

BEFORE THE OHIO POWER SITING BOARD

- - -

In the Matter of the :  
Application of Republic :  
Wind, LLC for a Certificate :  
of Environmental :  
Compatibility and Public : Case No. 17-2295-EL-BGN  
Need for a Wind-Powered :  
Electric Generating :  
Facility in Seneca and :  
Sandusky Counties, Ohio. :

- - -

PROCEEDINGS

before Mr. Jay S. Agranoff and Ms. Anna Sanyal,  
Administrative Law Judges, at the Ohio Power Siting  
Board, 180 East Broad Street, Room 11-B, Columbus,  
Ohio, called at 9:00 a.m. on Wednesday, November 13,  
2019.

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VOLUME V

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On behalf of the Ohio Department of  
Transportation and Witness John Stains.

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Wednesday Morning Session,  
November 13, 2019.

- - -

ALJ AGRANOFF: Please call your first  
witness.

MR. DeVINE: Mr. Kerschner, please.

ALJ AGRANOFF: Good morning, sir. Please  
raise your right hand.

(Witness sworn.)

- - -

MIKE KERSCHNER

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

DIRECT EXAMINATION

By Mr. DeVine:

Q. Could you please state your name and  
employment address for the record.

A. My name is Mike Kerschner. 111 Madison  
Street, Tiffin, Ohio.

Q. In front of you, sir, is a document  
marked Seneca County Exhibit 1.

A. Yes.

Q. Are you familiar with Seneca County  
Exhibit 1?

A. I am. That's my written testimony.

1           Q.    And if asked to testify on direct  
2           examination today, your testimony would be the same  
3           as previously set forth in the exhibit?

4           A.    Yes.

5           MR. DeVINE:  With that, Your Honors, we  
6           would move for the admission of Seneca County  
7           Exhibit 1, subject to cross-examination, and would  
8           tender Mr. Kerschner for cross-examination.

9           ALJ AGRANOFF:  Let's hang on for another  
10          second and go off the record.

11          (Off the record.)

12          ALJ AGRANOFF:  Let's go back on the  
13          record.

14          Mr. Kerschner's Direct Testimony shall be  
15          marked as Seneca County Exhibit 1.

16          MR. DeVINE:  Yes.

17          (EXHIBIT MARKED FOR IDENTIFICATION.)

18          ALJ SANYAL:  Okay.  Mr. Parram.

19          MR. PARRAM:  Yes, Your Honor.

20          Your Honors, I have a motion to strike a  
21          portion of the testimony of Mr. Kerschner.  I  
22          wondered if you wanted to handle that now or after --

23          ALJ SANYAL:  Yeah, let's do it in the  
24          beginning.

25          MR. PARRAM:  Okay.  Your Honors, I move



1 to strike lines 25 through 34 of Mr. Kerschner's  
2 testimony. It starts at "I have in my file multiple  
3 articles detailing the negative impact that wind  
4 farms have on residential home values" and concludes  
5 at the sentence stating "Not to mention the decreased  
6 real estate tax to the county as a result of lower  
7 home values." I'm moving to strike the entirety of  
8 that portion of his testimony based upon hearsay.

9 Mr. Kerschner is making definitive  
10 statements about the truth of or conclusions about  
11 property value studies or purported studies he has in  
12 his possession. He did not attach these to his  
13 testimony. They're not anywhere in the record. He  
14 is not citing to any studies here as an expert  
15 witness, as a learned treatise; yet, he's coming to a  
16 conclusion and essentially stating the truth of these  
17 statements based upon purported property value  
18 studies that are not included in his testimony, so  
19 it's improper hearsay and I move for it to be  
20 stricken.

21 ALJ SANYAL: Thank you, Mr. Parram.

22 Mr. DeVine.

23 MR. DeVINE: Your Honors, clearly  
24 Mr. Kerschner is not testifying as an expert witness.  
25 Nowhere in his testimony does he represent that he's

1 an expert on real estate valuations. He's only  
2 stating his understanding of certain facts and  
3 stating forth his opinion as a Commissioner of Seneca  
4 County as to the impact the project will have on real  
5 estate valuation. He's not testifying as an expert  
6 witness. He's testifying as to his personal opinions  
7 regarding what will happen to real estate values as a  
8 result of this project if it is in fact approved.

9 ALJ SANYAL: I'll allow you a brief  
10 response.

11 MR. PARRAM: Yes, Your Honor. If you  
12 just look at his statements that are contained in  
13 this portion of his testimony. He, No. 1, says that  
14 he's citing multiple articles. There's no argument  
15 he's relying upon documents that are outside of his  
16 testimony.

17 And, two, in each one of these sentences  
18 he has a conclusive statement with respect to  
19 negative impacts on residential home values. He  
20 indicates that it will be a value decrease to the  
21 extent of as much as 40 percent. He indicates that  
22 the value -- the decrease in value range from 20 --  
23 from 20 percent to 40 percent. He's making  
24 definitive statements and, even though he may not be  
25 an expert, he's relying upon these articles for

1 actual evidence of potential decreases in home values  
2 in the project area.

3 To the extent that we would be able to  
4 have an opportunity to challenge these articles or  
5 challenge these purported studies, we don't have an  
6 opportunity to do so because they're not attached to  
7 his testimony, they're not a part of the record, so  
8 again, that's why it's improper hearsay and it should  
9 be stricken.

10 ALJ SANYAL: Thank you. I'm going to ask  
11 Mr. Kerschner some questions and then I'll rule on  
12 your objection, okay?

13 Mr. Kerschner, as part of your duties as  
14 an elected representative of Seneca County, do you  
15 evaluate real estate impacts in your county? Is that  
16 part of your duties?

17 THE WITNESS: Part of my duties on the  
18 Board of Revision would be to assist in estimating  
19 values of property.

20 ALJ SANYAL: And why is that?

21 THE WITNESS: For tax purposes.

22 ALJ SANYAL: And what -- what kind of  
23 literature do you review and what kind of research do  
24 you do?

25 THE WITNESS: We rely on outside sources

1 for the appraisals. I experience --

2 MR. PARRAM: I apologize. Mr. Kerschner,  
3 could you speak into the mic a little bit closer.

4 ALJ SANYAL: It may not be on. There's a  
5 button.

6 THE WITNESS: Is that better?

7 MR. PARRAM: Thank you very much. It  
8 wasn't on.

9 THE WITNESS: You bet.

10 For purposes -- the last part, for  
11 purposes of tax valuation, what types of properties  
12 are residential and commercial properties.

13 ALJ SANYAL: And then when you refer to  
14 "I have in my file multiple articles" --

15 THE WITNESS: Yes.

16 ALJ SANYAL: -- what do you mean by that?

17 THE WITNESS: I have an appraisal -- I  
18 have articles that were written by folks from Rutgers  
19 University, other certified appraisers, stating that,  
20 in sum, the values are decreasing between -- it  
21 varies, but for the most part between 20 and  
22 45 percent.

23 ALJ SANYAL: And why did you not include  
24 those articles in your testimony?

25 THE WITNESS: I can't answer that

1 question. I had them but I did not attach them.

2 ALJ SANYAL: So I'm going to grant your  
3 motion to strike partially. We're going to strike  
4 from line 25 which starts "I have" and ending on  
5 line 30 which ends as "upon completion of the  
6 projects." The rest of Mr. Kerschner's testimony  
7 appears to be his personal thoughts on the matter and  
8 I'll allow that to stay.

9 Are there any questions?

10 MR. PARRAM: Just to clarify, so it  
11 ends -- the first sentence will start "In most cases  
12 the largest asset...."?

13 ALJ SANYAL: Correct.

14 MR. PARRAM: Okay. Thank you, Your  
15 Honor.

16 ALJ SANYAL: Any other motions,  
17 Mr. Parram?

18 MR. PARRAM: No, Your Honor.

19 ALJ SANYAL: Okay. You may proceed with  
20 cross.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. Parram:

24 Q. Good morning, Mr. Kerschner.

25 A. Good morning.

1           Q.    In your role as Commissioner, have you  
2 performed any independent study to determine --

3           A.    I'm having a hard time hearing you.

4           Q.    I'm sorry.

5                   In your role as Commissioner, have you  
6 performed any independent studies regarding potential  
7 decrease in real estate tax values to the county due  
8 to the --

9           A.    Have I personally done any studies?

10          Q.    Have you personally or have you engaged  
11 anyone to do any study with respect --

12          A.    No.

13          Q.    -- to the potential impact --

14          A.    No.

15          Q.    -- of the project.   Okay.   And,  
16 Mr. Kerschner, just so it's clear for the record, let  
17 me state my question and then you answer so we're not  
18 talking over each other for the court reporter, okay?

19          A.    Sure.

20          Q.    In your testimony on line 39, you  
21 indicate that "We have been advised by the FAA and  
22 ODOT that a number of the turbines would disrupt air  
23 travel in Seneca County."

24          A.    That's correct.

25          Q.    Okay.   Are you aware that the FAA has

1 issued a Determination of No Hazard with respect to  
2 all of the turbines proposed in this project?

3 A. I am not aware of that.

4 MR. PARRAM: I have no further questions,  
5 Your Honor.

6 ALJ SANYAL: Redirect or any other -- any  
7 other cross first?

8 Okay. Redirect?

9 MR. DEVINE: None. Thank you.

10 ALJ SANYAL: Thank you, Mr. Kerschner.

11 THE WITNESS: Thank you.

12 ALJ SANYAL: Just kidding, don't go.

13 - - -

14 EXAMINATION

15 By ALJ Agranoff:

16 Q. Mr. Kerschner, if you could just explain  
17 for us what the county's position or understanding is  
18 relative to the PILOT program --

19 A. Yes. Payment in lieu of taxes.

20 Q. -- at this current time, yes.

21 A. Our position is that the Apex project is  
22 qualified for the PILOT program. However, we did  
23 sunset our approval of the AEZ in June, I believe.

24 Q. What is the AEZ?

25 A. Alternative Energy Zone; that includes

1 the PILOT program. Under the AEZ is where the PILOT  
2 program exists, and we did rescind that as of, I  
3 think, I believe June 30th of this year for the  
4 county. So any other projects, according to our  
5 rescission, would not qualify for the PILOT program.

6 Q. But relative to this project as --

7 A. This project, as far as my understanding,  
8 it does qualify for the PILOT.

9 ALJ AGRANOFF: Based on that one limited  
10 question, is there any follow-up from counsel?

11 MR. PARRAM: No, Your Honor.

12 MR. DeVINE: No.

13 ALJ AGRANOFF: Thank you, Mr. Kerschner.

14 THE WITNESS: You're welcome.

15 MR. DeVINE: We would move for the  
16 admission of Seneca County Exhibit 1.

17 ALJ SANYAL: Any objections?

18 Hearing none, it is admitted.

19 (EXHIBIT ADMITTED INTO EVIDENCE.)

20 ALJ SANYAL: And you may step down.  
21 Thank you, Mr. Kerschner.

22 MR. DeVINE: He was waiting for you to  
23 tell him this time.

24 ALJ SANYAL: He's very polite because I  
25 told him to come back.



1 ALJ AGRANOFF: Mr. Van Kley.

2 MR. VAN KLEY: Thank you, Your Honor.

3 The Local Residents call Rob Chappell.

4 ALJ AGRANOFF: Please raise your right  
5 hand.

6 (Witness sworn.)

7 MR. VAN KLEY: Your Honors, at this time  
8 we would like to mark our next exhibit as  
9 LR Exhibit 17 which is the Direct Testimony of Robert  
10 Chappell.

11 ALJ AGRANOFF: It shall be so marked.

12 (EXHIBIT MARKED FOR IDENTIFICATION.)

13 - - -

14 ROBERT CHAPPELL

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

17 DIRECT EXAMINATION

18 By Mr. Van Kley:

19 Q. Mr. Chappell, you have a document before  
20 you that's been labeled as LR Exhibit 17. Can you  
21 identify that document?

22 A. This document would be my written  
23 testimony.

24 Q. Okay. And was this testimony prepared by  
25 you or under your supervision?

1 A. Yes, it was.

2 Q. And if I were to ask the same questions  
3 today as you answered in your Direct Testimony, would  
4 your answers be the same?

5 A. Yes, they would.

6 Q. Do you have any corrections to your  
7 testimony?

8 A. No, sir.

9 MR. VAN KLEY: Okay. At this time, Your  
10 Honors, we would make Mr. Chappell available for  
11 cross-examination.

12 ALJ AGRANOFF: If I can just ask one  
13 point of clarification, Mr. Van Kley. The testimony  
14 that you've just marked as LR 17, what was the filing  
15 date of that particular version?

16 MR. VAN KLEY: It would have been the  
17 corrected version and I believe the filing date is  
18 October 28.

19 MR. DeVINE: 29.

20 MR. VAN KLEY: 29. October 29. Thank  
21 you.

22 ALJ AGRANOFF: There was a filing of  
23 testimony for Mr. Chappell on --

24 ALJ SANYAL: October 30.

25 ALJ AGRANOFF: -- October 30.

1 MR. VAN KLEY: Okay. Oh. You're right,  
2 you're right. So this would be the testimony on  
3 October 30.

4 ALJ AGRANOFF: Okay. I just wanted the  
5 record to be clear since there were multiple  
6 versions.

7 MR. VAN KLEY: Yeah. I appreciate that.

8 ALJ AGRANOFF: Mr. Parram.

9 MR. PARRAM: Thank you, Your Honor.

10 - - -

11 CROSS-EXAMINATION

12 By Mr. Parram:

13 Q. Good morning, Mr. Chappell.

14 A. Good morning, Mr. Parram.

15 Q. Can you go to page 7 of your testimony at  
16 Question 16.

17 A. Okay.

18 Q. Are you there?

19 A. Yes.

20 Q. The question says "Do you have any  
21 experience with emergency aviation evacuation  
22 services?" Are you a Life Flight pilot?

23 A. No, sir, I am not.

24 Q. Okay. What is your role with respect to  
25 emergency aviation evacuation?

1           A.    As a firefighter and paramedic for the  
2   City of Tiffin currently, we oftentimes will utilize  
3   Life Flight services for transport of critically-ill  
4   or injured patients normally to the Toledo hospitals.

5           Q.    So there's times where you have to travel  
6   on the helicopter with the Life Flight pilot?

7           A.    No, sir. That would be a very rare event  
8   when they would need the additional people. Usually  
9   the aircrafts are relatively confined.

10          Q.    For my understanding, can you give me a  
11   scenario where you're interacting with the Life  
12   Flight helicopter as with respect to EMS in your  
13   personal experience?

14          A.    Several motor vehicle accidents where we  
15   may have a critical patient that would not receive  
16   the necessary medical care locally in Seneca County  
17   that they could in a Toledo hospital. That's  
18   commonly when a Life Flight helicopter would be  
19   called for.

20          Q.    So in a real-world experience you would  
21   be going out on an ambulance?

22          A.    Yes.

23          Q.    And then you would be treating an injured  
24   individual, and then if that person needs to be  
25   quickly transported to a hospital, Life Flight would

1     come and you would -- you would put that person on  
2     the medical helicopter and the helicopter would take  
3     them away. Did I summarize that correctly?

4             A.     That's correct. Our primary objective in  
5     the field is to try and stabilize the patient as best  
6     we can and prepare them for that transport by  
7     helicopter.

8             Q.     Since you're not a helicopter pilot, you  
9     don't have any type of aviation training?

10            A.     No, sir, I do not.

11            Q.     Are you familiar with any -- any wind  
12     farm projects that -- let me restate that.

13                    Have you done any type of analysis or  
14     looked into any wind farm projects and the potential  
15     impacts on Life Flight with respect to those  
16     projects?

17            A.     No, sir, I have not.

18            Q.     And do you have -- do you know, I guess,  
19     the average distance between the various turbines  
20     within the Republic Wind project area?

21            A.     I believe that would vary from siting to  
22     siting. I don't know if there's an average that's  
23     been determined.

24            Q.     Do you know if how close the turbines are  
25     to each other would have an impact on helicopter

1 aviation?

2 A. I am not a subject-matter expert on that.

3 Q. Do you know how close a helicopter can  
4 land next to a wind turbine?

5 A. From the information I've seen from Life  
6 Flight, I believe they requested a mile and a half  
7 for any landing zone from a turbine.

8 Q. And where was this information that you  
9 saw?

10 A. This was in a letter put together by, I  
11 believe, the director from Life Flight.

12 Q. Do you know whether or not that letter  
13 assessed how close they could -- or do you know in  
14 preparation of that letter whether or not they  
15 assessed how close helicopters could fly to the  
16 proposed turbines in this project area?

17 A. From what I recall of the letter, I  
18 believe they were more concerned with the ceiling  
19 height that the helicopters would be able to fly  
20 based on the aviation ceiling at that time.

21 Q. Do you recall what that ceiling height  
22 was?

23 A. I do not.

24 Q. On page 8 of your testimony, line 8 and  
25 9, there's a sentence that states "The inability to

1 use this type of rapid transport may have resulted in  
2 great detriment to these trauma victims." So in that  
3 sentence your concern is that there would have been  
4 an inability to use ambulance helicopters to  
5 transport victims; is that correct?

6 A. Yes, that is a concern of mine.

7 Q. You don't have any direct knowledge of --  
8 you don't know whether or not air ambulance  
9 helicopters will be able to access the project area.

10 A. No, sir, I do not.

11 Q. If you go back to page 7, line 22,  
12 there's a sentence that starts "Unfortunately, there  
13 are many occasions when one or more ambulances may be  
14 out of service simultaneously due to staffing  
15 issues." Do you see that?

16 A. Yes.

17 Q. In that sentence you're just highlighting  
18 the current staffing issue in the project area,  
19 correct?

20 A. As an individual who has -- I began my  
21 EMS career, we can call it, volunteering in the  
22 Seneca County EMS system; first in Green Springs,  
23 later Republic. Both villages are within the project  
24 area or close to it, I should say. County-wide,  
25 there are issues with the staffing of the ambulances.

1 It's a volunteer system.

2 Q. That staffing concern is not directly  
3 related to the Republic Wind project.

4 A. No.

5 Q. Going back to page 8, line 20, there's a  
6 sentence that starts "However." Do you see where I'm  
7 at there?

8 A. Yes, sir.

9 Q. "However, if the helicopter cannot land  
10 next to the accident scene due to the presence of a  
11 nearby wind turbine, the EMTs would have to transport  
12 the critical patient or patients to the  
13 pre-determined landing zone." So based on your  
14 current knowledge, you don't know whether or not a  
15 helicopter would not be able to land next to a scene  
16 due to a wind turbine being there.

17 A. No. My concern is that it would not be  
18 able to.

19 ALJ AGRANOFF: And that's just your own  
20 opinion, not based on any empirical data.

21 THE WITNESS: Yes, that's correct.

22 Q. And if you go over to page 9, line 11  
23 through 13. Are you there?

24 A. Yes, sir.

25 Q. It says "Time is the most valuable asset



1 to a trauma victim or person having a heart attack.  
2 Any added delay in their care may decrease their  
3 ability to recover." You don't have any direct  
4 knowledge with respect to what types of delay would  
5 result to Life Flight due to the Republic Wind  
6 project.

7 A. No.

8 MR. PARRAM: No further questions, Your  
9 Honor.

10 ALJ AGRANOFF: Thank you.

11 Mr. Van Kley or Ms. Bair?

12 MS. BAIR: I have no questions, Your  
13 Honor.

14 MR. VAN KLEY: I have a little bit of  
15 redirect.

16 - - -

17 REDIRECT EXAMINATION

18 By Mr. Van Kley:

19 Q. Mr. Chappell, you stated, in response to  
20 counsel's question, that you have a concern that  
21 there may be an inability for a helicopter to  
22 transport a victim. My question is, do you have any  
23 other concerns with respect to the wind project  
24 related to any delay that may occur even if the  
25 helicopter is able to transport the patient?

1           A.     In the event that a Life Flight  
2 helicopter, air ambulance, would not be able to fly  
3 directly to the scene, if it had to redirect or alter  
4 its normal flight path it would use, that could add  
5 potentially minutes to the time it would take for  
6 them to first reach that ill or injured patient.

7                     The theory would hold that they would  
8 probably have to use a very similar flight path then  
9 to return back to Toledo to transport that patient,  
10 thereby resulting in a couple of delays that would  
11 have occurred.

12           Q.     In your testimony you talk about the use  
13 of a landing zone that the first responders would  
14 have to potentially have to take the patient to meet  
15 the helicopter. Does that have anything to do with  
16 any concerns you may have about delay that may be  
17 caused by the presence of turbines?

18           A.     As also stated in my testimony, one of  
19 the common uses for Life Flight is due to motor  
20 vehicle collisions which have occurred, and in that  
21 event it's not uncommon for there to be multiple  
22 vehicles and also multiple patients that may have  
23 sustained injuries.

24                     As I explained, if there's one patient  
25 that is a critical patient that requires the use of

1 Life Flight, then until another ambulance is there  
2 and other EMTs are there at the scene, the other  
3 patients cannot be left behind, it would be  
4 abandonment.

5 Q. Based on your experience as an emergency  
6 responder, can you explain what, if any, importance  
7 there is in avoiding delay in transporting a patient  
8 to a hospital?

9 A. Yes. In the pre-hospital setting and  
10 throughout emergency medicine there's a term applied  
11 to trauma as "the golden hour." It is the 60-minute  
12 window that begins with the moment that the person  
13 sustains the injury and that window would then close  
14 when they reach the definitive care they would need.

15 In the event of a trauma patient, that  
16 would be somebody that may require surgical  
17 intervention to stop something such as an internal  
18 bleed, which would not be able to be done locally, it  
19 would have to be done in a Toledo, most commonly,  
20 area hospital.

21 There's also similar circumstances for  
22 patients that might be experiencing a heart attack, a  
23 myocardial infarction, that we use Life Flight to  
24 also transport those patients and with that they  
25 refer to it as "the door to balloon time" for the

1 angioplasty and possible stents to be placed to  
2 provide care to that patient in that regard.

3 Q. How much of a delay can make a difference  
4 with respect to the treatment of the patient?

5 A. In my opinion, every minute that we can  
6 save that patient matters.

7 MR. VAN KLEY: All right. I have no  
8 further questions.

9 ALJ AGRANOFF: Any other recross,  
10 Mr. Parram?

11 MR. PARRAM: Just a couple clarifying  
12 questions, Your Honor.

13 ALJ AGRANOFF: Go ahead.

14 - - -

15 RECROSS-EXAMINATION

16 By Mr. Parram:

17 Q. Are you aware how close a helicopter can  
18 land next to a wind turbine?

19 A. No.

20 MR. VAN KLEY: Your Honor, I'll object.  
21 That's outside the scope of redirect.

22 ALJ AGRANOFF: Mr. Parram.

23 MR. PARRAM: Well, Your Honor, one of the  
24 questions on redirect was with respect to the landing  
25 zone. I think the question goes to the fact that

1 Life Flight does not necessarily have to land at the  
2 landing zone. Life Flight has the capability of  
3 landing at different areas near the accident scene  
4 and near the turbine which I think addresses the  
5 specific concern of Mr. Chappell.

6 So I'm trying to assess whether or not,  
7 one, he knows how close the helicopter can be to a  
8 turbine and, two, the fact that a helicopter can  
9 access different areas of the project area to address  
10 health concerns without necessarily relying on the  
11 landing zone.

12 ALJ AGRANOFF: Mr. Van Kley.

13 MR. VAN KLEY: I think he can answer the  
14 question.

15 ALJ AGRANOFF: I agree.

16 Do you want to restate the question for  
17 him?

18 MR. PARRAM: Sure.

19 Q. (By Mr. Parram) Do -- is it your  
20 understanding that helicopters, accessing the project  
21 area, would only be able to land at the landing zone?

22 A. I'm not familiar with what regard Life  
23 Flight will approach the project. I would have to  
24 assume that they would be willing to land at the  
25 predetermined landing zone if that was, in fact, put

1 in place.

2 Q. And to the extent that Life Flight could  
3 safely land near a turbine, is it your understanding  
4 that Life Flight would do so?

5 A. I believe that would be to the discretion  
6 of the pilot flying that aircraft.

7 Q. And you don't have any direct knowledge  
8 with respect to how close Life Flight could land next  
9 to a turbine?

10 A. I don't -- I don't know of any policy  
11 they would have in place for that at this time.

12 Q. Are you aware of any other Ohio wind farm  
13 projects that are required to rely solely upon a  
14 landing zone for Life Flight?

15 A. I am not aware of any, no.

16 Q. Mr. Van Kley asked you a question about  
17 potentially having to reroute the helicopter for  
18 different scenarios. Are you aware of the cruising  
19 height of Life Flight helicopters?

20 A. My general information on that is that  
21 the height that the aircraft can operate is based on  
22 the cloud ceiling for that day.

23 Q. Do you know if the helicopters would be  
24 able to fly over the turbine?

25 A. I do not know.

1 MR. PARRAM: I have no further questions,  
2 Your Honor.

3 ALJ AGRANOFF: Thank you.  
4 You're excused.

5 MR. VAN KLEY: We would like to move the  
6 admission of LR Exhibit 17 into evidence.

7 ALJ AGRANOFF: Any objection?

8 There being no objection, Exhibit LR 17  
9 shall be admitted as part of the record at this time.

10 (EXHIBIT ADMITTED INTO EVIDENCE.)

11 ALJ AGRANOFF: Mr. Van Kley, if you could  
12 please call your next witness.

13 MR. VAN KLEY: Okay. I guess I have an  
14 inquiry as to whether we wanted to go with Mr. Stains  
15 first.

16 MS. BAIR: He is not here. I can call  
17 him.

18 ALJ AGRANOFF: Let's go off the record.

19 (Discussion off the record.)

20 ALJ SANYAL: Let's get back on the  
21 record.

22 We'll let Ms. Bair contact Mr. Stains,  
23 and let's get Mr. Shieldcastle up here.

24 Good morning, Mr. Shieldcastle.

25 (Witness sworn.)

1 MR. DeVINE: Excuse me, they say they  
2 can't hear anything in the back. Is there any way to  
3 turn up the volume on the speakers?

4 ALJ SANYAL: Let's go off the record.

5 (Discussion off the record.)

6 ALJ SANYAL: We're going to go back on  
7 the record and I'm going to try and project, but  
8 you're also welcome to come up front so it's easier  
9 to hear. I know there's several seats up front that  
10 appear to be empty.

11 Mr. Van Kley, you may proceed.

12 MR. VAN KLEY: Okay. Thank you, Your  
13 Honor.

14 - - -

15 MARK SHIELDCASTLE

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

18 DIRECT EXAMINATION

19 By Mr. Van Kley:

20 Q. Would you state your name, please.

21 A. Mark Shieldcastle.

22 MR. VAN KLEY: At this time, Your Honors,  
23 we would like to mark Mark Shieldcastle's Direct  
24 Testimony as LR Exhibit 23. I premarked some of the  
25 other testimony and that's why we have a gap between



1 Exhibit 17 and Exhibit 23, and that gap will be  
2 filled in later with the introduction or the  
3 proffering of the Direct Testimony for other  
4 witnesses who Mr. Parram has indicated he has no  
5 cross-examination for, so this will be Exhibit 23.

6 ALJ SANYAL: Okay. Thank you.

7 (EXHIBIT MARKED FOR IDENTIFICATION.)

8 Q. (By Mr. Van Kley) Mr. Shieldcastle, you  
9 have in front of you what's been marked as  
10 Exhibit LR 23. Can you identify that document?

11 A. It is my Direct Testimony, written  
12 testimony.

13 Q. And was this testimony prepared by you or  
14 under your supervision?

15 A. Yes.

16 Q. If you were to be asked the same  
17 questions today, as you answered in your Direct  
18 Testimony, would your answers be the same?

19 A. Yes, they would.

20 Q. Do you have any corrections to make to  
21 your testimony?

22 A. No.

23 MR. VAN KLEY: At this time, Your Honor,  
24 the witness is ready for cross-examination.

25 ALJ SANYAL: Thank you. I know we have a

1 pending motion to strike and motion in limine. So, I  
2 have reviewed it. If you want to make some oral  
3 arguments, I'll allow you some time to do so now.

