
              Thank you.
19
                 THE WITNESS: Thank you, sir.
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                 ALJ TAUBER: Mr. Endsley.
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                 MR. ENDSLEY: Yes, Thank you, your Honor.
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    At this time I'd like to renew our motion to move
     into evidence Exhibit FB-1.
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24
                 ALJ TAUBER: Andy objection to Farm
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Bureau Exhibit 1?

1575 1 MR. HOWARD: No, your Honor. 2 ALJ TAUBER: It shall be moved into the 3 record. 4 (EXHIBIT ADMITTED INTO EVIDENCE.) 5 ALJ CHILES: Ms. Leppla. 6 MS. LEPPLA: Champaign Wind would like to 7 call Hugh Crowell as the next witness. 8 9 HUGH F. CROWELL 10 being first duly sworn, as prescribed by law, was 11 examined and testified as follows: 12 DIRECT EXAMINATION 13 By Ms. Leppla: 14 Q. Good evening, Mr. Crowell. 15 Α. Good evening. 16 Could you please state your name, title, Ο. 17 and your business address for the court? 18 My name is Hugh Crowell. I am a senior Α. project manager and principal at Hull & Associates, 19 20 6397 Emerald Parkway, Suite 200, Dublin, Ohio 43016. 21 MS. LEPPLA: At this time we would like 22 to mark the direct testimony of Mr. Crowell as 23 Company Exhibit 19. 24 ALJ CHILES: So marked. 25 (EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. (By Ms. Leppla) Mr. Crowell, can you identify Company Exhibit 19?
 - A. Yes.

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- Q. What is that?
- A. It's my direct testimony.
- Q. And at this time do you have changes to your direct testimony?
 - A. I do. There's one minor change.
- Q. What page is that?
 - A. Page 13, it's in response to question 11.
 - Q. What is the change you'd like to make?
- A. In the first full paragraph on 13, middle of the paragraph, there's a sentence that says, "It is expected that field confirmation of the delineation by the USACE will take place no later than spring 2012." I'd would like to change that to "will take place sometime in 2013."
- Q. Do you have any other changes for your testimony at this time?
- A. No.
- Q. If I would ask you the same questions in your testimony today, would your answers be the same?
- A. They would.
- MS. LEPPLA: Your Honor, Mr. Crowell is ready for cross-examination.

ALJ CHILES: Ms. Parcels.

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CROSS-EXAMINATION

By Ms. Parcels:

Q. Good evening, Mr. Crowell. I'm Breanne
Parcels representing the city of Urbana, and I don't
have too many questions for you.

But in your response to question 2 in your direct you say you are responsible for procuring, managing, and performing consulting work," and it goes further and talks about "wetland and stream delineation and assessment, surface water quality standards and permitting."

I'm not clear, are you also in charge of water hydrology studies for Hull & Associates, or is that someone else within your company?

- A. That would be someone else in my company.

 I do sometimes assist in those types of studies.
- Q. And what qualifications do you possess then to do those types of, I guess, hydrology studies for -- particularly, I'm asking about underground aquifers?
- A. I have no expertise in the area of underground aquifers.
 - Q. This will make the questions short then.

1 You indicated that -- well, Hull 2 indicated in Exhibit F in the Application, which should be in one of the binders in front of you, I 3 4 can't remember which volume it's in, that Hull 5 consultant, hydrogeologic from Federal Emergency Management, the United States Department of 6 Agriculture, United States Geological Service 7 8 Champaign County Engineer, Champaign County Health 9 Department, Ohio Environmental Protection, Ohio Department of Agriculture, Ohio Department of Natural 10 11 Resources, and Ohio State University Extension. 12 And on page 28 of Application, which is 13 Volume I, it says the area in the project is 14 characterized by springs and groundwater fed surface waters. 15 16 Do you know, based on your study of the 17 area, what source the city of Urbana gets it drinking 18 water from? 19 I don't know the answer to that. Α. 20 Was it the streams that you were studying Q. 21 or the aquifer that someone else in the company was 22 studying? 23 I don't know what the source of water is Α. 24 for the city of Urbana.

Okay. Also referencing the Application

25

Q.

on page 29, the Applicant indicates it probably would not be necessary to blast into bedrock for excavation of turbine foundations. In your experience, you said that you don't feel qualified to comment or have opinions so much on aquifers, but can blasting have an effect on both the aquifers and the surface water drainage?

- A. It could under certain circumstances.
- O. And what sort of circumstances are those?
- A. Well, if blasting occurred in or very, very near a surface water.
- Q. I'll direct your attention back to your direct testimony. Your answer to the question on page 7, it gets into a little bit of fiscal jargon. Can you tell me what a Category I wetland is as opposed to a Category II, just in layman terminology?
- A. Yes. The state of Ohio places all wetlands in the waters of the state into one of three categories based on their assessed value, ecological value, and habitat characteristics.

Category I is the lowest category of wetlands in terms of quality. These are generally low grade, low diversity, emergent, meaning dominated by herbaceous vegetation, not woody vegetation, wetlands that are quite common throughout the state.

Category II is a middle quality wetland that may or may not have some woody plant components, supports wildlife and many other wetland functions.

Category IIII wetlands are the highest value, adequate land, and are highly protected by the State of Ohio under the Wetland Water Quality Standard. They generally have superior diversity characteristics and many other superior functions.

- O. Are you familiar with the Cedar Bog?
- A. I am.

- Q. Would you characterize the Cedar Bog a Category III wetlands?
 - A. Yes.
- Q. And do you know how far Cedar Bog is outside of the project area?
- A. Without that map in front of me, just an estimator, I'd say it's approximately four to five miles, perhaps.
- Q. Okay. And are you familiar with the turbine locations indicated by the Applicant?
 - A. Yes.
- Q. How far would you say Cedar Bog is to the nearest turbine in the project area?
- A. I would say about that distance, about four to five miles.

