

BEFORE THE OHIO POWER SITING BOARD

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In the Matter of the :
Application of :
Angelina Solar I, LLC : Case No. 18-1579-EL-BGN
for a Certificate of :
Environmental Compatibility :
and Public Need. :

- - -

PROCEEDINGS

before Patricia A. Schabo, Administrative Law Judge,
at the Public Utilities Commission of Ohio, 180 East
Broad Street, Room 11-A, Columbus, Ohio, called at
9:00 a.m. on Thursday, August 1, 2019.

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VOLUME II

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Township, and the Board of Trustees of
Dixon Township, and the Preble County
Commissioners.

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Thursday Morning Session,
August 1, 2019.

- - -

ALJ SCHABO: The Ohio Power Siting Board has assigned for hearing, at this time and place, Case No. 18-1579-EL-BGN, being In the Matter of the Application of Angelina Solar I, LLC for a Certificate of Environmental Compatibility and Public Need.

My name is Patricia Schabo. I'm the Administrative Law Judge assigned by the Board to hear the case.

We will skip appearances, as it is Day 2 of our hearing, and go straight with witness presentation.

Mr. Taylor.

MR. TAYLOR: Thank you, Your Honor. The Applicant would like to call Mr. Matthew Robinson.

ALJ SCHABO: Let's go off the record for a minute.

(Off the record.)

(Witness sworn.)

ALJ SCHABO: Have a seat. If you could state your name and business address for the record, please.

1 THE WITNESS: My name is Matthew
2 Robinson. My business address is 217 Montgomery
3 Street, Syracuse, New York.

4 MR. TAYLOR: Your Honor, I'd like to
5 begin by marking a pair of exhibits this morning.

6 ALJ SCHABO: Let's do that.

7 MR. TAYLOR: Company Exhibit 12 is the
8 Direct Testimony of Mr. Robinson, and Company
9 Exhibit 16 is the Supplemental Direct Testimony of
10 Mr. Robinson.

11 ALJ SCHABO: All right. So marked.

12 (EXHIBITS MARKED FOR IDENTIFICATION.)

13 - - -

14 MATTHEW ROBINSON

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

17 DIRECT EXAMINATION

18 By Mr. Taylor:

19 Q. Good morning, Mr. Robinson.

20 A. Good morning.

21 Q. Could you please identify what's been
22 marked as Company Exhibit 12, please.

23 A. That is my Direct Testimony.

24 Q. And was this prepared by you or at your
25 direction?

1 A. Yes.

2 Q. And could you please identify what's been
3 marked as Company Exhibit 16, please.

4 A. That is my Supplemental Direct Testimony.

5 Q. And was that prepared by you or at your
6 direction?

7 A. Yes.

8 Q. Do you have any corrections or revisions
9 to either of those testimonies at this time?

10 A. I do.

11 Q. Okay.

12 A. The Direct Testimony, Company Exhibit 12,
13 on page 3, line 11, we have said that there are six
14 viewpoints that the visual simulations were produced
15 from, and that should actually be four.

16 Q. Okay. And do you have any other
17 corrections or clarifications?

18 A. Yes. In the report, Exhibit I, I
19 believe.

20 Q. And just to clarify that's Exhibit I to
21 the Application?

22 A. The Application, sorry, yes. On pages 6,
23 21, 24, and 37, we have mentioned that the panel
24 arrays will be 14 feet in height. For our analysis,
25 as stated on Figure 7, we actually used a 15-foot

1 height for this analysis to be even more conservative
2 because of the land form; so I just wanted to set
3 that straight.

4 Q. Do you have any other corrections or
5 revisions?

6 A. No, that is it.

7 MR. TAYLOR: Your Honor -- or, excuse me.

8 Q. Mr. Robinson, if I asked you -- subject
9 to that correction, if I asked you the same questions
10 in Company Exhibit 12 and Company Exhibit 16 today,
11 would your answers be the same?

12 A. Yes.

13 MR. TAYLOR: Your Honor, the witness is
14 available for cross-examination.

15 ALJ SCHABO: All right.

16 Mr. Van Kley.

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

18 - - -

19 CROSS-EXAMINATION

20 By Mr. Van Kley:

21 Q. Good morning, Mr. Robinson.

22 A. Good morning.

23 Q. Let's go to Exhibit I of the Application.
24 This is your report on the Visual Resource Assessment
25 prepared for the Application, correct?

1 A. Correct.

2 Q. Let me just follow up on the corrections
3 you made just a moment ago with respect to the visual
4 analysis that you performed. If I'm understanding
5 your changes to the report in Exhibit I that you made
6 this morning, you assumed that the panels were
7 15-feet tall for purposes of analyzing visibility; is
8 that correct?

9 A. For the purposes of the viewshed
10 analysis.

11 Q. The viewshed analysis, okay. And what is
12 the viewshed analysis?

13 A. The viewshed analysis provides us with a
14 preliminary idea of where the Project potentially may
15 be visible from.

16 Q. Okay. Now, did you do any other analysis
17 that required you to make any assumptions about the
18 height of the solar panels?

19 A. Yes, we did. We also make assumptions
20 for the height of the solar panels for the visual
21 simulations that we produce.

22 Q. Okay. And just for the record, where do
23 you find those visual simulations in Exhibit I?

24 A. I believe they are Figure 11.

25 Q. And tell me, again, what was the height

1 of the panels that you assumed for that purpose?

2 A. We used 8-foot panels for the purposes of
3 the visual simulations. That was the -- as we moved
4 further along in the Project we got a better
5 understanding of what the potential panel may be and
6 the technology at the time and we try to use the most
7 up-to-date technology that's going to be represented
8 in our simulations that could possibly be used; so,
9 at that time, it was thought that an 8-foot
10 single-axis tracker panel would be what probably
11 would be used, so that is what we put into the
12 simulations.

13 For the viewshed analysis we like to
14 provide a conservative analysis for our field crews
15 and for people in the field. This site was extremely
16 flat so we actually added a foot onto what we
17 normally do for our viewsheds of 14 feet, to 15 feet,
18 to just really make sure that we were capturing any
19 potential areas of visibility that we could go and
20 see in the field and verify.

21 Q. Now, you're aware that Angelina Solar has
22 not yet chosen the panels that it's going to install
23 in this Project?

24 A. Correct.

25 Q. And there are panels that are 15-foot in

1 height on the market, correct?

2 A. Correct.

3 Q. Okay. And, at this point in time, it's
4 your understanding that Angelina Solar still has the
5 option to select panels that are 15-foot tall for its
6 Project?

7 A. Correct.

8 Q. Turn to page 23 of Exhibit I. First, I'd
9 like to ask you some questions about Table 1 on that
10 page. Table 1 is entitled as "Solar Panel Viewshed
11 Analysis Results Summary," correct?

12 A. Yes.

13 Q. And this table contains results of your
14 viewshed analysis?

15 A. That is correct.

16 Q. And that's an analysis that assumed the
17 panels would be 15-foot tall?

18 A. Yes.

19 Q. So tell me if I'm interpreting this table
20 correctly. I'm looking at the column for -- the
21 columns for "Distance from Project Area" in the
22 middle of that table. Do you see that?

23 A. Yes.

24 Q. And under the heading "Distance from
25 Project Area" there are four distance intervals

1 listed, correct?

2 A. Correct.

3 Q. The first interval that is listed is from
4 0 to .5-mile away from the Project Area, correct?

5 A. Correct.

6 Q. And is this -- let's see. The figures
7 you have under that for "DSM Viewshed Visibility,"
8 there you stated it's based on topography,
9 structures, and vegetation, correct?

10 A. Correct.

11 Q. Explain what that means.

12 A. In order to do this we use what's called
13 LiDAR. It's light-emitting detection of distance
14 that is flown by helicopters or drones even these
15 days. It shoots millions of points of laser down to
16 the ground and it's able to detect the different
17 types of surfaces and it bounces back up to the LiDAR
18 machine that then reads that distance; so we are
19 given a surface that we're able to use in our program
20 that is very accurate and provides all of what
21 structures and vegetation would be on the ground at
22 that point in time.

23 Q. Okay. So the row that's labeled "DSM
24 Viewshed Visibility (Based on Topography, Structures,
25 and Vegetation)" shows the percentage of the area

1 that is visible from which the Project equipment, the
2 solar equipment, would be visible given the
3 topography and the existing structures and vegetation
4 in the area; is that accurate?

5 A. Where it could potentially be; a portion
6 of the Project could potentially be visible, yes.

7 Q. Okay. All right. So for the distance of
8 0 to .5-mile, a portion of the Project equipment
9 would be visible from 82.26 percent of that area
10 between 0 and 0.5-mile.

11 A. That is correct.

12 Q. And then from a distance of 1 to 2 miles
13 away from the Project Area, the Project's equipment
14 would be visible from 30.78 percent of that area.

15 A. That is correct.

16 Q. And then between 2 and 5 miles away from
17 the Project Area, the Project's equipment would be
18 visible to 7.52 percent of the area.

19 A. That is correct.

20 Q. I'd like to direct your attention to the
21 last paragraph on page 23 of Exhibit I. Counting
22 from the bottom, I'd like to look at the sentence
23 that starts five lines from the bottom which reads:
24 "Exceptions occur north of the Project site where
25 multiple adjoining agricultural fields align with

1 minimal intervening vegetation and structures." Do
2 you see that sentence?

3 A. Yes.

4 Q. Okay. Would you explain the meaning of
5 that sentence to me, please?

6 A. Right above that we talk about how the
7 visibility of solar panels drops off drastically as
8 you move away from them in distance as with the
9 numbers that we just looked at.

10 What we're trying to explain in that
11 sentence, if we look at Figure 7, Sheet 2, you can
12 see that most of the green area, which is
13 representing the potential visibility, is within that
14 2-mile black dotted study area but to the north there
15 are some lines that shoot out to the 5-mile.

16 And during field review, when we were out
17 there, because this site is so flat, the viewshed
18 works simply by drawing a line of sight from the
19 point that the viewer is at, or any point along here
20 is what it's representing but it could be where a
21 viewer is at, and draws it to the Project.

22 So, in this instance, the topography and
23 structures and vegetation from that northern part
24 does show that you can see potential Project
25 equipment. However, field review and our experience

1 shows that, beyond those distances, when you get out
2 that far it's very hard to discern any type of
3 Project equipment or what you're really seeing, but
4 technically, according to the viewshed, which is very
5 accurate to where the data that goes into it but it
6 can't take into account an actual human being in the
7 field.

8 Q. So at what mile distance is it your
9 opinion that the viewer would not be able to discern
10 the solar equipment?

11 A. For the Angelina Project, based on our
12 field review and the conditions of the existing
13 landscape, I believe we put down up to 2.5 miles and
14 then, past that, it's going to be very challenging to
15 discern any type of Project equipment.

16 Q. Since we're on Figure 7, Sheet 2 anyway,
17 let me ask you some more questions about that sheet.
18 The green color in this figure shows where the
19 panels, the solar panels, are visible from; is that
20 correct?

21 A. It shows potential visibility, yes.

22 Q. And Figure 7, Sheet 2 is based on
23 topography and existing vegetation and structures,
24 correct?

25 A. Correct.

1 Q. Now, with regard to the vegetation, that
2 vegetation would take the form of bushes and trees?

3 A. Yes.

4 Q. And for purposes of the information you
5 included in this sheet, you assumed that deciduous
6 trees and bushes would block the viewer's view; is
7 that correct?

8 A. For a certain portion of them when
9 they're wide enough. We do an offset for roads to
10 take care of small hedgerows that may only be one
11 deciduous-tree thick.

12 Again, the LiDAR data we use can be so
13 accurate that it can pick up distribution lines along
14 the side of roads and drop a line directly down to
15 the ground and show that it would be blocking it; so
16 we offset roads in order to capture those
17 distribution lines and, like I said, the small
18 hedgerows.

19 Hedgerows that are larger than that that
20 are deciduous are mostly mixed and we find when
21 they're thicker than one tree trunk that they will
22 provide some screening.

23 Q. But not complete screening during the
24 wintertime when the leaves have dropped off.

25 A. No.

1 Q. And for purposes of this analysis, you
2 assumed that any tree that was 6 feet in height or
3 taller would block the viewer's view of the Project?

4 A. I'd like to check just to make sure what
5 height we used.

6 Yes, 6 feet.

7 Q. Okay. And the panels could be as tall as
8 15 feet, correct?

9 A. Correct.

10 Q. Let's turn back one page to Figure 7,
11 Sheet 1. The information on this sheet is based on
12 visibility taking into account only topography and
13 not vegetation or structures, correct?

14 A. Correct.

15 Q. I have a question about the notes on the
16 bottom of the page. If you look at Note 4, it says
17 "Potential solar panel viewshed visibility is based
18 on the screening effects of topography, vegetation,
19 and man-made structures as represented in the OGRIP
20 State of Ohio 2007 lidar dataset (resampled to 5-foot
21 resolution)." Do you see that note?

22 A. Yes, I do.

23 Q. Okay. Is that inconsistent with your
24 testimony that this sheet is based only on
25 topography?

1 A. The note is correct as in what it's
2 saying, but it should not be on this sheet, that is
3 correct.

4 Q. Let's go to Figure 7, Sheet 3. I see
5 that there's a dotted line towards the middle of that
6 figure; do you see that?

7 A. Yes.

8 Q. And that dotted line represents an area
9 of 2-miles around the Project Area?

10 A. Yes. Well, for Sheet 3, it's the
11 substation.

12 Q. Oh, okay.

13 A. Just to clarify.

14 Q. Okay. You have another sheet that shows
15 the distance around the Project Area, right?

16 A. 1 and 2 use the Project Area. Sheets 3
17 and 4 use the substation.

18 Q. Oh, okay. So we also have that dotted
19 line --

20 A. On 1 and 2 as well.

21 Q. -- within 2 miles of the Project Area on
22 1 and 2, correct?

23 A. Correct.

24 Q. Okay. Now, can you tell me whether the
25 2-mile area around the Project Area includes portions

1 of the City of Eaton?

2 A. It does not.

3 Q. Okay. Would you turn to Figure 5 of the
4 Application. Not Figure 5 of Exhibit I, but Figure 5
5 of the Application.

6 ALJ SCHABO: It's in the same group of
7 maps that all you can see is Figure 4.

8 A. Five.

9 Q. All right. Did you find it?

10 A. Yes.

11 Q. Okay. Great. Are there any urban areas
12 that are depicted within 2 miles of the Project area?

13 A. On Figure 5?

14 Q. As shown on Figure 5, yes.

15 A. Figure 5 is a "Map of Ohio Solar
16 Resources"; is that correct?

17 Q. Yup.

18 A. So I'm not really sure what would be
19 depicting an area of -- I forgot the term you just
20 used, but where people live.

21 Q. Do you see -- you've visited the area,
22 right?

23 A. Yes, I have.

24 Q. And you drove around the Project Area?

25 A. Yes.

1 Q. All right. Did you see that there was an
2 urban development, named Lakengren, to the west of
3 the Project Area?

4 MR. TAYLOR: Objection. There's no
5 foundation to these.

6 MR. VAN KLEY: Say again.

7 MR. TAYLOR: There's no foundation
8 there's any urban development near this Project.

9 A. Correct. Just west of the Project --

10 ALJ SCHABO: Hold on.

11 MR. VAN KLEY: I just asked him whether
12 he saw an urban area, called Lakengren, within
13 2 miles of the Project.

14 ALJ SCHABO: Is your objection to the
15 word "urban"?

16 MR. TAYLOR: Correct. There's no
17 foundation that it's "urban."

18 ALJ SCHABO: Can you back up a couple
19 questions?

20 MR. VAN KLEY: Sure.

21 ALJ SCHABO: Thank you.

22 MR. VAN KLEY: Sure.

23 Q. (By Mr. Van Kley) When you drove around
24 the Project Area, did you notice an area that is
25 referred to as Lakengren?

1 A. I did not notice that area when I was
2 driving around the Alamo -- I mean the Angelina
3 Project, no.

4 There's a small community called Fairview
5 that I noticed that I drove through, and a community
6 that is part in Indiana and part in Ohio and it was
7 kind of confusing but College Corner, I believe it's
8 known as or so. Those are the two small urban areas,
9 that could be considered urban in some way, that were
10 located within the Project Area.

11 Q. Okay. Let's go to page 38 of your report
12 which is Exhibit I. I would like to refer you to the
13 discussion on that page about visual screening which
14 you'll find on the bottom half of that page. Are you
15 there?

16 A. Yes.

17 Q. All right. Now, tell me what types of
18 screening, if any, are planned for the Angelina Solar
19 Project.

20 A. We are currently in the development of
21 three different modules, as we call them, which are
22 conceptual planting designs.

23 One of the modules is based off of what
24 we call roadside enhancement where we use
25 pollinator-friendly grasses to soften the fence.

1 The second module is based off of
2 hedgerow infill and also small native shrubs. This
3 is for further distances, used in areas where it may
4 not be directly adjacent to the roadside.

5 And then we have a third module that we
6 call our adjacent resource or residence module and
7 that one includes the most amount of screening and is
8 placed around residences and, as I said, adjacent
9 resources that are identified in the Project Area.