4 MS. FLINT: Thank you, Your Honor.

5 Yes, we do have a pending motion to  
6 strike, and the sections of Mr. Shieldcastle's  
7 written Direct Testimony we seek to strike are listed  
8 in the motion. I won't repeat them here. But in  
9 response to our motion, Mr. Van Kley basically  
10 concedes that Mr. Shieldcastle has no prior  
11 experience at all in bat studies and they're relying  
12 on the fact that he has experience in general in  
13 wildlife management and studies, and we would submit  
14 that is not the standard for expert testimony.

15 Under that rationale, Mr. Shieldcastle  
16 would be able to be deemed an expert to opine about  
17 literally any study of any mammal or bird on the  
18 planet and that is not, again, the standard to  
19 qualify as an expert. He has no specialized  
20 knowledge, skill, or experience regarding the study  
21 of bats or the surveying of bats at all, let alone in  
22 compliance with the study protocols that would be  
23 applicable here.

24 ALJ SANYAL: Thank you.

25 MR. VAN KLEY: Your Honor,

1 Mr. Shieldcastle indeed does have the expertise  
2 necessary to do surveys of any animal or bird on the  
3 plant because there are principles of wildlife  
4 surveys that are applicable across the board  
5 regardless of what kind of creature that you're  
6 surveying.

7 It is not necessary that he has any  
8 specific experience with regard to netting a bat, for  
9 example, because he has netted thousands and  
10 thousands of birds and the principles for surveying  
11 the existence and populations of one flying creature  
12 is the same as surveying another flying creature. He  
13 indeed has lots of experience with surveying mammals  
14 of all different types and, of course, the bat is a  
15 mammal.

16 So there's really no difference that is  
17 -- that has any relevance with respect to whether he  
18 is surveying bats versus birds and it is undeniable  
19 that he has abundant experience in surveying and  
20 capturing birds and other creatures, so this motion  
21 is unfounded and it should be denied.

22 ALJ SANYAL: I'll allow you a brief  
23 response if you have any.

24 MS. FLINT: Very brief.

25 Again, under this rationale, he would be

1     able to come in to any court or administrative  
2     proceeding and opine about any study about any mammal  
3     on the planet and that is just -- that just defies  
4     logic and certainly the standard for qualifying as an  
5     expert. And it is absolutely false to suggest that  
6     he could perform a bat study and the bat studies that  
7     are at issue here because he has no permit from U.S.  
8     Fish and Wildlife Service to capture bats.

9             ALJ SANYAL: Okay. Thank you.

10            I have some questions for you,  
11     Mr. Shieldcastle. So in your testimony today, are  
12     you questioning the methodology that was utilized for  
13     the bat surveys?

14            THE WITNESS: In many instances, yes.  
15     It's the study design that we have questions, yes.

16            ALJ SANYAL: Okay. And I think you  
17     concede you're not a bat expert, an expert on bats?

18            THE WITNESS: I concede that, yes.

19            ALJ SANYAL: Okay. With regard to the  
20     bat surveys specifically, what are the deficiencies  
21     that you noted?

22            THE WITNESS: Well, there's two  
23     different -- there are two different surveys, one was  
24     acoustic and one was mist netting for capture. The  
25     acoustic, the design of the study used here was to

1 place the acoustic hardware in a location that was  
2 really not even close to where bat habitat would be  
3 and what was recognized in the studies of bat habitat  
4 was up to 700 meters from the closest woodlot with  
5 a -- and a bat capability of 30 meters. The design  
6 is almost designed to not pick up bats.

7 ALJ SANYAL: And are these methodologies  
8 that would be utilized in a common bat survey?

9 THE WITNESS: It would be depending on  
10 what the question was. In this case it's to  
11 determine the potential risk and impact. It's the  
12 Power Siting Board question that's raised.

13 So to design that study, a definite  
14 component would be to assure at least some of the  
15 reporting is done in what would be classified as the  
16 higher-likelihood areas, stratifying habitat to, you  
17 know, out in open areas versus in corridors, between  
18 woodlots, things like that, where bats are more  
19 likely, and studies that have been done show more  
20 activity of bats.

21 So, at the very least, you would want to  
22 stratify your actual design to get at the areas where  
23 bats are more likely to occur to get a more true  
24 picture of the environmental impact and risk. So  
25 there was definitely flaws in the design there.

1 I'm not questioning whether the equipment  
2 operated properly and data from that equipment was  
3 proper data, but it goes back to the design to  
4 capture that data. If the design is not proper then  
5 the data you collect is not really relevant to the  
6 question that was asked.

7 The mist netting project, that is  
8 standard procedure in bat mist netting projects.  
9 While I, myself, have never conducted. Designing,  
10 again, comes back to the more common denominators.  
11 They did place the nets in proper habitat. They were  
12 in the habitat we expect to see bats move. It was  
13 near the woodlots or within the woodlots which was  
14 part of the reason the acoustic data did not track  
15 with the mist netting data as they acknowledged  
16 themselves. So they did go in the proper area.

17 The question I had of the design there is  
18 their surveys were done over an extremely short  
19 period of time of the entire window that bats could  
20 be available. And to properly design a study, to  
21 really get at, again, environmental impact and risk,  
22 you need to cover that portion of the lifecycle where  
23 bats are present, not just a very small window of  
24 that. So it was the intensity of surveying that was  
25 done, not where they surveyed or using the proper

1 mist nests or having someone that has the permits to  
2 capture bats, that was done all correctly, it's  
3 really the sample design of going out and collecting  
4 data to represent the true risk to the species  
5 they're supposed to be looking at, were really  
6 potentially improper.

7 ALJ SANYAL: Okay. Thank you.

8 ALJ AGRANOFF: Have you performed any bat  
9 studies?

10 THE WITNESS: I have not.

11 ALJ AGRANOFF: Or any netting of bats?

12 THE WITNESS: We catch bats in our normal  
13 bird migration stuff data.

14 ALJ SANYAL: What do you mean "we"?

15 THE WITNESS: People I have worked with  
16 directly at the Black Swamp Bird Observatory, field  
17 study -- field staff. It's primarily migratory bats  
18 that we capture. They're doing the same thing the  
19 birds are doing at the same time of year, so we do  
20 have the ability to remove the bat from the nets  
21 safely. We do not mark them, we do not have the  
22 permits to do that, so it's just a release.

23 ALJ SANYAL: Mr. Shieldcastle, so you  
24 haven't conducted bat surveys and you're not a bat  
25 expert, so help us understand how you've identified

1 the deficiencies in the bat survey conducted.

2 THE WITNESS: Bat surveys aren't really  
3 any different. Wildlife surveys in general, there  
4 are a series of commonalities that go back to the  
5 question, what is the question you're trying to get  
6 at, and then the design of the study is to try to get  
7 at those answers.

8 There's five parts to every research  
9 project and these are all research projects if you  
10 want to call them research or monitoring or surveys,  
11 and what is your question, you want to focus on that  
12 as close as possible.

13 The question here that's been asked is  
14 from the Power Siting Board which is to evaluate  
15 environmental impact and risk to these different  
16 taxa. A second is to design a study to get at that  
17 question. That is a lifecycle component as well as  
18 the habitat component, weather component, the  
19 individual species involved. And then you go out and  
20 collect data. The fourth is to analyze it and then  
21 the fifth is to publish it. The most important parts  
22 of any study is the design and the question.

23 And while I have not designed a bat  
24 study, I have designed mammal studies and bird  
25 studies and, again, it comes back to what is your



1 question and really getting at the components that  
2 make up the design that would get at that question.

3 ALJ SANYAL: Mr. Shieldcastle, are you  
4 still at ODNR or where do you currently work?

5 THE WITNESS: I work for Black Swamp Bird  
6 Observatory. I retired from the DNR.

7 ALJ SANYAL: Okay. Thank you.

8 Okay. At this time, I am going to deny  
9 your motion. I think, during cross, you can make it  
10 clear that he's not an expert on bats, okay, and you  
11 may proceed.

12 - - -

13 CROSS-EXAMINATION

14 By Ms. Flint:

15 Q. Good morning, Mr. Shieldcastle. Am I  
16 correct that your main issue with the bird and bat  
17 studies that were performed for the Republic Wind  
18 project is that you believe they do not provide  
19 scientifically-valid analyses of the project's  
20 environmental impact; is that correct?

21 A. Yes.

22 Q. And the basis for your position is that  
23 you do not believe the studies identify validated  
24 methodologies sufficient to determine the probable  
25 and adverse environmental impact of the project on

1 birds and bats; is that correct?

2 A. That's correct.

3 Q. Are you aware that the bird and bat study  
4 protocols for the Republic Wind project come from  
5 ODNR's 2009 On-Shore Bird and Bat Pre- and  
6 Post-Construction Monitoring Protocol for Commercial  
7 Wind Energy Facilities in Ohio?

8 A. I am.

9 Q. And you have never performed a bird or  
10 bat study under those protocols, have you?

11 A. Those protocols aren't complete study  
12 design.

13 Q. My question, Mr. Shieldcastle, was you  
14 have never performed a bird or bat study under the  
15 ODNR's protocol for wind facilities.

16 A. No, I have not.

17 Q. Is that correct?

18 A. Correct.

19 Q. But you are generally familiar with the  
20 protocols that are set forth in ODNR's 2009  
21 monitoring protocols?

22 A. Yes.

23 ALJ SANYAL: And, Ms. Flint, the 2009  
24 monitoring protocol, is it for turbines or just --

25 MS. FLINT: Specifically for commercial

1 wind energy facilities, on-shore.

2 ALJ SANYAL: Thank you.

3 ALJ AGRANOFF: Is there a citation for  
4 that?

5 MS. FLINT: I'm actually going to, just  
6 now, admit it into the record. Oh, the protocols?

7 ALJ AGRANOFF: Yes.

8 MS. FLINT: It's called the On-Shore Bird  
9 and Bat Pre- and Post-Construction Monitoring  
10 Protocol for Commercial Wind Energy Facilities in  
11 Ohio.

12 ALJ SANYAL: And you're going to give us  
13 a copy shortly?

14 MS. FLINT: Yes, I am.

15 ALJ SANYAL: Okay.

16 MS. FLINT: I have marked Applicant's  
17 Exhibit No. 33, which Mr. Parram is handing out. I  
18 do have extras.

19 (EXHIBIT MARKED FOR IDENTIFICATION.)

20 Q. (By Ms. Flint) Mr. Shieldcastle, you've  
21 been handed what's been marked Applicant Exhibit  
22 No. 33. Do you recognize this document?

23 A. Yes, I do.

24 Q. What is it?

25 A. It is the On-Shore Bird and Bat Pre- and

1 Post-Construction Monitoring Protocol for Commercial  
2 Wind Energy Facilities in Ohio.

3 Q. And this is ODNR's protocol, correct?

4 A. Correct.

5 Q. According to ODNR, what is the purpose of  
6 those study protocols, do you know?

7 A. To try to come up with commonality and  
8 studies done to -- to further knowledge as far as of  
9 impact and risk to have as a living document.

10 Q. And that's specifically for commercial  
11 wind energy facilities, correct?

12 A. Correct. On-shore.

13 Q. If you take a look at page 1 of  
14 Exhibit 33, the protocol.

15 A. Uh-huh.

16 Q. In the first paragraph, could you read  
17 the very first sentence?

18 A. "The following protocols are meant to  
19 establish a standardized framework in which pre- and  
20 post-construction surveying should be conducted at  
21 proposed commercial wind turbine facilities within  
22 the state of Ohio."

23 ALJ AGRANOFF: If I could seek a point of  
24 clarification. Were these the protocols that were in  
25 effect at the time that the studies that the

1 Applicant performed were done?

2 MS. FLINT: Yes, Your Honor.

3 ALJ AGRANOFF: Okay. If the witness can  
4 let me know whether that's your understanding as  
5 well.

6 THE WITNESS: Yes, it is.

7 ALJ AGRANOFF: Okay. Thank you.

8 Q. (By Ms. Flint) And staying on that first  
9 paragraph, it's towards the center of that first  
10 paragraph, there's a sentence that starts "These  
11 studies are meant to document." Do you see that,  
12 sir?

13 A. Yes.

14 Q. Could you read --

15 A. "These studies are meant to document the  
16 level and timing of species activity, diversity, and  
17 abundance."

18 Q. The next sentence?

19 A. "Results of the studies outlined within  
20 this document will allow the ODNR Division of  
21 Wildlife to assess the potential impact that a  
22 proposed turbine may have either directly through  
23 mortalities or indirectly through avoidance  
24 behaviors, on Ohio's wildlife resources."

25 Q. So based on what you just read from the

1 2009 protocols, would you agree, at least according  
2 to ODNR, the purpose of the studies, this  
3 standardized framework, is to allow ODNR to assess  
4 the potential impact that a proposed turbine facility  
5 may have on Ohio's wildlife resources?

6 A. That is the intent.

7 Q. Staying on page 1 of that protocol. In  
8 the second paragraph, could you read the first  
9 sentence?

10 A. "The type of surveying recommended will  
11 be at the discretion of the ODNR Division of  
12 Wildlife, and will be tailored to the specific site,  
13 but may fit generally into one of the categories  
14 listed below."

15 Q. And is it your understanding that ODNR  
16 informed Republic Wind that its bird and bat studies  
17 conformed to their protocols?

18 A. To their protocol, yes.

19 MS. FLINT: Mr. Parram is going to hand  
20 Mr. Shieldcastle what's previously been marked as  
21 Applicant Exhibit No. 23.

22 ALJ SANYAL: Is that an e-mail or not?

23 MS. FLINT: The first page is an e-mail,  
24 correct.

25 ALJ SANYAL: Give us a moment to locate

1 that as well.

2 MS. FLINT: Mr. Devin -- Mr. Parram is  
3 getting his steps in today. Does everybody have a  
4 copy?

5 Q. (By Ms. Flint) Have you seen Exhibit 23  
6 before, do you recall seeing this?

7 A. Yes, I have.

8 Q. So on the first page -- well, the first  
9 page, that's an e-mail, correct?

10 A. Correct.

11 Q. Or a series of e-mails, correct?

12 A. Yes.

13 Q. Okay. Halfway down, if you could please  
14 read the e-mail from a Ms. Geiger, dated January 17,  
15 2018, to a Ms. Erin Hazelton.

16 A. (As read): "As I mentioned on the phone  
17 we have put together a summary of studies completed  
18 for the proposed Republic Wind Project to date, as  
19 well as at the adjacent proposed Emerson West Wind  
20 Project (which is similar in terms of habitat and  
21 species composition). If you could please confirm  
22 that this document meets your needs to illustrate  
23 compliance with the ODNR guidelines, as required for  
24 the Ohio Power Siting Board permit application to be  
25 considered complete, I would appreciate it."

1 Q. And at the top of Exhibit 23, what is  
2 Ms. Hazelton's response?

3 A. "These surveys meet ODNR's  
4 pre-construction monitoring protocols for the new  
5 project boundary."

6 Q. On the second page of Exhibit 23, the  
7 next page, that is the attachment to the e-mail; is  
8 that correct?

9 A. Correct.

10 Q. At the bottom of page 1 of this Technical  
11 Memorandum, could you read that last paragraph?

12 A. (As read): "The purpose of this memo is  
13 to document compliance with the ODNR Wind Guidelines  
14 based on the current Republic Wind Project boundary,  
15 and thus illustrate compliance with Ohio Power Siting  
16 Board requirements for issuance of a permit."

17 Q. Then on page 2 of the Technical  
18 Memorandum, the next page, at the bottom of the page,  
19 that last paragraph, could you read that, starting  
20 with "Additional"?

21 A. (As read): "Additional wildlife studies  
22 were completed for the adjacent Emerson West Wind  
23 Project from 2015 to '17, a portion of which has been  
24 subsumed by the current Project boundary (Figure 1).  
25 Given the proximity of the two Projects and



1 similarities in landcover, data from Emerson West  
2 provides additional information on species  
3 composition and usage patterns throughout the Project  
4 area."

5 Q. Okay. That's fine. Thank you. So in  
6 that last paragraph it states that, given the  
7 proximity of the two projects and similarities in  
8 landcover, data from the Emerson West project  
9 provides additional information on species  
10 composition and usage patterns throughout the project  
11 area, correct?

12 A. Correct.

13 Q. Then on page 5 of that Technical  
14 Memorandum, Table 3, it lists the surveys that were  
15 completed based on ODNR recommendations. Do those  
16 surveys include some surveys that were performed for  
17 the Emerson West Wind project?

18 A. Yes, they do.

19 Q. And again, ODNR informed Republic Wind  
20 that these surveys, meaning all of these surveys,  
21 meet ODNR's pre-construction monitoring protocols for  
22 the Republic project, correct?

23 A. That's what it says, yes.

24 Q. You're aware that there have been over  
25 100 post-construction fatality studies done at wind

1 facilities, correct?

2 A. Correct.

3 Q. You've only reviewed one of those  
4 studies, correct?

5 A. One where we had the entire data set,  
6 yes.

7 Q. But you don't trust the results of the  
8 data from those post-construction fatality studies,  
9 do you?

10 A. Because of the study design.

11 Q. So is the answer correct, you do not  
12 trust the results or the data --

13 A. Correct.

14 Q. -- from those post-construction studies?

15 A. Correct.

16 Q. And that's because you do not trust the  
17 post-construction study protocols that are set forth  
18 by ODNR and Fish and Wildlife Service, correct?

19 A. The ODNR and Fish and Wildlife Service  
20 did not set a complete study design. Do not confuse  
21 the protocol guidelines with study design.

22 Q. My question is, the ODNR and U.S. Fish  
23 and Wildlife Service, you acknowledge that they set  
24 forth post-construction monitoring protocols,  
25 correct?

1 A. Protocols.

2 Q. Is that correct?

3 A. Correct.

4 Q. And you do not trust those protocols.

5 A. Well, the protocols do not cover the  
6 entire study design which goes beyond the --

7 Q. I'm asking about the protocols for  
8 post --

9 A. They're incomplete.

10 Q. In your opinion they're incomplete.

11 A. To reach the question that was raised by  
12 the Ohio Power Siting Board, yes.

13 Q. Well, these are post-construction  
14 monitoring protocols that are formulated by ODNR and  
15 U.S. Fish and Wildlife Service, correct,  
16 specifically --

17 A. Well, everything here is ODNR.

18 Q. Okay. You are only somewhat familiar  
19 with U.S. Fish and Wildlife Service's 2012 Land-Based  
20 Wind Energy Guidelines, correct?

21 A. I've looked at it more since the  
22 deposition, so I'm a little more familiar, yes.

23 Q. But at the time of your deposition --

24 A. Right.

25 Q. -- you indicated you were somewhat

1 familiar with --

2 A. It would have been a while since I had  
3 read those, yes.

4 Q. Okay. Do you know if the bird and bat  
5 surveys that were conducted for the Republic Wind  
6 project were done in compliance with U.S. Fish and  
7 Wildlife Service's 2012 Land-Based Wind Energy  
8 Guidelines? Yes or no?

9 A. They were following the guidelines.

10 Q. And you are only a little bit familiar  
11 with U.S. Fish and Wildlife Service's 2013 Eagle  
12 Conservation Plan guidance, correct?

13 A. I said -- I believe I said somewhat  
14 familiar.

15 Q. When you say you believe you "said  
16 somewhat," when?

17 A. In the deposition.

18 Q. Okay.

19 A. Because I requested the definition of the  
20 adjectives which I did not get.

21 Q. I believe that was for the other -- the  
22 other guidelines, but we can get your deposition out  
23 if you'd like. Is it true, though, that you said, in  
24 your deposition, you haven't read it for quite a  
25 while?

1           A.     In that sense just when it came out.

2           Q.     Do you know if the eagle studies  
3 conducted for the Republic Wind project were done in  
4 compliance with U.S. Fish and Wildlife Service's 2013  
5 Eagle Conservation Plan guidance?

6           A.     They were definitely within the spirit.

7           Q.     Again, Mr. Shieldcastle, you've never  
8 designed a bird or bat survey or study in relation to  
9 a proposed wind project, have you?

10          A.     No, I have not. Not to wind.

11          Q.     You have never conducted a bird or bat  
12 survey or study for purposes of assessing risk at a  
13 proposed wind facility, have you?

14          A.     I have done some eagle.

15          Q.     At a proposed wind facility?

16          A.     A wind -- well, it was a single turbine  
17 project; it was not a commercial-grade.

18          Q.     You have never utilized the protocols,  
19 the study protocols that are at issue in this case,  
20 have you?

21          A.     No, I have not.

22          Q.     When you -- Mr. Shieldcastle, earlier  
23 when one of the Administrative Law Judges was asking  
24 you questions about the bat studies, do you remember  
25 that?

1           A.    Yes.

2           Q.    Again, you have never conducted a bat  
3 study under either ODNR or U.S. Fish and Wildlife  
4 Service study protocols for wind facilities, have  
5 you?

6           A.    No, I have not.

7           Q.    But, as you just acknowledged, both of  
8 the bird and bat studies that were conducted for this  
9 project were done in conformity with those protocols.

10          A.    With the protocols.

11          Q.    That would include the acoustic bat  
12 monitoring survey, correct?

13          A.    I don't recall as to whether there was  
14 direction within the protocol as to the distance  
15 of -- to bat habitat which would be more in the  
16 sample study design.

17          Q.    Do you recall what the protocols say  
18 about where acoustic monitoring should occur?

19          A.    I think it mentions on the met towers.

20          Q.    Not in the habitat; is that correct?

21          A.    That's why I say I do not believe the  
22 protocols go into the real study design to get at the  
23 question.

24          Q.    Okay. But again, the acoustic  
25 monitoring, the bat monitoring that was done here was

1 done in conformity with the applicable protocols.

2 A. With the protocol.

3 MS. FLINT: No further questions at this  
4 time.

5 ALJ AGRANOFF: Thank you.

6 MS. FLINT: I'm sorry to interrupt you.  
7 I would like to, I guess, based on this  
8 cross-examination, I would like to reiterate the  
9 bases for our motion to strike on his ability to  
10 opine as to the bat studies.

11 ALJ SANYAL: That motion has already been  
12 denied, and I hope you'll make it clear in your  
13 briefing based on your cross.

14 MS. FLINT: Okay. I wasn't sure when you  
15 said I could discuss it in cross if that meant --

16 ALJ SANYAL: No.

17 MS. FLINT: Okay. Thank you.

18 MR. VAN KLEY: Could we take a 10-minute  
19 break to do a little discussion and maybe take a  
20 break for -- it's 10:30.

21 ALJ SANYAL: Yes.

22 ALJ AGRANOFF: But, before we do that, I  
23 just want the record to be clear. When you made the  
24 reference to "met towers," those are the  
25 meteorological towers?

1 THE WITNESS: Correct.

2 ALJ AGRANOFF: Thank you.

3 ALJ SANYAL: We will be back at 10:38.

4 (Recess taken.)

5 ALJ SANYAL: Okay. Let's get back on the  
6 record.

7 Mr. Van Kley

8 MR. VAN KLEY: Thank you, Your Honor.

9 - - -

10 REDIRECT EXAMINATION

11 By Mr. Van Kley:

12 Q. Mr. Shieldcastle, we're going to take  
13 your redirect in roughly the same order as your  
14 cross-examination proceeded.

15 So why don't we start at the beginning  
16 then and let's start with Company Exhibit 23 which is  
17 the e-mail from Erin Hazelton to Jennie Geiger.  
18 First of all, would you tell me what the date of this  
19 e-mail is that's the first e-mail on the top of the  
20 first page where Erin Hazelton says to Jennie Geiger  
21 that these surveys meet ODNR's pre-construction  
22 monitoring protocols for the new project boundary.

23 A. January 25, 2018.

24 Q. Okay. And then would you take a look at  
25 figure -- Table 3, which is further into the document



1 and it's labeled "Surveys completed based on ODNR  
2 recommendations at the Republic and Emerson West Wind  
3 Projects." Do you see that?

4 A. Yes, I do.

5 Q. What are the dates of those surveys?

6 A. The majority for Republic was done in  
7 2011 and 2012. There was some additional work done  
8 in 2016 and '17. Emerson West appears to be mostly  
9 all 2016 and a couple sliding into the early part of  
10 '17.

11 Q. All right. So with regard to the date of  
12 Ms. Hazelton's e-mail which is January 25, 2018, and  
13 the dates of the surveys that are listed in Table 3,  
14 can you explain whether the dates of these surveys  
15 and the correspondence have any bearing on the  
16 usefulness of the information obtained in those  
17 surveys for purposes of determining whether the  
18 Republic Wind facility poses a risk to birds and  
19 bats?

20 A. Well, the dates of most of these surveys  
21 were really done so far in the distance that they're  
22 -- it's questionable how relevant they are to today.  
23 The footprint of this project has changed so many  
24 times that reading through a lot of these different  
25 projects, even though the same one was done in 2011

1 and 2012, gave different footprints of different  
2 acreages of what the project is.

3 Again, what we've looked at is going back  
4 to the question that has been raised by the Power  
5 Siting Board and gathering data to meet that question  
6 and it's really evaluate the project which is the  
7 footprint of today which is extremely different than  
8 the footprint of eight years ago.

9 Many of these studies were -- so they're  
10 dated in time, they do not include the entire  
11 footprint of the project now, they do not cover  
12 the -- the design did not cover the critical, all the  
13 different critical times of the different species  
14 that were involved to meet the question that was  
15 raised. I go back to where our concern is with the  
16 study design and meeting the question that's asked.

17 ALJ AGRANOFF: And just for clarification  
18 purposes, you've mentioned a couple times now about  
19 the question that was asked.

20 THE WITNESS: Correct.

21 ALJ AGRANOFF: If you can just clarify  
22 for the record what you believe that question was.

23 THE WITNESS: There was two parts. It's  
24 been reiterated in several testimonies. One is to  
25 assess the environmental impact of the project and

1 the second has to do with mitigating the  
2 environmental impact if I remember right. I'd have  
3 to look at the -- it's listed right in the beginning  
4 of the Power Siting Board's -- what's needed in the  
5 project.

6 ALJ AGRANOFF: Okay.

7 Q. (By Mr. Van Kley) Can you provide us with  
8 some specifics as to what happens to the accuracy or  
9 representative -- representativeness of a survey if  
10 the survey is dated in time?

11 A. There is extreme high variability in  
12 wildlife populations whether it be breeding,  
13 migration, or wintering, and that variability cannot  
14 be answered in one season. It takes multiple years.  
15 Migration variability is extreme.

16 We have seen, through some of the studies  
17 we have done up along the lake and I use that because  
18 that's where we have done considerable work that it's  
19 representative of what migration is. It's as great  
20 as a 50-percent difference between two years. If you  
21 want to do one year on any of these studies, are you  
22 getting the low end, the high end? You're not really  
23 addressing risk because you don't know what the  
24 variety of that risk could be. You could be hurting  
25 yourself because you happen to hit a bad year for

1 your purposes or you could have hit a good year.

2 So in study design it's multi-year and in  
3 most all the wildlife surveys because of the  
4 variability in wildlife work we never know truth  
5 because we do not know what's really out there in the  
6 total population. That's why you do very robust  
7 studies. That's repeated in the Eagle Conservation  
8 Plan, a rigorous study, there's a meaning for that  
9 word, so you need multiple years.

10 And as habitat changes, conditions  
11 change. You know, what happened eight years ago may  
12 not be relevant to a site today. The only way to  
13 know that is to gather data and you do that through a  
14 strong study design.

15 Q. Why is it that what happened eight years  
16 ago or whatever the number of years ago the survey  
17 was done, what can happen over a period of time that  
18 will make the study, that has been done eight years  
19 or so ago, not representative of today's conditions?

20 MS. FLINT: Objection. My objection is  
21 based on this seems to be a general question as  
22 opposed to the facts at issue in this case.

23 MR. VAN KLEY: Well, it's a pretty  
24 critical general question. It's very applicable to  
25 whether or not all of these old studies provide any

1 useful information for today. He's talking about the  
2 general principles of how you do a proper wildlife  
3 survey and this question is directly applicable to  
4 that.

5 MS. FLINT: Mr. Shieldcastle just  
6 testified based on habitat and he has not pointed to  
7 any facts that show that the habitat in this project  
8 area has changed in the last eight years.

9 ALJ SANYAL: Carolyn, may I have the  
10 question read back, please?

11 (Record read.)

12 ALJ SANYAL: Your objection is overruled.  
13 You may answer.

14 THE WITNESS: Okay. I can put it to this  
15 specific project if that's what you would like.

16 I can't say because I haven't conducted  
17 the studies either, but until those studies are done  
18 no one can really answer that. It's not just acreage  
19 percentages. It's the quality of those acreages as  
20 well, and land sat, and whatever type of remote  
21 sensing would be done to look at the breakdown. It  
22 doesn't get at those questions or sections of the  
23 questions.