- Q. Okay. I'll direct your attention to page 31 of the Application that talks about floodplains -- well, whoever wrote the Application mentioned that Hull studied Treecko Creek, Dugan Run, Buck Creek, Little Darby Creek. Are those all in the same watershed, to your knowledge?
 - A. You said page 31.
 - Q. Application, yes.
 - A. I don't believe all of those streams are in the same eight-digit hydrologic unit code or hot code or watershed.
- Q. So you know what watershed each of those would be assigned to?
 - A. I don't recall precisely.
- Q. Okay. Now, is it your experience from your study of the project area that there are actually two main watersheds in that six-township area?
- 19 A. Yes.

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- Q. And can you identify those two major watersheds?
- A. Yes. One is Mad River Watershed and one is the Big Darby Watershed, which is really part of the Scioto River Watershed.
 - Q. And you indicate on page 10 of your

- direct testimony, looks like fourth paragraph down, there is one general permit applicable to the Big Darby Watershed as opposed to your general permit for anywhere in Ohio. What is so special about the Big Darby Watershed?
- A. The Big Darby Stream called the Big
 Darby, is unique nationwide, very high quality,
 perennial stream, high biological diversity, a fair
 number of rare and threatened and endangered aquatic
 species are present. It's a beautiful stream, and
 it's highly protected by the State of Ohio and
 through the efforts of other organizations, nonprofit
 organizations.
- Q. Do you know whether the Big Darby has been designated by the Ohio Department of Natural Resources as a scenic river?
 - A. Yes, it is.

- Q. Do you know whether Mad River, the other watershed, has been designated by the Ohio Department of Natural Resources as a scenic river?
 - A. I'm not certain about that.
- Q. Okay. On page 4 of your testimony you indicated Hull & Associates performed desktop and field screening for potential presence of endangered and threatened species, and you indicate that the

Darby Watershed is one of those areas adjacent to the project area that may contain endangered species.

A. Correct.

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- Q. And there were no endangered species found by Hull in the project areas. Is that what I'm to understand that your direct testimony indicates?
 - A. That's correct.
- Q. Okay. We went into the difference between Category I, Category II, Category III wetlands. Can you tell me again in layman's terms, because I'm not a hydrologist or a stream biologist, the difference an exceptional warm habitat stream and an exceptional cold water habitat stream, again, in layman's terms?
- A. Yes. Again, the state of Ohio has an established water quality standard in the Ohio Administrative Code, which explain various categories for levels of quality in habitat that exists throughout the state in various stream types.

The vast majority of perennial streams in Ohio are designated as warm water habitat. These are average quality streams. They have generally good biological diversity. They have good habitat development, and they are relatively common in Ohio.

Cold water has been to the -- I should go

on to an exceptional warm water habitat. Exceptional warm water habitats are warm water habitat streams that exhibit an exceptional degree of quality based on biological diversity, habitat quality, and, to some extent, flood characteristics.

Cold water streams are those in which a great deal of their basic volume of flow is contributed by groundwater, cold groundwater, so these tend to be very cold streams, and as a result they develop a unique biological diversity of taxa that specifically evolved and adapted for life in cold water conditions.

- Q. Would you characterize, based on your knowledge, the Mad River as one such cold water environment or habitat?
- A. I haven't specifically looked up the Ohio Administrative Code status of the Mad River. I may have done it in past, but I've forgotten what the status was.
- Q. That's fine, just again if you knew.

 Last but not least, you went into some
 significant detail about the number of and types of
 habitats for both wetlands and streams in your direct
 testimony.

Do you believe that Condition 36 of the

Staff Report, if you look at the Staff Report, which has some requirements for the company to do substantial testing before an erection of a turbine -- I should back up.

You talk in your direct testimony about the requirements for certain permits from both the Ohio EPA and National Pollutant Discharge Elimination System, which I think, if I understand your testimony correctly, is through the Army Corps of Engineers or is that through EPA as well?

- A. Well, the National Pollutant Discharge Elimination System, or NPDES system, is administered by the EPA at the national level. The state level is administered by Ohio EPA. I'm not sure -- I don't recall what the previous permitting program you mentioned was?
- Q. You mentioned some permits that you might -- not you, but the company may have obtain from the US Corps of Army Engineers.
 - A. Right.

- Q. So could you describe briefly the difference? Because, again, it's a lot of technical jargon, and I don't want to be confused.
- A. Okay. Anytime there is the potential for the discharge of fill material into federal waterway,

something designated as a water of the United States,
which includes almost all streams and most wetlands
in Ohio, there is a permit required by -- under
Section 404 of the Clean Water Act, the Federal Clean
Water Act. That Section 404 permit is reviewed,
administered, and issued by the US Army Corps of
Engineers. That's their responsibility.

Associated with that permit and in order to make a 404 permit valid, one must also have a water quality certification that is issued under Section 401 of the Federal Clean Water Act.

The 401 program is reviewed, administered, and issued by the Ohio Environmental Protection Agency.

As I mentioned, the NPDES program is also administered in Ohio by the Ohio EPA. Those are the main permits that are required for anything related to impacts or things that may impact surface waters in the project area.

Q. All right. Thank you for clearing that up.

And just to clarify, when you talk about fill material, you mean dirt, gravel, and other things that can be excavated when digging out a turbine foundation site?

A. That's correct.

MS. PARCELS: I have nothing further,

2 your Honor. Thank you.

ALJ CHILES: Ms. Napier.

MS. NAPIER: Thank you.

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CROSS-EXAMINATION

By Ms. Napier:

Q. Mr. Crowell, my name is Jane Napier. I represent the county and townships between the footprint of the project.

I had reviewed your direct testimony and you have an extensive ecological experience and background, correct?

- A. Correct.
- Q. And can you tell me what an ecological consultant does?
- A. An ecological consultant is an individual who works for a private business, a consulting business, which helps entities, whether they be municipalities, private industry, a variety of different types of clients, investigate and potentially permit or deal with in other ways ecological issues on sites, whether those are terrestrial, ecology, aquatic ecology.
 - Q. Thank you. In answer to question 3, is

- that your full educational and professional
 background, I guess, relevant professional
 background?
 - A. Yes.