10 Q. All right. Let's break down each of
11 these three types of modules for screening to get a
12 better description as to what they entail. Let me
13 refer you to Figure 13, Simulation 1, Viewpoint 3,
14 and I'll repeat this in a moment as everybody gets
15 there. This is in Exhibit I.

16 Okay. So again, it's Figure 13 --

17 A. I'm there.

18 Q. -- Simulation 1, Viewpoint 3, Sheet 2 of
19 4.

20 A. I'm there.

21 Q. All right, great. Now, this is one of
22 the visual simulations you talked about, right?

23 A. Correct.

24 Q. And this visual simulation is based on
25 the assumption that the panels are 8-foot tall

1 instead of 15-foot tall?

2 A. Correct.

3 Q. So if the panels are 15-foot tall, they
4 would be depicted as being higher in this simulation,
5 correct?

6 A. Correct.

7 Q. Just as a matter of curiosity, I guess, I
8 was wondering about the fence that's shown in this
9 simulation. It appears to be a solid fence; is that
10 right?

11 A. It's a chain-link.

12 Q. It's a chain-link fence?

13 A. Yup.

14 Q. Now, with a chain-link fence, you can see
15 the solar panels through the fence, right?

16 A. Correct.

17 Q. But it doesn't look like the solar panels
18 are depicted as being visible through the fence in
19 your simulation.

20 A. Yeah, I'm not sure what you mean by that
21 question.

22 Q. Well, I guess I'm looking at the
23 simulation. I don't see the panels behind the fence.
24 Do you see them?

25 A. Yes. All the blue. It's -- everything

1 that I think you're looking at, that you might think
2 is the fence, is the panels.

3 Q. Okay. All right. Let me ask you about
4 the vegetation that's in front of the panels. Is
5 this meant to depict one of your types of screening?

6 A. At the time it was produced it was meant
7 to depict pollinator habitat, which is a large
8 portion of Module 1 that we are producing.

9 Q. All right. So how tall do the plants,
10 included in Module 1 for roadside enhancement, get?

11 A. The mix that we were looking at, at this
12 point in time the Company said there was potential
13 for some of the material to be 4 to 6 feet in height
14 in one season.

15 Q. And how tall would the vegetation be at
16 full maturity?

17 A. That is one season of growth is full
18 maturity. Wildflowers will die each year and then
19 grow back.

20 Q. So the vegetation, used in your roadside
21 enhancement module, do not hide the fence or the
22 solar panels, correct?

23 A. "Hide" is not the term I would use, no.
24 They soften the edge of it.

25 Q. What do you mean by "soften the edge"?

1 A. The introduction of the fence and the
2 panels creates a vertical line into the landscape and
3 that type of vegetation is a way of breaking that
4 vertical line and softens that edge. So when I say
5 "soften the edge," I mean we've got material that is
6 breaking a vertical line.

7 Q. Let's talk a little bit more about
8 Module 2 for mitigation which I think you refer to as
9 the hedgerow module, right?

10 A. Really it's based off of using native and
11 local shrubs to create or infill areas.

12 Q. And in which type of area would you
13 envision the hedgerow mitigation to be used?

14 A. It can be used -- Module 2 can be used
15 along different types of roadsides in different areas
16 where the setback might be different. If the
17 property has not been signed up that's adjacent to
18 the road and the panels are further back from the
19 road or there's more space because of some type of
20 wetland that may be there or something, there's
21 different -- that would be a module we would use
22 that's a little further away from the road normally.

23 Q. And how tall does the vegetation used in
24 this module get at full maturity?

25 A. Depending on placement, we do have --

1 sometimes EDR will put full-size trees in that module
2 so they could grow to 45 feet. We're not -- EDR does
3 not use trees, like pine, that's going to grow to
4 80 feet. The choice is more of local deciduous trees
5 that end up being around 45.

6 The shrubs that are chosen end up being
7 in the 15 to 20-foot range at full maturity. And
8 then there's also trees that are smaller trees that
9 can be used as well, the same kind of idea, and those
10 grow to about 25 feet in height.

11 Q. All right. With regard to your third
12 module for mitigation which entails placing
13 vegetation near residences and other sensitive
14 receptors, describe what kind of vegetation is
15 planned for those areas.

16 A. Module 3 incorporates more evergreen
17 material so that the screening is longer-lasting into
18 the winter and it really beefs up Module 2 with that
19 evergreen material. It also has tighter spacing in
20 the planting to screen more of the Project.

21 Module 3 is based on, as we say, a
22 resource residence where somebody is most likely not
23 moving, a viewer is in a stationary position, so
24 we've tightened the spacing..

25 When a viewer -- Module 2 is more for

1 viewers that are traveling along the roadways, so the
2 spacing of the vegetation is wider because of the
3 speed of the traveler.

4 Q. So with regard to Module 3, how tall
5 would the evergreens get at full maturity?

6 A. Some of those evergreens would reach into
7 the 60-foot range.

8 Q. And do you envision that the vegetation
9 for Module 3 would completely block the view of the
10 solar equipment from the sensitive receptors?

11 A. It's never my goal to have 100-percent
12 screening. EDR does not feel that that is
13 appropriate in the landscape and often it looks
14 awkward and draws attention.

15 The idea is to create a screen that is --
16 that does its job at screening the majority of the
17 Project, usually this is a very adjacent Project,
18 while still allowing some light and some air to kind
19 of move through the space rather than creating almost
20 a green wall that kind of separates everything that's
21 going on.

22 So it's never a goal to get 100-percent
23 screening. In order to do that, we would really be
24 looking at different types of materials and, in this
25 situation, putting in a 10-foot opaque fence is also

1 not what we would suggest in any way; it does not fit
2 the character of the landscape nor what we would feel
3 would fit in with what the locals would agree with
4 and want.

5 Q. Okay. Is it you who will be designing
6 the mitigation plan for visibility in the Project?

7 A. I am a large part of it, yes. There's
8 certainly a team at EDR. I am not an Ohio-plant
9 expert myself but we do have them, so I'm working
10 with a team of landscape architects to develop the
11 plans.

12 Q. And has that process started --

13 A. It has, yes.

14 Q. -- of developing the plan?

15 Okay. Have you, at this point, consulted
16 with any of the landowners, who have property
17 adjacent to the Project Area, for purposes of
18 soliciting their views on what would be necessary to
19 protect their views from their property?

20 A. In EDR's experience lots of times
21 bringing in the neighbors makes it harder for us; it
22 over-engineers some things sometimes. Lots of times
23 they will choose plants that are not the correct
24 plant for that location. It will create problems
25 further on down the road.

1 We're trying to place something there
2 that accomplishes the goals of the Project but still
3 allows -- and allows it to grow and mature without
4 needing too much maintenance or looking like it may
5 die. We want to really spec material that is
6 appropriate for that location and, lots of times,
7 when we have other opinions, that we may or may not
8 need to work with, it kind of jams up what actually
9 needs to go into the ground.

10 Q. So are you saying then that you have not
11 consulted with any of the neighbors at this point?

12 A. We -- correct. EDR will not be
13 consulting with the neighbors. If there's specific
14 outreach that's been done by Angelina Solar, they can
15 let us know, but EDR does it based off of receptors
16 and the appropriate material for that area.

17 Q. So not only have you not consulted with
18 the neighbors thus far in your creation of the plan,
19 but you have no plans to consult with the neighbors
20 in the future.

21 MR. TAYLOR: I'm going to object to the
22 usage of "you." If you can be more specific in what
23 "you" means.

24 Q. EDR.

25 A. EDR will accept any information that is

1 given to us from Angelina certainly, but EDR will not
2 be reaching out to any landowners.

3 Q. So, at this point, the mitigation plan is
4 still in the works, right?

5 A. It has not been complete. It's not been
6 100-percent completed, no. We are waiting for final
7 design.

8 Q. And because it hasn't been completed, the
9 plan has not been included in the Application?

10 A. That is correct.

11 MR. VAN KLEY: I have no further
12 questions.

13 ALJ SCHABO: Any redirect?

14 I'm sorry, anybody else want to cross?

15 MS. WEST: No, Your Honor.

16 ALJ SCHABO: Any redirect?

17 MR. TAYLOR: Your Honor, may we take a
18 moment?

19 ALJ SCHABO: Yes. Let's go off the
20 record for five.

21 (Off the record.)

22 ALJ SCHABO: We'll go back on the record.

23 Mr. Taylor, do you have any redirect?

24 MR. TAYLOR: I do, Your Honor.

25 ALJ SCHABO: All right.

1 will be able to see what that equipment is.

2 So visibility, when we look at a
3 visibility analysis and we see that it says
4 "potential visibility out to 5 miles," that
5 visibility is very, very, very different than the
6 visibility that it's talking about when you're
7 adjacent to the Project.

8 We use the same term "visibility" but
9 the -- but when you're doing field review and what
10 you're discerning with the eye is very different from
11 those distances.

12 Q. Looking inside of that 2-1/2 miles, would
13 you necessarily be able to discern the Project
14 equipment at that range?

15 A. Most likely not. You would still see
16 more of the horizontal line or the idea that there
17 may be something in front of a hedgerow, but being
18 able to tell what it is would be very difficult.

19 Q. On page 23 of your report, I'm looking at
20 the -- actually, we'll move on, Mr. Robinson.

21 Mr. Robinson, Mr. Van Kley asked you some
22 questions about -- or, excuse me.

23 In response to one of Mr. Van Kley's
24 questions, you indicated that the communities of
25 Fairhaven and College Corner were in the general

1 vicinity of the Project; is that right?

2 A. That's correct.

3 Q. Will the Project be visible from those
4 communities?

5 A. The viewshed analysis showed no
6 visibility from those communities, and the field
7 review confirmed that there's intervening vegetation
8 that would be blocking from those communities; so no,
9 there is no Project visibility from those two areas.

10 Q. And finally, Mr. Robinson, Mr. Van Kley
11 asked you some questions about Figure 13 to your
12 report. This simulation was run with panels at a
13 height of 8 feet; is that correct?

14 A. That is correct.

15 Q. Would your conclusions in your report be
16 different if those simulations were run at a height
17 of 15 feet?

18 A. They would not, no. We're still
19 introducing contrasting use into the landscape that,
20 from an adjacent position, you would notice and it
21 would be visible.

22 And then the same thing goes with
23 visibility. As we move away, we're not going to
24 notice it as much, so that height change would not
25 change the outcome of the simulations.

1 Q. Just to follow up on one of my earlier
2 questions. Would you be able to -- turning back to
3 the view of the actual equipment. Would you be able
4 to discern the individual Project equipment at a
5 distance inside of 2 miles?

6 A. I mean, inside of just 2 miles, no. If
7 we're talking about inside down to .5, yes, but
8 really in that .5 to 2-mile range is where that
9 discernible equipment starts to go away and you can't
10 tell what it is; you can't see individual components
11 anymore.

12 Q. Okay. And why is that?

13 A. It's the nature of the equipment and the
14 nature of the human eye with the background. We --
15 it's harder to understand the small little lines, the
16 little creases that are in between the solar panels,
17 the different colors that make them up. As we move
18 further away, it all blends into one similar cohesive
19 kind of unit so you're not able to make out any type
20 of individual equipment.

21 MR. TAYLOR: Thank you, Your Honor. No
22 further questions.

23 ALJ SCHABO: Any recross, Mr. Van Kley?

24 MR. VAN KLEY: A little bit.

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REXCROSS-EXAMINATION

By Mr. Van Kley:

Q. So with regard to the fact that you used the assumption that the panels would be 8-foot instead of 15-foot tall in your visual simulations. If the panels are 15-foot tall instead of 8-foot tall, that means, for purposes of mitigation, Module No. 1, you'll be able to see more of the panels above the vegetation, correct?

A. Module 1 is not designed to really screen the panels themselves very much. It's more to soften the edge of the fence. There would be more panel available above that, yes, but it would not change the goal of that mitigation module.

Q. Because the goal of that module is not to hide the fence --

A. Correct.

Q. -- or the panels, right?

A. Correct.

MR. VAN KLEY: No further questions.

ALJ SCHABO: Okay. Thank you. You may step down.

MR. TAYLOR: Your Honor --

ALJ SCHABO: Yes.

MR. TAYLOR: -- the Applicant would like

1 to move Company Exhibit 12 and Company Exhibit 16
2 into the record, please.

3 ALJ SCHABO: Any objections?

4 MR. VAN KLEY: No, Your Honor.

5 ALJ SCHABO: Hearing none, they will be
6 admitted.

7 (EXHIBITS ADMITTED INTO EVIDENCE.)

8 ALJ SCHABO: Mr. Taylor, your next
9 witness.

10 MR. TAYLOR: Your Honor, the Applicant
11 would like to call Mr. Ryan Rupprecht.

12 (Witness sworn.)

13 ALJ SCHABO: Thank you. Have a seat.

14 Please state your name and your business
15 address for the record.

16 THE WITNESS: My name is Ryan Rupprecht.
17 Business address is 121 Continental Drive, Suite 308,
18 Newark, Delaware.

19 MR. TAYLOR: Your Honor, I'd like to
20 begin by marking an exhibit.

21 ALJ SCHABO: Yes.

22 MR. TAYLOR: Company Exhibit 13 is the
23 Direct -- excuse me -- the Direct Testimony of Ryan
24 Rupprecht.

25 ALJ SCHABO: So marked.

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(EXHIBIT MARKED FOR IDENTIFICATION.)

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RYAN RUPPRECHT

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

DIRECT EXAMINATION

By Mr. Taylor:

Q. Mr. Rupprecht, could you identify what's been marked as Company Exhibit 13?

A. It's my Direct Testimony.

Q. And was this prepared by you or at your direction?

A. It was.

Q. And do you have any revisions to that testimony at this time?

A. I do have one revision.

Q. Okay.

A. Question --

Q. What is that?

A. Yup. Question 8, line 15, after "November 2017" I'd like to insert "and April 2018."

As well as line 16, at the end of "survey," add an "s" to make it "surveys."

Q. Do you have any other changes or revisions?

1 A. I do not.

2 ALJ SCHABO: I'm sorry.

3 MS. BAIR: Your Honor, could I ask for
4 the first change to be reiterated?

5 THE WITNESS: I'm sorry, yeah. So it's
6 Question 8, line 15, after "November 2017" insert
7 "and April 2018."

8 ALJ SCHABO: And then your second
9 correction?

10 THE WITNESS: The second correction is
11 line 16, add an "s" to the first word of that line,
12 "survey," to make it "surveys."

13 ALJ SCHABO: Thank you.

14 Q. (By Mr. Taylor) I think I'll ask you
15 again. Did you have any other revisions to your
16 testimony?

17 A. I do not.

18 Q. And subject to that revision, if I asked
19 you the questions in Company Exhibit 13 today, would
20 your answers be the same?

21 A. They would be.

22 MR. TAYLOR: Your Honor, the witness is
23 available for cross-examination.

24 ALJ SCHABO: Mr. Van Kley.

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

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CROSS-EXAMINATION

By Mr. Van Kley:

Q. Why don't we start with the Direct Testimony that you just changed. I'll ask you a few questions about your -- about Cardno's visits to the Project Area. How many total visits did Cardno make to the Project Area?

A. A total of three.

Q. And can you give me the dates of those three visits?

A. November of 2017 was a multi-day visit; that was when the first round of wetland and water body delineation work was conducted as well as habitat evaluation. And again in April of 2018, I believe that was a day or two days of additional field surveys for added parcels, as well as an individual visit in April of 2019.

Q. What did you do during your visit in April 2019?

A. That was my own personal visit to the Project site. I was trying to get a better feel for the Project Area prior to meeting with Staff.

Q. Was that the first time that you, personally, visited the site?

1 A. That was the first time I, personally,
2 have visited the site, correct.

3 Q. So, in November 2017, the purpose of the
4 visit was to delineate wetlands and anything else?

5 A. Habitat evaluation.

6 Q. What was the purpose of the visit in
7 April 2018 by Cardno?

8 A. The same; wetland delineation as well as
9 habitat evaluation.

10 Q. Were these visits all conducted during
11 daylight hours?

12 A. They were.

13 Q. None of these visits occurred during the
14 height of the -- let me ask you -- there's a
15 foundation here. Are you an expert in the
16 identification of birds?

17 A. I'm not sure what you mean by "expert,"
18 but I have conducted bird surveys, particularly
19 raptors.

20 Q. Okay. And are you proficient in
21 identifying raptors or other bird species by sight?

22 A. By sight, yes.

23 Q. Okay. How about by song?

24 A. My personal experience probably not, but
25 Cardno certainly has folks that are qualified to do

1 that.

2 Q. Did any of those folks participate in the
3 site visits to this Project Area?

4 A. I would have to check, but I don't know
5 off the top of my head.

6 Q. Other than casual observations about what
7 species of birds might have been seen during the
8 wetland delineations and habitat analysis, was there
9 any survey of birds conducted during any of those
10 visits?

11 MR. TAYLOR: Objection, Your Honor. The
12 reference to "casual observations" has no foundation.
13 It's a mischaracterization of the witness's
14 testimony.