24 A good example is the bald eagle. The  
25 population has extremely exploded in the past couple

1 decades and in this region especially in the past  
2 decade. The growth of the population extending from  
3 the Lake Erie population, the Marsh region, is  
4 expanding down the Sandusky drainage and is now  
5 spreading out across the landscape, so the amount of  
6 nests that are in the area now are totally not even  
7 related to what it was a decade, nearly a decade ago.  
8 The only way to look at that and look at the  
9 potential risk is to do, you know, new studies to  
10 look at that.

11 As far as habitat, no, I can't say  
12 there's been any major changes but that's what a  
13 study is for is you design the study to look at what  
14 is the quality of the habitat which affects breeding  
15 birds. It does affect migrating birds as well. It's  
16 a little different, they use the habitat differently  
17 than a breeding bird. The very same species is  
18 almost a different bird and the different life cycles  
19 of it.

20 So, again, it goes back to the study  
21 design and doing the proper studies to get at the  
22 question which again is, is there any risk to these  
23 populations that are resident or passing through the  
24 area.

25 Q. (By Mr. Van Kley) With respect to the

1 eagle populations in or near the project area, do you  
2 know whether those populations have changed over  
3 time?

4 A. They have expanded just unbelievable.  
5 When I -- I can still remember the first nest in the  
6 region was the Fort Seneca nest on the Sandusky  
7 River. Then they started to expand to the Old Fort  
8 nest which is a little further up the river, a nest  
9 over east of, I believe south of Clyde actually. The  
10 Pontiac nest which is just across the county border  
11 in Huron County and, since then, things are starting  
12 to fill in.

13 Having worked intimately with the species  
14 for nearly 30 years where we monitor every nest in  
15 the state of Ohio, I feel very comfortable that we  
16 were doing every nest until about 2000. At that  
17 point the population was expanding into portions of  
18 the state that it's not -- you're not going to find  
19 every nest. They can hide for a while. We started  
20 getting reports in the second year that, yeah, that  
21 nest was there last year type of thing.

22 We had a volunteer program that basically  
23 some of these nests had somebody monitoring that bird  
24 every day during breeding season, and breeding season  
25 is really -- actually birds right now are working on

1    nests. The day length is the driver of behavior, so  
2    we have eagles that are working on nests right now.  
3    As days get a little shorter as we get into December,  
4    that will shut them down hormonally. Then we get  
5    into January and the days start getting longer and  
6    the hormones will kick back in and they will start  
7    the sequence.

8                As the days get longer, that changes the  
9    hormone level from nest building into egg laying and  
10   on through. So that was really, you know, you're out  
11   looking for nests at that time. You're not going to  
12   find really nests in June or July and, if you look at  
13   the timing of some of these surveys, that's when they  
14   were done. It's not the time to look for bald  
15   eagles.

16               The new nest that now is -- the Republic  
17   nest was the nest that shifted this project the first  
18   time around, basically shut it down and the footprint  
19   had to be changed for that nest which is due south of  
20   the -- if you look at the old footprint and the newer  
21   footprints, it's a result of that nest to a big  
22   extent.

23               Now with the Weller nest dead center in  
24   this footprint that kicks it into Category 1 under  
25   the Eagle Conservation Plan from Fish and Wildlife



1 Service. Now, that's a voluntary program just as the  
2 state protocols are voluntary as well and it gives  
3 guidance. It's not actually study designs per se.  
4 It's the types of studies you should be doing, not  
5 necessarily how you exactly do it, and that's where  
6 our concerns are coming from, it's how they're done,  
7 the design itself. But in Category 1 under that,  
8 it's basically modify or you abandon.

9 Q. Now, so with regard to the studies that  
10 Republic Wind did in 2011 and 2012 on bald eagles, is  
11 the information obtained in those studies still  
12 representative of conditions today?

13 A. The nests that were located, my  
14 understanding from reading was that actually going  
15 out and looking for nests really wasn't done much.  
16 It was relying on the state and federal telling them  
17 where the nests were at, so that caused a little  
18 pause to me as well, you know, actively going out and  
19 trying to find these things. All those pairs are  
20 still in existence that was included in those, plus a  
21 large variety, probably more than we know right now.

22 The map that was put in as part of my  
23 written testimony, working off of sitings that have  
24 been done in the past year, to me indicates, from my  
25 experience working with the eagles in and out of all

1 their behaviors, there could be two more nests within  
2 or very close to the footprint because of the  
3 activity levels.

4 And that's kind of how we really, over  
5 the years starting -- I started working on the  
6 project in the mid '80s and was in charge of it until  
7 I retired in 2008. A lot of our first information  
8 come from the general citizenry, "We're seeing eagles  
9 here." What are the ages, what does the bird look  
10 like. It tells me a lot about the potential of what  
11 the bird is doing there.

12 The reports that we got here, that were  
13 forwarded on to me, were all adults, generally pair  
14 movement. That's a territorial behavior which we  
15 want to start looking at closer. The observations  
16 are coming out with definite loci of activity which  
17 means these are important areas to that bird.

18 Under the Eagle Conservation Plan, the  
19 nest is one important area, feeding areas, loafing  
20 areas are all important areas, and you link those  
21 together to help form a territory. The territory is  
22 what's important to that conservation plan and to  
23 what the state program has always been.

24 We don't collect the data now since I  
25 retired but it's still the responsibility of the

1 agency, but looking at those loci, there are loci to  
 2 the southeast and southwest of the Weller nest which  
 3 I would say is part of that pair. I can't guarantee  
 4 that, it takes a study to go out and look at it,  
 5 where are the birds moving back and forth. You don't  
 6 go out in June and do it. You do it throughout the  
 7 entire life nesting period which would be starting  
 8 now through then because, when you get into June, the  
 9 young could have already fledged off the nest. I  
 10 wouldn't expect necessarily to find a bird in June at  
 11 the nest.

12 So that territory, the territories of  
 13 these inland birds are roughly around a 2-1/2 to  
 14 3-mile radius around the nest. It's related to  
 15 neighbor bird pairs, any time a new pair comes in.

16 I'm sure -- looking at that nest, visual  
 17 observation, it wasn't the greatest day we had, it  
 18 looks like that nest was probably there in 2018 as  
 19 well. There was definitely demarcation in the nest  
 20 that gives -- looking at that pair, that nest has  
 21 been present for two breeding seasons. There's been  
 22 no studies to look for it.

23 Q. Okay. Now --

24 ALJ AGRANOFF: If I can just ask one  
 25 clarifying question. A number of times in your

1 response you talked about "we" and you also talked  
2 about when you were retired and you said "the  
3 agency."

4 THE WITNESS: Right.

5 ALJ AGRANOFF: So if you could just  
6 clarify who the "we," the "agency," and where you  
7 retired from --

8 THE WITNESS: Okay.

9 ALJ AGRANOFF: -- so that there's  
10 context.

11 THE WITNESS: My feeling, I always kind  
12 of use "we" because none of us worked in a vacuum and  
13 it takes a lot of people to do it. The "we" during  
14 that time frame was the agency which is the Ohio  
15 Division of Wildlife. I was in charge of Wetland  
16 Wildlife Research for the State of Ohio which the  
17 eagle program was under. It was my responsibility  
18 for the recovery of that species along with a lot of  
19 other species projects, mammals, as well as birds.

20 The "we" there was the division staff.  
21 Depending on what part of the state the nest was in,  
22 there was different staff involved in monitoring.

23 The "we" also included the Eagle  
24 Volunteer Monitoring Program. We had about 150  
25 volunteers that we put through training on what

1 you're looking at, the different behaviors to  
2 interpret what was going on with the nest. The birds  
3 are very -- each bird is an individual and they  
4 really act as individuals in many things, but there  
5 are very common behaviors that can tell you what's  
6 happening in that nest even though you can't see,  
7 whether they're on eggs, on young, what's going on.

8 We gave them the training on it. They  
9 became our eyes and ears. When I started the program  
10 it was --

11 ALJ AGRANOFF: That's okay, I was just  
12 looking for the context.

13 THE WITNESS: Okay.

14 ALJ AGRANOFF: Thank you.

15 THE WITNESS: Did I get all three? I  
16 retired in January of 2009.

17 ALJ AGRANOFF: Okay. Thank you.

18 Q. (By Mr. Van Kley) In your previous answer  
19 you also mentioned "the project." What was that  
20 project?

21 A. I believe it was the Republic.

22 Q. No, I mean you talked about the project  
23 concerning eagle monitoring.

24 A. It was the Bald Eagle Recovery Plan for  
25 the State of Ohio.

1           Q.    Okay.  Since we're talking about the  
2   Eagle Conservation Plan guidance, why don't we talk  
3   about that a little bit more.  When did you first  
4   become aware of the U.S. Fish and Wildlife Service  
5   Eagle Conservation Plan guidance?

6           A.    It would -- it was really early on.  I  
7   had a lot more knowledge of it in draft form and  
8   that's why the question was asked how familiar was I.  
9   I hadn't really looked at the plan much since 2014,  
10  '15, somewhere in there, to be honest.  The reason  
11  being was I had some pretty good idea of what was in  
12  it.  It really does not go into the strong study  
13  design, you know, rigorous-type stuff, it's more  
14  guidelines.

15                I was requested by the Wildlife Society,  
16  which is the professional organization for wildlife  
17  management, the same as AMA is for the medical  
18  profession, as one of five individuals to review the  
19  draft of the Eagle Conservation Plan.

20                It was very strongly written for golden  
21  eagles because the primary authors were from the  
22  west, working on the golden eagle.  One of the  
23  reasons that I was involved was to try to make it a  
24  little more balanced toward bald eagles as well  
25  because it's a very different bird.  They're not even

1 closely related, totally different habitats, and the  
2 risk and mitigation is very different for the two as  
3 well.

4 One of the main mitigations, for example,  
5 for the golden eagle is to modify poles, electric  
6 poles. I guess the problem is with them landing on  
7 the pole and being electrocuted. We have that  
8 problem with red-tailed hawks here in Ohio.

9 In my 30 years with bald eagles, we never  
10 had a bald eagle land on a pole and be electrocuted.  
11 They fly into the lines and get electrocuted because  
12 their wingspan is so great, they hit the wire, flip,  
13 and the other wing will catch the other wire and be  
14 electrocuted. Flying into things is probably the  
15 number one mortality in Ohio for the bird we could  
16 find. So that was -- I became pretty familiar with  
17 it at that time, but I was really looking at more,  
18 you know, is it really covering the bald eagle.

19 Having since now recently read over the  
20 thing again, there was definitely an attempt to make  
21 it a little bit more for both species. It's just a  
22 lot less is known about bald eagles right now. The  
23 wind industry is now moving into what we call bald  
24 eagle habitat, so I think all results are going to be  
25 changing in the next decade or so as far as what is

1 the risk for that species. Golden eagles, there's no  
2 question what the risk is there. There's a lot been  
3 done and it's a problem for them.

4 So, as far as, you know, the early part,  
5 yeah, quite a bit involved in looking at it for the  
6 bald eagle because it is the Eagle Conservation Plan.

7 Q. Okay. Does the Fish and Wildlife Service  
8 still use that Eagle Conservation Plan guidance to  
9 determine risk to bald eagles?

10 A. It's still used for guidance to try to  
11 reduce risk. It has a whole series of layers. It's  
12 built to fit within the 2012 guidelines for wind  
13 industry, wildlife wind. Those things went through a  
14 lot of iterations as well. Again, I was somewhat  
15 more familiar with them in earlier stages in draft  
16 than the final.

17 But they have three categories where it  
18 starts at, and to meet Category 1, which is high  
19 risk, is to have an important eagle area within the  
20 footprint which a nest is one of those and then it  
21 goes -- well, how you go through the tiers of the  
22 plan has to do with which category you start out in.  
23 The idea is to get yourself into a Category 3. If  
24 you can't get out of Category 1, they're pretty clear  
25 as to what the results are.



1           Again, it's voluntary which means the  
2       company doesn't have to follow it. If they don't,  
3       then they are open to the bald eagle -- bald eagle  
4       and eagle protection act and everything they can  
5       bring down on people in an organization, but they try  
6       very hard to create how you can reduce risk.

7           And they recognize too that, you know,  
8       you can't always reduce -- no one expects it to be to  
9       zero. You would like to think you could. It's not  
10      realistic to put on any company. It's just are they  
11      really making a good-faith effort to try to reduce  
12      that risk and they move forward with it.

13          It's not been updated. It's getting  
14      really a little bit dated now as well. You're  
15      looking at, you know, it's 2013. There's a lot more  
16      out there. They do have the ability to bring new  
17      studies in and how they discuss how they might, you  
18      know, recommend going in on a given project.

19          Q.    Okay. You mentioned the Category 1  
20      scenario from the Eagle Conservation Plan guidance.  
21      Could you explain what that is?

22          MS. FLINT: Objection. I think this has  
23      nothing to do with the cross-examination. I don't  
24      know that we're here for an instruction or a class on  
25      what the eagle conservation guidance is, how it

1 evolved. This is totally irrelevant.

2 MR. VAN KLEY: Well, they brought it up.  
3 They brought up the Eagle Conservation Plan guidance  
4 and asked Mr. Shieldcastle about it and attempted to  
5 show that the Republic Wind project complies with the  
6 Eagle Conservation Plan guidance and I'm simply  
7 asking the witness whether it does.

8 MS. FLINT: And the witness answered the  
9 question, did the studies, the applicable studies  
10 here comply with that guidance and he said yes, so I  
11 don't understand why we're talking about what the  
12 guidance entails.

13 MR. VAN KLEY: Well, because I'm asking  
14 follow-up questions to exactly that question which is  
15 does it entirely comply, and I think the witness's  
16 answer in that regard was incomplete because he  
17 wasn't allowed to explain his answer. He was asked  
18 for a yes or no answer.

19 ALJ SANYAL: I think the witness  
20 responded that it complied, so I'm inclined to agree  
21 with Ms. Flint here. I'll give you some very brief  
22 leeway but I do want to note that I would instruct  
23 your witness to maybe keep his responses to the point  
24 a little bit more because I'm having a little bit of  
25 trouble following personally.

1 MR. VAN KLEY: Okay. All right.

2 Q. (By Mr. Van Kley) With regard to  
3 counsel's question about whether the Republic Wind  
4 study of eagles complied with the Eagle Conservation  
5 Plan guidance, do you have any elaboration on your  
6 answer that would clarify it?

7 MS. FLINT: Objection. I don't know what  
8 you could clarify on when the response was yes, it  
9 complies.

10 MR. VAN KLEY: Well, that's what I'm  
11 asking him.

12 MS. FLINT: And he's leading the witness.

13 ALJ SANYAL: Okay. Hang on just one  
14 second. Your objection is sustained. We're going to  
15 move on from that question.

16 Q. (By Mr. Van Kley) Let's talk about  
17 protocols and I think that you were attempting to  
18 make a distinction in your cross-examination between  
19 protocols and design studies. Do you recall that --

20 A. Yes, I do.

21 Q. Okay. Is there a difference between a  
22 protocol and a design -- a design for a survey?

23 MS. FLINT: Objection. The line of  
24 questioning I believe Mr. Van Kley is referring to is  
25 the protocols, the study protocols outlined in

1 various documents from ODNR or U.S. Fish and Wildlife  
2 Service, and those protocols and study designs are  
3 what they are. They are what they are. And I guess  
4 I'm not understanding the question, if he could  
5 clarify is he talking about the design studies in the  
6 guidance documents or is he talking about  
7 Mr. Shieldcastle's definition of what is a good study  
8 design?

9 ALJ SANYAL: I think that's an apt  
10 clarification. If you could make your question  
11 clearer, that would be helpful.

12 MR. VAN KLEY: Okay. Well, I'm doing my  
13 best not to lead the witness. If counsel wants me to  
14 be more direct and leading, I can do that rather than  
15 asking questions in a general fashion, but I can be  
16 more specific on this one.

17 Q. (By Mr. Van Kley) Let's just start with  
18 the basics. What is a protocol with regard to  
19 studying wildlife?

20 A. That varies, I mean, as to what the  
21 protocol is written for. The protocols here really  
22 are guidance on the type of studies to do, not  
23 exactly how to do them which is design. The protocol  
24 is not necessarily getting at the question that was  
25 asked as well. That's for the Applicant to do.

1           So the difference in this case here as an  
2     example, using the state protocol, is the protocol is  
3     an incomplete design to be honest. It doesn't give  
4     you all the details that really necessarily need to  
5     be done.

6           MS. FLINT: Objection.

7           ALJ SANYAL: What's the objection?

8           MS. FLINT: He's conflating what are in  
9     the study designs for a -- for the studies at issue  
10    here with, again, his idea generally of what a study  
11    design should be. I don't understand the relevancy  
12    of this line of questioning.

13          ALJ SANYAL: Overruled. You can clear  
14    that up on cross.

15          Q.     (By Mr. Van Kley) Did you finish your  
16    answer?

17          A.     I think so.

18          Q.     You think so? Okay. All right.

19                 Do the protocols for the U.S. Fish and  
20    Wildlife Service and ODNR for studying wildlife with  
21    respect to wind projects place a limitation on the  
22    field studies that the Applicant for the wind project  
23    is allowed to conduct?

24          A.     No.

25          Q.     Now, you were asked whether you have

1 personally implemented the ODNR or the U.S. Fish and  
2 Wildlife Service protocols for any of the studies  
3 that you have performed on wildlife. Do you recall  
4 those questions?

5 A. Yes, I do.

6 Q. Okay. Why did you not use those  
7 protocols for any of the wildlife studies that you've  
8 done?

9 MS. FLINT: Objection. Mr. Shieldcastle  
10 has said that he has never done a bird or bat study  
11 in relation to a wind project, so why would he ever  
12 have the need to use those protocols?

13 MR. VAN KLEY: Well, that may be  
14 Mr. Shieldcastle's answer, so I think that can be  
15 explained. I'm just following up on her question.

16 ALJ SANYAL: Overruled.

17 A. No, I haven't because it's incomplete  
18 design and it wasn't getting at the questions we were  
19 working on at the time. It just does not meet -- the  
20 protocols give a direction. You're to do a point  
21 count, you're to do a mist netting. It doesn't go  
22 into the design criteria of doing that. So it's not  
23 robust enough for really any of the things that I  
24 have worked on.

25 ALJ SANYAL: Mr. Shieldcastle, just to

1 clarify though, you've never, however, conducted a  
2 bat or bird survey with relation to a wind turbine  
3 project.

4 THE WITNESS: No, I have not.

5 Q. (By Mr. Van Kley) Is there any difference  
6 in designing a wildlife study, a bird and bat study  
7 for the purpose of siting a wind turbine project  
8 versus a bird and bat study for the purposes that  
9 you've conducted it?

10 A. Well, with what is included in the  
11 protocols, really no because it's telling the type of  
12 the survey to do. The differences come back to the  
13 question that's being asked as to how you then would  
14 design that into the details of the study to gather  
15 data at the proper times of the year and in the  
16 proper ways for the species in question.

17 Q. You were asked some questions about some  
18 post-construction studies that were done at wind  
19 projects. I believe you were asked about 100  
20 post-construction studies that were done, so let's  
21 talk about that for a little bit. Have you done  
22 any -- have you -- are you familiar with the studies  
23 that were done generally speaking?

24 A. Generally speaking, yes.

25 Q. Okay. And how did you become familiar

1 with those studies?

2 A. The concern is as to the risk to birds  
3 and bats and wanting to understand better as to  
4 what's been out there. Seeing the literature and  
5 some of the PR that's done and then wanting to  
6 understand were the studies done well, was the study  
7 design really getting at the question that's really  
8 out there.

9 Our first attempt to get that data was  
10 basically stonewalled by the company in western Ohio.  
11 They didn't want their data out there. In fact,  
12 ultimately filed suit against the State of Ohio to  
13 keep them from releasing the data. A neighboring  
14 company actually sat down and met with us.

15 The first company did let us -- they had  
16 a little bit of information they passed out to us in  
17 a meeting we had with several of their executives and  
18 lawyers; just enough to realize there's significant  
19 concerns on our part here.

20 But the neighboring company that was  
21 working on the neighboring wind farm that's in the  
22 state of Ohio, we met with them and they gave us the  
23 whole thing. And just first starting to look at  
24 that, the design, how it was done, there was a lot of  
25 real pattern for me. And in talking with a couple



1 experts in the country that have been doing a lot of  
2 this work, a considerable amount of work primarily  
3 out west, was seeing the same things on different  
4 ways of reducing that end-of-the-road mortality  
5 figure. And so, you know, as we've gotten deeper  
6 into it, you're starting to see the different layers  
7 of where -- what appears to be a conscious effort to  
8 reduce the mortality figure that comes out at the  
9 end.

10 Q. What do you mean by that?

11 A. There are multiple studies -- most  
12 everything in post-construction is related to  
13 mortality. The state protocols, the amendment in  
14 2013 gives two options on ways studies can be done in  
15 the state and that's really what we've worked under  
16 as of now.

17 It does give a fairly decent layout of  
18 how you conduct a study but there's nothing in it at  
19 all as to how you analyze that data, and that's where  
20 what we're seeing in post-construction has been the  
21 analytical manipulations that are going on.

22 At the same time there's new work that's  
23 being done that shows that a human is probably not  
24 the right creature to be out there looking for a dead  
25 bird. There's other methods that can be much more --

1 that do away with a lot of the uncertainty right now.  
2 Because of the uncertainty, there's two major studies  
3 that have to be done as part of any post-construction  
4 search for efficiency.

5 No two people have the same site plan and  
6 everything of finding the birds that are out there,  
7 so you really have to look at their ability to find a  
8 bird. It's called detection probability. That  
9 detection probability is to correct the actual number  
10 found. If you go out and say you find five birds,  
11 how many really were out there? So you have to know  
12 what was the chance of the observer finding that bird  
13 in the first place, so that's one correction factor.

14 The second correction factor is scavenger  
15 rates. While we are limited in our ability to find  
16 things, you know, pretty much due to our sight, other  
17 creatures are out there that are looking for the same  
18 things that are much better equipped and they're  
19 working at hours before we even go out because we  
20 don't see well in the dark. So you have to determine  
21 what is the scavenger rates in a given area because  
22 was that object even available for an observer to  
23 find. So both of those studies have to be done.

24 And then there's ways then that you can  
25 manipulate that to reduce it. The whole idea is you

1 use these two to correct the actual mortality in the  
2 estimator, which there's several different estimators  
3 available right now but they both all need that  
4 correction factor put in there, and the objective is  
5 to try to get that correction factor to 1. What you  
6 find is all there is, that reduces that mortality  
7 rate and that is really where our concern is as far  
8 as, again, trusting the data.

9           The average in the country right now is  
10 2-point-something birds per turbine. That's given  
11 different ways, nameplate versus number of turbines.  
12 There's a lot of different ways that can be given.  
13 Most studies I've had a chance to review or have been  
14 reviewed in the literature do not cover the entire  
15 year but then they basically call it a year  
16 mortality.

17           The study in Ohio under option B of the  
18 protocol only had to go out to a 98-meter circle on  
19 some turbines, and other turbines only 60 meters, and  
20 then the majority of turbines you just did the -- the  
21 turbine pad and access road. The idea was to cut  
22 down the amount of effort it really had to take by  
23 the company, you know, to really do that. It's an  
24 expense on the company, there's no question about it.

25           Q.    So with respect to the 100

1 post-construction studies, who performed those  
2 studies?

3 MS. FLINT: Objection.

4 A. I've --

5 MS. FLINT: Objection. The -- first of  
6 all, this is going way beyond the cross-examination  
7 again. The purpose of this hearing is not to give  
8 a -- a study on what these studies are and  
9 Mr. Shieldcastle's opinion on whether he agrees with  
10 them or not. And Mr. Shieldcastle testified that he  
11 is -- of the hundreds of post-construction monitoring  
12 reports that have been done, he has reviewed one.

13 MR. VAN KLEY: Well, there's several  
14 things wrong with that objection. First of all, he  
15 was asked about the studies, and I'm probing his  
16 knowledge with respect to those studies.

17 Secondly, the questions asked of him were  
18 designed, by counsel, to demonstrate that  
19 post-construction studies for a wind turbine project  
20 that's been built are -- show there is very little  
21 impact to birds, and Mr. Shieldcastle definitely has  
22 an opinion about that which he should be allowed to  
23 express; so my questions are natural follow-ups to  
24 the questions she asked.

25 MS. FLINT: My questions about

1 post-construction monitoring, there were maybe two  
2 and none of them had to do with the results of those  
3 studies. I never once asked about the results of the  
4 studies.

5 ALJ SANYAL: Mr. Shieldcastle, how many  
6 of these post-construction reviews have you --  
7 post-construction reports have you reviewed?

8 THE WITNESS: With the complete data set,  
9 just the one.

10 ALJ SANYAL: Okay. I think you can --

11 MR. VAN KLEY: Well, I do have a reaction  
12 to that, Your Honor, which is that --

13 ALJ SANYAL: I mean is that an objection  
14 or just a reaction?

15 MR. VAN KLEY: Well, it's additional  
16 argument on the objection which is that -- that the  
17 information that counsel was inquiring about, with  
18 respect to 100 post-construction studies, is from  
19 literature and there is other literature about the  
20 accuracy and the nature of these studies which I  
21 think is important for context as to his answers to  
22 her questions.

23 Her questions were obviously designed to  
24 show that post-construction studies show there's no  
25 problem. There's plenty of literature out there,

1 which I'm happy to explore with the witness, that  
2 show that those post-construction studies are not  
3 accurate.

4 MS. FLINT: Again, I don't mean to  
5 belabor but, again, I never once asked about the  
6 results of the study. Not once. This is going way  
7 beyond cross-examination.

8 ALJ SANYAL: Okay. I'm going to  
9 partially grant your objection, Ms. Flint.

10 Mr. Van Kley, what we're going to do here  
11 is with regard to the one post-construction report  
12 he's reviewed, whatever that data and information is  
13 as it relates to this project, he can -- you can ask  
14 him questions about that.

15 MR. VAN KLEY: Okay. All right.

16 Q. (By Mr. Van Kley) First of all, with  
17 regard to the data for the project that you reviewed  
18 the data on, first of all, identify that wind  
19 project.

20 A. Timber Road.

21 Q. Okay. Is that a wind project that  
22 operates in Ohio?

23 A. Yes.

24 Q. Okay. Does it operate in northern Ohio?

25 A. Van Wert and I believe Paulding County.

1           Q.    Okay.  And with respect to that data,  
2   you've reviewed the data?

3           A.    Yes.

4           Q.    And did you formulate any opinions with  
5   regard to whether or not -- let me just back up.

6                   Did you also review the -- the protocol  
7   for conducting or collecting the data?

8           A.    The Ohio protocol, yes.

9           Q.    Yeah.  With respect to this particular  
10   project, do you know what procedures the wind company  
11   used to compile that data?

12          A.    Option B of the protocol was the  
13   guidelines they used.

14          Q.    So specifically how did they -- how did  
15   they evaluate the mortalities from the wind project?

16          A.    They did land searches of the three  
17   categories.  There's a formula on how many turbines  
18   in each of the categories they have to do.  The  
19   purpose of it is to reduce the onus on the company,  
20   what they have to, because that's Option A, you do  
21   all the turbines all the time.  So in each of the  
22   three categories is also a time limit; once a week,  
23   once every 10 -- I don't remember the exact things.

24                   So one thing is then they're averaged  
25   which, you know, I personally can't see how you can

1 confuse, you know, doing a circle of a 98-meter  
2 radius being anything related to just doing a road.  
3 So you come up with an average of a number.

4 The other -- another area that cut  
5 corners and reduced the estimated mortality was using  
6 their own data. They only went out 98 meters. The  
7 fall zone can be much farther than that. There's  
8 been studies to determine how far a bird or bat could  
9 fall from a turbine strike. It all depends on what  
10 the winds are, where they hit the turbine, all that  
11 kind of stuff, a lot of things go into that.

12 Their own data, the linear fit line  
13 showed about 120 to 130 meters, so their own data  
14 said birds were falling beyond the 98 meters. They  
15 used zero. They did no looking at all. It's just a  
16 zero added onto what is found.