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- Q. I wanted to ask you first, have you reviewed the Staff Report of Investigation?
 - A. Yes, I have.
 - Q. There's one up there somewhere.
 - A. I brought one with me.
- Q. Great. If you could look at condition number 19, I'll give you a chance to look at that.
 - A. Yes, I have it in front of me.
 - Q. Are you familiar with that section?
- 14 A. Yes.
 - Q. Okay. Do you endorse that condition?
 - A. In my direct testimony I indicated that there were portions of Condition 19 as written in the Staff Report that appeared to me to be redundant with some of the requirements of Section 404 and 401 program of the Clean Water Act to which I previously alluded.
 - I did not, however, object to the condition as a whole. I do know from my understanding that the OPSP staff agreed to modifications by the Applicant to that condition.

- Q. Are they your suggestions?
- A. No. Those are suggestions of the Applicant.
 - Q. Are you endorsing the suggestions of Applicant?
 - A. Yes.
 - Q. Why?

- A. Well, because I am deferring to them.

 I'm deferring to their view of that condition.
- Q. Aren't you the expert as opposed to the Applicant on these issues?
 - A. I am an expert in the area of ecology and wetlands, and to the extent that that condition addressed ecology and wetlands, I commented specifically on that. In all other aspects or comments on that condition, I deferred to the Applicant.
 - Q. And the portion that they would like to strike is basically the third sentence of section 19 till the end; is that correct?
 - A. I don't know. I know that they had -the Applicant had additional comments on section 19,
 and that those were accepted or agreed to, but I
 don't know exactly what the revision was.
 - Q. Okay. Have you discussed it with

- 1590 1 EverPower? 2 MS. LEPPLA: Your Honor, I object. 3 she could point to the changes that she is talking 4 about. 5 If you look under Mr. Speerschneider's Q. 6 testimony, which was admitted, page 16, Exhibit 2. 7 Α. Can you tell me what page that is? 8 Q. 16. 9 Okay, I have it in front of me. Α. 10 Thank you. Q. 11 THE WITNESS: Could you repeat the question, please? 12 13 ALJ CHILES: Could you clarify, page 16 14 of what? 15 MS. NAPIER: I believe it is Exhibit 2, the Direct Testimony of Michael Speerschneider. 16 17 MS. LEPPLA: Your Honor, it's actually Company Exhibit 5. 18 19 MS. NAPIER: Thank you.
- Q. (By Ms. Napier) Have you been able to look at it?
- A. Yes. And I did ask that you repeat the question.
- MS. NAPIER: Will the court reporter repeat the question.

(Record read.)

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- Q. Can you tell me why you believe that this should be removed from the portions that

 Mr. Speerschneider has recommended should be removed from Condition 19?
- A. I don't -- I don't know

 Mr. Speerschneider's mind on this, why he recommended
 the removal of these lines.
 - Q. Would you agree with the removal then?
 - A. Only to the extent that they affect my testimony, my direct testimony about Condition 19.
 - Q. Okay. So, I guess, what is your testimony as to Condition 19?
 - A. My testimony on Condition 19 is very clear. It's in my direct testimony.
 - Q. Okay.
 - A. And it says there appears to be portions of Condition 19 referring specifically to wetland and streams that are redundant, and that would be covered under Section 404 and 401 permitting portions that the Applicant is required to go through.
 - Q. So since portions don't give me specifically what you would like removed or what you are approving, are you agreeing with Mr. Speerschneider's recommendation?

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- A. If you would like to go through this line by line, I can tell you which portions are consistent with my direct testimony.
- Q. Okay. Let's start with the
 Mr. Speerschneider's copy, which he has included
 "unless addressed by final engineering drawings."
- A. That's not part of my direct testimony.

 I don't know his mind on why he added that line.
- Q. I'm not asking you his mind. I'm asking your opinion as to that change?
 - A. I don't have an opinion.
- Q. Okay. Let's skip down to the line that is marked off "the plan," starts with "the plan."
 - A. Yes.

- Q. "Shall consider the location of streams, wetlands, wooded areas, and sensitive plant species as identified by the ODNR Division of Wildlife."
- A. I'll continue reading. "And explain how impacts to all sensitive resources will be avoided or minimized by construction, operation, and maintenance."
- Q. You agree that that statement should stay in?
- A. No. I agree that it should be struck because that's consistent with my testimony. That

- information is provided -- will be provided in any permit that's issued under Section 404 and 401 for this project. Therefore, it's redundant that it occurs in the condition.
- Q. So the Applicant then doesn't have to submit to the staff the plan; is that your testimony?
- A. No. I think they're -- they don't have to resubmit the location of streams, wetland, wooded areas, and sensitive plant species, as that's going to be part of the permitting process.
 - Q. Permitting process?

- A. Section 404 and 401, which is a public review process.
- Q. So you don't believe that that should be covered in that? Those are issued by a different entity than the staff?
- A. That's correct. And also I should point out the location of streams, wetlands, wooded areas, and sensitive plant species as identified by the ODNR, and explaining how impacts to all sensitive resources will be avoided or minimized during construction, operation, and maintenance. Then that's already addressed in that Application.
- Q. Do you believe that's an appropriate plan set forth in the Application?

- A. The plan for the?
- Q. Plan that is set forth in Section 19 or Condition 19?
 - A. I assume you are referring to the construction and maintenance access plan?
- Q. I don't know. You said it was in the Application.
 - A. This information, you mean?
- 9 Q. I'm just repeating what you just said.
- You said this information is already in the Application.
- 12 A. Yes.

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- 13 O. Where is it in there?
- A. Oh, it's in the appendices to the
 Application, specifically the one dealing with
 streams, wetlands, threatened, and endangered
 species.
- Q. So do you believe that to be enough detail to meet what the staff has recommended?
 - A. Yes.
- Q. So at least there isn't any reason to strike it if you can present it to the staff; is that correct?
- A. I don't understand the question.
 - Q. If it's already been drafted, why don't

- you just submit it to staff for their review?
- It has been submitted. It's in the 2 Α. Application. 3
 - Okay. So then, in essence, you're saying Q. that Applicant has fulfilled this condition already, correct?
 - Α. Yes.