15 ALJ SCHABO: Can you read that question
16 back for me, please?

17 (Record read.)

18 ALJ SCHABO: Can you ask that question
19 again?

20 MR. VAN KLEY: Yeah, I'll break it down
21 to a few --

22 ALJ SCHABO: Thank you.

23 MR. VAN KLEY: -- components.

24 Q. (By Mr. Van Kley) Did Cardno's
25 representatives, during any of these field visits,

1 perform any bird surveys of the area?

2 A. There was no direct species of bird
3 surveys conducted by Cardno. It was not designed
4 to, you know, evaluate birds in relation to the site
5 directly.

6 Q. Okay. And were any bat surveys
7 conducted?

8 A. There were no bat surveys conducted by
9 Cardno. Again, no direct surveys were designed for
10 identification of bats, no.

11 Q. You're aware that the Project has some
12 habitat that could be used by the endangered Indiana
13 bat?

14 MR. TAYLOR: Objection, Your Honor.
15 There's no foundation again.

16 MR. VAN KLEY: I'm just asking if he's
17 aware of that, of whether there was.

18 ALJ SCHABO: That's a fair question.
19 You can answer.

20 A. I'm aware that the area of the Project
21 Area is within the range of Indiana bat, yes.

22 Q. Okay. And are you aware of whether there
23 are any species of trees in the Project Area that can
24 be used by the Indiana bats as habitat?

25 A. There's potential trees in the Project

1 Area that could be used for the Indiana bat; however,
2 the Project has no proposed tree clearing that would
3 affect this habitat.

4 Q. Well, some of the vegetation in the area
5 is proposed to be cleared; is that correct?

6 A. There is .07 acres of trees that are
7 proposed to be cleared. This number is very
8 conservative. The way it's developed is through GIS
9 which essentially takes the entire canopy of the area
10 and blocks it out as acreage of saying that that's
11 wooded area.

12 The reality is that area is not
13 completely comprised of wooded vegetation and a lot
14 of times this represents what are called "windrows,"
15 very narrow strips of trees between properties,
16 usually existing old property boundaries or fence
17 lines or things along those lines, and I believe most
18 of the clearing is related to those areas.

19 So the estimate of .07 acres is probably
20 an overestimate of the total amount of clearing, so I
21 would say the amount of clearing is extremely minimal
22 and that this will not represent a change in the
23 habitat for bats.

24 Q. Do you know what species of trees are
25 used by bats for their habitat?

1 A. They prefer foliating bark trees and
2 such, an example would be what's called a shagbark
3 tree, but they could use other trees, particularly
4 old oaks or things, especially ones that have died
5 and their bark is starting to flake which is the kind
6 of thing that's an attractive bat habitat. Those are
7 the types of trees they would seek out.

8 Q. Does the Project Area include or contain
9 any species of trees that can be used as habitat by
10 the Indiana bat?

11 A. Yes, as far as in the Project Area that
12 is correct; but in what's called "the buildable
13 area," which is a smaller subset of that and
14 primarily where the panels would be placed and other
15 infrastructure, there is not.

16 Q. So is it your understanding then that
17 none of the areas, that will be cleared for the
18 Project, include any species of trees that can be
19 used as Indiana bat habitat?

20 A. I don't know the specific trees that are
21 going to be cleared. My understanding is it's very
22 minimal. If we're talking about a single tree or
23 two, I don't think that will affect the use of the
24 area by bats is what I'm saying.

25 Q. Well, bat species are known, at times, to

1 use just a single tree as a roosting tree; isn't that
2 correct?

3 A. Bats may use multiple roosting trees, but
4 yes, during mating periods they may be more
5 susceptible to single-use areas, yes.

6 Q. So there was no mist netting to look for
7 species of bats in the area?

8 A. There was no mist netting conducted by
9 Cardno, and I'm not aware of any other mist netting
10 done by another consultant, no.

11 Q. And the Project Area also falls within
12 the range of the northern bat, correct?

13 A. Are you referring to the northern
14 long-eared bat?

15 Q. Yes.

16 A. I believe it is also in the range of the
17 long-eared bat, yes.

18 Q. Is that an endangered species?

19 A. I believe it's a threatened species, yes.

20 Q. Did Cardno perform any surveys of mammals
21 in the Project Area?

22 A. Again, we did no surveys that were
23 directly in line to count or enumerate mammals within
24 the Project Area, no.

25 Q. I'd like to direct your attention to

1 Answer 11 of your Direct Testimony on page 7. I'd
2 like to read the second and the third sentence of
3 that answer and then ask you some questions about
4 those sentences.

5 "Using deer as a proxy, Cardno evaluated
6 whether development of the Project would increase
7 wildlife population density in areas surrounding the
8 Project. We determined that deer in the surrounding
9 area would increase by less than 5 percent, or less
10 than 0.01 deer per acre."

11 Now, would you discuss or describe the
12 determination that you made and how you got to the
13 conclusion expressed in those two sentences?

14 A. Sure.

15 So Cardno was asked to evaluate the
16 potential effect of the fence line to wildlife. In
17 doing research, we determined that deer could be used
18 as a proxy as we were able to collect additional
19 information and sufficient information on deer,
20 because that's a managed resource by ODNR and other
21 resources, to be able to do that type of analysis.

22 So a multi, you know, multi-person team
23 developed this analysis. It's using habitat
24 utilization factors to determine the use of the --
25 the land use in the surrounding area to determine how

1 many deer are in that area and what would be the
2 effect of taking away the buildable area.

3 So essentially to start, in doing
4 research we found that deer have a home range in the
5 area of between a half mile to 5 miles, so we
6 considered 5 miles to be the study area.

7 We then, using National Land Cover
8 Database, which is government-run information,
9 determined the land use within that area.

10 Land use, there's a lot of research out
11 there on deer and how they utilize different types of
12 land use. There's no direct tie of utilization
13 factors to particular land use from the National Land
14 Cover Database; however, this type of work is not new
15 to Cardno or anything else like that, but we had to
16 develop our own habitat utilization factors based on
17 that research.

18 So essentially what those habitat
19 utilization factors are is how much of that land is
20 available or how much time would the deer utilize
21 that area.

22 So, for an example, a wooded area and
23 stuff would have a habitat utilization of 1 or 100 in
24 relation to a percentage. Essentially that area is
25 available to the deer at all times. It's also their

1 kind of home area where they actually bed and
2 maintain, you know, actual areas to live.

3 Other areas, such as someone's lawn or a
4 medium-developed area, these are less utilized by
5 deer so, therefore, they get a lower utilization
6 factor.

7 And areas of forage and such,
8 agricultural areas and such, would receive a
9 moderately-high utilization factor since this is the
10 primary forage for deer.

11 Using these factors, we then determined
12 how much of that area is within that 5-mile radius
13 and then we developed an estimate for deer density
14 within Preble County. We use a couple different
15 sources to kind of determine what that was.

16 Our primary resource was U.S.
17 Department of Agriculture. They've done -- put
18 together a survey for deer for the Eastern United
19 States. This data is in the form of shapefiles that
20 you have to download. If you download these files,
21 they go down to the granular level of county level
22 within each of these different areas.

23 If you click on a particular county, in
24 this particular case Preble County, you get a code.
25 You go to the key for that code and it tells you what

1 they estimate the density of deer is for that
2 particular county in that particular area. In this
3 particular case it was estimated at less than 15 deer
4 per square mile.

5 We ground-truth this against ODNR data.
6 ODNR data -- ODNR does not directly determine the
7 population of deer in Ohio. They have certain
8 estimates and things that they've put together over
9 the years and everything else, but they don't report
10 an actual density or total number of deer for the
11 State of Ohio.

12 However, based on some of their estimates
13 and models, ODNR estimated that there's approximately
14 725,000 deer within the State of Ohio and there's
15 approximately 44,000 square miles in the State of
16 Ohio, so that gives you a rough estimate, as far as
17 density within Ohio, of 16 deer per square mile. So,
18 again, our 15 and 16 are very close.

19 We then looked at Preble County; is
20 Preble County considered higher or lower in average
21 in comparison with the rest of the State of Ohio.

22 Based on hunting data and stuff from
23 ODNR, we determined that Preble County is on the
24 lower end of density for deer, based on hunting
25 results and other survey information presented by

1 ODNR, so, therefore, we felt that 15 deer per square
2 mile, represented by the U.S. Department of
3 Agriculture, was relatively accurate and used that as
4 our density.

5 Again, these habitat utilization factors
6 were not developed by myself alone. This was a team
7 made up of wildlife biologists, senior statisticians,
8 and stuff.

9 Cardno has a lot of experience running
10 these types of surveys and this type of work as
11 Cardno does a lot of what's called "Natural Resource
12 Damage Assessments" or "NRDA" for short. This is
13 basically to evaluate natural disasters or other
14 things as to loss of habitat or what the value of
15 that loss is. Oil spills and wildfires are perfect
16 examples of this type of analysis that we've done
17 this for.

18 It's also not the first time we've done
19 this type of analysis for energy projects in relation
20 to deer. We've done this in Ohio, North Carolina,
21 Virginia, other states as well.

22 So again, looking at this, you take the
23 number of deer that you believe are in that 5-mile
24 radius and then you determine how many deer are
25 inside the actual buildable area.

1 Then you take out that buildable area,
2 which is 827 acres of agricultural land, and then
3 redistribute those deer within the 5 acres, still
4 keeping the original density there and saying what is
5 that increase in density, what is that increase or
6 change from the Project Area no longer being able for
7 forage. In this particular case, we got a result of
8 less than 5 percent.

9 Q. When you calculated a redistribution of
10 the deer from the Project Area into the area around
11 the Project Area, did you assume that those deer
12 would be redistributed evenly throughout the 2 miles
13 surrounding the Project Area?

14 A. No. Again, using the --

15 MR. TAYLOR: Objection.

16 THE WITNESS: Sorry.

17 MR. TAYLOR: Objection to the extent that
18 Mr. Van Kley is mischaracterizing the witness's
19 testimony of the 2-mile area.

20 ALJ SCHABO: Could you read the --

21 MR. VAN KLEY: Oh, okay. 5-mile, right?

22 THE WITNESS: Correct.

23 MR. VAN KLEY: Let me re-ask the
24 question. You're correct.

25 Q. (By Mr. Van Kley) When you figured out

1 your figures for redistribution into the 5-mile area
2 around the Project Area, did you assume that those
3 deer from the Project Area would be evenly
4 distributed throughout that 5-mile radius?

5 A. No. We calculated that the deer would be
6 redistributed based on the utilization so, therefore,
7 we would say more deer went into the wooded areas or
8 more deer went into other agricultural areas as those
9 received higher utilization factors versus factors
10 related to lower or medium-density areas.

11 Q. All right. So in your Answer 11, where
12 you state "We determined that deer in the surrounding
13 area would increase by less than 5 percent, or less
14 than 0.01 deer per acre," and I don't see any
15 variation in that number, I just see one number; so
16 how do you explain then how you took into account
17 various habitats in that 5-mile area when you figured
18 out this 5-percent number?

19 A. So the redistribution is essentially a
20 ratio. So when we calculated the total number of
21 deer in the area, it was based on the habitat
22 utilization. When you redistribute them, you're
23 redistributing them at the same rate so, therefore,
24 the percent change would be identical for all those
25 different categories.

1 Q. Okay. So, for agricultural land, it's
 2 your view that the number of deer utilizing that kind
 3 of habitat is moderate, I think you said?

4 A. Moderate to high, yes.

5 Q. Moderate to high, okay. So if that's the
 6 case, then the number of deer in the agricultural
 7 areas around the Project Area, in your analysis,
 8 would increase by 5 percent.

9 A. Less than 5 percent, correct.

10 Q. Okay. So based on all the assumptions
 11 you made in your evaluation, how many deer currently
 12 are assumed to use the Project Area?

13 A. The Project Area within the fence line,
 14 is that what you're referring to?

15 Q. Yes.

16 A. Based on our analysis, I believe we got
 17 just under 14 deer within the Project Area within
 18 what's considered the buildable area.

19 Q. What's the total square-mile area within
 20 the fenced part of the Project?

21 A. I don't know what it is in square miles,
 22 but I believe it's roughly 827 acres.

23 Q. So with regard to the estimated 14 deer
 24 within the fence, that currently use the area that
 25 will be used for the fenced solar equipment, did your

1 analysis assume that those 14 deer would be
2 distributed throughout the 5 miles surrounding the
3 Project Area?

4 A. So the redistribution is basically saying
5 where would those deer be able to utilize and such
6 based on the utilization factor, so the distribution
7 does not take into account location. It basically
8 says it's all within the same homebound range of
9 5 miles, so yes.

10 Q. I see. But if the deer are currently
11 using the Project Area and they will be displaced by
12 the fences once the Project is built, wouldn't you
13 expect those deer to more heavily use the areas that
14 are adjacent to the property -- adjacent to the
15 Project Area instead of areas that are further away?

16 A. Potentially initially, but deer will
17 migrate throughout the day and stuff to find food, so
18 I believe they will migrate wherever they are able to
19 find adequate food.

20 This area is heavily agriculturally used.
21 Deer, I believe in this area, are used to
22 displacement and such on an annual basis. These
23 fields are tilled and harvested on a regular basis as
24 far as annually and, therefore, that would cause the
25 deer to displace from these fields naturally, so I

1 have a feeling they would displace in a similar
2 fashion as if a farmer was harvesting their field and
3 such during construction.

4 Q. So let's say that one of the neighboring
5 landowners has a field full of corn and it hasn't
6 been harvested yet. And that landowner, being
7 adjacent to the Project area, is closer to the areas
8 that were previously used by the deer in the Project
9 Area, than areas that are further away from the
10 Project Area. Those deer are going to be more likely
11 to use the closest areas containing food for them,
12 than to wander further away in search of food,
13 correct?

14 A. I believe that's a possibility. Our
15 analysis was not that granular. Our analysis was to
16 determine if this would be a long-term issue for the
17 deer population, so any effect like that would be
18 considered short-term and was not a direct part of
19 our analysis.

20 Q. Are you familiar with a state park known
21 as Hueston Woods in the area?

22 A. I am.

23 Q. Okay. How far is that from the Project
24 Area?

25 A. A little over 5 miles to the southeast.

1 Q. 5 miles?

2 A. A little over 5 miles, yes.

3 Q. Do you know what the deer -- the
4 population -- do you know what the density of the
5 deer population is in Hueston Woods?

6 A. I do not know.

7 Q. So when you looked for USDA figures on
8 deer density, those figures did not take into account
9 natural areas that are denser in deer population,
10 correct?

11 A. No, that's not correct. So one of our
12 assumptions is the density of deer in Preble County
13 is relatively evenly distributed based on utilization
14 factors.

15 So essentially in the USDA thing it says
16 the density is less than 15 deer per acre of suitable
17 habitat so that's why we use the utilization factors
18 to determine what is considered suitable habitat and
19 apply that density to it. In doing so, when we
20 redistributed the deer, we would take into account
21 they would utilize areas of -- higher-quality areas
22 more than other areas in our redistribution.

23 So to kind of answer your question,
24 some of that is taken into account but one of our
25 assumptions is that the deer population in Preble

1 County is relatively evenly distributed throughout
2 the County, yes.

3 Q. Are you aware that, in some natural
4 areas, the deer populations are higher than can be
5 sustained by the amount of vegetation in those areas?

6 MR. TAYLOR: I'm going to object as to
7 foundation.

8 MR. VAN KLEY: I'm just asking whether he
9 was aware of that.

10 ALJ SCHABO: Well, is the question
11 whether he was aware of or aware that?

12 MR. VAN KLEY: The question is whether it
13 is true that -- whether he knows whether deer can be
14 overpopulated in those areas.

15 ALJ SCHABO: You can answer that
16 question.

17 THE WITNESS: Deer populations vary
18 throughout the time of year and by sex.

19 During mating periods and stuff, deer may
20 become more concentrated or actually less
21 concentrated in certain areas. Deer, during other
22 times of the year, may be more evenly distributed as
23 they're grazing and feeding. During the wintertime
24 they may be more concentrated as food sources may be
25 more scarce, therefore the deer concentrate on those

1 food source areas.

2 So I would say the deer populations and
 3 density vary throughout the year, but when you think
 4 about year to year and throughout entire seasons,
 5 developing an average to say what the deer population
 6 is at any given time, I think, is a fair estimate and
 7 a fair assumption.

8 Q. Do you know whether the deer in Hueston
 9 Woods are overpopulated?

10 A. I do not know.

11 Q. Do you know whether the deer in Hueston
 12 Woods roam outside of the park to find food?

13 A. I have no direct knowledge, but I would
 14 assume that they do, yes.

15 Q. Do you know whether the deer in Hueston
 16 Woods Park travel as far as the Project Area to
 17 forage for food?

18 A. I would say that it's possible but not
 19 probable considering the distance between the two
 20 areas.

21 Q. Well, you said the range for a deer to go
 22 for foraging is between a half mile and 5 miles,
 23 right?

24 A. That is correct.

25 Q. And Hueston Woods Park is 5 miles from

1 the Project Area?