17 They then went -- in their detection  
18 probability they broke the species down into small  
19 birds, large birds, and bats. It changed two or  
20 three times in their report as to what a large bird  
21 was and the number of large birds. That was really  
22 kind of hard to follow as to whether this was just  
23 typos or what and it came up with a percent of  
24 detection on each of the three.

25 If I remember correctly, and this is



1 strictly going off of memory, large birds were  
 2 relatively high which you would kind of expect.  
 3 Large birds was primarily red-tailed hawk, things  
 4 like that. It was in the low 90s, I believe. Birds  
 5 and bats were down in the 50, 60 percent. It was  
 6 really a fairly high percentage looking at some other  
 7 studies. You know, it's in the literature of what  
 8 that percentage is and some new literature that's out  
 9 there as well.

10 Q. And what do you mean by the percentage?

11 A. In other words they found, let's use  
 12 55 percent for a bat. I'm not saying that is exactly  
 13 correct. If there's 100 bats out there, observers  
 14 found 55 of them so 45 went unnoticed. So that would  
 15 be held correct that if you found 10 and you saw  
 16 half, well that means there's 20.

17 The scavenger trials that were done, the  
 18 company did a 40-day trial. The trial -- the length  
 19 of the trials expanded. It started out at 14 days,  
 20 then 20, and now they're doing kind of regular-basis  
 21 40-day trials.

22 The idea is that, you know, you put out  
 23 specimens to see if they disappear. It's not things  
 24 that actually hit the turbines necessarily. What you  
 25 want to find out is, you know, is the local possum or

1 raccoon population, cat or rat or fox or crow or  
2 whatever are taking these before a human observer can  
3 get out there to locate them. A human observer can't  
4 be faulted for not finding something if it's gone  
5 before they ever get out there.

6 The data for that project, at about 20  
7 days, about half of the specimens were gone and then  
8 it flatlined. Most likely it mummified or basically  
9 deteriorated to the point where it's not attractive  
10 to a scavenger. That percentage and how long they  
11 last then can help correct what you find. If it does  
12 last after 20 days and you're checking every 7 days,  
13 you have more than one opportunity to find them  
14 credibly. So that can be used to help correct that  
15 detection-rate probability.

16 But the first real hint that there's  
17 really some real manipulation going on are the  
18 average length of stay of a large bird on site was  
19 84 days in a 40-day trial. That's just not possible  
20 but that was what was written into the report, which  
21 basically said if it got hit, it got counted because  
22 it reduced that detection rate to 1 because they  
23 said, you know, the birds -- because every time you  
24 go through an iteration where you could possibly go  
25 out and look, there's a chance of ultimately finding

1 that bird.

2 So it's just a series of manipulations  
3 to -- and that all happens before it goes into the  
4 estimator. Once it goes into the estimator, whatever  
5 it kicks out is what it kicks out, and it's the same  
6 company that's doing most all of the studies  
7 post-construction in this part of the country.

8 What we saw from the other project that  
9 we did get to talk to the people on was the same  
10 company and it was the Blue Creek Wind Farm and some  
11 of the same things were being told to us there --

12 Q. Okay.

13 A. -- on how they did their studies.

14 MR. VAN KLEY: All right. Very good. I  
15 have no further questions.

16 ALJ AGRANOFF: I have one clarifying  
17 question and that is the data that you were just  
18 discussing, the post-construction data --

19 THE WITNESS: Correct.

20 ALJ AGRANOFF: -- where is that  
21 information being reported?

22 THE WITNESS: They have to report that to  
23 both the State and U.S. Fish and Wildlife Service as  
24 part of those. Blue Creek, we FOI'd to get that  
25 information. The State wanted to give it to us and

1 notified the company you're going to give it to us  
2 unless you file, and they filed.

3 ALJ AGRANOFF: Where, within the State of  
4 Ohio, is that information being reported?

5 THE WITNESS: Division of wildlife.

6 ALJ SANYAL: Recross? Do you need a few  
7 moments?

8 MS. FLINT: I don't think so.

9 - - -

10 RECROSS-EXAMINATION

11 By Ms. Flint:

12 Q. Mr. Shieldcastle, are you aware of ODNR's  
13 and U.S. Fish and Wildlife Service's role in  
14 coordinating with the Ohio Power Siting Board and its  
15 Staff on a proposed wind project's impacts or  
16 potential impacts on birds and bats?

17 A. Pretty much, yes. I mean, the DNR sits  
18 on the Power Siting Board. I'm not sure that really  
19 answered your question.

20 Q. And again, you are not -- your testimony  
21 is not that Republic Wind's studies did not comply  
22 with ODNR and U.S. Fish and Wildlife's protocols,  
23 correct?

24 A. It complied with the intent. I'm not  
25 sure I would go as far as to say --

1           Q.    Your previous testimony was that you  
2   acknowledged and agreed that the studies that were  
3   performed here were done in accordance with U.S. Fish  
4   and Wildlife Service's applicable guidelines and  
5   ODNR's applicable protocols, correct?

6           A.    Correct.

7           MS. FLINT:  I have nothing further.

8           ALJ SANYAL:  Okay.  So I have quite a few  
9   questions.

10          THE WITNESS:  Okay.

11                                 - - -

12                                 EXAMINATION

13   By ALJ Sanyal:

14          Q.    Just so I understand, your testimony  
15   today is if ODNR has approved pre-construction  
16   monitoring protocols and whatever studies the Company  
17   has done under those protocols, the Company should  
18   still go beyond those studies it has completed?

19          A.    It's my understanding the Company's  
20   responsibility is to meet the question of the Power  
21   Siting Board.  The guidance provided by, in this case  
22   the State but to the same extent the federal  
23   guidelines as well is just to give kind of a roadmap  
24   of things that they think should be done, but they do  
25   not go into the detail that really is necessary of a

1 complete study design because --

2 Q. So you --

3 A. -- places are different.

4 Q. Okay. So you think the ODNR protocols,  
5 that are in place today, do not go toward answering  
6 the questions posed by the Power Siting Board.

7 A. No, I do not; and from discussions with  
8 them, they do not either.

9 ALJ SANYAL: When you say "they do not,"  
10 who is "they"?

11 THE WITNESS: Division of Wildlife, I'm  
12 sorry.

13 Q. Okay. So you're saying the federal  
14 government doesn't believe that?

15 A. I've not talked with the federal  
16 government at all. Ohio Division of Wildlife, their  
17 protocols.

18 Q. Okay.

19 A. They are looking at revising the  
20 protocols.

21 Q. Okay. And have you conducted any studies  
22 to demonstrate that the habitat within the project  
23 boundary of this case, of Republic Wind, has changed  
24 since 2011?

25 A. No, I have not.

1           Q.    And then can you help me understand  
2 why --

3           A.    Ma'am, if I just --

4           Q.    Yeah, yeah, of course.

5           A.    What I said on that, it really wasn't  
6 something -- I don't know but, you know, a study  
7 maybe should be done to see if it's changed.

8           Q.    But you haven't conducted any --

9           A.    No.

10          Q.    -- correct?

11                Okay. Help me understand why you think  
12 the studies should be conducted within the footprint  
13 of this project; why studies conducted around the  
14 footprint are not enough.

15          A.    The question is, what is the risk of the  
16 project, and the project footprint is what the  
17 project is occurring on. I'm trying to think how  
18 best to explain this.

19          Q.    Take your time.

20          A.    Surrounding areas could be used as  
21 supplemental. No different than a literature review.  
22 I don't see a problem with that at all. But to  
23 directly say it relates directly to the project  
24 footprint until there is competing studies to test  
25 for differences, you can't say it's the same.

1 I mean that's the standard operating  
2 procedure is before you can lump things, you have to  
3 test for differences. If they're not different then  
4 they can be lumped. But until you do that test,  
5 which can be relatively a simple type of testing,  
6 until then, it's not -- it may -- it may indicate but  
7 not really necessarily support.

8 Q. Okay. I have some questions with regard  
9 to your prefiled testimony, so if you'll turn to that  
10 so we can follow along together. I'm starting on  
11 page 2, line 22, and here you say "I developed the  
12 original Avian Concern Zones for the DNR relating to  
13 wind power initiatives and associated risk to  
14 wildlife."

15 A. Yes.

16 Q. Do you see that?

17 A. Yes.

18 Q. So are those concern zones related to  
19 Republic Exhibit 33, Applicant's Exhibit 33, or in  
20 any way are they related?

21 A. Yes, that map is in there.

22 Q. Okay.

23 A. In looking at it, there does not appear,  
24 one, to be any alterations to what was originally  
25 done.



1 Q. Okay. Will you help me locate the map?

2 A. It's page 19 of 40, Figure 1.

3 Q. Okay.

4 A. At that time this is pre them developing  
5 a protocol. We developed the concern zones. This  
6 was off of basically the knowledge we had of how  
7 birds operate in the state. This is an avian -- this  
8 gives a starting point.

9 Q. Okay. So you developed this map --

10 A. Correct.

11 Q. -- and your testimony today is --

12 A. It looks a lot nicer now.

13 Q. Okay. But it hasn't materially changed.

14 A. No, it hasn't. It's not been updated.

15 Q. Okay.

16 A. The circles you see in orange are eagle  
17 nests, so between when this was done, I can't say  
18 it's not been updated at all since 2009, but it's  
19 obviously not been updated recently.

20 Q. Okay. And just so I -- help me  
21 understand what this map depicts.

22 A. Well, the purpose of creating the concern  
23 zones was to give information to initiatives,  
24 power-initiative applicants if you were going to  
25 build in one of these zones, at that time the feeling

1 was red represented high risk, there was a lot of  
2 bird activity. And it wasn't whether it was -- you  
3 know, it was bird activity at some point of the year.  
4 If you're going to do that, that the original was it  
5 would require three years of pre-construction data  
6 and three post, minimum.

7 The orange would require at least two.  
8 And if you went to the -- I guess yellow and orange  
9 is really somewhat similar. Orange is just a  
10 modification of the yellow, primarily again dealing  
11 with eagle nests. And if you were in the green, then  
12 we felt one year pre would be adequate.

13 This was going off of literally basically  
14 no data to base on. The idea being that these would  
15 be -- incoming data would be informative and adjust  
16 as we gather data. That's really what the protocol  
17 then was developed for.

18 Q. I think you've given me enough  
19 information --

20 A. Okay.

21 Q. -- on this map.

22 A. Okay.

23 Q. So let's turn to page 4. And then on  
24 line 19, you make a reference to "nocturnal migrating  
25 landbirds."

1           A.    Correct.

2           Q.    Can you -- will you let us know which  
3 birds you're referring to here?

4           A.    Okay. Landbirds are pretty, you know,  
5 there's a lot of different -- I mean I can go through  
6 the whole list that would fit that.

7           Q.    Just give us a highlight.

8           A.    It's what we think of as songbirds --

9           Q.    Okay.

10          A.    -- primarily. The vast majority, not  
11 all, but the vast majority of these migrate at night  
12 so they spend their night in migration. They are the  
13 ones that pretty much all, especially eastern U.S.  
14 studies, the data that is out there in  
15 post-construction, they make up the vast majority of  
16 mortality. They're flying at night, they can't see  
17 things up in the air column, they're using the air  
18 column habitat which we don't have really any  
19 particular protections for.

20          Q.    So I'm going to stop you because I just  
21 wanted to know what kind of birds.

22          A.    Okay.

23          Q.    Thank you.

24                Page 7, you have an example here, on  
25 lines 4 through 7, of a documented migrant. When was

1 this study conducted? What is this study? I'm  
2 having trouble understanding this information you've  
3 given us.

4 A. Okay. This is out of a long-term study  
5 started in 1978. It's been ongoing.

6 Q. This is when you were at ODNR?

7 A. No. This is my own. It's not part of  
8 Black Swamp Bird Observatory. It's my migration  
9 study. It started in 1978 when I started the work on  
10 there. It's still in active data collecting now.  
11 We've got several different papers and publication in  
12 different segments right now. It takes a lot of  
13 years to really have data worth trying to publish.  
14 The process of this, this is mist netting of birds.

15 Q. Okay.

16 A. And this example here is one species. It  
17 was a least flycatcher which does not breed in Ohio.  
18 It's strictly a migrant bird. There may be some  
19 isolated in northeast Ohio in that little segment of  
20 habitat but they're strictly a migrant bird through  
21 Ohio especially for us in the western portion of the  
22 state. That was captured. We had a major northeast  
23 storm come in which occurs every year --

24 Q. When was this?

25 A. I cannot give you the exact year. It was

1 in the past ten.

2 Q. Okay.

3 A. And it has been documented and in some  
4 radar work now, too, is birds will reverse migrate to  
5 get away from bad weather. Especially in Lake Erie  
6 in the spring, the lake is a lot colder than the land  
7 and the air. So if we get wind off the lake, the  
8 lakeshore can be a lot -- 20 degrees cooler than  
9 10 miles inland and these birds back off to get away.

10 This individual was captured just north  
11 of Columbus, so he had backed up half of the state to  
12 get away from this massive storm that came in. They  
13 turn around and they go back north. We have got  
14 other anecdotal examples of that.

15 Q. Okay. I think that's enough with regard  
16 to that particular example.

17 A. Okay.

18 Q. If you look at page 14, line 4, you have  
19 a statement in here that says "This appears to  
20 contradict DNR's position that a Project must collect  
21 its own data." Where are you getting this conclusion  
22 from?

23 A. I believe it may be somewhere else in  
24 here, but that was the direct word from the Chief of  
25 Division of Wildlife. It was when we met with the

1 Blue Creek people when he was trying -- the Division  
2 was trying to help assist in getting the data  
3 released.

4 And one of their objections -- and I  
5 understand their objection -- was, you know, that we  
6 put all this money into this study and, you know, if  
7 we put it out into the public realm then a competitor  
8 can use it for their project and not have to spend  
9 this. And he made the statement that, in Ohio, every  
10 project has to do their own data.

11 Q. Okay. Thank you.

12 And then my last question, if you turn to  
13 page 20, lines 3 and 4. Here you say "A statistical  
14 mean is inappropriate since it will dilute diversity  
15 and underestimate avian value of the study area."  
16 Could you explain that a little further?

17 A. Okay. Species richness is a total of the  
18 species seen on a site so it's just additive. You  
19 may collect it each time you're out, there's X number  
20 of species. To really look at diversity that a site  
21 may have, it's the total species. You may have 25  
22 species one day and 10 another day depending on the  
23 time of year.

24 That average isn't giving -- it's  
25 underrepresenting the avian value of the study area

1 because the total number of species richness you have  
2 is what the total is. You don't add up, you know,  
3 you got 20 today, 10 of them tomorrow, some of them  
4 are the same, it's individual species. So  
5 representing total species should be what is used and  
6 not a mean.

7 Q. And you're contending that Republic has  
8 used a mean?

9 A. That's what they did in their studies.

10 ALJ AGRANOFF: Is that the similar  
11 concern that you express on page 22 of your  
12 testimony?

13 THE WITNESS: What line, sir?

14 ALJ AGRANOFF: Line 3 in particular.  
15 About the use of averages.

16 THE WITNESS: It's not the exact same as  
17 the richness question. This has to do with, again,  
18 the individual sites that they looked at are  
19 different and they should be tested for similarity  
20 before you just add them together.

21 One site may have been much more --  
22 this -- I think does this have to do with the bat,  
23 yeah, bats -- may be more, much more at risk than the  
24 other sites which should be looked at separately  
25 rather than just adding them all together and coming

1 up with some mean.

2 ALJ AGRANOFF: So your contention is,  
3 again, that the reporting was done on an average  
4 basis.

5 THE WITNESS: Correct, yes. That  
6 similarity, yes.

7 ALJ SANYAL: Okay. Any questions based  
8 on my questions and --

9 MR. VAN KLEY: No, none from me.

10 ALJ SANYAL: Okay.

11 MR. PARRAM: One second, Your Honor.

12 MS. FLINT: I have no questions. Thank  
13 you.

14 ALJ SANYAL: Okay. Well, thank you,  
15 Mr. Shieldcastle. You may step down.

16 And would you like to admit your exhibit?

17 MR. VAN KLEY: Yes, I sure would. We so  
18 move to admit Local Residents Exhibit 23.

19 ALJ SANYAL: Any objections?

20 Hearing none, it is admitted.

21 (EXHIBIT ADMITTED INTO EVIDENCE.)

22 ALJ SANYAL: And then we also have  
23 Republic Exhibit 33.

24 MS. FLINT: Yes, Your Honor, we move to  
25 admit.



1 ALJ SANYAL: Okay. Any objections?

2 MR. VAN KLEY: No.

3 MS. BAIR: No.

4 MR. DeVINE: No.

5 ALJ SANYAL: It's admitted.

6 (EXHIBIT ADMITTED INTO EVIDENCE.)

7 ALJ SANYAL: Okay. Let's go off the  
8 record.

9 (Discussion off the record.)

10 (At 11:55 a.m. a lunch recess was taken  
11 until 1:00 p.m.)

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1 Wednesday Afternoon Session,  
2 November 13, 2019.

3 - - -

4 ALJ SANYAL: Let's get back on the  
5 record.

6 Mr. Van Kley, we thought that perhaps we  
7 should just go ahead and introduce the testimony of  
8 the Local Intervenors and ask you the questions that  
9 we have --

10 MR. VAN KLEY: Okay.

11 ALJ SANYAL: -- and then go forward with  
12 Mr. Stains.

13 MR. VAN KLEY: Okay.

14 ALJ SANYAL: Okay. So would you like to  
15 introduce those --

16 MR. VAN KLEY: Yes.

17 ALJ SANYAL: -- exhibits.

18 MR. VAN KLEY: So the first exhibit that  
19 we would like to mark is the Direct Testimony of  
20 Crystal Hoepf which we would like to mark as  
21 LR Exhibit 18.

22 The second exhibit would be the Direct  
23 Testimony of Dawn Hoepf which we would like to mark  
24 as LR Exhibit 19.

25 The next exhibit we would like to mark is

1 the Direct Testimony of Ann Wright, which has been  
2 marked as LR Exhibit 20.

3 The next exhibit we would like to mark is  
4 the Direct Testimony of Chris Zeman which we would  
5 like to mark as LR Exhibit 21.

6 And then the last one would be the Direct  
7 Testimony of Aaron Boes which we would like to mark  
8 as LR Exhibit 22.

9 ALJ SANYAL: Okay. I'm going to go ahead  
10 and ask my questions first and then Mr. Agranoff  
11 will. So if you'll turn to Ms. Dawn Hoepf -- "Hep"?  
12 "Hepf"?

13 MR. VAN KLEY: "Hep." The "f" is silent.

14 ALJ SANYAL: Okay. Ms. Dawn Hoepf's  
15 testimony. Is Ms. Hoepf's property within the  
16 project area? And I'm looking at page 2, lines 5 and  
17 6, specifically.

18 MR. VAN KLEY: Yes, it's within -- or,  
19 wait.

20 ALJ SANYAL: I mean it says "our home and  
21 property are located near a number of turbine sites,"  
22 but I'm not sure if her home is within the project  
23 area.

24 MR. VAN KLEY: Within the boundaries of  
25 the project area. I mean she's here. She says yes.

1 Do you want to put her on the stand to ask that?

2 ALJ SANYAL: Yeah.

3 MR. VAN KLEY: Okay.

4 ALJ SANYAL: If you're here, why don't  
5 we.

6 MR. VAN KLEY: Go ahead. So I will  
7 present the witness with LR Exhibit 19, then, that  
8 she can use if she needs it.

9 ALJ SANYAL: Sure. Just so the record is  
10 clear, Exhibits 18 through 22 have been marked as you  
11 have indicated.

12 (EXHIBITS MARKED FOR IDENTIFICATION.)

13 (Witness sworn.)

14 ALJ SANYAL: You may be seated.

15 - - -

16 DAWN HOEPF

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

19 EXAMINATION

20 By ALJ Sanyal:

21 Q. I just have a few questions for you. So  
22 if you'll turn to page 2 of your testimony and  
23 lines 5 through 6. My question is, is your property  
24 within the project area?

25 A. Yes, it is.

1           Q.    Okay.  And then I'm looking at Question  
2    7.  I know you have a map attached to this but the  
3    map that I printed out wasn't in color.  So with  
4    regard to Question 7, are some of these sightings  
5    within the project area or all of the sightings of  
6    these bald eagle nests within the project area?

7           A.    Of the -- of the nests that I've seen,  
8    one is in approximately the center of the project  
9    area.

10          Q.    Okay.  And the others are not.

11          A.    The others are outside the project  
12   border.

13                ALJ SANYAL:  Okay.

14                Do you have any questions?

15                Okay.  I don't have any other questions.

16                Do you have -- does anyone have any  
17   questions based on my few?

18                MR. VAN KLEY:  No.

19                ALJ SANYAL:  Okay.  Thank you, Ms. Hoepf,  
20   you may step down.

21                Okay.  So any objections to Ms. Dawn  
22   Hoepf's testimony being admitted?  And that is  
23   Exhibit 19.

24                MR. PARRAM:  None.

25                MS. BAIR:  No.

1 ALJ SANYAL: Okay. That one is admitted.

2 (EXHIBIT ADMITTED INTO EVIDENCE.)

3 ALJ SANYAL: And then one moment.

4 With Mr. Zeman's testimony --

5 MR. VAN KLEY: He is here too --

6 ALJ SANYAL: Okay.

7 MR. VAN KLEY: -- if you'd like to ask

8 those questions of Mr. Zeman.

9 ALJ SANYAL: Sure.

10 MR. VAN KLEY: It's his lucky day. He  
11 didn't have to come, he did anyway and this is what  
12 he gets.

13 ALJ SANYAL: Thank you for coming.

14 THE WITNESS: Thank you.

15 (Witness sworn.)

16 ALJ SANYAL: You may be seated.

17 - - -

18 CHRIS ZEMAN

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

21 EXAMINATION

22 By ALJ Sanyal:

23 Q. Mr. Zeman, I just have one question. In  
24 lines 7 through 8, again I just want to clarify that  
25 your home is within the project area?

1           A.     No.  It's just outside the project area.

2           ALJ SANYAL:  Okay.  Okay.  That's all the  
3 questions I have.

4           THE WITNESS:  Thank you.

5           ALJ SANYAL:  Thank you very much.

6           I assume no one else had any questions?

7           Okay.

8           MR. PARRAM:  And, your Honor, just for  
9 the record, for LR 18 through 22, I don't expect any  
10 cross-examination as I've indicated to Mr. Van Kley.  
11 We're not waiving any arguments with respect to the  
12 accuracy of any of the testimony or the documents,  
13 but I don't have any cross-examination for any of the  
14 witnesses.

15           ALJ SANYAL:  Thank you, Mr. Parram.  I  
16 believe you indicated that via e-mail.

17           MR. PARRAM:  Thank you.

18           ALJ SANYAL:  Any objections to LR 21  
19 being admitted?

20           Okay.  LR 21 is admitted.

21           (EXHIBIT ADMITTED INTO EVIDENCE.)

22           ALJ SANYAL:  Then I have a similar  
23 question for Ms. Wright.

24           MR. VAN KLEY:  She's not here.

25           ALJ SANYAL:  Okay.  Is Ms. Wright's

1 property within the project area?

2 MR. VAN KLEY: I don't know. I don't  
3 know the answer to that question.

4 ALJ SANYAL: Can we maybe find out the  
5 answer at some point?

6 MR. VAN KLEY: Sure, yeah, we can find  
7 out.

8 ALJ SANYAL: Okay. With just that  
9 clarification pending, are we okay with submitting  
10 this to the record, this testimony?

11 Okay.

12 MR. VAN KLEY: What form would you like  
13 us to provide that information?

14 ALJ SANYAL: Just verbally --

15 MR. VAN KLEY: Okay.

16 ALJ SANYAL: -- on the record --

17 MR. VAN KLEY: Okay.

18 ALJ SANYAL: -- whenever you have it --

19 MR. VAN KLEY: Sure.

20 ALJ SANYAL: -- during this hearing.

21 Okay. LR, is this 20? LR 20 is  
22 admitted.

23 (EXHIBIT ADMITTED INTO EVIDENCE.)

24 ALJ AGRANOFF: With respect to Crystal  
25 Hoepf, is she here?



1 MR. VAN KLEY: She's not, no, but Dawn is  
2 her mother-in-law so I'm betting she would know the  
3 answer if you're going to ask where she lives.

4 ALJ AGRANOFF: I want to know whether or  
5 not she resides within the project area.

6 FROM THE AUDIENCE: She just stepped out  
7 to contact Ms. Wright, I believe.

8 MR. VAN KLEY: Oh. Would you go ask her  
9 to come back in.

10 ALJ AGRANOFF: And then, similarly, I'd  
11 like to know whether or not the eagles that are  
12 discussed in her testimony, whether those were  
13 observed within the project area or outside of the  
14 project area.

15 MR. VAN KLEY: Yeah, that information you  
16 can see in the testimony itself because the map, the  
17 map will show you the locations of all the sightings  
18 that are described in her testimony.

19 If we're looking at Crystal Hoepf's  
20 testimony, Exhibit G shows you where the eagles were  
21 seen that Crystal personally saw and they're denoted  
22 by the Xs on that -- on that map. And you'll see  
23 there's one X just outside of the boundary of the  
24 project area where you see that number, it looks like  
25 a 6 there, and then the rest of the Xs are located

1 within the boundary of the project area.

2 And then Crystal Hoepf also did a  
3 compilation, which you will see marked as Exhibit H  
4 of her testimony, which shows the locations of the  
5 eagle sightings and the eagle nest sightings of all  
6 of our witnesses that she compiled using the maps  
7 that are attached to everybody else's testimony.

8 ALJ AGRANOFF: And then specifically how  
9 are they denoted? Is it the dots?

10 MR. VAN KLEY: Yes. On Exhibit H of  
11 Crystal Hoepf's testimony, the black dots signify the  
12 locations at which one or more eagles were seen on  
13 one occasion. The circles that have black dots in  
14 them are locations of eagle nests. And then the  
15 circles without any black dots in them are areas in  
16 which multiple eagles are seen over a period of time.  
17 And all of that -- all of those sightings that are  
18 noted on Exhibit H of Crystal Hoepf's testimony are  
19 described specifically in the testimony of the other  
20 persons who are testifying for us.

21 ALJ AGRANOFF: So with respect to  
22 Exhibit H, that's just a compilation without any  
23 specific identification of any of the specific  
24 witnesses who have provided these inputs.

25 MR. VAN KLEY: Right.

1 ALJ AGRANOFF: Okay.

2 MR. VAN KLEY: And if you go to the  
3 specific descriptions in the other witnesses'  
4 testimony, you can look at the maps that they  
5 attached with their eagle sightings and match it to  
6 what Crystal Hoepf put in her summary map.

7 ALJ AGRANOFF: Okay. Any additional  
8 questions of counsel?

9 MR. PARRAM: No, Your Honor.

10 MR. VAN KLEY: Do you want to put this on  
11 the record?

12 ALJ AGRANOFF: Yes, please.

13 MR. VAN KLEY: Why don't you just go back  
14 up there. I think you're still under oath; is that  
15 right? Or you can just say it from here. Is that  
16 okay?

17 ALJ AGRANOFF: She can say it from there  
18 as though she's testifying.

19 MS. D. HOEPF: The original map, she was  
20 within the boundary line; and now, as they've shrunk  
21 the boundary, she is on the edge of it.

22 ALJ AGRANOFF: Adjacent abutting or --

23 MS. D. HOEPF: Abutting.

24 ALJ AGRANOFF: -- adjacent to?

25 MS. D. HOEPF: She is abutting. The line

1 comes down on the road in front of their house but  
2 stops.

3 ALJ AGRANOFF: So she is right on the  
4 line.

5 MS. D. HOEPF: Uh-huh.

6 ALJ AGRANOFF: Any objection to the  
7 admission of LR Exhibit 18?

8 There being none, LR Exhibit 18 shall be  
9 admitted as part of the record at this time.

10 (EXHIBIT ADMITTED INTO EVIDENCE.)

11 ALJ AGRANOFF: With respect to  
12 LR Exhibit 22, are there any objections to the  
13 admission of that particular exhibit?

14 MR. PARRAM: Your Honors, I'm sorry, I  
15 did have a clarifying question with respect to  
16 Ms. Hoepf's location of her residence. Is it on the  
17 line or -- I wasn't sure if it was on the line within  
18 the project footprint or out on the line outside of  
19 the project footprint. I'm just trying to get  
20 clarification.