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- Ο. So there's no reason to strike it; is that correct?
- Well, the only reason to strike it is if Α. 11 it was redundant at the time, my whole point.
 - Q. Why is it redundant if they already said they submitted it?
 - Well, to submit it again and provide it Α. on a later plan when it's already included in the Application and will also be included in 604 and 601 applications, I would say that's redundant. Why include it again?
 - All right. So the Application was filed Q. this year. Do you have any idea when the construction will occur on the project?
 - I don't have a clear idea of when that Α. would be.
- 24 Ο. Okay. Would there be any reason to 25 update that plan?

A. I don't think so.

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- Q. All right. Never any changes in sensitive plant species, any changes in streams, ditches that need to be crossed?
 - A. There can be.
- Q. So would it make sense to have an update on that, when construction is going to happen?

MS. LEPPLA: I object to what "that" she is talking about for clarification?

ALJ CHILES: Can you rephrase the question for clarification?

- Q. Wouldn't it be appropriate to have it updated when construction was going to be commenced, if necessary?
- A. In my opinion as an ecologist, these conditions, wetlands, streams, endangered species, don't change significantly over a period of a few years. The typical accepted validity of a wetland and stream delineation and of threatened and endangered species generally is about five years.
- Q. Do you know when you did the -- some of the studies that were included in Exhibit E and F of the Application?
 - A. When I did these?
 - Q. Yes.

- 1 A. Yes. Those studies were done last year,
- 2 2011.

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- Q. Okay. Some of them were also done in 2009; is that correct?
- 5 A. Surface water and wetland evaluation in 6 Section 2.2 in Appendix F --
 - Q. Okay.
- A. -- states the delineation of surface
 water evaluation was conducted in October and
 December 2011.
- Q. You had done some of the first project also, the Buckeye I; is that correct?
- 13 A. Yes.
- Q. You didn't do those in 2011, though, correct?
- 16 A. Correct.
 - Q. Do you know if Buckeye I has been done, been constructed as of yet?
- 19 A. It has not been constructed.
- Q. So there may be some time between Application and construction, correct?
- 22 A. Yes.
- Q. I'll move on from there. You also indicate that you supervise six biologists in your current position, correct?

A. Yes.

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- Q. And you have undertaken four studies, your firm has undertaken four studies, correct?
 - A. Correct.
- Q. And three of the four involved kind of what I would term to be ecological in nature. Would that be a fair statement?
- A. I don't know. Which ones are you referring to?
- Q. Well, I guess the fourth one would
 probably have been the Transportation Route Survey.

 That's a little bit not so ecologically involved. Is
- 14 A. I would agree with that.

that a fair statement?

- 15 Q. Okay. Now, did you conduct the 16 Transportation Route Study yourself?
- 17 A. No.
- 18 Q. Who did?
- 19 A. Hull Engineering Group.
- 20 Q. Okay.
- 21 A. Under my management.
- 22 Q. Are you an engineer?
- 23 A. No.
- Q. Okay. Do you know why the study was requested for this project?

- A. It's a requirement, as I understand it, of the Ohio Power Siting Board rules to have some general understanding of the routes that are going to be for used to transport equipment and materials to the facility area for construction.
- ${\tt Q.}$ And if I can turn your attention to Exhibit E.
 - A. Okay.
- Q. On page 3 under 1.3, the study states that "The primary, secondary, and tertiary roads identified in the SUS during the 2009 study will be used for the construction of Buckeye II wind farm," correct?
- A. Yes.
 - Q. Is that a final transportation route?
- 16 A. No.

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- Q. Okay. Do you know if the county engineer has been consulted regarding that transportation route?
 - A. I don't know for certain.
- Q. Okay. So somebody in your firm has kind of -- went out to Champaign County, it sounds like; is that correct?
- 24 A. Yes.
- Q. Okay. And they reviewed the roads they

felt as though would be the road used during construction in the Buckeye II wind farm; is that correct?

- A. That's correct.
- Q. Okay. Did you consult with them as to which roads they were going to consider?
 - A. No.

- Q. Okay. Do you know who did?
- A. Yes.
- Q. Who was that?
- A. In our company it was Mark Boniface who is our engineering division leader, and he was assisted by Eric Schaffer, who is a professional engineer under his supervision.
- Q. Okay. Did those gentlemen map out the proposed transportation route for construction of Buckeye II wind farm?
- A. They mapped out preliminary routes, and these are not the final routes.
 - Q. Okay.
- A. The final -- the final routes are determined by the company that actually specializes in delivering this equipment because of its size and weight and requires specialized vehicles to transport them.

- Q. Okay. Now, you indicated somewhat that you were somehow involved with this study in your firm?
- A. I was involved as a reviewer and as a manager.
- Q. Okay. What kind of review as a nonengineer would you give the study?

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- A. I would give it a review for clarity, consistency, and not so much on technical content in which I'm not a subject area expert.
- Q. Now, do you believe as you're testifying today on that study you would be able to answer my questions if I asked you about that study?
- A. Depends on the level of detail. If I get into detail about decisions that were made on the base of an engineer's judgment and education and experience, I would not be able to answer those.
- Q. Do you believe that's important to presenting this transportation route survey?
 - A. Could you --
- Q. Do you think that discussing the details as set forth in the Transportation Route Survey is important to presenting that study here today?
- A. Well, I think it is, to the extent -- I would say that it is well discussed in the report

1 itself in the appendix.

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- 2 Q. Okay. But you didn't write the appendix?
 - A. I did not review the appendix.
 - Q. Now, were you present when the on-site visual assessments were done?
 - A. No.
 - Q. I thought you answered that, but I'm not sure.
 - A. No.
 - Q. Okay. Do you know if someone from EverPower went on the on-site visual assessment?
 - A. They did not.
 - Q. Okay. What I wanted to talk to you about specifically is on page 9 of that study.
 - ALJ TAUBER: For clarity of the record, can you explain what you mean by "that study"?
 - MS. NAPIER: I'm sorry, on Exhibit E, the Transportation Route Study, page 9.
 - Q. Under 3.1, these are visual observation results. You indicate that under number 1, that "Stringtown Road from South Mutual Union Road to access road leading to turbine 112, asphalt is in good condition."
- Can you tell me what the basis of that assertion is?