2 A. Over 5 miles.

3 Q. How much over 5 miles?

4 A. Not a lot, but it is over.

5 Q. Did you do any analysis of -- did you do
6 any analysis to determine whether the number of
7 coyotes in the area around the Project will increase
8 as a result of the fencing in the Project Area?

9 A. I did not do a direct analysis on
10 coyotes. However, we can use deer as a proxy as far
11 as what the change in population would be of animals
12 that would be excluded by fence lines and I would put
13 coyotes in that factor; so whatever density of
14 coyotes are in the Project Area, we assume their
15 distribution would be very similar to the way the
16 deer react to the fence line.

17 However, we did look at -- again, ODNR
18 puts out statistics on managed species and such.
19 Again, this is not very granular to be able to
20 determine densities and stuff, but ODNR does not list
21 Preble County as a hotspot for coyotes; it's still
22 considered below average.

23 Q. But you didn't do a survey --

24 A. We did not.

25 Q. -- of the coyote populations.

1 A. We did not.

2 Q. And I assume then that you also don't
3 live in Preble County.

4 A. I do not live in Preble County.

5 Q. So you've had no opportunity to observe,
6 firsthand, the presence or lack of presence of
7 coyotes in that area.

8 A. That is correct.

9 MR. VAN KLEY: I have no further
10 questions.

11 ALJ SCHABO: Mr. Taylor.

12 MR. TAYLOR: Your Honor, we'd just like
13 five minutes, please.

14 ALJ SCHABO: Yeah. Let's go off the
15 record until a quarter till 11:00.

16 (Recess taken.)

17 ALJ SCHABO: Let's go back on the record
18 again.

19 Mr. Taylor, do you have some redirect?

20 MR. TAYLOR: Yes, we do, Your Honor.

21 ALJ SCHABO: Proceed.

22 - - -

23 REDIRECT EXAMINATION

24 By Mr. Taylor:

25 Q. Mr. Rupprecht, you were asked a number of

1 questions about the deer evaluation that Cardno
2 conducted. Just to clarify, what is the -- what was
3 the study area for that evaluation?

4 A. Just to clarify, the study area went out
5 to 2 miles around the fence line, not 5 miles.

6 Q. Does that make any other changes to your
7 testimony?

8 A. It does not. The calculations, as far as
9 the change in percentage, is all the same.

10 Q. Thank you.

11 You were also asked a number of questions
12 about the potential impact to adjacent properties.
13 Do you recall that?

14 A. (Witness nods.)

15 Q. What will the -- what will the impact of
16 construction be on deer displacements?

17 A. Construction is not an instantaneous
18 action and the fence line doesn't go up
19 instantaneously, so the dispersement of deer will
20 happen over a period time. Nine months to a year is
21 generally what the construction time would be.

22 And as those noise levels increase and
23 activity levels increase, the deer will displace even
24 further away from that Project Area and, as they
25 displace and are taking away that forage area, the

1 deer are more likely to find kind of a new home range
 2 as food is not limiting a factor in this area so,
 3 therefore, they find a new kind of home range area
 4 outside of the Project Area, as they would be used to
 5 that displacement over that period of time.

6 MR. TAYLOR: Thank you, Your Honor. No
 7 further questions.

8 ALJ SCHABO: Any recross, Mr. Van Kley?

9 MR. VAN KLEY: Yeah.

10 - - -

11 RE-CROSS-EXAMINATION

12 By Mr. Van Kley:

13 Q. I guess now I'm confused about your
 14 testimony concerning the 5 miles that we talked about
 15 earlier, so I want to make sure I'm clear on that.

16 I think earlier you may have said that
 17 you assumed the deer displaced by the Project Area
 18 fences would be dispersed in an area of 5 miles.

19 A. That's correct, I believe I did say that
 20 and I'm correcting that our analysis was for 2 miles,
 21 not 5 miles; I misspoke.

22 So the range of deer ranges quite a bit.
 23 There's a lot of literature out there that say deer
 24 may range quite a bit, but we've found the home
 25 bounding of deer is between a half mile and 2 miles,

1 not 5 miles, so I just want to make sure that is
 2 clear. And so, therefore, the calculations that we
 3 did as far as the land use and everything, this
 4 analysis was for 2 miles.

5 MR. VAN KLEY: Okay. All right. I think
 6 I'm clear on that now. I have no further questions.

7 ALJ SCHABO: Thank you. You may step
 8 down.

9 Mr. Taylor.

10 MR. TAYLOR: Your Honor, we move that
 11 Company Exhibit 13 be admitted into the record.

12 ALJ SCHABO: Any objections to Company
 13 Exhibit 13?

14 Hearing none, it will be admitted.

15 (EXHIBIT ADMITTED INTO EVIDENCE.)

16 ALJ SCHABO: Mr. Settineri, your next
 17 witness.

18 MR. SETTINERI: Thank you, Your Honor.
 19 At this time, Angelina Solar will call David Hessler
 20 to the stand, please.

21 (Witness sworn.)

22 ALJ SCHABO: Thank you. Have a seat and
 23 state your name and business address for the record
 24 when you're ready.

25 THE WITNESS: My name is David Hessler.

1 I work for Hessler Associates, and my office is
2 located at 5096 North Silver Cloud Drive in Saint
3 George, Utah.

4 ALJ SCHABO: Thank you.

5 MR. SETTINERI: Your Honor, at this time,
6 we'd like to go ahead and mark, as Company Exhibit
7 14, the Direct Testimony of David Hessler.

8 ALJ SCHABO: So marked.

9 (EXHIBIT MARKED FOR IDENTIFICATION.)

10 - - -

11 DAVID HESSLER

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

14 DIRECT EXAMINATION

15 By Mr. Settineri:

16 Q. Good morning, Mr. Hessler.

17 A. Good morning.

18 Q. Do you have before you what's been marked
19 as Company Exhibit 14?

20 A. I do.

21 MR. SETTINERI: Okay. Your Honor, if I
22 may just go off the record briefly?

23 ALJ SCHABO: Yes. Let's go off the
24 record.

25 (Off the record.)

1 ALJ SCHABO: Back on.

2 Q. (By Mr. Settineri) Mr. Hessler, do you
3 have any changes or corrections to your testimony
4 today?

5 A. Yes. Just two minor corrections.

6 The first one is the answer to
7 Question 1, line 4. I've just moved and my office
8 address is different now. The new address is what I
9 just gave of 5096 North Silver Cloud in Saint George.
10 The new zip code is 84770.

11 And the other change is just to one word
12 on page 4, line 20, where it says "only occurring
13 during the day....", I'd like to change that to
14 "mainly occurring during the day...."

15 Q. So, for the record, you're striking the
16 word "only" and substituting the word "mainly"?

17 A. That is correct.

18 Q. Do you have any other changes to your
19 testimony today?

20 A. No.

21 Q. Okay. And was this testimony prepared by
22 you or at your direction?

23 A. It was.

24 Q. Okay. And if I was to ask you the
25 questions in your testimony today -- strike that.

1 Mr. Hessler, regarding the change you
2 made regarding "mainly," why did you make that
3 change?

4 A. Because it's come to my attention, since
5 I wrote this, that the transformer, the step-up
6 transformer in the substation does not go completely
7 off at night, as I had originally thought, but
8 remains energized and there's some potential for a
9 continuing noise there.

10 Q. So if I was to ask you the questions in
11 your testimony, would your answers be the same today
12 as you have revised?

13 A. Yes.

14 MR. SETTINERI: Thank you, Mr. Hessler.

15 Your Honor, the witness is available for
16 cross-examination.

17 ALJ SCHABO: Mr. Van Kley.

18 - - -

19 CROSS-EXAMINATION

20 By Mr. Van Kley:

21 Q. Mr. Hessler, with regard to the
22 substation that's included in the Project, you did
23 some analysis of the sound levels that are expected
24 to be heard at nearby residences from that
25 substation?

1 A. That's correct.

2 Q. Okay. That analysis is included in
3 Exhibit E of the Application, correct?

4 A. I believe so.

5 Q. Okay. If you can turn to Exhibit E,
6 please, and tell me whether that is a report that you
7 wrote for the Application.

8 A. Yes, that's correct. I didn't know
9 whether it was E or what it was, but yes, that's it.

10 Q. All right. Will you turn to the place in
11 your report where you identify the sound levels
12 expected to be heard at the nearest residences and
13 let me know where to find that.

14 A. Well, the best place is a table at the
15 end of the text. It's Table T-2113-101618-0.

16 Q. What page number of the report is that
17 table found on?

18 A. It's after page 16 of the report.

19 Q. Is it the first page after page 16?

20 A. Yes.

21 Q. So interpret this table for me, if you
22 would, specifically with regard to the sound levels
23 expected to be heard at the nearest residence.

24 A. The first part of the table calculates
25 the sound level from the transformer and then it's

1 projected out to three different residences which are
2 referred to as Design Point 1, 2, and 3.

3 The nearest residence is Design Point 1
4 in Section 2 of the table. The predicted sound level
5 there is 39 dBA and that receptor point is the
6 residence of the landowner that's leasing the land
7 that the substation is on.

8 And then the next two more distant
9 receptors are nonparticipating. The next nearest
10 house is about 1,300 feet away; the predicted level
11 there is 28 dBA. And then the next nearest house is
12 about 1,500 feet away; the predicted level there is
13 26 dBA.

14 Q. Are these calculations of the sound
15 levels expected to be heard during the daytime?

16 A. Yes. When the transformer is in normal,
17 full operation. These levels may continue through
18 the evening. It's unclear whether they'll be this
19 loud. This will be a worst case for nighttime.

20 Q. Go to page 5 of your report and keep your
21 finger on the table that we've been discussing
22 because I'd like to refer to that table and page 5 at
23 the same time.

24 I'm looking at the last paragraph on
25 page 5, where the first sentence states "What these

1 results generally show is that this environment is
2 extremely quiet with sound levels typically in the 20
3 to 35 dBA range." Do you see that sentence?

4 A. Yes.

5 Q. Now, the sound levels of 20 to 35 dBA
6 comes from your evaluation of the background sound in
7 the area around the substation, right?

8 A. Right.

9 Q. And explain why you quantified the
10 background sound level in this area.

11 A. It's standard practice to do a
12 preconstruction survey to establish what the existing
13 background level is, so that that can be compared to
14 projections of the future Project sound level.

15 So we monitored near the closest
16 residence, that's DP-1, for 14 days, to see what the
17 existing conditions were, and they're plotted in this
18 chart that's shown right above the part we were just
19 talking about.

20 But the bottom line is the daytime sound
21 level there, the L90, the real residual background is
22 about, on average, 31 dBA. And then the average
23 level, the Leq during the day, is 39 dBA. And that
24 represents the true average level that happens every
25 10 minutes.

1 Q. And the reason that you quantify the
2 background sound is because you want to find out how
3 much sound normally in the area would mask the sound
4 of any new source of -- any new sound source that
5 would come into the area.

6 A. Exactly.

7 Q. Now, did you do any background sound
8 measurements at night?

9 A. Yeah. We measured 24 hours a day.

10 Q. Okay. And can you tell me what the range
11 of background sound in this area around the
12 substation site is at night?

13 A. Yeah. The area is very quiet in general.

14 At night, the average L90, which by the
15 way is the sound level that occurs in between any
16 sporadic noise event, any car going by, wind gust,
17 the true real background, that's 27 at night and then
18 the average level at night is 33. All those numbers
19 are very, very low.

20 Q. Go to page 2 of your report which is
21 marked as Exhibit E to the Application.

22 A. Okay.

23 Q. I'd like to direct your attention to the
24 third paragraph on page 2. Towards the middle of
25 that paragraph you see the reference to the sounds

1 expected to be produced by an inverter?

2 A. Right.

3 Q. And you're aware that the Angelina Solar
4 Project will include inverters?

5 A. Right.

6 Q. Now, at the time that you wrote this
7 report, what information did you have concerning the
8 sound levels that are produced by inverters of the
9 nature that Angelina expects to use in this Project?

10 MR. SETTINERI: I'd just object as to
11 foundation being laid as to inverters that Angelina
12 expects to use at this Project. There has to be
13 foundation laid as to whether he knows what inverters
14 will be utilized.

15 ALJ SCHABO: Could you rephrase your
16 question, please?

17 MR. VAN KLEY: Yeah. Actually Counsel
18 raises a good question that I would like to ask
19 Mr. Hessler which is: Do you know what kind of
20 inverters will be used in this Project?

21 THE WITNESS: I don't, and that's normal
22 because I don't think they're finalized or sited
23 until a detailed design phase.

24 Q. (By Mr. Van Kley) So when you evaluate
25 the sound expected to be produced by a project, do

1 you normally look at the specifications for the
2 project equipment, that is expected to be used, in
3 order to find out what the expected sound produced by
4 that equipment would be?

5 MR. SETTINERI: I object. Sorry to
6 interrupt a long question. I object to the use of
7 the word "project" and what types of project.

8 MR. VAN KLEY: I'm speaking generally,
9 his practice generally when he evaluates any
10 potential sound impact. The question is entirely
11 proper.

12 ALJ SCHABO: He can answer the question.

13 MR. SETTINERI: I'm just clarifying the
14 record.

15 A. Yes, and that's why we obtained detailed
16 information on the transformer here because that was
17 known, the MVA rating, and we input that into the
18 analysis and we know where that's going to be and how
19 big it's going to be, so we're able to make
20 projections to the houses and that was that table
21 that we talked about a few minutes ago.

22 The inverters are kind of undefined so
23 there's no way to specifically model them or
24 calculate the sound from them ahead of time.

25 Q. In order to model the expected sound from

1 equipment, you would have to know what equipment is
2 going to be chosen, right?

3 A. Exactly, and where it is, and so on and
4 so forth.

5 Q. You didn't have that information for this
6 Project for the inverters.

7 A. That's correct, nor any solar project
8 that I've worked on, so we have to deal with them in
9 generalities essentially.

10 Now, you started to ask about what
11 information we had, and that was a study that was
12 done some years ago in Massachusetts where some field
13 measurements were taken at three different solar
14 sites to quantify inverter noise. That study
15 essentially said that the inverters were inaudible
16 around the boundaries of all the projects and any
17 kind of tone or character to the noise was not
18 audible at the boundaries of these projects.

19 Q. Would you go to page 13 of Exhibit E to
20 the Application. I'd like to direct your attention
21 to the second paragraph on that page. The study that
22 you've just mentioned is also identified in the
23 second paragraph on page 13, isn't it?

24 A. Yes.

25 Q. This is a study done for the

1 Massachusetts Clean Energy Center?

2 A. Correct.

3 Q. How far were the boundaries of the
4 projects, analyzed in that study, from the inverters
5 that were studied by that study?

6 A. They didn't specify but they gave a
7 general site plan in the beginning of the study that
8 shows presumably one of the sites and, in that
9 figure, the inverters are all a minimum of about
10 400 feet from the site boundaries.

11 Q. Is it fair to say then that the
12 conclusion in that study was that by the time -- let
13 me start over.

14 Actually, I think it might be helpful if
15 we could all look at the report that we've been
16 talking about and that's mentioned in your Exhibit E.

17 MR. VAN KLEY: Your Honor, I'd like to
18 mark this as CCPC Exhibit No. 1.

19 ALJ SCHABO: I'm sorry, what are we
20 marking that?

21 MR. VAN KLEY: CCPC, which is the
22 initials, No. 1.

23 ALJ SCHABO: I'm sorry, what are we
24 marking as CCPC 1?

25 MR. VAN KLEY: It's the report that is

1 mentioned on page 13 of his Exhibit E, which is
 2 entitled "Study of Acoustic and EMF Levels from Solar
 3 Photovoltaic Projects" done for the Massachusetts
 4 Clean Energy Center.

5 ALJ SCHABO: So marked.

6 (EXHIBIT MARKED FOR IDENTIFICATION.)

7 Q. (By Mr. Van Kley) Mr. Hessler, I have
 8 handed you a document that has been labeled CCPC
 9 Exhibit No. 1, entitled "Study of Acoustic and EMF
 10 Levels From Solar Photovoltaic Projects." Is this a
 11 copy of the study that is referenced in the second
 12 paragraph on page 13 of Exhibit E of the Application?

13 A. Yes, it is.

14 Q. Okay.

15 MR. SETTINERI: Your Honor, if I may,
 16 given the size of this exhibit, to the extent -- I'd
 17 just like to note, to the extent the witness requires
 18 time to review the exhibit before questioning, I
 19 would ask for that ability.

20 ALJ SCHABO: Sure, we can.

21 MR. SETTINERI: That's only if the
 22 witness would like that.

23 ALJ SCHABO: Would you like a moment to
 24 look over the exhibit?

25 THE WITNESS: No, that's okay.

1 MR. SETTINERI: Thank you.

2 ALJ SCHABO: Proceed.

3 THE WITNESS: Thanks though.

4 MR. VAN KLEY: We already went over this
5 exhibit in the Alamo --

6 ALJ SCHABO: Okay.

7 MR. VAN KLEY: -- case, so everybody
8 knows this exhibit already.

9 MR. SETTINERI: I'd just move to strike
10 that. Irrelevant for this proceeding and for the
11 record.

12 ALJ SCHABO: I think that's a little
13 friendly banter on the record that can stay.

14 MR. SETTINERI: Thank you for clarifying
15 that.

16 Q. (By Mr. Van Kley) Mr. Hessler, can you
17 point to any information in this document that
18 identifies the distance between the inverters studied
19 therein and the boundaries of the project?