21 MR. VAN KLEY: I believe it would be on  
22 the line just outside of the footprint. It would be  
23 adjacent. It would be adjacent to the footprint of  
24 the project area.

25 ALJ AGRANOFF: That's not what I thought

1 I heard before. I thought she said it abutted.

2 MS. D. HOEPF: Can I look at the -- can I  
3 look at the map? May I look at the map?

4 ALJ AGRANOFF: Sure.

5 MS. D. HOEPF: And you're asking about  
6 Crystal's not -- not Dawn's, correct?

7 ALJ AGRANOFF: Mr. Parram, what was your  
8 question specific to?

9 MR. PARRAM: The last, the last one we  
10 were talking about. I apologize.

11 MS. D. HOEPF: So may I approach and show  
12 you on the map?

13 ALJ AGRANOFF: You can, yes.

14 MS. D. HOEPF: I can?

15 ALJ AGRANOFF: Please come forward.

16 Let's -- for the record's clarity, if you  
17 can please identify what it is that you're looking  
18 at.

19 MS. D. HOEPF: I'm looking at the exact  
20 location of Crystal Hoepf's home.

21 ALJ AGRANOFF: What is the document  
22 you're looking at?

23 MS. D. HOEPF: The document is the  
24 project area, turbine location, map of transportation  
25 it says in the corner of it.

1 ALJ AGRANOFF: Mr. Van Kley, has that  
2 been marked previously as an exhibit?

3 MR. VAN KLEY: Show me what you're  
4 looking at. Yes, she is looking at Crystal Hoepf's  
5 testimony, Exhibit G.

6 ALJ AGRANOFF: Please come forward.

7 Okay. With respect to that document --

8 MS. D. HOEPF: Her home is that black X  
9 right there and this is the project border; so within  
10 the project but right there on the line.

11 ALJ AGRANOFF: So, again, you're stating  
12 that she resides exactly on the line.

13 MS. D. HOEPF: Uh-huh. Yes.

14 ALJ AGRANOFF: Thank you.

15 MS. D. HOEPF: And Ann Wright is within  
16 the project.

17 ALJ AGRANOFF: Ann Wright resides within  
18 the project?

19 MS. D. HOEPF: Resides within the  
20 project.

21 ALJ AGRANOFF: Okay. Thank you.

22 Mr. Parram, do you have any further  
23 questions?

24 MR. PARRAM: No, Your Honor. Thank you.

25 ALJ AGRANOFF: Okay. I believe I was

1 just in the process of asking whether there were any  
2 objections to LR Exhibit 22 which is the testimony of  
3 Mr. Boes. Is there any objection?

4 Hearing none, LR Exhibit 22 shall be  
5 admitted as part of the record at this time.

6 (EXHIBIT ADMITTED INTO EVIDENCE.)

7 ALJ AGRANOFF: Now, Ms. Bair, with  
8 respect to Mr. Stains.

9 MS. BAIR: Thank you, Your Honor. Before  
10 calling Mr. Stains to the stand, would you like  
11 Mr. Cole to make an appearance on this record, though  
12 we did file a Notice of Appearance on October 29?

13 ALJ AGRANOFF: It certainly couldn't hurt  
14 since he's here now.

15 MS. BAIR: Thank you.

16 MR. COLE: Good afternoon, Your Honors.  
17 I'm William Cole. I'm an Assistant Attorney General  
18 and I'm representing Mr. Stains and the Department of  
19 Transportation.

20 ALJ AGRANOFF: Thank you. And just to  
21 make it official, if you could please give your  
22 address.

23 MR. COLE: It's the Transportation  
24 Section, 150 East Gay Street, 22nd floor, Columbus,  
25 Ohio 43215.

1 ALJ AGRANOFF: Thank you.

2 MS. BAIR: And Staff calls John Stains as  
3 its witness.

4 ALJ AGRANOFF: Before we actually begin  
5 with Mr. Stains, if I could just seek a point of  
6 clarification, Mr. Cole, with respect to your  
7 participation in this proceeding today. Is it solely  
8 limited for the purposes of providing the Direct  
9 Testimony of Mr. Stains and not for the purposes of  
10 participating in this proceeding in any other  
11 purpose?

12 MR. COLE: Your Honor, I was tasked with  
13 representing him, making objections to any improper  
14 questions that I feel. I don't anticipate asking  
15 Mr. Stains any questions unless perhaps to clarify a  
16 statement he might make. That's about it.

17 ALJ AGRANOFF: But beyond Mr. Stains'  
18 testimony, you are not participating in this  
19 proceeding in any capacity.

20 MR. COLE: That is correct.

21 ALJ AGRANOFF: Okay. Thank you.

22 Please come forward. Please raise your  
23 right hand.

24 (Witness sworn.)

25 ALJ AGRANOFF: Please be seated.



1 Please proceed.

2 MS. BAIR: Thank you.

3 - - -

4 JOHN STAINS

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

7 DIRECT EXAMINATION

8 By Ms. Bair:

9 Q. Could you please state your name and  
10 spell it for the record.

11 A. John Stains. J-o-h-n S-t-a-i-n-s.

12 Q. By whom are you employed and what are  
13 your responsibilities?

14 A. I'm employed by the Ohio Department of  
15 Transportation as a Transportation Engineer. My  
16 responsibilities with the Office of Aviation include  
17 administration of the Ohio Airport Grant program,  
18 Airport Inspection program, and administration of the  
19 Ohio Airport Protection program.

20 MS. BAIR: Your Honor, I'd like to have  
21 marked as Staff Exhibit 3, the Direct Testimony,  
22 Prefiled, by Mr. Stains. I've placed a copy in front  
23 of the witness and Your Honors and the reporter.

24 ALJ AGRANOFF: It shall be so marked.

25 (EXHIBIT MARKED FOR IDENTIFICATION.)

1 MS. BAIR: Thank you.

2 Q. (By Ms. Bair) Mr. Stains, do you have  
3 that document before you?

4 A. Yes, I do.

5 Q. What is that document?

6 A. This is the Prefiled Testimony that was  
7 filed on my behalf.

8 Q. And was this testimony prepared by you or  
9 under your direction?

10 A. Yes, it was.

11 Q. Do you have any changes, corrections, or  
12 additions to make to that?

13 A. I do not.

14 Q. And if I were to ask you the questions,  
15 would your answers be the same as they are in your  
16 Prefiled Testimony?

17 A. Yes.

18 MS. BAIR: Your Honor, I would also like  
19 to have marked as Staff Exhibit 4, an Ohio Department  
20 of Transportation letter, dated September 27, 2019.

21 ALJ AGRANOFF: It shall be so marked.

22 (EXHIBIT MARKED FOR IDENTIFICATION.)

23 MS. BAIR: Do you not have a copy? I  
24 thought I provided two. Do you have it?

25 ALJ AGRANOFF: Yeah, we have it.

1 MS. BAIR: Thank you, Your Honor.

2 Q. (By Ms. Bair) And do you recognize this  
3 document, Mr. Stains?

4 A. Yes, I do.

5 Q. And did you write this letter?

6 A. Yes, I did.

7 MS. BAIR: Thank you. I would submit  
8 Staff Exhibit 3 into the record and Staff Exhibit 4,  
9 subject to cross-examination.

10 ALJ AGRANOFF: Thank you.

11 Mr. Stinson or Mr. Parram?

12 MR. PARRAM: Thank you, Your Honor. Just  
13 for clarity, will Ms. Bair or Mr. Cole be making  
14 objections?

15 MS. BAIR: What was the question?

16 ALJ AGRANOFF: Which of counsel, whether  
17 it be yourself or Mr. Cole, will be the sole counsel  
18 for the purposes of raising objections?

19 MS. BAIR: Your Honor, it was my  
20 understanding that Staff, as required by 4906.10, as  
21 part of the Power Siting Board laws, is required to  
22 consult with the Ohio Department of Transportation;  
23 so, as part of that duty, I was putting him on as a  
24 Staff witness. Mr. Cole is representing him on  
25 behalf of his position at ODOT as his attorney in his

employment.

ALJ AGRANOFF: For purposes of this proceeding and what we're here today for, which of the two of you will be raising objections?

MS. BAIR: I will do that.

ALJ AGRANOFF: Okay. Thank you.

MR. PARRAM: Thank you, Your Honor.

- - -

CROSS-EXAMINATION

By Mr. Parram:

Q. Good afternoon, Mr. Stains. Do you have in front of you Staff Exhibit No. 3?

A. Yes, I do.

Q. And that is your Prefiled Testimony in this case, correct?

A. That's correct.

MS. BAIR: Your Honor -- is your microphone -- or --

MR. PARRAM: Sorry. Can you hear me now?

MS. BAIR: Yes. Thank you.

Q. (By Mr. Parram) You started working at ODOT in 2006, correct?

A. Correct.

Q. And before you joined the Office of Aviation, you worked with the Office of Maintenance

1 Administration?

2 A. That's correct.

3 Q. Before you worked in the Office of  
4 Aviation, you didn't have any involvement with  
5 aeronautical issues?

6 A. No.

7 Q. And before you worked with the Office of  
8 Aviation, you didn't have any duties examining  
9 potential obstructions to navigable airspace.

10 A. No.

11 Q. You're not a pilot.

12 A. No.

13 Q. You haven't worked as an air traffic  
14 controller.

15 A. No.

16 Q. If you go to page 1 of your testimony, on  
17 lines 16 through 17, you indicate that you administer  
18 the Department's Airspace Protection program. Do you  
19 see that?

20 A. Yes, I do.

21 Q. What is the Airspace Protection program?

22 A. The Ohio Revised Code outlines duties  
23 that are assigned to the Department to permit all  
24 structures that impact navigable airspace.

25 Q. As part of that program, does ODOT issue

1 permits to entities that want to construct large  
2 structures?

3 A. Yes.

4 Q. And also as part of that process, ODOT  
5 coordinates with the Ohio Power Siting Board with  
6 respect to projects that may involve the construction  
7 of large structures?

8 A. As part of the program, we issue  
9 determinations to the Ohio Power Siting Board.

10 Q. And your involvement in this case  
11 involves the determinations that you have issued in  
12 this particular case?

13 A. Yes.

14 Q. On pages 3 and 4 of your testimony, you  
15 discuss total economic -- total annual economic  
16 output of the Seneca County Airport, the Sandusky  
17 County Airport, and the Fostoria Metropolitan  
18 Airport. Do you see that?

19 A. Yes.

20 Q. You haven't performed any analysis to  
21 determine whether the wind turbines in this case  
22 would impact the annual economic output of these  
23 airports.

24 A. No, I have not.

25 Q. And you haven't done any independent

1 analysis to determine the number of operations  
2 these -- the number -- to determine how many  
3 operations these airports would either gain or lose  
4 due to the Republic Wind project being constructed.

5 A. I only reported the most-recent data  
6 available.

7 Q. So you don't have any independent  
8 analysis indicating how many operations would be lost  
9 due to the Republic Wind project at these airports.

10 A. No.

11 ALJ AGRANOFF: Just so we can be clear,  
12 is your analysis, that's discussed in lines 9 and 10  
13 on page 4, relative to all of the airports you were  
14 discussing or simply relative to the Fostoria  
15 airport?

16 THE WITNESS: Your Honor, on page 4,  
17 lines 9 and 10, it's referencing the payroll and  
18 economic output for the Fostoria Metropolitan  
19 Airport.

20 ALJ AGRANOFF: Okay. Thank you.

21 Q. (By Mr. Parram) On page 4 of your  
22 testimony, lines 17 and 18, you talk about ODOT  
23 performing a separate and independent analysis based  
24 on the same obstruction criteria detailed in 14 CFR  
25 Part 77. Do you see that?

1           A.    Yes.

2           Q.    What is the separate and independent  
3 analysis you're referring to?

4           A.    The application is known as the 7460-1.  
5 It's a Federal Aviation Administration Notice of  
6 Proposed Construction. It's filed with the FAA. The  
7 FAA performs an analysis and issues a determination  
8 and, as is required by the Revised Code, we also  
9 perform an analysis, independent of the FAA, based on  
10 that information submitted with the 7460.

11          Q.    I want to give a little bit of background  
12 with respect to what this analysis involves. So if  
13 you could, this analysis starts off by determining  
14 whether or not a structure is an obstruction,  
15 correct?

16          A.    That's correct.

17          Q.    In your definition, what is an  
18 obstruction?

19          A.    An obstruction is any structure, proposed  
20 or existing, that exceeds the obstruction standards  
21 set forth in 14 CFR Part 77.

22          Q.    So if a structure is determined to be an  
23 obstruction per Part 77.17 [sic] it is necessarily an  
24 obstruction?

25          A.    Correct.



1           Q.    And ODOT's definition of an obstruction  
2   is the same as the FAA's definition of an  
3   obstruction.

4           A.    Yes.

5           Q.    I think you agreed with me, but let me  
6   just be clear: The determination of whether or not  
7   it's an obstruction is just the first step in your  
8   process.

9           A.    That's correct.

10          Q.    In your experience, ODOT always comes to  
11   the same conclusion with the FAA regarding whether or  
12   not a structure is an obstruction; is that correct?

13          A.    Yes.

14          Q.    In your testimony you refer to ODOT  
15   working with an entity called Federal Airways and  
16   Airspace. What is Federal Airways and Airspace?

17          A.    Federal Airways and Airspace is a private  
18   contractor that we utilize for the bulk of our  
19   airspace analysis.

20          Q.    And Federal Airways and Airspace assists  
21   you in making a determination whether or not a  
22   structure is an obstruction.

23          A.    That's correct.

24          Q.    The final results of the Federal Airways  
25   and Airspace process, it never differs from the FAA's

1 determination of whether or not a structure is an  
2 obstruction.

3 A. No.

4 Q. And nothing comes out of the analysis of  
5 Federal Airways and Airspace that informs your  
6 ultimate decision regarding whether or not an  
7 obstruction should be waived.

8 A. They provide information of whether an  
9 existing or proposed structure exceeds obstruction  
10 standards.

11 Q. So their analysis addresses whether or  
12 not a structure is an obstruction.

13 A. Correct.

14 Q. So I'd like to transition now, we've  
15 talked about the initial step where you make a  
16 determination whether a structure is actually an  
17 obstruction, to whether or not it presents a hazard  
18 to airspace. After you determine a structure  
19 constitutes an obstruction, you have to go forth and  
20 determine whether or not it presents a hazard.

21 A. That's incorrect.

22 Q. So what is your analysis after you  
23 determine that a structure is an obstruction?

24 A. In the case of the Power Siting Board,  
25 we, as part of our determination, identify the

1 obstructions and whether or not those obstruction  
2 standards can be waived or the conditions necessary  
3 to modify the structure to eliminate the obstruction.

4 Q. When you say with respect to Power Siting  
5 Board projects, what are you -- what's the  
6 distinction you're making?

7 A. We issue a determination to the Ohio  
8 Power Siting Board.

9 Q. So with respect to -- with respect to  
10 non-Power Siting Board projects, does ODOT make a  
11 determination of whether or not a structure will  
12 present a hazard to airspace?

13 A. No. We issue either a permit, a permit  
14 with waiver to obstruction standards, or a denial of  
15 the permit.

16 Q. So when you're issuing a permit, you also  
17 have to determine whether or not you will issue a  
18 waiver of the obstruction.

19 A. Correct.

20 Q. So for Ohio Power Siting Board projects,  
21 you first determine whether or not it's an  
22 obstruction, correct?

23 A. Yes.

24 Q. And then if it is an obstruction, you  
25 determine whether or not it will be waived.

1           A.     Partially. We may also identify the  
2 conditions in which the structure should be modified  
3 to eliminate the obstruction.

4           Q.     So let me restate it. In Ohio Power  
5 Siting Board projects, you determine, first, whether  
6 or not it will be an obstruction, correct?

7           A.     Correct.

8           Q.     Then you determine whether or not the  
9 obstruction can be waived, or whether or not there  
10 could be a modification to the structure that would  
11 address the obstruction.

12          A.     That would eliminate the obstruction.

13          Q.     That would eliminate the obstruction.

14          A.     Yes.

15          Q.     How would the -- how would the  
16 obstruction be eliminated?

17          A.     Lowering the proposed structure or moving  
18 it.

19          Q.     So, for example, in our case, how would  
20 the obstruction be eliminated?

21          A.     Could you be more specific? There are, I  
22 think, 50 structures.

23          Q.     Sure. I'll clarify as we move along.

24                   If you go to page 10 of your testimony,  
25 Question 20, and at line 9, you included a statement

1 regarding a decision being made based upon sound  
2 aeronautical principles. Do you see that?

3 A. Yes.

4 Q. How do you define "sound aeronautical  
5 principles"?

6 A. Our statutes and rules don't define  
7 "sound aeronautical principles," so a number of  
8 things are taken into consideration.

9 Q. When you say your statutes, what are you  
10 referring to?

11 A. The Ohio Revised Code.

12 Q. Are you familiar with Ohio Revised Code  
13 4561.341?

14 A. Yeah, I am.

15 Q. What is that statute?

16 A. That's a section of the Revised Code that  
17 somebody references our determination to the Ohio  
18 Power Siting Board.

19 Q. Then are you also familiar with Revised  
20 Code 4561.32?

21 A. Yes.

22 Q. What is that statute?

23 A. In summary, it's the statute that  
24 requires us to issue a permit. I don't -- I don't  
25 know it verbatim.

1 MS. BAIR: Your Honor, I'd like to  
2 provide a copy to the witness --

3 MR. PARRAM: I'm marking one now.

4 MS. BAIR: -- if there's going to be more  
5 questions.

6 MR. PARRAM: I'm actually marking an  
7 exhibit now.

8 MR. COLE: Your Honor, may I ask a  
9 question?

10 ALJ AGRANOFF: Certainly.

11 MR. COLE: I take it from the Court's  
12 earlier determination that only -- there may be only  
13 one objector from this side, and during the testimony  
14 I was thinking a little bit. My interest here is to  
15 defend Mr. Stains during his testimony and not  
16 necessarily would have the same interests as my  
17 colleague, Ms. Bair, and, in that vein, I would ask  
18 the Court permission to object. She may choose not  
19 to object if it's not in her client's interest, but I  
20 would ask the ability to also have the right to  
21 object to any questions. It wouldn't be limited to  
22 only her or me.

23 MR. PARRAM: Your Honor, I -- I think  
24 that's highly unusual. We have one witness on the  
25 stand, usually we have one person putting forth the

1 objections. I'm not concerned about which counsel,  
2 they can choose, but I think there should be just one  
3 individual setting forth the objections. And I'm not  
4 clear on his statement with respect to there's  
5 differing interests between counsel for ODOT and  
6 counsel for Staff, so I believe there should be one  
7 person making the objections for the witness.

8 MR. COLE: Your Honor, I am not  
9 representing Staff or anyone at the Power Siting  
10 Board or the Commission. I'm here, as Mr. Stains is,  
11 as an employee of the State of Ohio and the  
12 Transportation Department, and I am here to represent  
13 him, and I would -- any objections I would make would  
14 be solely in his interest to what would be an  
15 improper question that would be otherwise  
16 objectionable but nothing to do with the interests of  
17 any other party in the case.

18 ALJ AGRANOFF: I understand.

19 At this point in time, I'm going to  
20 continue with the directive that I gave previously  
21 and we'll just have Ms. Bair, I believe you said you  
22 were the one that was going to be speaking. Thank  
23 you.

24 Please continue.

25 MR. PARRAM: Your Honor, may I approach

1 the witness?

2 ALJ AGRANOFF: Certainly.

3 MR. PARRAM: I'd like to have marked, for  
4 purposes of identification, a provision of the  
5 Revised Code, R.C. 4561.32, "Department of  
6 transportation to adopt rules and conduct studies for  
7 investigations." I'm going to mark this as Applicant  
8 Exhibit 34.

9 ALJ AGRANOFF: It shall be so marked.

10 (EXHIBIT MARKED FOR IDENTIFICATION.)

11 ALJ AGRANOFF: Mr. Parram, do you have  
12 copies for us?

13 MR. PARRAM: Oh, I thought I gave you  
14 one. Sorry. A lot of extras.

15 ALJ AGRANOFF: We can share if need be.

16 MR. PARRAM: I think we're good.

17 Q. (By Mr. Parram) Mr. Stains, do you have  
18 Applicant Exhibit 34 in front of you?

19 A. Yes, I do.

20 Q. And is this the Revised Code section we  
21 were just referring to?

22 A. Yes.

23 Q. If you look at the last sentence of this  
24 provision, it indicates "The rules shall also provide  
25 that the department shall base its decision on



1 whether to grant such a waiver on sound aeronautical  
2 principles, as set out in F.A.A. technical manuals,  
3 as amended, including advisory circular 150/5300-13,  
4 'airport design standards'; 7400.2 c,  
5 'airspace procedures handbook,'; and the U.S.  
6 terminal procedures handbook." Do you see that  
7 provision?

8 A. I do.

9 Q. So this provision of the Revised Code, in  
10 this specific section, indicates that waivers should  
11 be based upon sound aeronautical principles, correct?

12 MS. BAIR: Objection. The statute speaks  
13 for itself. He just read it into the record.

14 ALJ AGRANOFF: I'll sustain the  
15 objection.

16 Q. Mr. Stains, does ODOT, when they're  
17 determining whether or not they are using sound  
18 aeronautical principles, rely upon FAA technical  
19 manuals?

20 A. When issuing a permit, yes.

21 Q. Do you not rely on FAA technical manuals  
22 when you are making an OPSB determination?

23 A. They're taken into consideration.

24 Q. But you're not required to rely upon  
25 them?

1           A.    No.

2           Q.    Are you required to rely upon them when  
3 you are issuing a permit?

4           A.    Only a permit with a waiver.

5           Q.    Okay.  So if you are issuing a permit and  
6 you want to make -- when you're making a  
7 determination whether or not you will -- there will  
8 be a waiver, you're required to rely upon these  
9 manuals that are set forth in that sentence.

10           MS. BAIR:  Objection.  Calls for a legal  
11 conclusion.  He is not testifying as an attorney.

12           ALJ AGRANOFF:  Let's try it this way.  In  
13 your normal course of processing applications, what  
14 is it that you rely upon?

15           THE WITNESS:  Your Honor, when we process  
16 applications, 7460 data, we rely on any number of  
17 things.  We take into consideration all of the FAA  
18 technical manuals, the FAA determination, we look  
19 at, you know, sound aeronautical principles can  
20 include how aircraft are moving through the airspace,  
21 other obstructions that come into play that exist,  
22 the existing condition or configuration of an  
23 airport, the future growth plans or further potential  
24 negative growth plans, all those are taken into  
25 consideration in making our decision on whether to

1 grant a permit.

2 ALJ AGRANOFF: Okay.

3 Q. (By Mr. Parram) So when you are -- and to  
4 be clear, is it whether or not -- you take these into  
5 consideration when you're deciding whether or not  
6 you're going to issue a permit?

7 A. Yes.

8 Q. Or do you take these into consideration  
9 when you're deciding whether or not you're going to  
10 issue a waiver?

11 A. A permit with waiver to obstruction  
12 standards.

13 Q. Okay. So when you -- are you required to  
14 rely upon these technical manuals, that are listed in  
15 this provision, when you are issuing a permit?

16 MS. BAIR: Objection. We are not talking  
17 about a permit here. It is irrelevant. We're  
18 talking about a determination for the Power Siting  
19 Board. We're going down a path that isn't relevant.

20 ALJ AGRANOFF: Mr. Parram.

21 MR. PARRAM: Your Honor, it's relevant to  
22 the extent that this provision presumably requires  
23 ODOT to rely upon these technical manuals to  
24 ultimately decide upon a waiver, if that waiver is  
25 based on sound aeronautical principles.

1           To the extent that ODOT makes a decision  
2 to, in permitting cases, to actually rely upon these  
3 technical manuals that are consistent with the FAA  
4 standards, yet for OPSB cases decides they will not  
5 rely upon these standards and apply a completely  
6 different arbitrary standard, I think it's relevant.

7           And to the extent the witness can just  
8 explain what he relies upon in permitting cases or is  
9 required to rely upon in permitting cases, and then  
10 explain what he's required to rely upon in OPSB cases  
11 and actually relied upon, I think those facts are  
12 relevant to the process that took place here.

13           MS. BAIR: Your Honor, I would argue that  
14 he is talking about the permit under the statute that  
15 he is asking which is irrelevant because we're not  
16 talking about a permit. The statute that is relevant  
17 is 4561.341. That is a different statute entirely.

18           MR. PARRAM: Your Honor, I think we have  
19 different legal positions on this provision which we  
20 can argue in brief, but to the extent that the  
21 witness actually either relied upon these manuals or  
22 did not rely upon them in OPSB cases or in permitting  
23 cases, that's what I'm trying to explore, not whether  
24 or not, in his legal opinion, when this provision  
25 applies.

1 ALJ AGRANOFF: I'll allow the question.

2 MS. BAIR: Could you reread the question,  
3 please?

4 MR. PARRAM: Please.

5 (Record read.)

6 A. The answer is no.

7 Q. And so for non-permitting cases, Ohio  
8 Power Siting Board cases, are you required to rely  
9 upon these technical manuals in deciding whether or  
10 not you're going to issue a waiver?

11 ALJ AGRANOFF: Are you asking in Ohio  
12 Power Siting --

13 Q. In Ohio Power Siting Board cases.

14 A. Point of clarity. Am I -- could you just  
15 repeat the question?

16 Q. In Ohio Power Siting Board cases, you  
17 have to make a determination whether or not an  
18 obstruction can be waived, correct?

19 A. Yes.

20 Q. In making that determination whether or  
21 not there will be a waiver, are you required to rely  
22 upon any of these resources listed in the last  
23 sentence of Applicant Exhibit 34?

24 A. We're issuing a determination. We're not  
25 determining -- as part of that determination we're

1 identifying the things that -- modifications  
2 necessary to remove the obstruction to the Ohio Power  
3 Siting Board. We're not approving anything.

4 MR. PARRAM: Can I have my question  
5 reread.

6 (Record read.)

7 A. I don't have the last sentence of 34 in  
8 front of me.

9 Q. Do you have Applicant Exhibit 34 in front  
10 of you?

11 A. Oh, I'm sorry, Applicant Exhibit 34, yes.  
12 The answer is no.

13 Q. So in those circumstances where you  
14 determine that you will grant a waiver in Ohio Power  
15 Siting Board cases, if you're not relying on any of  
16 these resources --

17 MS. BAIR: Objection. He's  
18 mischaracterizing the witness's answer. He didn't  
19 say "any."

20 MR. PARRAM: I'll withdraw the question,  
21 Your Honor.

22 ALJ AGRANOFF: Thank you.

23 Q. (By Mr. Parram) So jumping to page 6 of  
24 your testimony --

25 A. Which page, I'm sorry?

1           Q.    Page 6.  In Question 10 and Answer 10,  
2   you make a reference to 4561.341.  Do you see that  
3   there?

4           A.    Yes.

5           Q.    Am I correct that's the Revised Code  
6   provision that indicates that ODOT will, in Ohio  
7   Power Siting Board cases, make a recommendation to  
8   the Ohio Power Siting Board?

9           A.    No.

10          Q.    What is 4561.341 that you refer to in  
11   your testimony?

12          A.    It outlines that we issue a determination  
13   to the Power Siting Board.

14          Q.    So this provision indicates that, as  
15   opposed to issuing permits, you will issue a  
16   determination to the Power Siting Board.

17          A.    That's correct.

18               MR. PARRAM:  Your Honor, I'm marking as  
19   an exhibit, Revised Code 4561.341, "Office of  
20   aviation to review application," which is referenced  
21   specifically in Mr. Stains' testimony on page 6,  
22   line 6.  I'm marking that as Exhibit -- Applicant  
23   Exhibit 35.

24               ALJ AGRANOFF:  It shall be so marked.

25               (EXHIBIT MARKED FOR IDENTIFICATION.)