- A. Not as an engineer.
- Q. Well, you didn't actually see the asphalt, correct?
 - A. That's correct.
- Q. Okay. And you would be relying on someone else's assessment; is that correct?
 - A. Correct.

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- Q. Okay. And do you know what the term "good condition" meant to that person?
 - A. I do not.
- Q. Do you know what grade of asphalt was set forth on Stringtown Road from South Mutual Union Road to the access road leading to turbine 112?
 - A. I do not.
- Q. Okay. Do you have any idea of the grade of asphalt on any of those six roads identified under visual observations?
- A. I do not.
- Q. Okay. You identify or someone identifies in -- on page 8, the last full sentence, that says "Only identifiable improvements or the widening of intersections and sharp curves, which is a relatively simple procedure that will require authorization for the right-of-way owner, ODOT, county or, township, and the property owner." Correct?

A. Correct.

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- Q. Do you know what that procedure is?
- A. In general terms, I do. It would be to require or to obtain the temporary easements at a turn, and then prepare that corner within the easements for the turn. These are very tight, very small intersections, some of them, and very restricted.
- Q. And how do you know some of the intersections are tight and small?
- A. From the information presented in this report.
 - Q. Okay.
 - A. Developed by Hull.
 - Q. So someone other than you?
- A. Correct.
- Q. You indicated that some improvements are necessary, correct, on the intersections, I believe?
- A. Are you referring to a section of this particular report?
 - Q. I believe I'm just referring to what you said about intersections were small and needing increased in some way; is that correct?
- A. That's correct.
 - Q. And do you know how those improvements

were calculated?

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- A. It's my understanding from review of the report and from speaking with the engineers that these were calculated based on the calculated turning radius of vehicles that will be used to deliver, in particular, the turbine blades, which are quite long and require a specialized vehicle.
- Q. Okay. Let's look at figure 1 at the back of that.
- MS. LEPPLA: What page are you referring to, counsel?
- MS. NAPIER: Figure 1, the first one at the end of that.
 - Q. Can you tell me what increase -- how much front footage is increased on this picture of the intersection?
 - A. I don't know.
- Q. Okay. How was this calculated, this increase?
 - A. I assume it was calculated based upon the length of the vehicle that needed to make this turn.
 - Q. You say you're assuming. Do you know?

 Do you have any personal knowledge of that?
- A. My personal knowledge comes from reading the report.

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- Q. Okay. So I also have the personal knowledge to testify on this study?

 MS. LEPPLA: Objection. That's badgering.
- 5 ALJ CHILES: Ms. Napier?
 6 MS. NAPIER: I'll rephrase.
- 7 withdraw that question.
 - Q. Let's go to figure 2. Do you know how much acreage is needed to increase this intersection in figure 2?
- 11 A. I don't know, unless it's included in the report.
 - Q. You don't have any notes on it with you today?
- 15 A. No.

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- Q. Let's go to figure 3. Do you know how much acreage on front footage is needed to increase the intersection in figure 3?
- 19 A. No.
- MS. LEPPLA: Your Honor, I object to this
 line of questioning. Mr. Crowell's purpose here is
 to summarize the report, summarize the studies done
 by his firm, under his supervision, and he's
 testifying, you know, he understands the report and
 he's testifying based on that.

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ALJ CHILES: Ms. Napier.
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MS. NAPIER: Actually, your Honor, his answers illustrate, I think, an issue that has come up throughout this. He is presenting a study which he is not an engineer. He cannot answer any question about the specifics in this study.

This study we would request should be stricken as the person presenting it is not an expert, cannot rely on hearsay in order to testify. He has stated he is not an engineer. Basically he's read it. So I apologize, I know the late date, and I'm getting a little tired.

ALJ CHILES: You are moving to strike Exhibit 2?

MS. NAPIER: Exhibit E, the whole thing. He indicated he can't tell me any of the conclusions that are set forth in Exhibit E.

MR. VAN KLEY: We join that objection, your Honor.

MS. PARCELS: As would the city.

21 ALJ CHILES: We all need to be talking

22 one at time.

Ms. Parcels, do you have an argument to set forth?

MS. PARCELS: In reference to my

testimony, I cut off the line of questioning because he indicated he was not an expert in aquifers in interest of time.

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But along the same lines, Ms. Napier questioned him extensively to show that he's not an engineer for the route study and cannot answer any questions about the route study.

ALJ CHILES: Ms. Napier, do you have anything to add?

MS. NAPIER: We ask that the portion that deals with the Transportation Route Study would also be stricken in his testimony. I certainly understand he's an ecologist. I'm not questioning that portion. But he isn't an engineer, and the Transportation Route Study is far outside of his purview as an ecologist. He indicated his background. He has no background in anything other than environmental ecology.

ALJ CHILES: Thank you. Can you give us some specifics, please, so we know exactly what you are moving to strike, the stated portions of his testimony?

MS. NAPIER: I will do so. I believe that question 6 talks about the Transportation Route Study.

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I believe page 52, top of the page, put those into sections, he discusses the Transportation Route Study and makes conclusions as to the Exhibit E, although he doesn't identify it. He does identify it by name.
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ALJ CHILES: I understand what your basis is. I need to know exactly what you are moving to strike.

MS. NAPIER: I believe the whole paragraph on the Transportation Route Study.

I can keep questioning as to his knowledge as set forth, vis a vis. I just don't think we need to waste the Tribunal's time.

MS. LEPPLA: Your Honor, I would also like to respond.

ALJ CHILES: Right. I understand. I'm confused. Is it the Transportation Route Study, that's all you're objecting to at this time?

MS. NAPIER: Yes, which is Exhibit E,

including all of the exhibit.

ALJ CHILES: Exhibit E, as well as the paragraph offered on the Transportation Route Study.

MS. NAPIER: I believe Exhibit E, and the Route Evaluation Study he addressed in his direct testimony, along with the figures.

ALJ CHILES: The entirety of Exhibit E, as well as the paragraph entitled Transportation Route Study.

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MS. NAPIER: Yes, thank you.

ALJ CHILES: Ms. Leppla.