20 A. Well, as I just mentioned, Figure 1,
21 which is seven or eight pages into the document
22 here --

23 Q. Okay. Would you identify a page number
24 if you have one?

25 A. Well, it doesn't have one.

1 Q. You said Table 1 or Figure 1?

2 A. I said Figure 1. It's after page 1 of
3 the text here.

4 Q. All right. You can proceed.

5 A. That's the only site plan that's given in
6 the study to my recollection and it shows what's
7 probably intended to be a typical layout and, at this
8 site, there's four inverters that are centrally
9 located in the four quadrants of the site area and
10 all of them are a minimum about 400 feet from the
11 site boundaries. There's some few dimensions given
12 on here that you can estimate that by.

13 Q. All right. Redirecting your attention to
14 the second paragraph on page 13 of Exhibit E. You
15 state in here that any noise from these cabinets --
16 which are the cabinets enclosing the inverters,
17 right?

18 A. Right.

19 Q. -- generally drops into the background
20 level and becomes insignificant at a distance of
21 150 feet. Where do you see information in Exhibit 1
22 that leads you to the conclusion that I've just
23 paraphrased from paragraph 2 on page 13 of Exhibit E?

24 A. It would be in the Executive Summary on
25 page iii. I'm just repeating in my report

1 essentially the conclusion in this report which, down
2 in the bottom of the third paragraph, it says "At
3 150 feet from the inverter pad, sound levels
4 approached background levels."

5 Q. And what were the background levels for
6 the projects that were analyzed in Exhibit 1?

7 A. It varied from site to site of course.
8 At Site 1, it was, on average, 43.9.

9 Q. Okay. And give us page numbers or figure
10 numbers where you find that information, please.

11 A. That comes from Table 1 on page 9.

12 Q. Okay. Just give us a moment to find it,
13 please.

14 So now we're on Table 1 on page 9 of CCPC
15 Exhibit No. 1, and would you repeat your answer as to
16 the background levels at the project site that is
17 dealt with in Table 1 on page 9?

18 A. Yes. At Site 1, they measured 43.9 as a
19 background.

20 Q. All right. Now, with regard to Site 1,
21 is there any information in this report that
22 identifies the sound coming from the inverters at a
23 distance of 150 feet away?

24 A. Yeah. On the next page, Table 2, if you
25 look halfway down, it says perpendicular to inverter

1 face at 150 feet, they measured 41.8.

2 And they tested two inverters here at
3 this site. At the very bottom of the table, the
4 other inverter was 41 at 150 feet.

5 Q. Staying on Table 2 on page 10 for a
6 moment. The sound from the inverter at 30 feet was
7 at what level?

8 A. Well, they've got various measurements
9 here in different directions from different
10 inverters. In the first instance, on the third line,
11 they measured 58.8 at 30 feet from one side of one of
12 them and 59.5 from perpendicular to the inverter
13 face.

14 Q. And then what about the third set of
15 numbers there? For 30 feet where you see 54.8, is
16 that a measurement of inverter sound at a distance of
17 30 feet from the inverter?

18 A. Yeah, that must be. Well, that's a
19 measurement of the other unit that they tested there.
20 Parallel, they got 54.8, and perpendicular, 56.3.

21 Q. And then how about the fourth set of
22 numbers, does that have any information about the
23 sound level from the inverter at any particular
24 point?

25 A. What fourth set of numbers?

1 Q. The last four lines on Table 2.

2 A. Well, the second from the bottom,
3 perpendicular to the inverter face, they measured
4 56.3.

5 Q. Okay. Going back to my questions about
6 the inverter sound levels at 150 feet, there's also
7 two more numbers given besides the two that you
8 provided us, right? Looking at the fourth line of
9 Table 2, parallel to inverter face, 150 feet, you
10 have a decibel level of 45.2?

11 A. Right.

12 Q. And then the third set of numbers on
13 Table 2, for north east pad parallel to inverter
14 face, 150 feet, you have a decibel level of 43.4?

15 A. That's correct.

16 Q. Okay. All right. So we've discussed
17 Site 1 studied in the report that's been marked as
18 CCPC Exhibit No. 1. Are there other sites that were
19 studied and reported in Exhibit 1?

20 A. Yeah, there's two more sites.

21 Q. Okay. Take us to the second site and
22 show us where, in the report, we can find information
23 about the decibel levels from the inverters from that
24 site.

25 A. Okay. At Site 2, there's a table on

1 page 18 that lists all of the figures at 150-feet and
2 30-feet that we were just talking about at the other
3 site. So, at this site, they measured 46.2 at
4 150 feet, and 53.4 at 30 feet perpendicular, and
5 44.3 dBA at 30 feet parallel to the inverter face.
6 And the reason there's a distinction is because the
7 sound comes out of two sides of the unit, and the
8 ends don't produce any noise.

9 Q. So what's the inverter face that is
10 mentioned on the tables we've been discussing?

11 A. Presumably that's the long side where the
12 louvers are; where the cooling air intakes and
13 discharges are.

14 Q. Is there any information, in CCPC
15 Exhibit No. 1, about the distance to the boundary
16 between the inverters -- from the inverters that were
17 studied in Site 2?

18 A. There's no site plan, no, but all they
19 say is that at the boundaries of all three sites that
20 they couldn't detect anything. Generally speaking,
21 they said at one or two positions they could hear
22 some faint hum but, at most positions, everything,
23 the entire site, was totally inaudible.

24 Q. Directing your attention to Table 4 on
25 page 17 of CCPC Exhibit No. 1. Does that table

1 include information about the background sound level
2 at Site 2?

3 A. Yes. It says the average was 49.6 there.

4 Q. So at Site 2 there was 49.6 decibels of
5 background sound available to mask the sound from the
6 inverters at a distance of 150 feet away; is that
7 fair to say?

8 A. Correct.

9 Q. In fact, the background level at Site 2,
10 at a distance of 150 feet from the inverter, was
11 48.6 decibels, right?

12 A. The 48.6 was measured 150 feet away from
13 the fence of the project.

14 Q. Okay.

15 A. That's what they took to be the
16 background was everything 50 feet and further from
17 the fence because they couldn't hear anything from
18 the project at those positions.

19 Q. All right. There's also a Site No. 3
20 studied in the report that's been marked as CCPC
21 Exhibit No. 1, right?

22 A. Yes.

23 Q. Let's go to page 25. Table 7 on that
24 page shows you the mean background sound level at
25 this site was 42.5?

1 A. Correct.

2 Q. And then directing your attention to
3 Table 8 on page 26, the L90-decibel level for the
4 inverters at a distance of 150 feet away was 43.9
5 perpendicular to the inverter face, right?

6 A. Yeah, that's right.

7 Q. At 150 feet from the inverter, parallel
8 to the inverter face, the L90 level was 41.8 dBA,
9 right?

10 A. Right.

11 Q. So again, for Site 3 there was enough
12 background sound to mask the sounds from the inverter
13 at a distance of 150 feet away from the inverter,
14 correct?

15 A. Yes, that was the situation.

16 Q. Yeah.

17 And going back to Site No. 1, Table 2 on
18 page 10, there was enough background sound at that
19 site to mask the sounds of the inverter at a distance
20 of 150 feet away from the inverter, correct?

21 MR. SETTINERI: I just object.

22 Mischaracterizing the study itself in terms of
23 exactly what equipment was on the pads and being
24 measured.

25 MR. VAN KLEY: I'm sorry, could you

1 repeat that?

2 MR. SETTINERI: I'm objecting to your
3 characterization of the study and the equipment that
4 is located on these sites.

5 ALJ SCHABO: Can you reread his question?

6 (Record read.)

7 ALJ SCHABO: Mr. Hessler can correct any
8 mischaracterization, that he feels may have been
9 there, in his answer.

10 Please answer the question.

11 A. Yes, yes, there was enough background
12 there that it faded away into the background.

13 Q. Okay. You can put Exhibit No. 1 to the
14 side for now and go back to Exhibit E of the
15 Application. I would like to direct your attention
16 to page 13, Section 6.0.

17 A. Okay.

18 Q. Section 6.0 discusses the sounds expected
19 during construction of the Solar Project, right?

20 A. Right.

21 Q. And you state in the first sentence of
22 Section 6.0 on page 13 that "the construction phase
23 of a solar energy facility is remarkably short,"
24 correct?

25 A. That's what I said.

1 Q. Okay. Do you know how long the
2 construction phase of the Angelina Project is
3 expected to be?

4 A. I think it's something on the order of
5 nine months to a year, I heard.

6 Q. Okay. Do you believe that is a time
7 period that is remarkably short?

8 A. Well, it is compared to the construction
9 of a fossil plant or any other kind of power plant.

10 Q. Go to page 14 of Exhibit E. I would like
11 to direct your attention to Table 6.0.1. Now, the
12 purpose of this table is to compare some of the
13 sounds from the construction of the Angelina Solar
14 Project to other -- well, actually, let me rephrase
15 that.

16 The purpose of this table is to provide
17 the decibel levels expected to be produced by
18 equipment used for construction of the Angelina Solar
19 Project, correct?

20 A. Correct.

21 Q. So, for example, Table 6.0.1 identifies
22 85 dBA as the sound level expected from a dozer to be
23 used at the Project, right?

24 A. Right.

25 Q. And then you -- in table -- in this table

1 it states that 84 dBA is expected to be the level of
2 sound coming from a Vermeer PD10 pile driver,
3 correct?

4 A. Correct.

5 Q. Do you expect that this type of equipment
6 will be used to install the posts for the solar
7 panels in the Angelina Project?

8 A. I believe something -- either this type
9 of equipment or something similar is likely to be
10 used, yes.

11 Q. And then the drill rig truck is stated to
12 have a decibel level of 84 dBA, right?

13 A. Right.

14 Q. Is that also a piece of equipment that is
15 used to install posts for solar panels?

16 A. It can be. There's two different ways to
17 put the posts in, by driving them or by screwing them
18 into the ground. It would be one or the other.

19 Q. Okay. So the drill rig truck can be used
20 to screw the posts into the ground, right?

21 A. Yes.

22 Q. And the Vermeer pile driver can be used
23 to pound them into the ground, right?

24 A. Right.

25 Q. Okay. And for all of the decibel levels

1 we've been discussing that are included in Table
2 6.0.1, those are the sound levels expected to be
3 heard 50 feet away, correct?

4 A. Right.

5 Q. And those sound levels of 84 or 85, that
6 we've been discussing, will occur in an area in which
7 the background sound levels are expected to be
8 typically in the 20 to 35 dBA range, correct?

9 A. I would characterize the daytime average
10 level as a little higher. We measured about 39 for
11 the Leq there. Construction only occurs during the
12 day.

13 Q. Well, let's go back to page 5 of your
14 report where we earlier talked about the first
15 sentence in the last paragraph on that page which
16 reads: "What these results generally show is that
17 this environment is extremely quiet with sound levels
18 typically in the 20 to 35 dBA range." Did I read
19 that correctly?

20 A. Right. But those low levels, the 20s
21 happen at night when there wouldn't be any
22 construction. That's not to say that the background
23 is all that loud during the day either. There's no
24 question that construction noise is going to be
25 audible.

1 Q. Do you know what the range of background
2 sounds during the daytime are in the Project Area?

3 A. Yes. If we look at page 5, this shows
4 the sound levels measured over two weeks, 24 hours a
5 day, and there are times when it might be 35 during
6 the day, or up to the high 40s, or over 50 if there's
7 any kind of wind.

8 Q. All right. Go to page 6 of Exhibit E.
9 I'd like to refer you to Table 3.0.1. If you look at
10 the right-hand column of that table, you see a column
11 labeled "dBA" and, under that, "31.1."

12 A. That's the average L90. Like I said,
13 that's the level that happens when there's no cars
14 going by, no wind, no birds; totally still.

15 Q. Okay. So, again, this represents the
16 daytime average --

17 A. That's correct.

18 Q. -- sound level, correct?

19 A. That's correct, yeah.

20 MR. VAN KLEY: I have no further
21 questions at this time.

22 MS. BAIR: Your Honor, Staff has a
23 question on cross-examination.

24 ALJ SCHABO: Proceed.

25 - - -

CROSS-EXAMINATION

1
2 By Ms. Bair:

3 Q. You have the Application before you,
4 don't you?

5 A. I've got my report.

6 Q. I think the Application is there too.
7 I'm going to ask you to go to page 58 of the
8 Application which is in the front of that document
9 that you have, I believe.

10 MS. BAIR: Does he not? Does he have the
11 Application?

12 MR. SETTINERI: Yes, he does.

13 THE WITNESS: I've got lots of stuff
14 here.

15 MS. BAIR: Page 58.

16 ALJ SCHABO: Go to the very front, you'll
17 find the narrative.

18 MS. BAIR: First document.

19 THE WITNESS: Okay, yeah.

20 Q. (By Ms. Bair) I'm going to ask you to
21 look at the second full paragraph. In particular,
22 the last sentence in that second full paragraph.

23 A. Okay, yeah.

24 Q. That says "The Project will be designed
25 to site the inverters within the solar fields to

1 ensure they do not cause material, adverse impacts to
2 any sensitive, off-site receptors." Do you see that
3 sentence?

4 A. Oh. Yes, I see it.

5 Q. You found it?

6 A. Yeah.

7 Q. Can you tell me what "material" means in
8 the context of this sentence?

9 A. No. I didn't write this summary.

10 MS. BAIR: Thank you. I have no more
11 questions.

12 ALJ SCHABO: Any other cross?

13 Mr. Settineri, do you have any redirect?

14 MR. SETTINERI: If I may just have a
15 brief moment?

16 ALJ SCHABO: Yes. Let's go off the
17 record for five minutes.

18 MR. SETTINERI: Thank you, Your Honor.

19 (Off the record.)

20 ALJ SCHABO: Let's return to the record.

21 Mr. Settineri.

22 MR. SETTINERI: Yes, just a few
23 questions, Your Honor, on redirect.

24 - - -

REDIRECT EXAMINATION

1
2 By Mr. Settineri:

3 Q. For the record, Mr. Hessler, we've
4 mentioned L90, daytime L90. Can you explain for the
5 record what is the L90?

6 A. The L90 is the quietest 10 percent of the
7 measurement period. In this case we did 10-minute
8 intervals so it's the quietest one-minute that
9 happened over that period not necessarily
10 consecutive. It might be a few seconds here and a
11 few seconds there but, all put together, it's the
12 quietest 10 percent.

13 Q. In regards to references to "daytime L90"
14 and you had provided, I believe, a daytime L90 value.
15 What period is that daytime -- what period does the
16 daytime L90 represent as used in your study?

17 A. The standard interpretation, which is
18 from 7:00 a.m. to 10:00 p.m.

19 Q. And in regards to inverters specifically,
20 have you ever been called upon to provide noise
21 mitigation to an inverter for a solar farm?

22 A. No, I haven't, and that's because noise
23 hardly ever comes up with respect to solar projects.

24 MR. VAN KLEY: I'm going to object to
25 that answer and ask that it be stricken. It's purely

1 speculative as to why someone may not have called him
2 to deal with an inverter issue. He's assuming just
3 because he doesn't receive any calls about inverter
4 sound that it must not actually be a problem
5 anywhere, and I think that's a very speculative
6 answer without a foundation.

7 Maybe there -- maybe the solar people,
8 who may be having problems with noise, don't know
9 that he does this sort of work. It could be any
10 reason why they're not calling him about it.

11 ALJ SCHABO: I'll grant that after the
12 "No."

13 Mr. Settineri, you can ask further
14 questions.

15 MR. SETTINERI: Can I have that --

16 Q. (By Mr. Settineri) Mr. Hessler, you've
17 been working in acoustics for how long?

18 A. Close to 30 years.

19 Q. As part of your acoustic career, do you
20 attend conferences, on a regular basis, on acoustics?

21 A. Yes.

22 Q. Have you worked on various -- have you
23 worked on solar projects other than the Angelina
24 Project?

25 A. Yes.

1 Q. Have you done so in other states?

2 A. Yeah; primarily New York.

3 Q. Okay. And do you regularly review trade
4 journals --

5 A. Yes.

6 Q. -- on acoustics?

7 A. Yes.

8 Q. All right. Based on your knowledge in
9 the industry and in your opinion, are you aware of
10 any complaints made as to noise related to solar
11 facilities?

12 MR. VAN KLEY: Objection. There has not
13 been a sufficient factual basis for him to answer
14 this question. Just because he's read some trade
15 journals and attended some conferences on noise,
16 doesn't have any bearing on whether inverter sound is
17 a problem.

18 ALJ SCHABO: Overruled. He asked in his
19 experience and to his knowledge.

20 You may answer the question.

21 A. In my experience I've never heard of any
22 complaints of a solar project. I can't even think of
23 any papers or anything, anybody even talking about
24 solar projects at acoustics conferences.