1 MS. BAIR: Are you going to provide  
2 copies of that?

3 MR. PARRAM: Yeah. I'm marking it right  
4 now.

5 Q. (By Mr. Parram) Do you have Applicant  
6 Exhibit 35 in front of you?

7 A. Yes.

8 Q. And you've seen this provision of the  
9 Revised Code before?

10 A. Yes.

11 Q. If you go down to the fourth line down,  
12 it indicates that -- I'll just go ahead and read it  
13 to you, make sure we're on the same page. It says  
14 "Pursuant to any consultation with the power siting  
15 board regarding an application for certification  
16 under section 4906.3 or 4906.10 of the Revised Code,  
17 the office of aviation of the division of multi-modal  
18 planning and programs of the department of  
19 transportation shall review the application to  
20 determine whether the facility constitutes or will  
21 constitute an obstruction to air navigation based  
22 upon the rules adopted under section 4561.32 of the  
23 Revised Code."

24 Are you aware if ODOT has adopted rules  
25 with respect to whether or not an obstruction



1 constitutes -- let me restate that.

2 Are you aware if ODOT has established  
3 rules regarding whether or not a facility will  
4 constitute an obstruction to air navigation?

5 A. Yes.

6 Q. Can you turn to page 5 of your testimony.  
7 Are you there?

8 A. Yes.

9 Q. Question and Answer 8, specifically  
10 line 14, you refer to Ohio Administrative Code rule  
11 5501:1-10-05. Do you see that?

12 A. Yes.

13 Q. Are those the rules that ODOT established  
14 to determine whether a facility constitutes or will  
15 constitute an obstruction to air navigation?

16 A. Yes.

17 Q. So do you apply those rules when you are  
18 making a determination or issuing a determination to  
19 the Ohio Power Siting Board?

20 A. Yes.

21 MR. PARRAM: Your Honor, I'm just going  
22 to mark this Ohio Administrative Code provision as an  
23 exhibit as well and I'll provide copies to the  
24 parties. I'm going to mark Ohio Administrative Code  
25 5501:1-10-05, "Standards for determining obstructions

1101

1 and navigable airspace," as Applicant Exhibit 36.

2 ALJ AGRANOFF: It shall be so marked.

3 (EXHIBIT MARKED FOR IDENTIFICATION.)

4 Q. (By Mr. Parram) So do you have Applicant  
5 Exhibit 36 in front of you?

6 A. Yes.

7 Q. What is that document?

8 A. Section 5501:1-10-05 of the  
9 Administrative Code.

10 Q. So this code provision refers to a number  
11 of technical manuals. Are you familiar with these  
12 technical manuals?

13 A. Yes.

14 Q. Have you used these in the past?

15 A. Yes.

16 Q. Did you rely upon any of these technical  
17 manuals in this case?

18 A. The ones that apply were used as  
19 reference.

20 Q. Which ones did you -- which ones did you  
21 reference in this case?

22 A. Federal Aviation Regulations Part 77,  
23 Objects Affecting Navigable Airspace, Title 14, CFR.

24 Q. Anything else?

25 A. FAA Joint Order 7400.2 c, Procedures for

1 Handling Airspace Matters, as amended.

2 Q. So FAA 7400.2 c, is that the most-current  
3 version of this document?

4 A. 2 c is not.

5 Q. What's the most-current version?

6 A. 7400.2 m.

7 Q. So why did you refer to this document in  
8 this case?

9 A. It's reference material.

10 Q. How did you apply it in this case?

11 A. I didn't.

12 Q. So you referred to it and then decided  
13 not to apply it in this case?

14 A. Well, in this case we were not issuing a  
15 permit which includes a full waiver from full  
16 compliance with the obstruction standards.

17 Q. Does 74 -- does -- I'm sorry. 7400.25  
18 you said?

19 A. 7400.2 m.

20 Q. "m." I'm sorry. Does 7400.2 m address  
21 whether or not a structure represents a significant  
22 adverse -- or, whether or not an obstruction will  
23 have a significant adverse affect on navigable  
24 airspace?

25 A. It does as part of the FAA's process.

1 Q. Did you consider whether any of the  
2 structures in this case would be considered --  
3 whether they would have a significant adverse affect  
4 according to the procedures set forth in 7400.25 m?

5 A. I'm not sure I understand the question.  
6 Could you repeat it, please?

7 Q. Sure. After you made a determination  
8 that the structures were an obstruction --

9 A. Yes.

10 Q. -- did you review 7400.25 m?

11 MS. BAIR: Objection. There's no 25 m --

12 MR. PARRAM: I'm sorry.

13 MS. BAIR: -- that the witness has  
14 referred to.

15 ALJ AGRANOFF: I believe, Mr. Parram, it  
16 was 7400.2 m.

17 MR. PARRAM: "n"?

18 ALJ AGRANOFF: "m" as in Mary.

19 MR. PARRAM: I apologize.

20 Q. (By Mr. Parram) Did you refer to 7400.25  
21 m --

22 ALJ AGRANOFF: There's no 5.

23 MR. PARRAM: Oh. Why am I saying 5?

24 (Laughter.)

25 Q. 2 m.

1           A.    It was used as reference.

2           Q.    So, Mr. Stains, in this case, ODOT issued  
3 a determination, an initial determination letter on  
4 July 18, 2019; is that correct?

5           A.    No.

6           Q.    When was the first determination letter  
7 issued in this case?

8           A.    I believe it was in April.

9                   ALJ SANYAL:  If you could use the  
10 microphone, please.

11          A.    It was in April.

12          Q.    That April determination letter indicated  
13 that ODOT couldn't make a determination -- couldn't  
14 issue a determination because the FAA  
15 determination -- the FAA process had not been  
16 completed, correct?

17          A.    That's correct.

18          Q.    So after that initial letter and after  
19 the FAA completed their process, ODOT issued a letter  
20 on July 18, 2019?

21          A.    That's correct.

22                   MR. PARRAM:  Your Honor, I'm marking the  
23 July 18, 2019 letter from ODOT to Mr. Andrew Conway,  
24 Public Utilities Commission of Ohio, which is the  
25 July 18, 2019 ODOT determination letter, I'm marking

1 that as Applicant Exhibit 37.

2 ALJ AGRANOFF: It shall be so marked.

3 (EXHIBIT MARKED FOR IDENTIFICATION.)

4 Q. (By Mr. Parram) Mr. Stains, do you have  
5 Applicant Exhibit 37 in front of you?

6 A. Yes, I do.

7 Q. Have you seen this before?

8 A. Yes.

9 Q. What is this document?

10 A. This is a determination letter issued by  
11 our office to the Public Utilities Commission of  
12 Ohio.

13 Q. The first sentence there indicates that  
14 this was issued pursuant to Revised Code 4561.341.  
15 Do you see that?

16 A. Yes.

17 Q. So I'd like to start in this document  
18 under the section that says "ODOT Analysis of Impact  
19 of the Fifty Wind Turbine Generators." The very  
20 first paragraph.

21 ALJ AGRANOFF: What page, Mr. Parram?

22 MR. PARRAM: I'm sorry. On the first  
23 page, Your Honor.

24 ALJ AGRANOFF: Okay.

25 Q. So the first paragraph talks about how

1 all 50 of the wind turbines would exceed 499 feet  
2 above ground level, AGL, and would constitute an  
3 obstruction to air navigation by exceeding the 14 CFR  
4 Part 77(a)(1) surface by 107 feet. Do you see that?

5 A. Yes. Part 77.17(a)(1).

6 Q. 17(a)(1). As we were talking about  
7 earlier, this provision, this is one provision that  
8 indicates that the structures, all the proposed wind  
9 turbine structures would be considered obstructions.

10 A. Yes.

11 Q. In the next paragraph it talks  
12 specifically about four of the wind turbines would be  
13 considered an obstruction under Part 77.17(a)(2). Do  
14 you see that?

15 A. Yes.

16 Q. And this addresses four turbines in  
17 particular, T1, T8, T48, and T49, and these turbines  
18 are considered obstructions because of the  
19 potential -- potentially exceeding surfaces related  
20 to the Sandusky County Regional Airport.

21 A. That's correct.

22 Q. Explain to me what a Part 77.17(a)(2)  
23 obstruction is.

24 A. Are you asking me to explain what the  
25 17(a)(2) surface is or --

1 Q. Why were these -- why was T1, T8, T48,  
2 and T49 considered an obstruction under Part  
3 77.17(a) (2)?

4 A. Because they exceed the established  
5 surface defined by 17(a) (2).

6 Q. What are those surfaces?

7 A. It's a surface centered on the airport  
8 reference point. It is the greater of 200 feet above  
9 ground or above the airport reference point elevation  
10 for 3 nautical miles. In between 3 and 6 nautical  
11 miles, it increases by 100 feet per nautical mile.

12 Q. At the time you prepared Applicant  
13 Exhibit 37, Sandusky County Airport had communicated  
14 with you; is that correct? Communicated with you  
15 regarding the project.

16 A. The airport manager did.

17 Q. And he indicated that he didn't have an  
18 issue with the project.

19 A. In summary, yes.

20 Q. So let's go to the next paragraph. So in  
21 this paragraph it talks about 33 structures  
22 constituting an obstruction to air navigation because  
23 they exceed Part 77.17(a) (3) for various instrument  
24 flight rule procedures for the Seneca County Airport  
25 and the Fostoria Metropolitan Airport; is that



1 correct?

2 A. That's correct.

3 Q. How did you learn of the -- when did you  
4 first become aware of the obstructions for these 33  
5 turbines?

6 A. I don't remember specifically.

7 Q. Did you first learn of the obstructions  
8 when you received a Determination of No Hazard from  
9 the FAA?

10 A. No.

11 Q. Was it prior to that?

12 A. Yes.

13 Q. Did you -- how do you go about  
14 determining whether or not a structure is an  
15 obstruction prior to the FAA Determination of No  
16 Hazard?

17 A. When the 7460 information is filed with  
18 the FAA, we pull the information directly from the  
19 FAA into our -- into our analysis software. That's  
20 done by our contractor.

21 Q. Federal Airways and Airspace is your  
22 contractor, correct?

23 A. That's correct.

24 Q. So this contractor made a determination  
25 that these structures would be an obstruction prior

1 to the Determination of No Hazard being issued?

2 A. Certainly they received the information.  
 3 I don't know what day it was pulled into the system.  
 4 Typically they run the summary reports at that time.  
 5 I believe they pull these in weekly. So that was  
 6 done by the contractor. Likely the first time I was  
 7 informed or became aware of this project was when it  
 8 went out for public comment.

9 ALJ AGRANOFF: Through the FAA?

10 THE WITNESS: That is correct, yes.

11 Q. So just to quickly summarize, there was a  
 12 determination by ODOT that there be an obstruction  
 13 under 77.17(a)(1) with respect to all the turbines,  
 14 right?

15 A. Correct.

16 Q. And 77.17(a)(2) with respect to four  
 17 turbines, correct?

18 A. Correct.

19 Q. And then an obstruction with respect to  
 20 33 turbines under 77.17(a)(3).

21 A. That's correct.

22 Q. So after you make a determination there's  
 23 going to be an obstruction or that essentially all of  
 24 the turbines constitute an obstruction, you then go  
 25 to the next step to determine whether or not a waiver

1 will be issued by ODOT, or whether or not the  
2 turbines need to be modified to eliminate the  
3 obstruction.

4 MS. BAIR: Objection. There were three  
5 questions in there. It was compound.

6 MR. PARRAM: Let me restate.

7 Q. What is the next step -- what was your  
8 next step after determining that there would be --  
9 that the turbines would -- all of the turbines would  
10 constitute an obstruction?

11 A. The next step was to determine what steps  
12 needed to be taken to eliminate the obstruction.

13 Q. By "eliminate the obstruction," what do  
14 you mean?

15 A. Recommend modifications to the structure  
16 such that the structure would no longer exceed the  
17 obstruction standards.

18 Q. If a -- if a structure exceeds the  
19 obstruction standards, does that constitute a hazard?

20 A. ODOT doesn't determine whether a  
21 structure is a hazard or not.

22 Q. Does ODOT consider whether or not a  
23 structure may present a safety concern?

24 A. Safety is considered but we are not  
25 determining safety or hazard --

1111

1 Q. So the answer to my question is yes?

2 ALJ AGRANOFF: Wait. Let --

3 MR. PARRAM: I'm sorry, I thought he was  
4 done, Your Honor.

5 ALJ AGRANOFF: Go ahead.

6 A. We're only identifying whether it exceeds  
7 obstruction standards.

8 Q. So ODOT considers safety concerns?

9 A. Yes.

10 ALJ AGRANOFF: In what context when you  
11 say they consider them?

12 THE WITNESS: Your Honor, in the context  
13 that all obstructions potentially could create a  
14 safety concern and that our job is to protect the  
15 navigable airspace for the traveling public and so  
16 safety is a consideration always.

17 ALJ AGRANOFF: As part of what analysis  
18 are you determining whether something is a safety  
19 concern?

20 THE WITNESS: In terms of whether, in  
21 this case, modifications are necessary to eliminate  
22 the obstruction.

23 ALJ AGRANOFF: Thank you.

24 Please proceed, Mr. Parram.

25 Q. (By Mr. Parram) Were there any safety

1 concerns with respect to the structures in your  
2 July 18, 2019 letter?

3 A. Yes.

4 Q. What were those concerns?

5 A. With respect to structure T1, the impacts  
6 to the minimum descent altitude for the  
7 non-directional beacon approach to runway 24 at  
8 Seneca County Airport.

9 And with respect to structures T8, T48  
10 and T49, that they exceeded the 14 CFR Part  
11 77.17(a) (2) surface at Sandusky County.

12 Q. You previously indicated that Sandusky  
13 County indicated they didn't have any concerns  
14 regarding T1, T8, T48, and T49, correct?

15 A. That's the discussion I had with the  
16 airport manager, yes.

17 Q. Although he didn't have any concerns, you  
18 decided there was a safety concern.

19 A. Any time an obstruction standard is  
20 exceeded, it is a potential safety concern.

21 MR. PARRAM: Can I have my question read  
22 back?

23 (Record read.)

24 Q. Was it "yes"?

25 A. Potentially, yes.

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1 ALJ AGRANOFF: Your response is that you  
2 decided that there was a potential safety concern?

3 THE WITNESS: Yes.

4 Q. So whenever there is a potential safety  
5 concern, a waiver is required?

6 A. No.

7 Q. Why was a waiver required in this case?

8 A. Because it exceeded obstruction  
9 standards.

10 Q. So any turbine that exceeds an  
11 obstruction standard requires a waiver.

12 A. With respect to this project, we're not  
13 issuing a waiver, we're making a determination of  
14 obstruction standards or of whether the structure  
15 presents -- exceeds obstruction standards and what is  
16 necessary to remove the obstruction, or a statement  
17 that obstruction standards can be waived.

18 MR. PARRAM: Can I have my question  
19 reread.

20 (Record read.)

21 A. No.

22 Q. But, in this case, a waiver was required  
23 for Sandusky County Airport.

24 A. No. We recommended modifications  
25 necessary to remove the obstruction unless we

1 received a statement from the airport authority that  
2 they were willing to essentially give up this  
3 airspace.

4 Q. So if the airport indicates they are  
5 willing to give up their airspace, specifically  
6 Sandusky, then there would be a waiver.

7 A. Well, again, we're not issuing a waiver.  
8 We're only making a determination. In that case if  
9 Sandusky County was willing to give up this airspace,  
10 then those turbines would -- we'd make a statement  
11 that the obstruction standards could be waived.

12 Q. So the answer is yes?

13 MS. BAIR: Objection. The witness  
14 answered his question.

15 MR. PARRAM: I didn't hear an answer.

16 Could you reread the question and the  
17 answer, please. Question and answer.

18 (Record read.)

19 ALJ AGRANOFF: If you could please  
20 provide a yes or no.

21 THE WITNESS: No.

22 Q. (By Mr. Parram) If Sandusky County  
23 indicated in writing, per a resolution, that they did  
24 not have any issues with respect to T1, T8, T48, T49,  
25 they would not meet -- Republic Wind would not be

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1 required to eliminate the obstruction by lowering the  
2 turbine height; is that correct?

3 A. Yes.

4 Q. What are the obstruction standards that  
5 can be waived?

6 A. Potentially any of them.

7 Q. What do you consider when you're deciding  
8 to waive an obstruction standard?

9 A. The opinion of the aviation stakeholders  
10 that are affected.

11 Q. Is Sandusky the aviation stakeholder  
12 affected?

13 A. They're one of them.

14 ALJ AGRANOFF: I was looking for  
15 clarification relative to your question.

16 Q. So is Sandusky -- is Sandusky County --  
17 Sandusky County Regional Airport is the affected  
18 stakeholder with respect to T1, T8, T48, and T49,  
19 correct?

20 A. They are one of them, yes.

21 Q. And for T8, when you initially issue --  
22 when you wrote the July 18, 2019 determination  
23 letter, which airports were impacted by T8?

24 A. The Sandusky County Regional Airport.

25 Q. What about T48?



1           A.    The same; Sandusky County Regional  
2   Airport.

3           Q.    T49?

4           A.    The same; Sandusky County Regional  
5   Airport.

6           Q.    So Sandusky County, as the interested  
7   stakeholder, communicated to you that they didn't  
8   have an issue with the obstruction.

9           A.    Verbally, yes, and it was the airport  
10  manager.

11           ALJ AGRANOFF:  Why don't we go off the  
12  record for a minute.

13                   (Discussion off the record.)

14                   (Recess taken.)

15           ALJ AGRANOFF:  Mr. Parram.

16           MR. PARRAM:  Thank you, Your Honor.

17           Q.    (By Mr. Parram) Mr. Stains, you still  
18  have Applicant Exhibit 37 in front of you.

19           A.    Yes.

20           Q.    Will you turn to page 3 of that document.  
21  At the top it indicates "Structures T8, T48 and T49."  
22  Do you see that?

23           A.    Yes.

24           Q.    So in that sentence, the very last line  
25  indicates that compliance -- or second-to-last line,

1 if the Board of Sandusky County is willing to accept  
 2 the impact to navigable airspace, it indicates  
 3 "compliance with the obstruction standards may be  
 4 waived as long as the conditions of the FAA are  
 5 complied with." Did I read that correctly?

6 A. Yes.

7 Q. And you indicated that -- so let me ask,  
 8 it's your position, when you prepared this letter,  
 9 that the obstructions would cause Sandusky County  
 10 Regional Airport to lose a portion of their airspace?

11 A. That's correct.

12 Q. Explain to me how they're losing a  
 13 portion of their airspace.

14 A. The structures, T8, T48, and T49, exceed  
 15 the 14 CFR Part 77.17(a)(2) surface.

16 ALJ AGRANOFF: What is a "surface"?

17 THE WITNESS: Your Honor, in this case  
 18 it's an imaginary surface. If you can think of an  
 19 upside-down bowl centered on the airport and so this  
 20 imaginary surface exists around the airport and it's  
 21 a defined area where aircraft operate.

22 ALJ AGRANOFF: So when you say that it  
 23 would "exceed the surface," what does that actually  
 24 signify?

25 THE WITNESS: So if you can imagine this

1 upside-down bowl centered on the airport, these  
2 structures, if you could maybe think in 3D, might  
3 penetrate and be visible up through the surface.

4 ALJ AGRANOFF: And when you say these  
5 "structures," meaning the proposed turbines?

6 THE WITNESS: That's correct, yes.

7 MR. PARRAM: So -- did you have another  
8 question, Your Honor?

9 ALJ AGRANOFF: No. You're good.

10 Q. (By Mr. Parram) So explain to me how the  
11 way airplanes would approach Sandusky County Airport  
12 would be changed or impacted due to the obstruction.

13 A. I'm not sure I understand the question.

14 Q. Sure. Do you have any information that  
15 indicates that the way airplanes would fly into  
16 Sandusky County Airport would have to change as a  
17 result of the obstruction?

18 A. Yes.

19 Q. Okay. And how would they have to  
20 approach the airport differently?

21 A. They would have to avoid the areas where  
22 the air turbines exist.

23 Q. And when you made that determination,  
24 what information were you looking at?

25 A. The obstruction standards.

1 Q. So if Sandusky -- so because of the  
2 obstruction, any airplane approaching Sandusky County  
3 would have to avoid that area?

4 A. I'm not -- I'm not sure I understand.

5 Q. Sure. So if -- if Sandusky County  
6 Airport indicated they didn't have a concern, I'm  
7 trying to understand what would be the impact on them  
8 flying into the airport simply due to the fact  
9 there's an obstruction.

10 MS. BAIR: Objection. I'm sorry. Who is  
11 "them"? I didn't understand the question.

12 Q. Sandusky Airport, is there a particular  
13 approach procedure that is impacted due to the (a)(2)  
14 obstruction for Sandusky County Airport?

15 A. By "approach procedure" you're referring  
16 to the instrument approach procedure?

17 Q. Yes.

18 A. No, there's not an instrument approach  
19 procedure impacted.

20 Q. Is it fair to say your concern with  
21 respect to (a)(2), for the (a)(2) obstruction for T8,  
22 T48, and T49, that you believed there was a safety  
23 concern?

24 A. Potentially, yes.

25 Q. And is it fair to say that to the extent

1 Sandusky County Airport was willing to send a letter  
2 indicating it was willing to accept the impact to  
3 navigable airspace, you'd be willing to accept that  
4 potential safety concern?

5 A. Yes, if the airport is willing to  
6 essentially surrender this airspace, the aircraft  
7 use, if they're willing to accept the loss of that  
8 utility by creating this safety concern, then as the  
9 owner of the airport they have that right.

10 Q. And the potential safety concern would  
11 not just address the owner of the airport but other  
12 individuals that are flying into the airport as well.

13 A. Correct.

14 Q. Just to be clear, so in this particular  
15 case you indicated that the waiver -- that compliance  
16 with the -- compliance with the obstruction standards  
17 with respect to T8, T48, and T49 could be waived.  
18 What standards did you rely upon to make that  
19 determination that in this particular case the  
20 standards could be waived?

21 A. If the airport sponsor is willing to give  
22 up this airspace.

23 Q. So that was the only criteria that you  
24 were using. As long as the airport sponsor is  
25 willing to give up the airspace in this case, you're

1 willing to waive the obstruction.

2 A. No other modifications to the airport or  
3 the traffic pattern are necessary.

4 Q. Can you point me to a specific regulation  
5 or manual or standard that says as long as an airport  
6 is willing to waive, then the obstruction will be  
7 waived?

8 A. No.

9 Q. Okay. So with respect to Applicant  
10 Exhibit 37, there were 33 structures that you  
11 determined were 77.17(a)(3) obstructions, correct?

12 A. That's correct.

13 Q. And when you were preparing Applicant  
14 Exhibit 37, you had received communication from  
15 representatives of Seneca County Airport about  
16 concerns; is that correct? Let me restate it.

17 So when you prepared Applicant Exhibit  
18 37, you had previously received communication from  
19 Seneca County Airport about potential impacts on  
20 their NDB approach; is that correct?

21 A. That is correct.

22 ALJ AGRANOFF: Just so the record is  
23 clear, the acronym you utilized?

24 MR. PARRAM: NDB, non-directional beacon.

25 ALJ AGRANOFF: Thank you.

1           Q.     (By Mr. Parram) And actually within  
2     Applicant Exhibit 37, as an attachment, which I guess  
3     would be the fourth from the last page, there's an  
4     April 11, 2018 letter from Brad Newman discussing  
5     some of the concerns with respect to the NDB approach  
6     at Seneca County; is that correct?

7           A.     That's correct.

8           Q.     So although you knew of the Seneca County  
9     Airport's concerns when you were preparing Applicant  
10    Exhibit 37, you did not have any recommendation  
11    regarding a waiver for the obstruction with respect  
12    to those 33 turbines; is that correct?

13          A.     I'm not quite sure I followed the  
14    question.

15          Q.     Sure. In Applicant Exhibit 37, when you  
16    prepared this, you were aware that there was an  
17    obstruction with respect to 33 turbines and it was a  
18    Part 77.17(a)(3) obstruction, correct?

19          A.     Correct.

20          Q.     And although these 33 turbines were an  
21    (a)(3) obstruction, you did not indicate that the  
22    obstruction needed to be waived, correct?

23          A.     I did not -- I'm still not following your  
24    question.

25          Q.     So although -- although 33 of the

1 turbines were Part 77.17(a)(3) obstructions, you did  
2 not recommend that the obstruction be eliminated.

3 A. I did in one case.

4 Q. Which case was that?

5 A. Structure T1.

6 Q. So for the other 32 turbines you did not.

7 A. That is correct.

8 ALJ AGRANOFF: Where is that denoted in  
9 Applicant Exhibit 37?

10 THE WITNESS: Your Honor, on the second  
11 page, the second-to-last paragraph, the heading is  
12 labeled "Structure T1."

13 ALJ AGRANOFF: Thank you.

14 THE WITNESS: And that is addressed  
15 there.

16 ALJ AGRANOFF: Thank you.

17 Q. (By Mr. Parram) How did you make a  
18 determination for those 32 turbines that the  
19 obstruction did not need to be eliminated?

20 A. Based on the feedback, my understanding,  
21 of the letter submitted by Mr. Brad Newman and no  
22 other feedback had been received.

23 Q. So because you had only received that  
24 feedback from Mr. Newman, you determined that the  
25 obstruction for the 32 turbines did not need to be



1 eliminated.

2 A. No. Structure T1, based on the letter  
3 received from Mr. Newman, I made the determination  
4 that the obstruction should be modified to remove the  
5 obstruction. The structure needed to be modified to  
6 remove the obstruction and that was the only one.

7 Q. Just so I'm clear, so for the other 32  
8 turbines that were obstructions, you concluded that  
9 the obstruction did not need to be eliminated.

10 A. At this point in time, yes.

11 Q. Was there any specific manual or standard  
12 or rule you referred to when you concluded the  
13 obstruction did not need to be -- the obstruction did  
14 not need to be eliminated for those 32 turbines?

15 A. It was based on the feedback that we had  
16 received from aviation stakeholders.

17 ALJ AGRANOFF: Could you please repeat  
18 your response?

19 THE WITNESS: It was based on the  
20 feedback we received from aviation stakeholders.

21 ALJ AGRANOFF: Thank you.

22 Q. (By Mr. Parram) Your decision was based  
23 upon feedback from airports.

24 A. And other aviation stakeholders.

25 Q. Can you -- who are those other aviation

1 stakeholders?

2 A. We contacted, as part of our outreach  
3 to -- as part of the FAA circularization process,  
4 various aviation groups such as the Aircraft Owners  
5 and Pilots Association, the Ohio Aviation  
6 Association, the Agricultural Association, the  
7 Medical Evacuation Association, we consider all of  
8 those aviation stakeholders.

9 Q. What did they communicate to you about  
10 the 32 turbines?

11 A. The airport manager for Seneca County, as  
12 I mentioned, provided the letter, and no other  
13 comments specific to those procedures that were  
14 impacted were received.

15 Q. You mentioned the FAA circularization  
16 process. Did you rely on the FAA circularization  
17 process?

18 A. Yes.

19 Q. This was not a separate comment process  
20 by ODOT?

21 A. We encourage people to participate in the  
22 FAA's process but we also receive comments directly.

23 Q. But at this time, in this case, the only  
24 comment you heard with respect to the Seneca County  
25 Airport was from the airport manager for Seneca

1 County.

2 A. The other comments that I included or  
3 that I considered are included in the determination  
4 letter.

5 ALJ AGRANOFF: Is Mr. Newman the airport  
6 manager that you were just referencing?

7 THE WITNESS: Yes, Mr. Newman is the  
8 airport manager for the Seneca County Airport, yes.

9 ALJ AGRANOFF: Okay.

10 Q. (By Mr. Parram) So all the comments you  
11 received regarding the 32 turbines are attached to  
12 Applicant Exhibit 37.

13 A. Partially. They were comments received  
14 on the circularization.

15 ALJ AGRANOFF: And just so that, again,  
16 the record is clear, when you say in response to the  
17 circularization, what is that specific to?

18 THE WITNESS: That's the FAA process of  
19 soliciting public comments on a -- on an aeronautical  
20 study.

21 Q. (By Mr. Parram) And with respect to the  
22 April 11 -- April 11, 2018 letter from Brad Newman  
23 which is included in Applicant Exhibit 37, it's the  
24 fourth from last page or fifth from last page. Are  
25 you there?

1           A.    Yes.

2                   MR. PARRAM:  The letter, for the record,  
3 indicates "Tiffin Aire Inc." on the top.

4           Q.    In the first full paragraph, Mr. Newman  
5 indicates that there are two notable impacts that  
6 have become apparent.  The first being the impact to  
7 the NDB RWY 24 approach at the Seneca County Airport.  
8 Do you see that?