MS. LEPPLA: First of all, Exhibit E that we are referring to is Exhibit E of the Application. That has already been admitted into evidence as Company Exhibit 1. It is already admitted. The motion to strike is a bit late as far as Exhibit E goes.

As far as Mr. Crowell's testimony,
Mr. Crowell was brought here today, and I believe the
purpose of his testimony is stated in his testimony,
to describe the studies of his firm that were
undertaken at his direction. He was here to
summarize the results of those, and Champaign Wind
isn't required to bring in every single person that
worked on a study, as it would be a number of people.
And, obviously, we have already gone on quite long
with the number of witnesses we've had.

But Mr. Crowell has read the study, he understands the study. He has spoken to the engineers at his office, and it was done at his direction.

ALJ CHILES: Thank you. The motion to strike is denied. The Board will afford Mr. Crowell the appropriate weight in light of his experience.

MS. NAPIER: Your Honor, we would strongly note our objection to the record. He is certainly not an expert. We have stricken lots of hearsay that experts are reviewing. This person is not even an expert.

ALJ CHILES: Your objection is noted for the record.

MS. NAPIER: That's fine.

ALJ CHILES: You may continue.

Q. (By Ms. Napier) For sake of time,
Mr. Crowell, with respect to appendix 1 and figures
1 through 9, and the remaining photographs set forth
in figure 10 through 17 --

MS. LEPPLA: Ms. Napier, referring to Exhibit E?

MS. NAPIER: Exhibit E.

- Q. Your answer would be the same, that you don't know how these photos or figures were obtained and the changes made to them were set forth?
 - A. I know how the photographs were obtained.
 - Q. Okay. Did you take those photographs?
 - A. No.

- Q. Were you present when the photographs were taken?
 - A. No.

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- Q. Do you know whether those photographs actually represent the text underneath each picture?
- A. I have complete confidence in the people that I work with.
- Q. I guess my question is, do you have personal knowledge that, for instance, like the photo of the intersection of State Route 4 and State Route 36?
- A. I must assume it is as depicted. I was not there when it was taken.
- Q. Okay. Would your answer to all the photos be the same?
- 16 A. Yes.
 - Q. And figures 10 through 17 to identify -- do you see those there in Exhibit E?
- 19 A. Yes.
- Q. And 10 through 17, did you calculate the proposed --
- MS. LEPPLA: I'm sorry, counsel, I'm not following where you are at?
- MS. NAPIER: 10 through 17 at the back of Exhibit E after the photos.

- MS. LEPPLA: Thank you.
 - Q. This is figure 10. Do you know how they calculated the increase in that intersection?
 - A. No.

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- Q. Figure 11, do you know how someone increased the intersection in that picture?
 - A. I did not do the work, no.
 - Q. Figure 12, same question?
 - A. Yes. No, I don't know how that was done.
 - Q. Figure 13, same question?
- A. I have told you that I know in reading the report how it was done.
 - Q. Okay. So tell me how it was done.
 - A. I already told you it was based on the length of the vehicle that's needed to transport particularly turbine blades, which are quite long, using a specialized vehicle to make that turn.
- Q. So in figure 13, tell me what the calculation is?
- MS. LEPPLA: Objection, your Honor.
- 21 Asked and answered this question.
- MS. NAPIER: I don't think I answered any
- 23 question.
- MS. LEPPLA: I'm sorry, not you, the
- 25 | witness.

ALJ CHILES: The objection is overruled.

If we need to go through one by one, by all means.

- Q. (By Ms. Napier) Mr. Crowell, we hope for a clean record. So you didn't prepare figure 13?
 - A. No.
- Q. You don't have any personal knowledge as to how the calculations were made to increase this intersection?
 - A. No.
- Q. Figure 14, did you help prepare this figure?
- 12 A. No.

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- Q. Do you have any personal knowledge how the increase in the intersection was calculated?
- 15 A. No.
 - Q. Do you have any idea even how much land would need to be taken to increase this intersection?
 - A. Not unless that's specifically stated in the report, I wouldn't mow.
 - Q. Do you need to look?
- A. Yes. I don't believe those areas are reported in the report.
- Q. Okay. So we will go to figure 15. Did
 you prepare this figure?
- 25 A. No.

- Q. Do you know how the increase in the intersection was calculated?
 - A. No.
 - Q. Figure 16, did you prepare the figure?
- 5 A. No.

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- Q. Do you know how this figure was calculated for the increase?
 - A. No.
 - Q. Figure 17, did you prepare figure 17?
- 10 A. No.
- 11 Q. Do you know how the increase in the intersection was calculated?
- 13 A. No.
- MS. NAPIER: For the record, we renew our motion to strike as set forth in Exhibit E.
- ALJ CHILES: And I will renew my denial
 of the motion to strike, but your motion is noted for
 the record.
- MS. NAPIER: Okay.
- Q. I'd like to go back to the text of
 Exhibit E. The study indicates in page 12 and 13
 Proposed Mitigation, 4.2.1, Insufficient Roadway
 Width.
- Do you know which routes were indicated to reroute overwidth vehicles to wider roadways,

- which would be the second bullet point in that?
- A. Are you asking me which specific roads that would apply to?
- 4 Q. Yes.

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- 5 A. I don't know which specific roads.
- Q. Do you know which routes have insufficient vertical clearance?
 - A. Not specifically, no.
 - Q. Do you know which routes have poor pavement condition or insufficient pavement durability?
- 12 A. No.
- Q. Do you know what "insufficient pavement durability" means for this project?
- 15 A. No.
 - Q. Do you know where there is insufficient cover over drainage structures?
- 18 A. No.
- Q. Do you have any idea which roads have poor structure condition?
- A. No. May I add to that?
- Q. Go ahead.
- A. I don't think that -- it does not appear
 that this report is meant to report any of these
 conditions for specific roads. This report is simply

saying where these are found to occur, this is the mitigation that will occur.

- Q. And on page 14, it says, Inadequate

 Bridge Capacity. Do you know any bridge along the

 proposed transportation route that is inadequate for
 capacity?
- A. Well, I would note that in section 3.1, the visual observation results, there are series of roads, six tertiary roads in particular, where there are probably constraints identified.
- Q. Okay. Do you know which one of those have insufficient bridge capacity?
 - A. No.