25 Q. I don't know if I asked this; I may have.

1 Have you ever done any form of noise mitigation on an
2 inverter for a solar panel?

3 A. No.

4 Q. But if you were, based on your
5 experience, how would you approach that?

6 A. Yeah, I did do a field survey of an
7 inverter that was operating in a project adjacent to
8 one that we were working on the development of. We
9 were there to do background monitoring and I was able
10 to get access to the site and took detailed
11 measurements of that inverter.

12 Having had a good look at it, it would be
13 very simple to dramatically reduce the noise from it.
14 It was just built for electrical purposes without any
15 thought to noise whatsoever, but it could easily be
16 retrofitted to just take it off the table as to the
17 noise source.

18 On that one, the noise was coming from
19 cooling fans from the intake and discharge through
20 some louvers. You could very easily retrofit an
21 acoustical hood on there, which is just a hood that's
22 lined with absorptive fiberglass material, and it
23 would soak up that noise.

24 And then in the Massachusetts study, some
25 of those units had a very high-frequency whine to

1 them. That could also be very easily taken care of
 2 by adding damping, a damping sheet to the inside of
 3 the cabinet panels. All that is is a plastic sheet.
 4 You just peel the cover off and stick it on and it
 5 dampens the panel.

6 But for any one of these, I'm sure, it
 7 could be dramatically attenuated very easily and
 8 inexpensively.

9 MR. SETTINERI: Thank you, Mr. Hessler.

10 No further questions, Your Honor.

11 ALJ SCHABO: Recross?

12 MR. VAN KLEY: Yes, Your Honor.

13 - - -

14 RE-CROSS-EXAMINATION

15 By Mr. Van Kley:

16 Q. Mr. Hessler, I'd like to direct your
 17 attention back to Exhibit E of the Application,
 18 page 5.

19 A. Okay.

20 Q. Here's the sentence in which the report
 21 states that the background sound is typically within
 22 the range of 20 to 35 dBA, correct?

23 A. That's where it says that, yes.

24 Q. Okay. And are these L90 numbers?

25 A. Yes.

1 Q. Okay. Why did you use L90 numbers for
2 this sentence?

3 A. Because L90 is the most-conservative
4 measure of the background; the lowest level.

5 Q. Why do -- do acoustic engineers, such as
6 yourself, commonly use the L90 to evaluate the
7 potential impact of sounds?

8 MR. SETTINERI: I just object. Outside
9 the scope of recross. I just asked what is L90. I
10 didn't ask how it was used or utilized.

11 MR. VAN KLEY: Well, my question goes
12 directly to Mr. Settineri's intent with regard to
13 that question, which is to show that the use of the
14 L90 is appropriate as a comparison of background
15 sound to the sounds expected from the Project.

16 MR. SETTINERI: I don't think I disclosed
17 attorney-client work product unless Mr. Van Kley can
18 read my mind. The question and answer was very
19 limited in clarifying the record as to what L90 is;
20 not its use or application. It's outside the scope
21 of redirect.

22 ALJ SCHABO: Sustained.

23 Q. (By Mr. Van Kley) So with regard to the
24 L90 metric, the sounds -- a sound measurement in L90
25 metric measures the sounds -- measures the level at

1 which the sound is below that level for 90 percent of
2 the time, right?

3 A. Exactly.

4 Q. Okay. So for 10 percent of the time, the
5 noise level at L90 will be above the L90.

6 A. Right.

7 Q. Okay. How many -- with respect to your
8 observations or your personal experience with how
9 often sounds have been reported as a problem, if at
10 all, how many solar facilities are you aware of that
11 are actually operating in the United States that are
12 800 acres in size or more?

13 A. I don't know how many are out there.

14 Q. Do you know how many are in Ohio that are
15 actually operating at that size?

16 A. No.

17 Q. Is it fair to say that large commercial
18 solar facilities, at this point in time, have not
19 been in widespread use throughout the United States?

20 A. Well, out where I live in southern Utah,
21 there's a lot of huge ones that are probably much
22 bigger than 800 acres and I think they've been there
23 for a while, but I don't have the statistics on how
24 many are out there or when they were built or how
25 many exist or how many are operating, I don't know.

1 Q. Well, with respect to the solar
2 facilities in Utah, to the extent that you're
3 familiar with them, how close are the inverters at
4 those facilities located to nonparticipating
5 residences?

6 A. Well, those projects are out in the
7 desert. Nobody lives there.

8 But I would add, the site that I measured
9 the inverter at that was in New York, at that site
10 people lived across the street from the fence of the
11 project and I'm not aware of any problems there.

12 Q. Is there anything in your report, that
13 was marked as Exhibit E to the Application, that
14 commits Angelina Solar to mitigating sounds from
15 inverters that prove to be a problem if that ever
16 occurs?

17 A. I just said in my report that if a
18 problem did arise, retrofit mitigation could easily
19 be applied to fix any -- rectify any situation.

20 Q. So your report says that it can be done,
21 not necessarily that it will be done.

22 A. Exactly.

23 MR. VAN KLEY: No further questions.

24 ALJ SCHABO: Mr. Settineri.

25 MR. SETTINERI: Yeah, I just want to make

1 sure I clear up my own confusion here, Your Honor.
2 Just a quick clarification.

3 - - -

4 FURTHER REDIRECT EXAMINATION

5 By Mr. Settineri:

6 Q. Going back to the L90. So the daytime
7 L90 for the Project Area background, I believe you
8 stated was 31 dBA.

9 A. On average, yes.

10 Q. Okay. Then does that mean, for
11 10 percent of the time, the sound level will be at 31
12 dBA or less?

13 A. I think I misspoke on one of those
14 answers a minute ago. The L90 means the level is
15 louder than that 90 percent of the time. I think I
16 might have had it backwards there.

17 MR. SETTINERI: No further questions.
18 Thank you, Mr. Hessler.

19 MR. VAN KLEY: Nothing further.

20 ALJ SCHABO: Mr. Hessler, you may step
21 down. Thank you.

22 MR. SETTINERI: Your Honor, at this time,
23 we'd like to move for the admission of Company
24 Exhibit 14 into the record, please.

25 ALJ SCHABO: Any objections?

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Hearing none, it will be admitted.

(EXHIBIT ADMITTED INTO EVIDENCE.)

ALJ SCHABO: Mr. Van Kley, will you be moving your exhibit?

MR. VAN KLEY: No, Your Honor.

ALJ SCHABO: Okay. Thank you.

Let's go off the record for a moment.

(Discussion off the record.)

ALJ SCHABO: Let's go back on the record. We'll take a break until 1:15. We're off the record again.

(At 12:08 p.m. a lunch recess was taken until 1:15 p.m.)

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Thursday Afternoon Session,
August 1, 2019.

- - -

ALJ SCHABO: We're on the record.
Mr. Settineri.

MR. SETTINERI: Thank you, Your Honor, at
this time, we would call Mr. Andrew Lines to the
stand.

(Witness sworn.)

ALJ SCHABO: Thank you. If you could
state your name and business address for the record,
please.

THE WITNESS: Sure. Andrew Lines.
L-i-n-e-s. 200 South Wacker Drive, Suite 2600,
Chicago, Illinois 60606.

MR. SETTINERI: Your Honor, at this time,
we would like to mark, as Company Exhibit 15, the
Direct Testimony of Andrew Lines.

ALJ SCHABO: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. SETTINERI: Copies have been provided
to the court reporter, the witness, and the Bench.

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ANDREW LINES

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

DIRECT EXAMINATION

By Mr. Settineri:

Q. Good afternoon, Mr. Lines.

A. Good afternoon.

Q. Do you have before you what's been marked as Company Exhibit 15?

A. I do.

Q. And can you identify that for the record, please?

A. It's my Direct Testimony.

Q. Okay. And was that prepared by you or at your direction?

A. Correct, it was.

Q. And do you have any revisions to that testimony?

A. I do not.

Q. And are you testifying today on behalf of Angelina Solar I, LLC?

A. Yes, I am.

Q. If I asked you the questions in your testimony today, would your answers be the same as written?

1 in different states and those conclusions and all the
2 data are exactly the same.

3 Q. Okay. Thank you. Then I'll be asking
4 you the same questions. Hopefully they're just as
5 good as last time.

6 All right. Why don't we start with some
7 questions about the solar farms that were included in
8 your study.

9 A. Okay.

10 Q. And would you just give me a rundown of
11 the sizes of the solar farms that were included in
12 your study in terms of megawatts and acreage.

13 A. Sure.

14 Here we are.

15 So the first solar farm and surrounding
16 property that we studied was located in Lapeer,
17 Michigan. It was a 27.4-megawatt solar farm situated
18 on approximately 170 acres of land.

19 Solar Farm No. 2 was in the City of North
20 Branch in unincorporated Chisago County, Minnesota.
21 This is a 100-megawatt solar farm situated over
22 approximately 1,000 acres of land.

23 Solar Farm No. 3 is in an area outside of
24 Indianapolis in Marion County, Indiana. This was a
25 roughly 12-megawatt solar field over 134 acres.

1 Solar Farm No. 4 was located in the City
2 of Streator in LaSalle County, Illinois. This was a
3 23-megawatt project on parcels totaling 160 acres.

4 Solar Farm No. 5 is located in
5 Fayetteville, North Carolina. This was a 71-megawatt
6 Project on 414 acres.

7 Solar Farm No. 6 was a 61-megawatt
8 project, located in Forest City, North Carolina, on a
9 489-acre parcel of land.

10 No. 7 was a 40-megawatt project on
11 354 acres in Elm City, North Carolina.

12 And the final project that we included in
13 this report was a 19-megawatt project in the Isle of
14 Wight in Virginia, on 204 acres.

15 Q. And what's your understanding with regard
16 to the size of the Angelina Solar Project?

17 A. My understanding it's about 80 megawatts,
18 over 900 acres, more or less.

19 Q. So only one of the solar farms that you
20 studied in your evaluation was as large as the
21 Angelina Project is expected to be?

22 A. There was only one that was larger than
23 what the Project was expected to be, but there were
24 two others that were similar as far as getting close
25 to the megawatts that are expected for the Project.

1 Q. Which two are those? The 489-acre
2 project would be one of those?

3 A. So I would say that the two North
4 Carolina, the one that was 71 megawatts and the one
5 that was 61 megawatts are of considerable size as far
6 as electrical output.

7 I think what makes the subject property
8 unique is that the area is layed out as opposed to
9 being concentrated in one rectangular development.
10 It's spread out over a few counties which helps kind
11 of displace some of the solar fields. In actuality
12 what you end up with is probably a project that looks
13 like a collection of 5- to 10-megawatt projects that
14 are all lined up near each other.

15 Q. For some of the solar farms that you
16 studied in your study there was a variety of land
17 uses around them; is that right?

18 A. Correct; agricultural, residential, and
19 sometimes commercial.

20 Q. And how far away from the boundaries of
21 the solar projects were the homes whose values you've
22 studied located?

23 A. They range. I would say, at the low end,
24 100 feet. I've had other studies that were a little
25 bit closer than that, but as low as 100 feet and then

1 some going up to 420 feet.

2 Q. Did you have any information concerning
3 the amount of vegetation that was located between the
4 residences whose value you studied?

5 A. They range and that's important to
6 denote. We conducted several studies and really how
7 we measure the impact is by seeing a discernible,
8 quantifiable, and consistent trend.

9 And so, what we have here is we have
10 different homes that we studied, which sold on the
11 open market, and those homes that were in test areas
12 located immediately adjacent to solar fields, some
13 had partial views, some had full views, and others
14 had some areas that were somewhat mitigated with
15 either fencing or scrub growth or trees that were
16 planted that might be in between a direct view from
17 the house and an existing pad.

18 Q. Okay. Would you go to Question and
19 Answer 10 on page 7 of your testimony. In your
20 answer to Question 10, you discuss an evaluation that
21 was done by a local county assessor, right?

22 A. Correct.

23 Q. Where was this county assessor located?
24 In Minnesota?

25 A. Correct. It's about 20 minutes

1 north-northeast of the Twin Cities.

2 Q. And this was done by the County Auditor;
3 is that right?

4 A. That's correct, and he presented his
5 findings in a public forum.

6 Q. Do you know whether the County Auditors,
7 in the State of Minnesota, are responsible for
8 determining property values?

9 A. For assessments.

10 Q. Okay. So the answer is yes?

11 A. They're responsible for property
12 assessments.

13 Q. Okay. And those assessments -- do those
14 assessments provide the basis for the amount of
15 property tax being assessed in Minnesota?

16 A. I would believe so.

17 Q. Okay. So the County Auditors have some
18 incentive to find that the property values are not
19 being decreased by the presence of solar farms?

20 MR. SETTINERI: I object. Calls for
21 speculation.

22 MR. VAN KLEY: It's pretty obvious, I
23 think.

24 ALJ SCHABO: Could you reread the
25 question, please?

1 (Record read.)

2 ALJ SCHABO: You can answer that.

3 A. I couldn't speculate whether or not they
4 have that desire or don't have that desire. I assume
5 they do their jobs correctly.

6 Q. Well, if the values of the properties go
7 down, that means that the amount of taxes collected
8 go down, right?

9 A. If you're asking me if there's a
10 correlation between increases and decreases in
11 property values and the amount of tax paid, that's
12 one part of it.

13 MR. VAN KLEY: Okay. All right. I have
14 no further questions.

15 ALJ SCHABO: Mr. Settineri, do you have
16 any redirect?

17 MR. SETTINERI: Yes.

18 - - -

19 REDIRECT EXAMINATION

20 By Mr. Settineri:

21 Q. Just one question, Mr. Lines. Have you
22 visited the Project Area?

23 A. I have.

24 MR. SETTINERI: Thank you, sir.

25 No further questions.

1 ALJ SCHABO: All right. Any limited
2 recross?

3 MR. VAN KLEY: No.

4 ALJ SCHABO: All right. Thank you very
5 much, Mr. Lines.

6 THE WITNESS: Thank you very much.

7 MR. SETTINERI: Your Honor, at this time,
8 we'd move into the record Company Exhibit 15, the
9 testimony of Andrew Lines, please.

10 ALJ SCHABO: Any objection?

11 Hearing none, it will be admitted.

12 (EXHIBIT ADMITTED INTO EVIDENCE.)

13 ALJ SCHABO: Does that conclude your
14 case, Mr. Taylor?

15 MR. TAYLOR: Yes, it does, Your Honor.

16 ALJ SCHABO: Okay. My understanding is
17 we're now going to Staff witnesses?

18 MS. BAIR: Yes, Your Honor.

19 ALJ SCHABO: Okay. Ms. Bair.

20 MS. BAIR: I have an understanding
21 between the parties that there is no
22 cross-examination for Staff Witness Tyler Conklin,
23 nor Derek Collins, nor Jason Cross, so if it is okay
24 with the parties and you, I would like to move those
25 into evidence at this time.

1 ALJ SCHABO: Let's mark them.

2 MS. BAIR: Okay. Could we mark Tyler
3 Conklin's as Staff Exhibit 2?

4 ALJ SCHABO: Yes.

5 MS. BAIR: Derek Collins as Staff
6 Exhibit 3. Is that okay?

7 ALJ SCHABO: Yes. Sorry.

8 MS. BAIR: And Jason Cross as Staff
9 Exhibit 4.

10 ALJ SCHABO: So marked on all three.

11 (EXHIBITS MARKED FOR IDENTIFICATION.)

12 ALJ SCHABO: Do the parties agree with
13 the representation that there's no cross and that the
14 exhibits be stipulated into the record?

15 MR. TAYLOR: Yes, Your Honor.

16 MR. VAN KLEY: Yes.

17 MS. BAIR: Does anyone need a copy?

18 ALJ SCHABO: Okay. All right. We will
19 stipulate those three exhibits into the record.

20 (EXHIBITS ADMITTED INTO EVIDENCE.)

21 ALJ SCHABO: Who would you like to call?

22 MS. BAIR: Staff would like to call Matt
23 Butler to the stand, please.

24 ALJ SCHABO: Good afternoon.

25 THE WITNESS: Good afternoon.

1 (Witness sworn.)

2 ALJ SCHABO: Thank you. If you can state
3 your name and your business address for the record,
4 please.

5 THE WITNESS: Matthew Butler. 180 East
6 Broad Street, Columbus, Ohio 43215.

7 ALJ SCHABO: Thank you.

8 - - -

9 MATTHEW BUTLER

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

12 DIRECT EXAMINATION

13 By Ms. Bair:

14 Q. Mr. Butler, by whom are you employed and
15 in what capacity?

16 A. I'm employed by the Public Utilities
17 Commission of Ohio as an Administrative Officer 2.

18 MS. BAIR: Your Honor, at this time, I
19 would like to mark the Staff Report as Staff
20 Exhibit 1, and Mr. Butler's testimony as Staff
21 Exhibit 5.

22 ALJ SCHABO: So marked.

23 (EXHIBITS MARKED FOR IDENTIFICATION.)