9           A.    Yes.

10          Q.    What's RWY?

11          A.    RWY is an abbreviation for runway.

12          Q.    So it's runway 24?

13          A.    Correct.

14          Q.    The next sentence says "This approach is  
15 the only ground-based approach to this runway and  
16 raising the minimums decreases the efficiency of the  
17 airport by requiring pilots to have better weather  
18 for landing."  Do you know if the NDB is the only  
19 ground-based approach to this runway?

20          A.    Yes.

21          Q.    How did you verify that?

22          A.    I checked the published procedures for  
23 the airport.

24          Q.    Are there any -- are there other types of  
25 ground-based approaches?

1 A. Yes.

2 Q. What are some of those?

3 A. It would be a VOR approach or also an  
4 ILS, instrument landing, or localizer approach.

5 Q. So when you received this letter, did you  
6 do any analysis to determine how many airplanes used  
7 the NDB approach at Seneca County Airport?

8 A. I received the information provided by  
9 the FAA in their determination.

10 Q. Did you do any independent analysis with  
11 respect to the amount of airports that use the NDB  
12 approach?

13 A. I'm sorry, I --

14 Q. Did you do any independent analysis,  
15 outside of the FAA Determination of No Hazard, to  
16 determine how many airplanes would be -- use the NDB  
17 approach for runway 24 at the Seneca County Airport?

18 A. Just the information provided by the  
19 airport manager.

20 Q. Did he specify how many airplanes used  
21 the NDB approach at runway 24 at Seneca County  
22 Airport?

23 A. He did not indicate a number of  
24 operations.

25 Q. Do you have Staff Exhibit 4 in front of

1 you?

2 MS. BAIR: I'm sorry, what was the  
3 reference?

4 MR. PARRAM: Staff Exhibit 4.

5 A. Yes.

6 Q. So Staff Exhibit 4 is a subsequent  
7 determination letter that ODOT issued in the Republic  
8 Wind case, correct?

9 A. That's correct.

10 Q. And if you can -- on page 1, I'd like to  
11 go to the part where it talks about the ODOT analysis  
12 of the impact of the 50 wind turbine generators. And  
13 again, all 50 of the turbines would constitute (a)(1)  
14 obstructions, correct?

15 A. That's correct; Part 77.17(a)(1).

16 Q. And the next section talks about four of  
17 the turbines, specifically T1, T8, T48, T49, are  
18 (a)(2) obstructions; is that correct?

19 A. That is correct; Part 77.17(a)(2).

20 Q. And then in the last paragraph, I'm now  
21 on the second page, 33 of the structures are  
22 considered Part 77.17(a)(3) obstructions, right?

23 A. That's correct.

24 Q. So from the July 18, 2019 determination  
25 to the September 27, 2019 determination letter, all

1 of the obstructions were the same under (a) (1),  
2 (a) (2), (a) (3).

3 A. That's correct.

4 Q. But in Staff Exhibit 4, ODOT came to a  
5 different conclusion with respect to potential  
6 waivers or elimination of obstructions; is that  
7 correct?

8 A. Our determination of the obstruction  
9 standards was the same. We made -- we made  
10 different -- we determined different modifications  
11 necessary to remove the obstructions.

12 Q. Well, there are more turbines identified  
13 in Staff Exhibit 4 that now require a removal of the  
14 obstruction, correct?

15 A. That require modifications to remove the  
16 obstruction, yes.

17 Q. Can you explain to me what information,  
18 after the July 18, 2019 letter, did you receive that  
19 resulted in a different recommendation with respect  
20 to modification of turbine structures to eliminate  
21 the obstruction?

22 A. We received feedback from the airport  
23 manager of the Fostoria Metropolitan Airport.

24 Q. Anything else?

25 A. Additional conversations with Mr. Newman

1 from Seneca County Airport as well.

2 Q. Were those communications with Mr. Newman  
3 in writing?

4 A. No.

5 Q. What additional information did  
6 Mr. Newman provide you that changed your analysis?

7 A. We discussed -- beyond the impact to  
8 minimum descent altitude for the non-directional  
9 beacon approach for Seneca County, we further  
10 discussed the other impacts to the circling area and  
11 missed approach area for that -- for that approach,  
12 and he provided clarification to me that his intent  
13 of the April 18 -- I'm sorry, the April 11 letter was  
14 that he requested the entire approach to be  
15 protected, not just the structure that impacted the  
16 minimum descent altitude.

17 Q. Can you clarify when you talk about "the  
18 entire approach," what are you referring to?

19 A. The full extent of the instrument  
20 approach procedure.

21 Q. How far is the full extent of the  
22 instrument approach procedure?

23 A. In this case they can go out potentially  
24 10 nautical miles. I don't remember on this  
25 particular one but the impacts are identified as part



1 of those 33 turbine structures, and those impacts  
2 include raising the minimum descent altitude on the  
3 initial approach fix and the missed approach, I  
4 believe.

5 Q. So Mr. Newman indicated to you that his  
6 concern was not just the -- did you say the final  
7 approach?

8 A. The minimum descent altitude on the final  
9 approach.

10 Q. Okay. So initially your focus was the  
11 minimum descent altitude on the final approach.

12 A. That is correct; that is what structure  
13 T1 impacts.

14 Q. But after further conversations with  
15 Mr. Newman, he explained that the concern was not  
16 just the minimum descent altitude with respect to the  
17 final approach but the entirety of the approach.

18 A. That is correct.

19 Q. Who initiated those conversations?

20 A. I don't recall.

21 Q. Did you receive any additional  
22 correspondence from Mr. Newman after the July 18,  
23 2019 determination letter?

24 A. Not written, no; only phone  
25 conversations.

1           Q.    How many phone conversations did you  
2   have?

3           A.    It's hard to say.  He also communicated  
4   with my colleague, so maybe four or five total.

5           Q.    Did he express to you that his concerns  
6   about potential impacts to the entirety of the  
7   approach could result in potential safety issues?

8           A.    Yes.

9           Q.    And what were those issues?

10          A.    Specific to raising the minimum descent  
11   altitude for the procedure turn by 100 feet, the  
12   potential impacts to aircraft by being in weather or  
13   not in weather, being in icing conditions or not  
14   being in icing conditions.

15          Q.    Are you distinguishing between weather  
16   and icing conditions?

17          A.    Well, being in clouds or not in clouds,  
18   that's what I'm referring to.  And when I refer to  
19   "weather," icing can be a part of that or it doesn't  
20   necessarily.  Just because you're in clouds doesn't  
21   mean you're in icing conditions.

22          Q.    Is being in clouds a safety issue?

23          A.    Potentially.

24          Q.    When would it be a safety issue?

25          A.    Flying in clouds in instrument

1 meteorological conditions requires certain ratings as  
2 a pilot. It's conditions of reduced visibility.

3 Q. So outside of your communications with  
4 Mr. Newman, were there any other communications that  
5 you had that changed your position with respect to  
6 modifications of the structures related to the Seneca  
7 County Airport?

8 A. No.

9 Q. Did the FAA consider the non-directional  
10 beacon issue for the Seneca County Airport?

11 A. I'm trying to understand. If you could  
12 be more specific.

13 Q. So if you go to page 12 of your  
14 testimony, Question 28. It says "In your opinion,  
15 did the FAA consider the Non-Directional Beacon issue  
16 fully" and you say "No."

17 A. That's correct.

18 Q. So they considered it but you have a  
19 concern that they didn't fully consider the issue; is  
20 that correct?

21 A. Yes.

22 Q. And on page 12, it indicates you're  
23 summarizing here a position of the FAA  
24 determination; is that right?

25 A. That's correct.

1 Q. And you refer to Performance Data  
2 Analysis and Reporting System; what is that?

3 A. That's a system that the FAA uses to  
4 track flight data.

5 Q. Is that a system that the FAA regularly  
6 uses when they're trying to determine whether or not  
7 an obstruction -- a structure is an obstruction or  
8 represents a hazard?

9 A. I can't answer that.

10 Q. So in your experience in reviewing  
11 Determinations of No Hazard, does the FAA often rely  
12 upon information from PDARS?

13 A. When there are IFR effects, which is not  
14 necessarily common, they will reference flight data.  
15 I believe this is the first time I've seen them  
16 specifically reference PDARS.

17 ALJ AGRANOFF: What is IFR?

18 THE WITNESS: Your Honor, IFR is  
19 instrument flight rules.

20 ALJ AGRANOFF: Is that a term of art?

21 THE WITNESS: I'm sorry?

22 ALJ AGRANOFF: What rules are they  
23 specifically referencing when you say --

24 THE WITNESS: Flight is conducted under  
25 visual flight rules or instrument flight rules. It's

1 a different set of rules based on the visibility,  
2 atmospheric conditions basically.

3 ALJ AGRANOFF: Are those FAA rules?

4 THE WITNESS: Yes.

5 Q. (By Mr. Parram) Does ODOT have any  
6 equivalent system to analyze IFR flight trajectory  
7 patterns?

8 A. Equivalent to the FAA?

9 Q. Yes.

10 A. No.

11 Q. So on page 12, continuing onto 13, it  
12 indicates that the PDARS information regarding the  
13 IFR flights showed that nearly all of, I'm continuing  
14 on the top of page 13, nearly all of the IFR  
15 approaches were straight in. Do you see that?

16 A. Yes.

17 Q. What does that mean?

18 A. Straight-in approach is an instrument  
19 approach procedure that is designed to approach the  
20 end of the runway without any turns; basically a  
21 straight approach.

22 Q. So for the FAA, based upon the  
23 information they had, nearly all of the approaches  
24 into Seneca County were straight in.

25 A. Yes.

1           Q.    Nearly all IFR approaches into Seneca  
2 County were straight in.

3           A.    That's what it indicates.

4           Q.    And also in your testimony it indicates  
5 that the -- that the -- that the overflight of the  
6 NDB are depicted but the actual published terminal  
7 procedure flight approach trajectory is missing. So  
8 the FAA indicated, based upon their information, that  
9 there was information lacking regarding the amount of  
10 NDB approaches?

11          A.    Essentially, yes.

12          Q.    So the next sentence talks about Toledo  
13 Terminal Radar Approach Control or TRACON. What is  
14 TRACON?

15          A.    Toledo TRACON is the approach control,  
16 air traffic control in Toledo.

17               ALJ AGRANOFF: At which airport?

18               THE WITNESS: I believe it's located at  
19 Toledo Express Airport, Your Honor, but I'm not a  
20 hundred percent sure. It should be on the airport,  
21 Toledo Express Airport.

22          Q.    So the FAA communicated with TRACON  
23 because TRACON is the air traffic control for the  
24 Seneca County Airport; is that correct?

25          A.    The Toledo TRACON, yes.

1 Q. Toledo TRACON.

2 A. Yes.

3 Q. Seneca County Airport doesn't have its  
4 own air traffic control?

5 A. They do not.

6 Q. And pilots, flying into Seneca County,  
7 communicate with TRACON regarding how they intend to  
8 approach the airport?

9 A. When they're on the instrument flight  
10 plan.

11 Q. So that's why -- so the FAA went to  
12 TRACON to determine what are the approaches being  
13 used for an instrument flight plan into Seneca  
14 County.

15 A. Yes.

16 Q. And based on the information TRACON had,  
17 few aircraft actually use the NDB approach.

18 MS. BAIR: Is there a question?

19 Q. Correct?

20 A. They provided the comment that few  
21 aircraft use the NDB approach.

22 Q. And in the next sentence it indicates  
23 "Specific data to verify the number of aircraft using  
24 this approach could not be obtained." You've  
25 underlined the term "specific data," correct?

1 A. Yes.

2 Q. Do you have a concern about the level of  
3 data that the FAA obtained regarding the number of  
4 aircraft flying into Seneca County airport?

5 A. I felt it was incomplete.

6 Q. What specific data did you want?

7 A. The number of aircraft using that  
8 approach. The number of operations specifically.

9 Q. When you communicated with Mr. Newman, he  
10 didn't provide you the number of aircraft using that  
11 approach, did he?

12 A. No.

13 Q. And you don't know the number today; is  
14 that correct?

15 A. That's correct.

16 Q. Mr. Newman indicated the NDB approach is  
17 used frequently; is that correct?

18 A. Yes.

19 Q. He didn't specify how frequently?

20 A. No, not specifically.

21 Q. You didn't do anything to verify that  
22 information.

23 MS. BAIR: Objection, Your Honor. There  
24 aren't questions at the end. Cross-examination is  
25 asking the witness a question.



1 MR. PARRAM: They're leading questions.  
2 I can say "Is that correct?"

3 MS. BAIR: Thank you.

4 ALJ AGRANOFF: Why don't you attempt to  
5 rephrase the question.

6 Q. (By Mr. Parram) You didn't independently  
7 verify how many or how frequently aircraft are using  
8 NDB approach at Seneca County; isn't that correct?

9 A. I did not independently verify.

10 Q. It is possible to work with a third-party  
11 consultant to perform a study to determine the  
12 frequency of the NDB approach at Seneca County  
13 Airport; isn't that correct?

14 A. I suppose it would be possible.

15 Q. You know of some entities that could take  
16 on such a task, correct?

17 A. Potentially, yes.

18 Q. You did not engage any of them, did you?

19 A. No.

20 Q. So the only information you have with  
21 respect to the purported impacts to the NDB approach  
22 at Seneca County Airport is based upon the word of  
23 Mr. Newman.

24 A. And the information provided by the FAA.

25 Q. And when you made a determination that

1 the information provided by Mr. Newman necessitated a  
2 modification of the structures to address the  
3 obstruction, what rules or regulations or technical  
4 manuals did you rely upon to make that decision?

5 A. The obstruction standards.

6 Q. So when you decided to -- help me  
7 understand that. The obstruction standards -- you  
8 made a determination there is an obstruction,  
9 correct?

10 A. Correct.

11 Q. And after you determined that there is an  
12 obstruction, the obstruction can be waived; is that  
13 correct?

14 A. Our determination to the Power Siting  
15 Board -- I guess are you asking specifically?

16 Q. I'm asking in general. Let me clarify.  
17 I'm trying to get a general understanding.

18 If -- if you -- if there is a  
19 determination that a structure is an obstruction,  
20 after that there are different options that the  
21 obstruction can either -- can be modified so it is no  
22 longer an obstruction, correct?

23 A. That's correct.

24 Q. Or the obstruction standard can be  
25 waived, correct?

1           A.     That's correct.

2           Q.     When you issued your initial  
3     determination, you did not indicate that a number of  
4     structures related to Seneca County Airport needed to  
5     be modified; is that correct?

6           A.     That's correct.

7           Q.     But in your subsequent determination,  
8     Staff Exhibit 4, you determined that they did need to  
9     be modified, correct?

10          A.     We recommended modifications to remove  
11     the obstruction standard -- the impacts to the  
12     obstruction standards.

13          Q.     So when you made that determination, what  
14     rule did you rely upon?

15          A.     We took the feedback of the impacted  
16     aviation stakeholder, in this case the Seneca County  
17     Airport represented by Mr. Brad Newman that the  
18     approach was utilized and important to the airport  
19     and they asked for us to protect it.

20          Q.     What rule or regulation indicates that  
21     ODOT, in making a determination that an obstruction  
22     should or should not be modified, can base that  
23     decision upon feedback from the airport?

24          A.     The obstruction standards in 14 CFR Part  
25     77.

1           Q.    Can you point me to the specific  
2 provision in Part 77?

3           MS. BAIR:  Have you provided it?  Do we  
4 have it here to look at?  If you're going to ask  
5 questions about it, we need to look at it.

6           MR. PARRAM:  The witness just indicated  
7 he knows where it is.

8           MS. BAIR:  He might know where it is but  
9 he might not have a copy in front of him.

10          MR. PARRAM:  I can pull it up.

11          ALJ AGRANOFF:  Hold on.  Do we have a  
12 copy that we can show the witness?

13          MR. PARRAM:  Of all of Part 77, no, I  
14 don't, Your Honor.

15          ALJ AGRANOFF:  Mr. Stains, do you have  
16 access to that particular CFR?

17          THE WITNESS:  I do not have access to the  
18 14 CFR Part 77 specifically.

19          ALJ AGRANOFF:  Okay.  And just from your  
20 own recollection, do you know what specific  
21 provision, within the CFR section that we've been  
22 talking about, might address what you relied upon in  
23 order to make the decision that you did?

24          THE WITNESS:  Yes, Your Honor.  As  
25 indicated in our determination, the structures in

1 question exceeded 14 CFR Part 77.17(a)(3) surfaces,  
2 the obstruction standards set forth in that, and we  
3 are required to adopt those obstruction standards in  
4 making our determination.

5 ALJ AGRANOFF: But in terms of taking  
6 into account the feedback that you received from the  
7 Seneca County Airport, is there a specific CFR  
8 section reference that you believe provides you with  
9 the ability or the authority to take that into  
10 consideration?

11 THE WITNESS: It would not be in the Part  
12 77 sections. We're required to adopt the obstruction  
13 standards in Part 77 in making our determination.  
14 That's what I'm referring to.

15 ALJ AGRANOFF: Okay. Mr. Parram.

16 Q. (By Mr. Parram) So Part 77.17(a)(3) does  
17 not -- does not authorize you to defer to the local  
18 airport, does it?

19 MS. BAIR: Objection. Calls for a legal  
20 decision. You're asking him to interpret the statute  
21 and what it requires. That's a legal question.

22 ALJ AGRANOFF: Why don't you simply ask  
23 whether or not that is the section for which you  
24 relied upon your taking into consideration Seneca  
25 County's feedback.

1 THE WITNESS: And maybe I'm not  
2 understanding completely the question that I'm being  
3 asked. The -- the structures exceed that specific  
4 Part 77 section, 17(a)(3) and that was the basis for  
5 our recommendation, taking into consideration the  
6 feedback received from Seneca County.

7 The -- the Part 77 section in question,  
8 17(a)(3), does not make reference -- it only  
9 establishes the obstruction surface for that  
10 obstruction section. It doesn't define making any  
11 other decision based on that.

12 Q. (By Mr. Parram) So (a)(3) does not have  
13 the specific -- okay.

14 Is there any other portion of Part 77 you  
15 think authorizes you to base your modification of an  
16 obstruction on the feedback from the local airport?

17 A. I'm not an attorney but I don't think  
18 Part 77 authorizes the Ohio Department of  
19 Transportation to do anything.

20 Q. You do have a working knowledge of Part  
21 77 in your role; isn't that correct?

22 A. Yes.

23 Q. Can you point me to any provision in Ohio  
24 Administrative Code 5501:1-10-05 that authorizes ODOT  
25 to modify an obstruction based upon the feedback from

1 a local airport?

2 A. Yes.

3 Q. If you can point me to it.

4 A. The second paragraph of the  
5 Administrative Code, 5501, begins "At its sole  
6 discretion, the office of aviation may grant a permit  
7 which includes a waiver from full compliance...." In  
8 this case we're not issuing a permit. In the same  
9 section it -- but it does give us discretion. In the  
10 first section it instructs us to adopt the  
11 obstruction standards set forth in 14 CFR 77.21 to  
12 14 CFR 77.29 as amended.

13 Q. So when you make -- when you make a  
14 decision to grant a waiver, is it based upon sound  
15 aeronautical principles as set forth in the technical  
16 manuals mentioned in that rule?

17 A. I'm sorry, are you asking specific to  
18 this case or in general?

19 Q. So specific to this case, if Sandusky  
20 County Regional Airport indicates that it is  
21 willing -- that it is willing to give up its  
22 airspace, compliance with the obstruction standards  
23 would be waived, correct?

24 MR. DeVINE: Objection. It's been asked  
25 and answered.

1 ALJ AGRANOFF: I agree. Sustained.

2 MR. PARRAM: Your Honor, can we take a  
3 quick break? I'm just going to determine how much  
4 longer I have.

5 ALJ AGRANOFF: We can. Why don't we take  
6 a five-minute break.

7 (Recess taken.)

8 ALJ AGRANOFF: Why don't we go back on  
9 the record.

10 Q. (By Mr. Parram) Mr. Stains --

11 A. Yes.

12 Q. -- going back again to your July 18, 2019  
13 determination letter and then your September 27, 2019  
14 determination letter, I want to make sure -- make  
15 sure this is clear that the only information or  
16 factual additional information that you received that  
17 resulted in a change in your recommendation to the  
18 Ohio Power Siting Board was additional information  
19 that you received from local airports.

20 MS. BAIR: Objection. Asked and  
21 answered.

22 MR. PARRAM: Your Honor, he has not  
23 answered that question directly.

24 ALJ AGRANOFF: I'll allow the question.

25 THE WITNESS: Could you -- could you



1 repeat it?

2 MR. PARRAM: Could you reread the  
3 question.

4 (Record read.)

5 A. That's correct.

6 Q. And so with respect to Fostoria Airport,  
7 in your September 27, 2019 determination you included  
8 additional recommendations to address obstructions  
9 that impact Fostoria Airport; is that correct?

10 A. That is correct.

11 Q. Your recommendation with respect to those  
12 turbines that potentially impact Fostoria Airport,  
13 your recommendation was not based upon potential  
14 impacts to vectoring into Fostoria; is that correct?

15 A. No.

16 Q. Are you familiar with the term "imaginary  
17 surfaces"?

18 A. Yes.

19 Q. What are those?

20 A. They're surfaces that are defined that  
21 don't physically exist.

22 Q. Are you familiar with Part 77.19,  
23 imaginary surfaces?

24 A. Yes.

25 Q. In the Republic Wind case, none of the

1 obstructions that were found in this case relate to  
2 77.19 imaginary surfaces; is that correct?

3 A. That's correct.

4 Q. So over the course of your tenure at  
5 ODOT, you have worked on three Ohio Power Siting  
6 Board wind cases; is that correct?

7 A. I believe so.

8 Q. The Republic Wind case, the Seneca Wind  
9 case, and Timber Road IV.

10 A. Yes, I believe that's correct.

11 Q. In Timber Road IV, you issued a  
12 determination letter regarding the project in that  
13 case.

14 MS. BAIR: Objection. Completely  
15 different case. We'll be here for weeks if we  
16 discuss Timber Road.

17 MR. PARRAM: It won't be weeks. It will  
18 just be --

19 MS. BAIR: It's irrelevant to this case.

20 ALJ AGRANOFF: Mr. Parram.

21 MR. PARRAM: I'll explain the relevancy,  
22 Your Honor. So it's just one other case and it's a  
23 case that Mr. Stains worked on and made specific  
24 obstruction determinations that are inconsistent or  
25 appear to be inconsistent in some ways than the

1 determinations that he made in this case under the  
2 same exact provisions and rules that regulate both of  
3 the cases.

4 To the extent that ODOT, in a prior case,  
5 came to a different conclusion with respect to  
6 similar facts, I should be able to explore that, and  
7 it's just one case.

8 MS. BAIR: Your Honor.

9 ALJ AGRANOFF: Yes, Ms. Bair.

10 MS. BAIR: How do we know they're similar  
11 facts? It was a different application based on  
12 totally different facts. I don't think you can make  
13 a comparison.

14 MR. PARRAM: I believe the witness can  
15 explain the facts.

16 MS. BAIR: That's irrelevant. That case  
17 is totally irrelevant to this case.

18 MR. PARRAM: It relates specifically to  
19 the Board's standards for consulting with and  
20 conferring with ODOT with respect to aviation and  
21 issuing a determination and then looking at the  
22 Part 77.17 obstruction standards and when those  
23 obstructions are either modified to address the  
24 obstruction or waived.

25 MS. BAIR: Your Honor, this witness

1 didn't even testify in that case. There was no  
2 testimony on the record.

3 ALJ AGRANOFF: One moment.

4 Mr. Stains, did you work on any of the  
5 cases that Mr. Parram just recently referenced?

6 THE WITNESS: Yes.

7 ALJ AGRANOFF: And do you have personal  
8 knowledge regarding the determinations that may have  
9 been made regarding obstructions?

10 THE WITNESS: It's been a while. I would  
11 prefer to review that information. I can't recall  
12 everything about it at this time.

13 MR. PARRAM: Your Honor, I have in front  
14 of me a November 8, 2018 determination letter from  
15 ODOT, presumably Mr. Stains, regarding the Timber  
16 Road IV case, which I'm sure will help refresh his  
17 recollection about his determination in that case  
18 which was just last year.

19 ALJ AGRANOFF: I'll allow you to have  
20 limited questioning at this point and I'll see where  
21 it goes.

22 MR. PARRAM: Your Honor, I'm marking  
23 Applicant Exhibit 38, which is a November 8 letter  
24 from ODOT to Andrew Conway of the Public Utilities  
25 Commission of Ohio. It is an ODOT determination

1 letter pursuant to 4561.341.

2 MS. BAIR: Is there a case number, a PUCO  
3 case number associated with it?

4 MR. PARRAM: Case No. 18-0091-EL-BGN.

5 ALJ SANYAL: One more time, Mr. Parram.

6 MR. PARRAM: Sure. It's Timber Road IV  
7 Wind Farm, Paulding Wind Farm IV, LLC, Case No.  
8 18-0091-EL-BGN.

9 ALJ AGRANOFF: And that letter was from  
10 whom?

11 MR. PARRAM: The letter was directly to  
12 Mr. Andrew Conway of the PUCO, Power Siting Board  
13 Staff, with respect to the determination of potential  
14 obstructions under Part 77.17(a)(3).

15 ALJ AGRANOFF: And who was the author of  
16 that letter?

17 MR. PARRAM: ODOT Office of Aviation.

18 ALJ AGRANOFF: Is it under somebody's  
19 signature?

20 MR. PARRAM: There is not a signature  
21 here, but this letter was obtained from Mr. Stains in  
22 response to a subpoena duces tecum regarding this  
23 case.

24 ALJ AGRANOFF: Okay. Proceed.

25 (EXHIBIT MARKED FOR IDENTIFICATION.)

1           Q.     (By Mr. Parram) Mr. Stains, do you have  
2 Applicant Exhibit 38 in front of you?

3           A.     Yes.

4           Q.     Do you see the subject line of that  
5 letter "Application for Certification of Timber Road  
6 IV Wind Farm (Case No. 18-0091-EL-BGN)"?

7           A.     Yes.

8           Q.     Do you see the words "addressed to  
9 Mr. Conway"?

10          A.     I don't see the words "addressed to  
11 Mr. Conway."

12          Q.     Do you see "November 8, 2018" at the top  
13 of the document?

14          A.     Yes.

15          Q.     Do you see "Andrew Conway, P.E." there?

16          A.     Yes.

17          Q.     Do you know who Andrew Conway is?

18          A.     Yes.

19          Q.     Who is Andrew Conway?

20          A.     He's Ohio Power Siting Board Staff.

21          Q.     Do you communicate with Mr. Conway  
22 regarding Power Siting Board cases?

23          A.     Yes.

24          Q.     Have you ever sent Mr. Conway a  
25 certification letter regarding -- an ODOT

1 determination letter regarding an OPSB wind farm  
2 project?

3 A. Have I ever?

4 Q. Yes.

5 A. Yes.

6 Q. Did you send him one regarding the Timber  
7 Road IV case?

8 A. I believe so.

9 Q. Would you have sent to him this letter  
10 pursuant to Revised Code 4561.341?

11 A. I'm the most likely to have sent it to  
12 him. I don't remember specifically.

13 Q. That would be one of your  
14 responsibilities?

15 A. Yes.

16 Q. And that's a similar letter that you sent  
17 in the Republic Wind case, correct?

18 A. Yes, I sent one in the Republic Wind  
19 case, yes.

20 Q. Okay. And you sent this letter to Andrew  
21 Conway?

22 A. I believe so.

23 Q. So if you go down to the second full  
24 paragraph. And just to be -- in your role at ODOT,  
25 if a letter is going to be sent to OPSB regarding

1 ODOT's determination regarding potential  
2 obstructions, you would be aware of that letter being  
3 sent in your role?

4 A. Yes.

5 Q. And you would review it and approve it  
6 before it is sent?

7 A. I would be one of the reviewers and  
8 approvers, yes.

9 Q. As of November 8, 2018, in your role you  
10 were responsible for reviewing and approving these  
11 letters, these types of letters?