- Q. I guess at the bottom of 14, when your study indicates, "upon completion of the project, Champaign Wind LLC, will, at a minimum, return all roadways to their preconstruction," are you speaking for the Applicant in making that statement?
- A. That is an agreement by the Applicant, yes.
- Q. Isn't it true that based on the fact that you lack the technological expertise in this, that you cannot make the conclusions sets forth in 5.0, first sentence, that based upon research with National wind turbine transportation companies and

information available from ODOT, including their experience with wind projects recently constructed in Ohio, sufficient infrastructure exists, via primary and secondary roads, to transport the turbine components.

So you do not have the technological expertise or education in terms of whether there is sufficient infrastructure; is that correct?

A. I do not, but my company does.

MS. NAPIER: Thank you.

I have no further questions.

ALJ CHILES: Thank you.

Mr. Van Kley.

MR. VAN KLEY: No questions, your Honor.

ALJ CHILES: Ms. Plantz.

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CROSS-EXAMINATION

By Ms. Plantz:

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- Q. Mr. Crowell, I'd like to turn back to some questions that were discussed previously with respect to the 401 and 404 permitting process?
 - A. Okay.
- Q. And for clarity of the record, your testimony that a 404 permit would come from the US Army Corps of Engineers?

A. That's correct.

- Q. And the 401 permit would come from the Ohio EPA?
 - A. That's correct.
- Q. In your direct you indicate that certain conditions in the Staff Report are redundant, and it's because of these two permits. Is that an accurate representation of your testimony today?
- A. My direct testimony says that certain of the materials required in Condition 19 to be included on the plan that's described in Condition 19 are redundant for that plan because they're being presented in the context of a Section 404 and 401 permit Application.
- Q. Have you had the opportunity to work on behalf of that client to obtain a 404 permit?
 - A. Yes.
- Q. And have you had the opportunity on behalf of that client to obtain a 401 certification for Ohio EPA?
 - A. Yes.
- Q. In those two types of permits -- or I guess, one is a permit and one is a certification, would you agree?
 - A. Correct.

- Q. Are there conditions that appear in those permits and certifications?
 - A. Yes, there are.
- Q. Are those the types of conditions you say would be redundant with the Staff Report condition?
 - A. No, that's not what I would say.
 - Q. Okay.

- A. I would say the materials that are presented in the applications for those permits, not the permit itself, all of the same information is presented in the context of a 404 and 401 permit application.
- Q. But you would agree with me a 404 permit and 401 certification typically do contain conditions?
 - A. Yes.
- Q. And the recipient of that permit and certification must comply with those conditions; is that correct?
 - A. Yes.
- Q. In particular with the 401 certification, issued by Ohio EPA, oftentimes those conditions include revegetation requirements?
 - A. Yes, they do sometimes.
 - Q. Would that also include some sort of

buffer requirement?

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- A. They can require buffers, particularly around avoided surface waters.
- Q. Looking at your direct testimony, I want to make sure I understand the purpose of your -- and when I say "your," you and Hull & Associates, the investigations that you undertook. My understanding from your testimony is that those investigations relate to potential impacts to surface water and ecological resources that might occur during construction of facilities; is that correct?
 - A. That's correct.
- Q. And when talking about construction, the potential impacts would be related to the construction of an access route; is that correct?
 - A. That would be one source of impact, yes.
- Q. And then the construction of the collection lines?
 - A. Those can also result in impacts.
- Q. And when we are talking about impacts, I think you also mentioned that there's a potential that a stormwater permit may also be required; is that correct?
- A. Stormwater permit will definitely be required.

- Q. Now, in your testimony I think you reference a specific type of general stormwater permit; is that correct?
 - A. Correct.

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- Q. That general stormwater permit for construction activities is in the Big Darby Creek Watershed?
- A. That was one of the NPDES general permits I referred to, yes.
- Q. In order to obtain that type of permit, the disturbance area would have to be less than one acre; is that correct?
 - A. No.
- Q. Okay. What is your understanding how they would have to get coverage under the general permit?
 - A. To the Big Darby?
- Q. Yes.
- A. The Big Darby NPDES general permits have some specialized requirements, and basically it would apply to any disturbance over an area, much as the statewide general permit. That's the threshold.
- The Buckeye permit differs from the
 general permit for the state in that it requires that
 these stormwater pollution prevention plans be

submitted in advance with the notice of intent, and the Ohio EPA be given a certain amount of time to review it and approve it. That is not the case in the general permit statewide.

- Q. Okay. Now back to the 401 and 404 permits. I believe in your testimony you indicate that there are certain stream water bodies and wetlands that, in your investigation, you found to be, I'll use your term, jurisdictional; is that correct?
 - A. That's correct.

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- Q. Could you describe what that means?
- A. Jurisdictional waters are surface waters of the United States as determined by the US Army Corps of Engineers and their guidance.
- Q. I'd like you to turn to page 8 of your testimony, please, in particular, your response to question No. 10. Your first sentence states that "At this time, the Applicant does not plan to impact any wetland areas." Is that an accurate reading of the beginning of that sentence?
 - A. Yes.
- Q. So is it there's no planned impact to wetlands? Are you aware of any changes to this?
 - A. No, I am not.