24 MS. BAIR: May I approach the witness?

25 ALJ SCHABO: You may.

1 Q. (By Ms. Bair) Do you have before you what
2 is marked as Staff Exhibit 5?

3 A. I do.

4 Q. And what is this document?

5 A. This is my Prefiled Testimony.

6 Q. Was the testimony prepared by you or
7 under your direction?

8 A. It was.

9 Q. Do you have any changes, corrections, or
10 additions that you would like to make to Staff
11 Exhibit 5?

12 A. Not at this time.

13 Q. If I were to ask you the questions set
14 forth in Staff Exhibit 5, would your answers be the
15 same today?

16 A. They would.

17 MS. BAIR: Your Honor, Mr. Butler is
18 available for cross-examination.

19 ALJ SCHABO: Thank you.

20 Mr. Van Kley.

21 MR. VAN KLEY: Yes, Your Honor.

22 - - -

23 CROSS-EXAMINATION

24 By Mr. Van Kley:

25 Q. Mr. Butler, you're responsible for

1 dealing with public communications with respect to
2 the Angelina Solar Project?

3 A. That's accurate.

4 Q. Will you continue to be responsible for
5 interaction with the public, related to the Angelina
6 Solar Project, if and when the Certificate is issued
7 for the Project?

8 A. That would be my expectation.

9 Q. Do you have experience with other
10 certificated projects in which you have had
11 responsibility for dealing with the public concerning
12 those projects?

13 A. Yes.

14 Q. Now, I'd like to direct your attention to
15 the Joint Stipulation and Recommendation that has
16 been marked as Joint Exhibit 1. Do you have that in
17 front of you?

18 A. I do not.

19 Thank you.

20 Got it.

21 Q. Would you go to page 6 of that Joint
22 Stipulation.

23 A. I'm on page 6.

24 Q. Okay. In recommended Condition No. 2,
25 you will see that it is -- that the Applicant will be

1 required to conduct a preconstruction conference
2 prior to the start of any construction activities.

3 Do you see that?

4 A. I do.

5 Q. With regard to preconstruction
6 conferences that are held by the Power Siting Board
7 for projects prior to construction, are those
8 conferences open to the public?

9 A. I prepared and worked on Conditions 12
10 through 15, so this is not a condition that I was
11 involved with in the preparation of.

12 Q. Do you know who was involved, at the
13 Staff level, with Condition 2?

14 A. Not specifically.

15 Q. Well, with respect to the other projects
16 in which you've had the responsibility for dealing
17 with the public, have there been preconstruction
18 conferences held for those projects?

19 A. This is a fairly standard condition from
20 what I understand, so I would expect that yes, that
21 would be the case. I don't know -- myself, I don't
22 generally attend those preconstruction conferences.

23 Q. Do you know whether preconstruction
24 conferences for any other projects, certificated by
25 the Board, have been open to the public?

1 MS. BAIR: Objection. Asked and
2 answered.

3 MR. VAN KLEY: No, I don't think so.

4 ALJ SCHABO: Go ahead and answer that.

5 A. I do not know.

6 Q. Go to recommended Condition 15 in the
7 Joint Stipulation and Recommendation. You'll find it
8 on page 8 of Joint Exhibit 1. Now, this condition
9 refers to a complaint summary report that is due
10 monthly and is submitted by the Applicant, correct?

11 MR. TAYLOR: I'll just object to that
12 characterization of a monthly report.

13 ALJ SCHABO: Noted.

14 MR. VAN KLEY: Yeah, okay, all right.
15 I'll rephrase the question.

16 Q. (By Mr. Van Kley) Condition 15 refers to
17 complaint summary reports that are submitted to the
18 Board, right?

19 A. Yes.

20 Q. Were you responsible for this condition?

21 A. Yes.

22 Q. Is there anything in the Stipulation or
23 in the Application that requires the Applicant to
24 make this -- make these reports available to the
25 public?

1 A. No.

2 Q. Now, throughout the recommended
3 conditions there are a number of plans that are
4 required to be submitted by the Applicant to the
5 Power Siting Board after the Certificate is issued,
6 correct?

7 A. I can only speak to the conditions that I
8 worked on, but for those conditions there are several
9 plans that would be submitted after certification.

10 Q. So, for example, Condition 3 requires the
11 submittal of detailed engineering drawings of the
12 final Project plan, right?

13 A. I'm not testifying specific to that
14 condition.

15 Q. Well, I'm just asking you whether your
16 reading of this condition requires that to be done.

17 MS. BAIR: Your Honor, could I have the
18 question read again, please?

19 (Record read.)

20 A. Condition 3 states "The Applicant shall
21 submit one set of detailed engineering drawings of
22 the final project design to Staff at least 30 days
23 before the preconstruction conference."

24 Q. And this would occur after the
25 Certificate is issued, right?

1 A. That's correct.

2 Q. Okay. With respect to any plans that the
3 Certificate would require to be submitted to the
4 Board after the Certificate is issued --

5 MR. TAYLOR: Your Honor, I again object.
6 There's no foundation that any of these reports need
7 to be submitted to the Board.

8 MR. VAN KLEY: Well, I think Counsel is
9 quibbling, but I'll rephrase.

10 Q. (By Mr. Van Kley) With respect to any
11 plans, that the Certificate requires to be submitted
12 to the Staff of the Power Siting Board, does the
13 Board typically issue any public notices informing
14 the public that those plans are available for public
15 review?

16 MS. BAIR: Objection, Your Honor.

17 ALJ SCHABO: Basis?

18 MS. BAIR: Lack of specificity as
19 particular to this witness's testimony. "Plans" is
20 wide open. Could he specify what plans he's
21 directing him to address?

22 ALJ SCHABO: Let's start with specifics,
23 Mr. Van Kley, and you can attempt to work your way up
24 to generalities.

25 MR. VAN KLEY: All right. Very good.

1 Q. (By Mr. Van Kley) All right. So,
2 Mr. Butler, we're going to go through the Stipulation
3 and Recommendation. We've already talked about the
4 engineering drawings of the final Project design in
5 Condition 3. Does the Board issue a public notice,
6 informing the public that those plans have been
7 submitted to the Staff of the Board?

8 A. I'm not really sure that I can speculate
9 on a question for a case that I don't know -- I don't
10 know the outcome of. I mean, I don't . . .

11 Q. Well, you've been -- you've already
12 testified you've been involved with other projects
13 that have received Certificates and that you have
14 dealt with the public relations aspects of those
15 projects after the Certificate is issued, right?

16 A. Yes.

17 Q. Okay. In any of those other cases has
18 the Board issued a public notice announcing that
19 detailed engineering drawings have been submitted
20 after the Certificate was issued?

21 A. What do you mean by "public notice"?

22 Q. Don't you issue public notices in your
23 job?

24 A. We issue press releases.

25 Q. Okay. That's not the same as a public

1 notice?

2 A. I don't view it the same. We do not
3 issue press releases when an applicant files.

4 Q. What do you think is a public notice?

5 A. I think of a public notice is more of
6 something like a letter that would be sent or
7 something that would be posted in a newspaper --

8 Q. Okay.

9 A. -- per our, you know, notification
10 requirements on the front end of the process.

11 Q. Okay. All right. Very good.

12 Then with regard to final engineering
13 drawings that are submitted after the Certificate is
14 issued, in your past experience has the Board or the
15 Staff of the Board issued any press releases
16 concerning those plans?

17 A. No.

18 Q. How about public notices?

19 A. No.

20 Q. Okay. All right. Then let's move on to
21 Condition 9. You'll see that Condition 9 requires
22 the Applicant to prepare a Phase I cultural resources
23 survey program. Is this the type of program that,
24 based on your past experience, would be the subject
25 of a press release announcing to the public that such

1 a program was available for review?

2 A. No.

3 Q. How about a public notice?

4 A. No.

5 Q. Okay. Let's go down to Condition 11. It
 6 states that the Applicant shall prepare a landscape
 7 and lighting plan. Is this the type of plan that the
 8 Board or its Staff would issue a press release or a
 9 public notice informing the public that that plan is
 10 available for review?

11 A. No.

12 Q. Okay. Condition 12, the Applicant shall
 13 provide Staff with a copy of its public information
 14 program. Is this the type of document that the
 15 department would announce, by press release or public
 16 notice, that it is available for public review?

17 A. No.

18 Q. Okay. Same questions with regard to the
 19 complaint resolution process that is submitted under
 20 Condition 13.

21 A. No.

22 Q. Same questions with regard to
 23 Condition 16 for the Stormwater Pollution Prevention
 24 Plan.

25 A. Not to my knowledge, no.

1 Q. Same question with regard to Condition 18
2 and its requirement of the submission of a vegetation
3 management plan.

4 A. No.

5 Q. Same question with regard to the
6 requirement in Condition 22 for submitting a
7 construction access plan.

8 A. No.

9 Q. Same question with regard to the final
10 traffic plan required by Condition 25.

11 A. No.

12 Q. Going to Condition 29. Same question
13 about the comprehensive decommissioning plan that
14 that condition requires to be submitted.

15 A. No.

16 Q. Are you responsible for responding to
17 requests for public records submitted to the Board or
18 its Staff?

19 A. No.

20 Q. You are not?

21 A. No.

22 Q. Who, if anyone at the Board or its Staff,
23 has that responsibility?

24 A. There's Staff members within our Legal
25 Department. I might take a request in, but then I

1 would provide it to them to respond.

2 Q. Okay. Do you have any -- when a public
3 records request comes in, do you have any
4 responsibility for compiling records responsive to
5 that request?

6 A. Only as directed by the Legal Department.

7 Q. Based on your experience with the Power
8 Siting Board Staff, can you tell me whether plans,
9 the types of plans that we've just gone through that
10 are required to be submitted after the Certificate is
11 issued, whether those plans are available to the
12 public in draft form to review before the Board or
13 its Staff acts on them?

14 A. Not to my knowledge, no.

15 MR. VAN KLEY: I have no further
16 questions.

17 ALJ SCHABO: Anybody else have cross?
18 Redirect?

19 MS. BAIR: Can I just have a minute?

20 ALJ SCHABO: We'll go off the record for
21 a couple minutes.

22 (Off the record.)

23 ALJ SCHABO: Let's go back on the record.

24 Ms. Bair, any redirect?

25 MS. BAIR: I have no redirect, and I

1 would like to move Staff Exhibit 5 into evidence.

2 ALJ SCHABO: Any objection to Staff
3 Exhibit 5?

4 Hearing none, it will be admitted.

5 (EXHIBIT ADMITTED INTO EVIDENCE.)

6 ALJ SCHABO: We'll go off the record and
7 take a 15-minute break and see what we can come up
8 with acoustically.

9 (Recess taken.)

10 ALJ SCHABO: Let's go back on the record,
11 please.

12 Ms. Bair.

13 MS. BAIR: Thank you, Your Honor. Staff
14 would like to call Robert Holderbaum as its next
15 witness.

16 ALJ SCHABO: Good afternoon.

17 THE WITNESS: Good afternoon. Raise your
18 right hand for me.

19 (Witness sworn.)

20 ALJ SCHABO: State your name and business
21 address for the record, please.

22 THE WITNESS: Robert -- Robert
23 Holderbaum. 180 East Broad Street, Columbus, Ohio
24 43215.

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ROBERT HOLDERBAUM

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

DIRECT EXAMINATION

By Ms. Bair:

Q. Could you please tell us by whom you're employed and in what capacity.

A. I'm employed by the Public Utilities Commission of Ohio as a Utility Specialist 2.

MS. BAIR: Your Honor, I would like to mark Mr. Holderbaum's testimony as Staff Exhibit 6.

ALJ SCHABO: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MS. BAIR: I have provided a copy to you, the witness, and --

ALJ SCHABO: I have a copy.

MS. BAIR: Okay.

ALJ SCHABO: Thank you.

Q. (By Ms. Bair) Do you have Staff Exhibit 4 before you?

ALJ SCHABO: "6."

Q. 6. Sorry.

A. Yes.

Q. And what is that document?

A. My Prefiled Testimony.

1 Q. Was this prepared by you or under your
2 direction?

3 A. It was.

4 Q. Do you have any additions, corrections,
5 or changes that you would like to make to that
6 document?

7 A. I do not.

8 Q. If I were to ask you the questions set
9 forth, would your answers be the same as they are in
10 Staff Exhibit 6?

11 A. Yes.

12 MS. BAIR: Your Honor, Mr. Holderbaum is
13 available for cross-examination.

14 ALJ SCHABO: Mr. Van Kley.

15 MR. VAN KLEY: Yes, Your Honor.

16 - - -

17 CROSS-EXAMINATION

18 By Mr. Van Kley:

19 Q. Mr. Holderbaum, please turn to page 3 of
20 your Direct Testimony. It says, in Answer 4, that
21 you were the Staff subject analyst for the surface
22 waters portion of the Staff Report; is that right?

23 A. Yes.

24 Q. Did that include responsibility for
25 dealing with tile issues?

1 A. Not necessarily.

2 Q. Okay. Was there another member of the
3 Staff that was responsible for tiles?

4 A. Yes, though I'm not sure who it was.

5 Q. All right. Would you -- do you have the
6 Staff Report of Investigation available to look at?

7 A. Yes.

8 Q. Okay. Would you turn to page 19 of that
9 Staff Report. I'd like to direct your attention to
10 the first paragraph on that page under the table for
11 vegetation. That paragraph starts with the words
12 "the estimated vegetative impact."

13 A. Okay.

14 Q. Specifically I'd like you to look at the
15 second-to-the-last sentence of that paragraph which
16 reads as follows: "The estimated impact to forestland
17 of 0.07 acre is the result of geographic information
18 system (GIS) calculations and actual forest clearing
19 may be more or less."

20 My question to you is, first of all, were
21 you responsible for drafting this language?

22 A. Yes.

23 Q. Next, I need to ask you if you could
24 explain what you meant when you refer to the actual
25 forest clearing may be more or less.

1 A. Sure. So that number, what we see is
2 that number is usually pretty accurate. We don't
3 want to say that's an exact number in case they end
4 up clearing, you know, .08 or .05 acres of trees,
5 something like that.

6 Q. So is it your understanding that, given
7 the terms of the Application and the Joint
8 Stipulation, that the Applicant would be allowed to
9 clear more than .07-acre?

10 A. It depends. I mean, we would review
11 those numbers before they would do it so, I mean, if
12 it was something that we thought was, you know, a
13 significantly greater impact, we would work with them
14 to figure why, see if it was necessary, that type of
15 thing. It wouldn't just be, you know, they throw out
16 a number and get to clear whatever they want.

17 Q. Are you aware that the Joint Stipulation
18 requires the Applicant to submit a vegetation
19 management plan after the Certificate is issued?

20 A. Yes.

21 Q. Would the -- would the amount of
22 vegetation that is ultimately earmarked for clearing
23 be a subject of that plan?

24 A. I believe so.

25 Q. So it would be in that plan where the

1 details for vegetation clearing would be established?

2 A. Yes.

3 MR. VAN KLEY: Okay. I have no further
4 questions.

5 ALJ SCHABO: Any other cross?

6 Any redirect?

7 MS. BAIR: No, Your Honor.

8 ALJ SCHABO: All right. Thank you very
9 much.

10 THE WITNESS: Thank you.

11 MS. BAIR: Staff would like to move Staff
12 Exhibit 6 into the record.

13 ALJ SCHABO: Any objection?

14 Hearing none, it will be admitted.

15 (EXHIBIT ADMITTED INTO EVIDENCE.)

16 ALJ SCHABO: Your next witness.

17 MS. BAIR: Thank you. Staff would like
18 to call Jon Pawley as its next witness, please.

19 ALJ SCHABO: Good afternoon.

20 THE WITNESS: Good afternoon.

21 (Witness sworn.)

22 ALJ SCHABO: Thank you. Please have a
23 seat, and state your name and business address for
24 the record.

25 THE WITNESS: My name is John Pawley.

1 P-a-w-l-e-y. My business address is 180 East Broad
2 Street, Columbus, Ohio 43215.

3 ALJ SCHABO: Ms. Bair.

4 - - -

5 JON C. PAWLEY

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

8 DIRECT EXAMINATION

9 By Ms. Bair:

10 Q. Could you please tell us by whom you're
11 employed and in what capacity.

12 A. I'm a Staff member with the Ohio Power
13 Siting Board, employed by the Public Utilities
14 Commission. My position is a Utility Specialist 3.

15 Q. Thank you.

16 MS. BAIR: Your Honor, may I approach?

17 ALJ SCHABO: You may.

18 MS. BAIR: I'd like to have Mr. Pawley's
19 Prefiled Testimony marked as Staff Exhibit 7.

20 ALJ SCHABO: So marked.

21 (EXHIBIT MARKED FOR IDENTIFICATION.)

22 MS. BAIR: Thank you.

23 Q. (By Ms. Bair) Mr. Pawley, do you
24 recognize Staff Exhibit 7?

25 A. I do.

1 Q. And what is that document?

2 A. That is my Prefiled Testimony.

3 Q. Was this prepared by you or under your
4 direction?

5 A. Yes.

6 Q. Do you have any changes, corrections, or
7 additions to make to this testimony?

8 A. No.

9 Q. If I were to ask you the questions
10 contained in Staff Exhibit 7, would your answers be
11 the same today?

12 A. Yes, they would.

13 MS. BAIR: Thank you.

14 Your Honor, Mr. Pawley is available for
15 cross-examination.

16 ALJ SCHABO: Thank you.

17 Mr. Settineri, do you have any cross?

18 Mr. Taylor?

19 Mr. Van Kley, do you have any cross?

20 MR. VAN KLEY: Just a little bit.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. Van Kley:

24 Q. Looking at Answer 7 in your Direct
25 Testimony, that answer states that you're responsible

1 for Conditions 9 and 11 in the Staff Report, right?