12 A. I was one of the reviewers and approvers,  
13 yes.

14 Q. Okay. So in the second full paragraph it  
15 indicates that 51 of the turbines exceed 499 feet  
16 above ground level and would constitute an  
17 obstruction to air navigation by exceeding the 14 CFR  
18 Part 77.17(a)(1) surface by 100 feet. So in the  
19 Timber Road IV case, there were 51 turbines and all  
20 of them exceeded the (a)(1) obstruction, correct?

21 A. 77.17(a)(1), yes.

22 Q. Okay. And then in the next sentence it  
23 indicates there were 16 of the 23 structures that had  
24 received Determinations of No Hazard from the FAA,  
25 impact either the minimum obstacle clearance altitude



1 or the minimum vectoring altitude of various en route  
2 airways or arrival procedures, all of which are  
3 14 CFR Part 77.17(a)(3) impacts. Do you see that  
4 sentence?

5 A. Yes, I do.

6 Q. So 16 of the structures regarding this  
7 project were (a)(3) obstructions.

8 MS. BAIR: Your Honor, the document  
9 speaks for itself. There was no question and he is  
10 reading from the document.

11 ALJ AGRANOFF: At this point, Mr. Parram,  
12 is there a particular question?

13 MR. PARRAM: Yeah.

14 Q. (By Mr. Parram) So why were 16 of these  
15 structures determined to be (a)(3) obstructions?

16 A. Because they exceeded the obstruction  
17 standards defined by Part 77.17(a)(3).

18 Q. What's the minimum obstacle clearance  
19 altitude?

20 A. Minimum obstacle clearance altitude is an  
21 altitude that meets the minimum separation  
22 requirements for any kind of obstacle.

23 Q. And what's a minimum vectoring altitude?

24 A. Minimum vectoring altitude is a specific  
25 altitude that air traffic control can vector aircraft

1 at and remain safe.

2 Q. So based on this determination, you  
3 indicated -- there was nothing in Applicant  
4 Exhibit 38 that indicated that a modification to the  
5 obstructions would be required in ODOT's mind; is  
6 that correct?

7 A. That's correct.

8 Q. And do you recall why you concluded no  
9 modification would be required even though 16 of the  
10 structures constituted 17(a)(3) obstructions?

11 A. To the best of my recollection, there  
12 were no airports that ODOT has issued a commercial  
13 operating certificate to that were impacted by this  
14 project or the procedures, terminal procedures for  
15 those airports.

16 Q. Do you recall if the FAA, in their  
17 Determination of No Hazard, indicated that the  
18 minimum obstacle clearance altitude should be  
19 adjusted to address the potential obstruction?

20 A. I don't specifically remember. I believe  
21 so based on what's on here.

22 Q. So the way you would have determined that  
23 would have been reviewing the FAA Determination of No  
24 Hazards that related to this particular project,  
25 correct?

1           A.     That's correct.

2           Q.     And if you go to the third page that has  
3     a grid that says Timber Road Farm -- Timber Road IV  
4     Wind Farm and has a list of 51 turbines. Are you on  
5     that page?

6           A.     Yes.

7           Q.     They list out all the -- well, in the  
8     first column there is "FAA ASN." What's FAA ASN?

9           A.     Federal Aviation Administration. ASN  
10    refers to the Aeronautical Study Number.

11          Q.     So if you look up the Aeronautical Study  
12    Number, any of these Aeronautical Study Numbers --  
13    let me back up.

14                 There's a third column, "FAA Status." It  
15    indicates "DNH." What does that mean?

16          A.     DNH is an abbreviation for Determination  
17    of No Hazard.

18          Q.     So for these 23 turbines, they had  
19    obtained a Determination of No Hazard.

20          A.     That's correct.

21                 MS. BAIR: Objection. I continue to  
22    question the relevance. In this case we have a DNH  
23    from the FAA also, so are we trying the Timber Road  
24    case again? It's irrelevant.

25                 MR. PARRAM: Your Honor, I have one last

1 point. There is a Determination of No Hazard that  
 2 explains specifically my last question to him with  
 3 respect to an increase in elevation of the -- the  
 4 minimum obstacle clearance altitude and how that  
 5 adjustment in that altitude addressed the obstruction  
 6 in this particular case and how, in that case, ODOT  
 7 concurred with the FAA and that adjustment which  
 8 essentially increased the altitude that airplanes  
 9 would have to fly, and ODOT had no concerns with it  
 10 in that particular case even though in this  
 11 particular case they're claiming it is a safety  
 12 hazard or an icing concern.

13 So from a case as of last year,  
 14 Mr. Stains was completely fine with an FAA  
 15 determination which, although there was an (a)(3)  
 16 obstruction and a proposed modification to the  
 17 altitude of the airplanes' flight path, ODOT had a  
 18 completely different position in that case and is  
 19 applying the standards in a completely different way  
 20 in our case.

21 So I have the Determination of No Hazard,  
 22 which he had to have read in his role last year in  
 23 this case, one document, one additional exhibit to  
 24 show to the witness to verify the fact that the MOCA,  
 25 minimum obstacle clearance altitude, was modified.

1 MS. BAIR: Your Honor, I move to strike  
2 the testimony of the attorney.

3 ALJ AGRANOFF: I'm going to grant the  
4 motion to strike and I would ask that you try to  
5 elicit the information that you just spoke about  
6 through questioning of the witness.

7 Q. (By Mr. Parram) Describe for me if there  
8 is an impact on the minimum obstacle clearance  
9 altitude -- let me state it this way: If there is an  
10 impact on the minimum obstacle clearance altitude,  
11 does that constitute an (a)(3) obstruction?

12 A. Yes.

13 Q. If the FAA determines that there will be  
14 an impact on the minimum obstacle clearance altitude,  
15 which would constitute an (a)(3) obstruction, would  
16 the FAA potentially recommend increasing the minimum  
17 obstacle clearance altitude to address that impact?

18 A. I can't answer for what the FAA would or  
19 would not do.

20 Q. Have you ever worked on a case where the  
21 minimum obstacle clearance altitude was recommended  
22 by the FAA to be increased?

23 A. Yes.

24 Q. Have you ever worked on a Power Siting  
25 Board case where the FAA recommended that a minimum

1 obstacle clearance altitude be increased to address  
2 the impact?

3 A. Yes.

4 Q. Did the FAA, in the Timber Road IV case,  
5 recommend an increase in the minimum obstacle  
6 clearance altitude to address potential impacts on  
7 the minimum obstacle clearance altitude?

8 A. In this case specifically?

9 Q. The Timber Road IV case.

10 A. I don't have the determination in front  
11 of me, but to the best of my recollection, I believe  
12 so.

13 Q. If the FAA recommended an increase in the  
14 minimum obstacle clearance altitude of 100 feet,  
15 would that result in increased icing conditions for  
16 pilots?

17 A. Potentially.

18 Q. Just to be clear, in the Seneca -- sorry,  
19 in the Timber Road IV case, if there was a minimum  
20 obstacle -- an increase in the minimum obstacle  
21 clearance of 100 feet -- let me restate it.

22 In the Timber Road IV case, ODOT did not  
23 indicate that there needed to be a modification to  
24 the structure to address the (a)(3) obstruction; is  
25 that correct?

1           A.     That is correct.

2           Q.     And ODOT did not indicate that there  
3 needed to be a waiver of the obstruction; is that  
4 correct?

5           A.     The document reads that compliance with  
6 the obstruction standards may be waived if the  
7 facility complies with all of the conditions of the  
8 FAA determination.

9           Q.     So all that was needed was for Timber  
10 Road IV to comply with everything within the FAA  
11 Determination of No Hazard, correct? ODOT had no  
12 additional recommendation.

13           MR. DeVINE: I'm going to object, Your  
14 Honor. He didn't get a chance to answer the last  
15 question.

16           ALJ AGRANOFF: Mr. Parram, if you could  
17 please wait until the witness has answered.

18           Are you done with your answer?

19           THE WITNESS: What was the --

20           MR. PARRAM: I didn't mean to speak over  
21 you. I thought I was trying to clarify a point.

22           Q.     (By Mr. Parram) ODOT did not have any  
23 additional recommendation beyond what was in the  
24 Determination of No Hazard.

25           A.     Yeah, we don't issue a recommendation.

1 We issue a determination, yes.

2 Q. ODOT's determination was consistent with  
3 the FAA's determination.

4 A. Yes.

5 Q. And to the extent there was an increase  
6 in the minimum obstacle clearance altitude of  
7 100 feet, ODOT was not concerned about potential  
8 icing conditions.

9 MS. BAIR: Objection. Asked and answered  
10 two minutes ago, that same exact question.

11 MR. PARRAM: I'll withdraw the question,  
12 Your Honor.

13 ALJ AGRANOFF: Okay.

14 MR. PARRAM: I have no further questions,  
15 Your Honor.

16 ALJ AGRANOFF: Thank you.

17 Any cross from any other intervenors?

18 Mr. DeVine.

19 MR. DeVINE: Yes, just a few questions.

20 ALJ AGRANOFF: Proceed.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. DeVine:

24 Q. The Ohio Department of Corrections -- of  
25 Corrections. Shows where I spend my time.



1           The Ohio Department of Transportation  
2 became aware of the Application, that we're here for  
3 today, at some point, correct?

4           A.     That's correct.

5           Q.     Okay. And pursuant to 4561.341, that  
6 agency has a duty, under Ohio law, to make a  
7 determination, correct?

8           A.     That is correct.

9           Q.     And is it fair to say, accurate to say,  
10 is it accurate to say that Staff Exhibit 4, the  
11 September 27, 2019 letter to Mr. Conway, is your  
12 agency's determination as it relates to this  
13 Application?

14           MR. PARRAM: Objection. Friendly cross,  
15 Your Honor.

16           ALJ AGRANOFF: I'm going to sustain that  
17 objection unless there's something further that  
18 you're --

19           MR. DeVINE: I'm not allowed to ask  
20 friendly questions on cross? I have to be --

21           ALJ AGRANOFF: Cross is supposed to be  
22 for --

23           MR. PARRAM: That's what Ms. Bair is here  
24 for.

25           MR. DeVINE: Okay.

1           Q.     (By Mr. DeVine) Did you have concerns as  
2     it relates to the FAA's circularization process as it  
3     relates to Fostoria?

4           A.     Yes.

5           Q.     And what were those concerns?

6           A.     We had made several attempts to contact  
7     the airport manager to make him aware of the  
8     circularization and to request that he review it and  
9     make any comments. Those attempts were unsuccessful.

10          Q.     Jumping to a different topic. Did -- did  
11     the FAA verify how many aircraft use NDB at the  
12     Seneca County Airport?

13                 MR. PARRAM: Objection. Friendly cross.

14                 ALJ AGRANOFF: What's the ultimate  
15     objective that you're trying to --

16                 MR. DeVINE: To find out -- he was asked  
17     if he did. I'm trying to find out if the FAA did.

18                 ALJ AGRANOFF: I'll allow the question.

19           A.     I'm sorry, could you repeat?

20          Q.     Did the FAA provide any verification of  
21     the number of aircraft that use NDB at the Seneca  
22     County Airport?

23           A.     No, they did not provide a specific  
24     number of operations.

25          Q.     You testified regarding the minimal

1 obstacle clearance altitude. It's "minimal"?

2 A. "Minimum."

3 Q. Minimum obstacle clearance altitude, what  
4 is that?

5 MR. PARRAM: Objection. Asked and  
6 answered.

7 MR. DeVINE: I don't have a clue what it  
8 is.

9 ALJ AGRANOFF: I'll allow the question  
10 for the time being.

11 MR. PARRAM: And again, objection,  
12 friendly cross.

13 ALJ AGRANOFF: Understood.

14 THE WITNESS: The question, could you  
15 repeat it, please?

16 Q. (By Mr. DeVine) How do you -- I guess  
17 what is minimal obstacle clearance altitude?

18 A. Minimum --

19 Q. Minimum.

20 A. -- obstacle clearance altitude is the  
21 minimum altitude that an aircraft can exist at or  
22 operate at that clears all the obstacles. And the  
23 FAA, as part of their regulations, establish how much  
24 separation, vertical separation must be maintained  
25 for safe operations. So the minimum obstacle

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1 clearance altitude is the minimum altitude that an  
2 aircraft can operate to avoid impacting obstacles.

3 Q. And do you know how that's calculated?

4 A. Specific as to what?

5 Q. Well, I guess for the area of where this  
6 project is intended to be, do you know what -- do you  
7 know how that number was calculated?

8 A. I guess we've talked about several  
9 projects, which one are we referring to?

10 MR. PARRAM: Just a clarification on  
11 which project we're talking about.

12 Q. Republic Wind.

13 A. Republic Wind.

14 Q. If you don't know, it's okay to say you  
15 don't know.

16 A. I don't recall any minimum -- "MOCA" is  
17 how it's referred to -- I don't recall if any MOCAs  
18 were impacted in Republic Wind. There were minimum  
19 descent altitudes and procedure-turn minimum  
20 altitudes.

21 MR. DEVINE: No further questions.

22 ALJ AGRANOFF: Okay. Thank you.

23 Mr. Van Kley.

24 MR. VAN KLEY: None from me.

25 ALJ AGRANOFF: Redirect?

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1 MS. BAIR: Yes. I need one brief moment.

2 ALJ AGRANOFF: Okay.

3 MS. BAIR: Thank you.

4 ALJ AGRANOFF: Let's go off the record.

5 (Off the record.)

6 MS. BAIR: We have no redirect.

7 ALJ AGRANOFF: Thank you.

8 I do have a couple of questions,

9 Mr. Stains.

10 - - -

11 EXAMINATION

12 By ALJ Agranoff:

13 Q. First, could you explain for me the  
14 distinction or whether or not there is no distinction  
15 between the FAA's terminology of a "hazard" versus  
16 ODOT's utilization of the terminology "obstruction"?

17 A. Yes, Your Honor. The FAA first  
18 identifies obstructions and then based on criteria  
19 of, in layman's terms, the impact of those  
20 obstructions, whether those obstructions create a  
21 substantial adverse effect. And if it is  
22 substantial, then they can determine that it is a  
23 hazard and that's -- that language is used in their  
24 determination.

25 Q. And if I understand your testimony

1 correctly, ODOT does not then go into the analysis of  
2 a hazard.

3 A. Correct. We don't have rules that create  
4 that process of determining hazards or non-hazard or  
5 substantial effect or not.

6 Q. And if you could explain for me and  
7 specifically if you go to page 6 of your testimony,  
8 and I call your attention to the Question 12 on  
9 page 6.

10 A. Yes.

11 Q. And the question that was asked was "Did  
12 the April 11 letter make any determinations regarding  
13 obstructions to air navigation?" And you said "No"  
14 and "our analysis was incomplete because the FAA had  
15 not issued final determinations on the project at  
16 that time."

17 A. Yes.

18 Q. I'm interested in knowing as to why there  
19 was a condition tying your response to the FAA's  
20 failure to complete its final determinations when, if  
21 I understood correctly, your testimony was indicating  
22 that ODOT is performing an independent separate  
23 analysis. So if you can explain to me the context  
24 then of your answer to Question 12.

25 A. Yes. So the Department of Transportation

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1 does not have a separate application process for tall  
2 structures. We have adopted the FAA's 7460 process  
3 as essentially our own and there's no separate  
4 application made to the State of Ohio.

5 As I testified, we have the ability to  
6 pull the 7460 information directly from the FAA once  
7 it's been filed and then we do an analysis, separate  
8 from the FAA, based on that information that was  
9 submitted through the 7460.

10 Because we're essentially piggybacking on  
11 the FAA's process, we allow the FAA's process to work  
12 through to its completion before we begin. As such,  
13 any changes made as part of that FAA process could  
14 potentially affect our process, that's why we wait  
15 until it's been completed at the FAA's level.

16 Q. And can you explain for me what you mean  
17 when you say the "process." Does that mean their  
18 ultimate determination or just their development of  
19 the record or both?

20 A. We wait until a final determination has  
21 been issued. So their process of getting from the  
22 application stage, you know, in this case it went  
23 through extended study due to the impacts, public  
24 comments, circularization, and ultimately they issued  
25 a final determination. So once the FAA has issued a

1 final determination, that's when we begin our  
2 process.

3 Q. But yet, it is a separate, independent  
4 analysis that is not intending to solely rely on the  
5 determination of the FAA.

6 A. That's correct, yes.

7 Q. If you could turn to page 7 of your  
8 testimony, specifically Question 14.

9 A. Yes.

10 Q. If I understood your testimony correctly,  
11 you were indicating for the four identified  
12 structures you were not going to be granting a waiver  
13 or would consider a waiver for those four structures?

14 A. Correct, unless we received an opinion  
15 from the Airport Authority of Sandusky County.

16 Q. And if, again, you could explain for me  
17 the rationale for why, with respect to those four  
18 structures, you would not have entertained a waiver  
19 on ODOT's own volition?

20 A. Ultimately ODOT does not own or operate  
21 any airport. The airports are owned and operated  
22 locally; in the case of Sandusky County by the  
23 county, by the County Commissioners. And so, when we  
24 have matters that impact the airspace of airports, in  
25 this case the 17(a)(2) surface, this is airspace that



1 is utilized by aircraft operating under VFR  
2 conditions, approaching and departing from the  
3 airport, and so this is airspace essentially that  
4 belongs to the airport sponsor and so any time we  
5 make a decision, a determination on that airspace, we  
6 want the input of the airport.

7 Q. If you could then turn to page 9 of your  
8 testimony and, in response to Question 18, you  
9 indicate that Mr. Sniffen filed a petition on  
10 August 1, 2019. That petition was filed with the  
11 FAA?

12 A. That's correct, yes.

13 Q. Then in response -- or, in your Question  
14 19, it references the letter from Mr. Sniffen. Is  
15 that letter intended to be the same petition that's  
16 discussed in the prior question?

17 A. Yes, it is.

18 Q. So was there a separate letter within the  
19 petition that you were intending to be referencing in  
20 your Question 19 or is the letter and the petition  
21 synonymous?

22 A. They are synonymous. That letter was  
23 submitted to the FAA as part of their petition for  
24 discretionary review process and that was the actual  
25 letter that was used to make that request.

1           Q.    And can you provide for me just a little  
2 bit more context with respect to Question 19 about  
3 the increase in the minimum flight altitude, even as  
4 little as 100 feet, represents a loss of utility for  
5 the approach procedure? Can you just explain to me  
6 what that actually entails?

7           A.    Sure. Currently, the minimum flight  
8 altitudes are set at a certain level based on a  
9 number of different factors, primarily the  
10 obstructions that exist today. So in the case of  
11 this particular approach at Fostoria, there is a  
12 circling area as part of that approach. The circling  
13 area, it's an area designated for whatever reason for  
14 aircraft to circle before landing, a holding pattern,  
15 and so associated with that holding pattern is a  
16 minimum -- minimum flight altitude. So that's the  
17 altitude that aircraft, the minimum altitude that  
18 they can circle or hold, operate in this holding  
19 pattern before landing. It exists today at, I  
20 believe it's 2,400 feet above sea level.

21                   And then if the turbines in question that  
22 impact this approach were to be built, they would  
23 have -- the FAA would have to modify the procedure by  
24 raising that holding pattern altitude by 100 feet.  
25 So the impact to the utility of the approach is now

1 instead of holding, operating in this holding pattern  
2 at the existing level, it would have to be 100 feet  
3 higher than it is today.

4 Q. And this is premised off of there being  
5 no change in the actual path of the landing but,  
6 rather, just remaining at a higher altitude at the  
7 same location.

8 A. That's correct, yes.

9 Q. Okay. I do have one final question. Are  
10 you aware of any other cases, before the Ohio Power  
11 Siting Board, where ODOT has taken a similar approach  
12 to what you have taken in this particular case where  
13 you have a difference of opinion relative to the FAA  
14 and how you stated your position in this case?

15 A. No, not that I'm aware of.

16 ALJ AGRANOFF: Okay. Based on my  
17 questions?

18 MR. PARRAM: Very, very quick follow-up,  
19 Your Honor.

20 - - -

21 RECROSS-EXAMINATION

22 By Mr. Parram:

23 Q. ALJ Agranoff asked you a question and one  
24 of your responses indicated that ODOT does not own  
25 the airport or the airspace; is that correct?

1           A.    Yes, we do not own or operate any  
2   airports.

3           Q.    Because of that, you indicated that's why  
4   you need to, if there's an impact on airspace related  
5   to an airport, you have to confer with that airport.

6           A.    We do. We do confer with the airport.

7           Q.    You indicated -- I believe you indicated  
8   because it is their airspace; is that correct?

9           A.    I believe that's what I said.

10          Q.    So it's your position that the airspace  
11   surrounding a particular airport belongs to that  
12   airport.

13          A.    It certainly impacts the airport. The  
14   procedures that operate in that airspace belong to  
15   the airport, so the airspace is necessary to operate  
16   at the airport.

17          Q.    So you could only modify a procedure that  
18   impacts the airspace with respect to a particular  
19   airport if you obtain affirmative consent from that  
20   airport?

21          A.    We choose to involve the airports in  
22   matters that impact their airport.

23          Q.    When you say "we choose to," that's a  
24   decision by ODOT?

25          A.    That's correct.

1 Q. But that's not necessarily required.

2 A. It's required by my administration.

3 Q. One last question. So with respect to  
4 potential impacts to an airport's airspace,  
5 individuals of the traveling public that may be  
6 flying into that airport, they would be -- they could  
7 potentially be impacted as well; is that correct?

8 A. Any users of the airport, yes.

9 Q. So not just the owners of that airport.

10 A. Correct.

11 Q. And potential safety concerns with  
12 respect to how the airspace is used, it can impact  
13 anyone that flies into the airport, correct?

14 A. Yes.

15 MR. PARRAM: That's all I have, Your  
16 Honor.

17 ALJ AGRANOFF: Staff?

18 MS. BAIR: None.

19 ALJ AGRANOFF: Thank you.

20 At this point does Staff seek the  
21 admission of Mr. Stains' Direct Testimony marked as  
22 Staff Exhibit 3?

23 MS. BAIR: Yes, Your Honor, and also for  
24 the admission of Staff Exhibit 4, the September 27,  
25 2019 ODOT letter.

1 ALJ AGRANOFF: Any objections?

2 Hearing none, Staff Exhibit 3 and Staff  
3 Exhibit 4 shall be admitted as part of the record at  
4 this time.

5 (EXHIBITS ADMITTED INTO EVIDENCE.)

6 ALJ AGRANOFF: Now, Mr. Parram, would you  
7 like to move a number of your exhibits?

8 MR. PARRAM: Yes, Your Honor. I just  
9 want to doublecheck because my check sheet still has  
10 Applicant Exhibit 33 didn't have -- that was already  
11 admitted into the record. It's from awhile back.  
12 That was the "On-Shore Bird" --

13 ALJ SANYAL: Yeah.

14 MR. PARRAM: So we're going to move for  
15 the admission of Applicant Exhibit 37 and 38 into the  
16 record.

17 ALJ AGRANOFF: Any objections?

18 MS. BAIR: Yes, I object to 38 as  
19 irrelevant.

20 ALJ AGRANOFF: Mr. Parram.

21 MR. PARRAM: It's directly relevant to  
22 ODOT's -- how ODOT applies its determination  
23 procedures with respect to 4561.341, which Mr. Stains  
24 indicated that he previously worked on that case and  
25 made determinations which are directly relevant to

1 the types of determinations that he made in our case  
2 about what is an obstruction, when it can be waived,  
3 or when ODOT will indicate that it is not objecting  
4 to or operating consistent with the FAA Determination  
5 of No Hazard in the Timber Road IV case; yet, in our  
6 case, operating in a different fashion.

7 The regs are directly relevant to both  
8 cases. Mr. Stains has worked on both cases. The  
9 case was only one year ago and it's relevant to this  
10 proceeding.

11 MS. BAIR: Well, I don't believe that  
12 the -- Mr. Parram talked about relevancy which is my  
13 objection because it is a different case, it was  
14 several years ago, the circumstances were very  
15 different, the facts were different, this witness did  
16 not testify in that case but he did have a letter in  
17 there and I think it's not relevant.

18 MR. PARRAM: I'm sorry if I wasn't clear  
19 with respect to why it is relevant, Your Honor. It's  
20 relevant to the exact standards that were applied in  
21 the Timber Road IV case which this letter indicates  
22 it was November 8, 2018, so just last year where he  
23 was applying the same standards or purportedly  
24 applying the same standards in that case and how he  
25 applies the same exact standards in this case with

1 respect to another wind farm project.

2 In that case you had an (a) (3)  
 3 obstruction. In our case we have an (a) (3)  
 4 obstruction. In both of the cases, ODOT came out  
 5 with a specific determination about how the OPSB  
 6 should proceed and it's critical in this case to  
 7 determine if there was a distinction on how  
 8 Mr. Stains and ODOT decided to apply regs that apply  
 9 in both cases, why there's a distinction, was that  
 10 distinction an arbitrary decision, and what was the  
 11 standard those decisions were based upon.

12 ALJ AGRANOFF: Anything further?

13 MS. BAIR: Nothing further.

14 ALJ AGRANOFF: First, with respect to  
 15 Applicant Exhibit 37, that exhibit shall be admitted  
 16 as part of the record at this time.

17 (EXHIBIT ADMITTED INTO EVIDENCE.)

18 ALJ AGRANOFF: With respect to Applicant  
 19 Exhibit 38, I'm going to allow the exhibit to be  
 20 admitted and counsel certainly has the opportunity  
 21 to, on brief, to distinguish to the extent they  
 22 believe it is distinguishable or it's similar in  
 23 nature and therefore appropriate.

24 (EXHIBIT ADMITTED INTO EVIDENCE.)

25 ALJ AGRANOFF: Anything else?



1 MR. PARRAM: No, Your Honor.

2 MS. BAIR: Nothing.

3 ALJ AGRANOFF: If not, then we are going  
4 to be recessed tomorrow and we will pick up on Friday  
5 morning with --

6 ALJ SANYAL: Sasowsky.

7 ALJ AGRANOFF: So we have Mr. Sasowsky.

8 ALJ SANYAL: McAllister.

9 ALJ AGRANOFF: McAllister and Newman.

10 MR. DeVINE: McAllister is available  
11 Monday.

12 ALJ SANYAL: That's right.

13 ALJ AGRANOFF: That's why we're going  
14 through this. Sasowsky, Newman, and then Conway for  
15 Friday. Everybody in agreement?

16 MS. BAIR: And if we have time for more  
17 Staff witnesses, they will be ready.

18 ALJ AGRANOFF: Be available. Could we at  
19 least identify who they may be so that counsel could  
20 be potentially prepared?

21 MS. BAIR: Bellamy and Morrison. Oh, I'm  
22 sorry, not Bellamy. We'll go -- I'm sorry. We would  
23 do Conway, Morrison, Zeto. I don't think we are  
24 going to get farther than that, there's no way.

25 ALJ AGRANOFF: But at least we have three

1 identified to the extent we have time available.

2 MR. STINSON: In that order?

3 ALJ AGRANOFF: Ms. Bair, would it be in  
4 the order you just mentioned?

5 ALJ SANYAL: Conway, Morrison, Zeto, in  
6 that order?

7 MS. BAIR: Conway, Morrison, Zeto, in  
8 that order.

9 ALJ SANYAL: Okay.

10 MR. PARRAM: Can we do the order one more  
11 time?

12 ALJ SANYAL: Sasowsky, Newman, Conway,  
13 Morrison, and Zeto.

14 MR. PARRAM: Never mind.

15 ALJ SANYAL: You look confused.

16 MR. DEVINE: And McAllister is on Monday.

17 ALJ AGRANOFF: McAllister is on Monday.

18 ALJ SANYAL: Mr. Parram, just so you  
19 know, McAllister is on Monday.

20 MR. PARRAM: Yes, Your Honor.

21 ALJ SANYAL: Okay.

22 ALJ AGRANOFF: Okay. We are adjourned.

23 Thank you.

24 (Thereupon, the proceedings concluded at  
25 5:30 p.m.)

CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Wednesday, November 13, 2019, and carefully compared with my original stenographic notes.

Carolyn M. Burke  
Carolyn M. Burke, Registered  
Professional Reporter, and  
Notary Public in and for the  
State of Ohio.

My commission expires July 17, 2023.

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Summary: Transcript Volume V - In the Matter of the Application of Republic Wind, LLC for a Certificate of Environmental Compatibility and Public Need for a Wind-Powered Electric Generating Facility in Seneca and Sandusky Counties, Ohio, hearing held on November 13th, 2019. electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Burke, Carolyn