Then to go on, you indicate that several 1 Q. 2 streams will probably be impacted; is that correct? 3 Α. Correct. 4 Are those streams you are indicating 5 would require either a 404 permit or a 6 401 certification or potentially both? 7 Those impacts would require both a Α. 8 404 and a 401 permit. The form of the permit may 9 vary. 10 MS. PLANTZ: Could I have one moment? 11 ALJ CHILES: Yes. MS. PLANTZ: I have no further questions. 12 13 Thank you, Mr. Crowell. 14 ALJ CHILES: Ms. Leppla. 15 16 REDIRECT EXAMINATION 17 By Ms. Leppla: 18 You were asked extensively about the 0. 19 transportation study earlier. I have a couple 20 questions. Earlier you said in your testimony today 21 that was a preliminary study, right? 2.2 Α. Correct. 23 Can you tell me what you mean by Q. "preliminary"? 24 25 Α. What I mean is that it's a general

1625 assessment of the primary, secondary, and tertiary 1 roads that could be used for delivery of construction 2 materials and equipment to the facility construction 3 4 area. 5 MS. LEPPLA: No further questions, your 6 Honor. 7 Thank you, Mr. Crowell. 8 ALJ CHILES: Thank you. 9 Recross, Ms. Parcels. 10 11 CROSS-EXAMINATION 12 By Ms. Parcels: 13 Relating to Ms. Leppla's question about Q. preliminary studies, would you also characterize 14 15 Exhibit F as a preliminary study? 16 Can you remind which study that is? 17 MS. LEPPLA: I object. It is outside the stop of my redirect. 18 19 MS. PARCELS: Nothing further. 20 ALJ CHILES: Ms. Napier. 21 MS. NAPIER: Yes, your Honor. 2.2 23 RECROSS-EXAMINATION 24 By Ms. Napier:

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Q. Mr. Crowell, Ms. Leppla just asked you

whether this was a preliminary report. Is it your intention to be involved in the final transportation survey?

A. No.

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- Q. In any way, shape, or form?
- A. No.
- Q. Why is that?
- A. That's because the final design of the transportation routes and planning is done by a specialized carrier, the carriers who have the equipment, the vehicles, and the expertise necessary to deliver these large and heavy materials to the building site.
- Q. So, in essence, this preliminary plan gives us no usable information as to a final transportation route, correct?
- A. I don't believe that's true. I think it does give some information that's important.
- Q. Okay. But your firm will not be doing that?
 - A. That's correct.
- Q. And, to your knowledge, will that final plan actually address some of the questions that I have asked you today and that you could not answer?
 - A. Correct, it will.

MS. NAPIER: Thank you.

ALJ CHILES: Thank you.

Mr. Van Kley.

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CROSS-EXAMINATION

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6 By Mr. Van Kley:

- Q. If this is a preliminary plan, what is your understanding as to when the final plan is going to be done?
- A. My understanding is that the final plans will be developed by the specialized carrier sometime prior to initiation of construction.
- Q. Is it your understanding that the final plans will be submitted to the Board only after the certificate is issued?
- A. I don't -- I don't know. I don't understand that process.
- Q. Okay. Is it your understanding that the final plan could change everything or anything that's in the preliminary plan?
- A. It's my understanding from reading the preliminary plan that there are really a fairly limited number of roadways that can be accessed and used for construction of this facility, and that I -- I assume, therefore, that any final plan is going to

utilize those same roads.

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- Q. Well, do you have an opinion as to whether or not the people who do the final plan are going to be bound by whatever safety precautions your firm has put into the preliminary plan?
- A. They will be bound by the regulations,
 ODOT regulations in particular, that are required of
 them for delivery of such large and heavy pieces of
 equipment.
- Q. But are they going to be bound by whatever safety precautions your firm put into the preliminary plan?
 - A. I don't -- I don't know.
- MR. VAN KLEY: Okay. I have no further questions.
- 16 ALJ TAUBER: Ms. Plantz?
- MS. PLANTZ: No questions, your Honors.
- Thank you.
- 19 ALJ CHILES: I have no questions. Thank
- 20 you. You are excused.
- 21 Ms. Leppla.
- MS. LEPPLA: We renew our motion to admit
- 23 Exhibit 19, which is Mr. Crowell's direct testimony.
- 24 ALJ CHILES: Any objection to the
- 25 admission of the exhibit?

MS. NAPIER: Yes, your Honor. We would renew our motion to strike the portion of the testimony on page 5 after the heading "Transportation Route Study," and we also renew our motion to strike Exhibit E that he references in his testimony in its entirety.

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ALJ CHILES: Are there any other objections to the admission of Company Exhibit 19?

MR. VAN KLEY: Yes, your Honor. We would join the county's objection and motions to strike for all of the same reasons that Ms. Napier has expressed during her cross-examination of the witness.

ALJ CHILES: Thank you.

MS. PARCELS: The city would also join the county's objection with regard to the transportation study. The city would also object to the first paragraph on page 6, Desktop Hydrogeological Study.

Mr. Crowell testified he was not a hydrogeologist or competent to testify about aquifers and did not do this study but someone else did.

ALJ CHILES: Can you clarify?

MS. PARCELS: Desktop Hydrogeological Study, the two studies -- not the well study that is referenced below.

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1
                  ALJ CHILES: Page reference?
2
                  MS. PARCELS: Page 6 of his testimony,
3
      subheading, Desktop Hydrogeological Study.
4
                  ALJ CHILES: Ms. Leppla, do you want to
5
      respond to that motion?
6
                  MS. LEPPLA: Yes, thank you, Your Honor.
7
                  Again, like the transportation study, the
8
     hydrological study was done under Mr. Crowell's
9
      supervision. It was conducted by his firm;
10
     therefore, his testimony summarizing that study is
11
      relevant and appropriate.
12
                  ALJ CHILES: Thank you. The objections
13
     and motions to strike are noted for the record.
14
     objections are overruled and the motions are denied.
15
     The Board will attribute the appropriate weight to
16
     this testimony in light of Mr. Crowell's
17
     qualifications.
18
                  (EXHIBIT ADMITTED INTO EVIDENCE.)
19
                  ALJ CHILES: Off the record.
                  (Discussion off the record.)
20
21
                  ALJ CHILES: Any other matter to discuss
2.2
     before we go off the record?
23
                  Hearing none, we will adjourn and
24
      reconvene next Monday at 9:00 o'clock.
25
                  (The hearing adjourned at 7:14 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 Friday, November 16, 2012, and carefully compared with my original stenographic notes. Rosemary Foster Anderson, Professional Reporter and Notary Public in and for the State of Ohio. My commission expires April 5, 2014. (RFA-8855) 2.3

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in

Case No(s). 12-0160-EL-BGN

Summary: Transcript of Champaign Wind, LLC hearing - Volume VI held on 11/16/12 electronically filed by Mrs. Jennifer Duffer on behalf of Armstrong & Okey, Inc. and Anderson, Rosemary Foster Mrs.