2 A. Correct.

3 Q. Condition 11 of the Staff Report deals
4 with lighting, correct?

5 A. Correct.

6 Q. And there's also a recommended condition
7 in the Joint Stipulation for lighting; is that
8 correct?

9 A. Correct.

10 Q. Okay. And that's Condition 11, right?

11 A. Yes, sir.

12 Q. Okay. Now, Condition 11 in the Staff
13 Report and Condition 11 in the Joint Stipulation,
14 both require the Applicant to submit a lighting plan
15 after the Certificate is issued, right?

16 A. Not necessarily. It's prior to
17 commencement of construction.

18 Q. Okay. So the Applicant could submit a
19 lighting plan at any time?

20 A. Correct.

21 Q. Okay. Based on your information about
22 the Project, is there anything that would prevent the
23 Applicant from submitting the lighting plan at the
24 time it submits its Application?

25 A. Not necessarily. They could.

1 MR. VAN KLEY: Okay. I have no further
2 questions.

3 ALJ SCHABO: Ms. Bair?

4 MS. BAIR: No redirect.

5 ALJ SCHABO: Anybody else have -- I don't
6 mean to leave you out.

7 Thank you very much.

8 THE WITNESS: Thank you.

9 ALJ SCHABO: You're done.

10 MS. BAIR: Staff would like to move Staff
11 Exhibit 7 into the record.

12 ALJ SCHABO: Any objection to Staff
13 Exhibit 7?

14 Hearing none, it will be admitted.

15 (EXHIBIT ADMITTED INTO EVIDENCE.)

16 MS. BAIR: Thank you.

17 Staff calls Mr. Bellamy as its next
18 witness, please.

19 ALJ SCHABO: Good afternoon.

20 THE WITNESS: Good afternoon.

21 (Witness sworn.)

22 ALJ SCHABO: Thank you. Have a seat. If
23 you'd state your name and business address for the
24 record, please.

25 THE WITNESS: My name is Mark Bellamy.

1 My business address is 180 East Broad Street,
2 Columbus, Ohio 43215.

3 ALJ SCHABO: Thank you.

4 Ms. Bair.

5 - - -

6 MARK BELLAMY

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

9 DIRECT EXAMINATION

10 By Ms. Bair:

11 Q. Could you please tell us your employer
12 and in what position you work in.

13 A. My employer is the Public Utilities
14 Commission of Ohio and the Ohio Power Siting Board.

15 Q. And what is your position there?

16 A. My position is a Utility Specialist 2.

17 MS. BAIR: Your Honor, I would like to
18 mark two exhibits: Mark Bellamy's Prefiled Direct
19 Testimony as Staff Exhibit 9 and Mr. Bellamy's
20 Supplemental Testimony as Staff Exhibit 10.

21 ALJ SCHABO: Okay. They will be so
22 marked.

23 (EXHIBITS MARKED FOR IDENTIFICATION.)

24 MS. BAIR: Thank you.

25 ALJ SCHABO: Thank you.

1 Q. (By Ms. Bair) Mr. Bellamy, do you have
2 before you what's been marked as Staff Exhibit 9?

3 A. I do.

4 Q. Let's do them together. Do you have
5 before you what's been marked as Staff Exhibit 10?

6 A. Yes.

7 Q. Can you please tell us what each of those
8 are?

9 A. Staff Exhibit 9 is my original Prefiled
10 Testimony, and Staff Exhibit 10 is my Supplemental
11 Prefiled Testimony.

12 Q. And were these exhibits prepared by you
13 or under your direction?

14 A. Yes.

15 Q. Do you have any changes, corrections, or
16 additions that you would like to make to Staff
17 Exhibit 9 or 10?

18 A. No.

19 Q. And if I were to ask you the questions
20 contained in Staff Exhibit 9 and 10, would your
21 questions -- would your answers be the same as those
22 in your Prefiled Testimony?

23 A. Yes.

24 MS. BAIR: Thank you.

25 Mr. Bellamy is available for

1 cross-examination.

2 ALJ SCHABO: Mr. Van Kley.

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

4 - - -

5 CROSS-EXAMINATION

6 By Mr. Van Kley:

7 Q. Mr. Bellamy, please turn to page 2 of
8 your Prefiled Testimony which is Staff Exhibit 9.

9 A. Okay. I'm there.

10 Q. All right. Now, in Answer 6, you stated
11 that you are testifying in support of the Staff
12 Report of Investigation in this case, specifically
13 the noise and agricultural district sections,
14 correct?

15 A. Yes.

16 Q. Let's start with noise. Would you please
17 turn to the Application in front of you, the
18 narrative portion, page 58.

19 A. I don't have the Application in front of
20 me.

21 THE WITNESS: Thank you.

22 A. I'm at page 58.

23 Q. Okay. I'd like to direct your attention
24 to the first paragraph under the heading
25 4906-4-08 (A) (3) (b). Do you see that paragraph?

1 A. Yes.

2 Q. And you'll see, starting four lines down
3 in that paragraph, there's a sentence that says "As
4 Hessler notes, the noise that inverters and their
5 associated step-up transformers generate is inaudible
6 at a distance of 50 to 150 feet from the source." Do
7 you see that sentence?

8 A. Yes.

9 Q. The next sentence says "The Project will
10 be designed to site the inverters within the solar
11 fields to ensure they do not cause material, adverse
12 impacts to any sensitive, off-site receptors." Do
13 you see that sentence?

14 A. Yes.

15 Q. Now, was it part of your responsibility,
16 related to this Application, to review the sentences
17 that I just read to you?

18 A. Yes.

19 Q. Is there anything in the Application or
20 in the Stipulation that provides a setback between
21 the inverters that would be installed in this Project
22 and the nearest nonparticipating residence?

23 A. I'm not sure, but I believe there's a
24 setback that says that the equipment needs to be
25 100 feet from a nonparticipating residence.

1 Q. All right. I'll refer you to page 54 of
2 the Application. Please look at the last paragraph
3 on that page and do you see a reference to that
4 100-foot setback in that paragraph?

5 A. Yes.

6 Q. Okay. So is that the only setback, to
7 your knowledge that's included and required by the
8 Application or the Joint Stipulation that would apply
9 to the inverters?

10 A. That's the only setback with a number.

11 As you just read on page 58, it says "The
12 Project will be designed to site the inverters within
13 the solar fields to ensure they do not cause any
14 material, adverse impacts to any sensitive, off-site
15 receptors." So that is, in effect, a setback because
16 the inverters have to be sited inside the Project so
17 that they do not cause those impacts.

18 Q. So when the sentence states that the
19 inverters have to be installed within the solar
20 fields, would it be your interpretation that the
21 inverters can be installed anywhere inside the solar
22 fields as long as they do not cause material adverse
23 impacts to any sensitive off-site receptors?

24 A. As far as noise goes, that's my
25 understanding.

1 Q. All right. Does the Application or the
2 Stipulation contain any information that would define
3 what would be regarded as a material adverse impact
4 from noise from an inverter?

5 A. I'm sorry, you said which documents?

6 Q. The Application or the Stipulation.

7 A. Okay. I'm not aware that that is
8 defined.

9 Q. Okay. So if someone were to -- if an
10 adjoining landowner, that is not participating in the
11 Project, would complain about noise from an inverter,
12 how would you, as a member of the Staff, determine
13 whether that noise or that amount of noise being
14 experienced by the landowner causes a material
15 adverse impact?

16 A. I can't guarantee how the noise
17 resolution process would be completed because I'm not
18 in charge of its completion but it would be my
19 understanding, when a noise complaint is made, the
20 Applicant is made aware of it, as is Staff, and the
21 Applicant works with the complainer to try to resolve
22 the issue.

23 If -- if the Applicant agrees that their
24 equipment is making an adverse impact, then they can
25 take steps to mitigate that impact. If the Applicant

1 disagrees that the equipment is not contributing to
2 any adverse impact, then the homeowner can contract
3 with a noise expert to evaluate the noise and, if
4 necessary, Staff can get involved and help evaluate
5 the noise, also, to make sure that the problem is
6 resolved.

7 Q. Go to page 20 of the Staff Report,
8 please. Please look at the second-to-the-last
9 paragraph on that page.

10 A. Yes, I'm there.

11 Q. All right. It states, at the beginning
12 of that paragraph, as follows: "The Applicant
13 conducted an ambient noise level study in order to
14 understand the existing noise levels near the
15 proposed facility. Noise impacts to
16 non-participating receptors was modeled." Now, that
17 is true only with regard to the substation in the
18 Project, correct?

19 A. Correct.

20 Q. No modeling was performed for sound from
21 the inverters, correct?

22 A. Correct.

23 Q. Directing your attention back to your
24 Direct Testimony, Exhibit 9, Staff Exhibit 9. I see
25 that Answer No. 9 refers to Condition 16 of the Staff

1 Report; is that right?

2 A. Yes.

3 Q. And that condition deals with drainage
4 tiles, correct?

5 A. Correct.

6 Q. Were you responsible for evaluating the
7 information in the Application concerning drainage
8 tiles?

9 A. Yes.

10 Q. And are you also responsible, on behalf
11 of the Staff, for Condition 16 of the Stipulation?

12 A. You're asking if I'm responsible for
13 Condition 16?

14 Q. With regard to Condition 16 of the Joint
15 Stipulation, were you a Staff member who was
16 responsible for reviewing that condition --

17 A. Yes.

18 Q. -- dealing with drainage tiles?

19 A. I reviewed that condition on behalf of
20 Staff.

21 Q. Okay. Is there anything in this
22 Condition 16 in the Joint Stipulation that requires
23 the Applicant to consult with adjoining landowners
24 about locations or other information about drainage
25 tiles?

1 A. Not specifically; however, the condition
2 states that "Damaged field tile systems shall be
3 promptly repaired no later than 30 days after such
4 damage is discovered...." So, as part of the repair,
5 the drain tile contractor will contact whoever they
6 need to in order to make sure the repair is done
7 correctly.

8 Q. So you're making the assumption that the
9 adjoining landowner would be consulted.

10 A. I'm making the assumption that the drain
11 tile repair company will contact everyone they need
12 to contact in order to make sure the repair is done
13 correctly.

14 Q. This condition also requires that the
15 benchmark conditions of surface drainage systems must
16 be documented prior to construction of the Project,
17 correct?

18 A. Yes.

19 Q. Is there anything in Condition 16 of the
20 Joint Stipulation or anything in the Staff Report
21 that requires the Applicant to consult with adjoining
22 landowners to learn information about the drainage
23 systems in the area?

24 MR. SETTINERI: I object. Compound
25 question; Staff Report or Application.

1 MR. VAN KLEY: I can break them down if
2 Counsel prefers.

3 MR. SETTINERI: I do.

4 Q. (By Mr. Van Kley) With regard to the
5 Staff Report, is there anything that would require
6 the Applicant to consult with adjoining landowners
7 during the course of preparing this benchmark
8 conditions report?

9 A. The Staff Report does not address that.

10 Q. Okay. Is there anything in the Joint
11 Stipulation that requires the Applicant to consult
12 with adjoining landowners in the process of putting
13 together this benchmark report?

14 A. Well, the condition says "Benchmark
15 conditions of surface drainage systems shall be
16 documented," so it's my understanding that the
17 Applicant will note all those benchmark conditions
18 that are necessary, around and inside the Project, in
19 order to understand the surface drainage systems, but
20 I am not aware of -- I don't have detailed knowledge
21 of the drainage systems to know, you know, which
22 landowners would be affected.

23 Q. Are you just making an assumption that
24 the Applicant will consult with adjoining landowners
25 in order to prepare the benchmark conditions report?

1 MR. SETTINERI: I object to the
2 characterization of it being a report. That's not
3 what the Stipulation says.

4 MR. VAN KLEY: Well, it does say
5 benchmark conditions will be documented. That sounds
6 like a report to me.

7 MR. SETTINERI: I'm just clarifying for
8 the record. I'm fine with it.

9 THE WITNESS: Can you repeat the
10 question?

11 MR. VAN KLEY: Yeah.

12 Q. Are you just making an assumption that
13 the Applicant's documentation of benchmark conditions
14 of surface drainage systems will include
15 consultations with adjacent landowners?

16 A. No. I -- I assume only what the
17 condition states, so I assume that benchmark
18 conditions shall be documented prior to construction
19 and that -- that's what it says.

20 Q. Okay. So what -- under your reading of
21 Condition 16, what, if any, consultation with
22 adjoining landowners is required by that condition?

23 A. Whatever is necessary to benchmark the
24 conditions.

25 MR. VAN KLEY: I have no further

1 questions.

2 ALJ SCHABO: Any cross from any other
3 party?

4 MR. SETTINERI: No.

5 ALJ SCHABO: Any redirect?

6 MS. BAIR: No redirect.

7 ALJ SCHABO: Thank you, Mr. Bellamy.

8 MS. BAIR: Can I go off the record?

9 (Discussion off the record.)

10 ALJ SCHABO: Let's go back on the record.

11 MS. BAIR: Staff moves Staff Exhibit 9
12 and 10 into the record.

13 ALJ SCHABO: Any objection?

14 Hearing none, Staff Exhibits 9 and 10
15 will be admitted.

16 (EXHIBITS ADMITTED INTO EVIDENCE.)

17 ALJ SCHABO: Your next witness, Ms. Bair.

18 MS. BAIR: Thank you. Staff calls Andrew
19 Conway as its next witness.

20 ALJ SCHABO: Good afternoon.

21 (Witness sworn.)

22 ALJ SCHABO: Please have a seat. State
23 your name and business address.

24 THE WITNESS: My name is Andrew Conway,
25 and I work for the Public Utilities Commission of

1 Ohio at 180 East Broad Street, Columbus, Ohio, 43215.

2 ALJ SCHABO: Thank you.

3 - - -

4 ANDREW CONWAY

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. What is your position with the
10 Commission?

11 A. I'm an Engineering Specialist.

12 MS. BAIR: Your Honor, I'd like to have
13 marked as Staff Exhibit 10 and 11 --

14 ALJ SCHABO: 11 and 12.

15 MS. BAIR: 11 and 12, I'm sorry. 11 is
16 the Prefiled Testimony of Andrew Conway, and 12 is
17 the Supplemental Prefiled Testimony. 11 and 12.

18 ALJ SCHABO: They will be so marked.

19 MS. BAIR: Thank you.

20 (EXHIBITS MARKED FOR IDENTIFICATION.)

21 Q. (By Ms. Bair) Mr. Conway, could you
22 please tell me what Staff Exhibit 11 is.

23 A. That's my Prefiled Testimony, Direct
24 Testimony.

25 Q. And was this prepared by you or under

1 your direction?

2 A. Yes, it was.

3 Q. And could you please tell me what Staff
4 Exhibit 12 is?

5 A. That's my Prefiled Supplemental
6 Testimony.

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

9 A. Yes, it was.

10 Q. Do you have any changes or corrections to
11 make to either exhibits?

12 A. No, not to those exhibits.

13 Q. Do you have any clarifications to make to
14 either of those -- well, if I ask you the questions
15 contained in those, would your answers be the same or
16 do you have any clarifications to make?

17 A. I have a clarification to make that in
18 page 7 of the Staff Report there's a -- it lists
19 827 acres. I would like to note that that excludes
20 the laydown area and the substation acreage.

21 Q. Okay. Could you repeat that page number,
22 please?

23 A. Page 7.

24 Q. And what are you specifically discussing,
25 what paragraph? The top paragraph?

1 A. Yeah, in the first paragraph where it
2 says "827 acres."

3 Q. That excludes what?

4 A. The substation and the laydown area.

5 Q. Thank you.

6 And with those clarifications noted, if I
7 were to ask you the questions in Staff Exhibit 11 and
8 12, would your answers be the same today?

9 A. Yes, they would.

10 MS. BAIR: Thank you.

11 Mr. Conway is available for
12 cross-examination, Your Honor.

13 ALJ SCHABO: Mr. Van Kley.

14 MR. VAN KLEY: Yes, Your Honor.

15 - - -

16 CROSS-EXAMINATION

17 By Mr. Van Kley:

18 Q. Mr. Conway, do you have the Joint
19 Stipulation in front of you, Joint Exhibit 1?

20 A. Yes, I do.

21 Q. Okay. Would you go to page 6 of that
22 Joint Stipulation. Before I ask questions about the
23 Joint Stipulation, let me ask you this question which
24 is: You're the Staff lead with regard to the Staff's
25 evaluation of the Application in this case, correct?

1 A. That's correct.

2 Q. Will you continue to be the Staff lead
3 with regard to the Staff's oversight of construction
4 and design of the facility after the Certificate is
5 issued?

6 A. Yes, that's my expectation.

7 Q. Directing your attention to Condition 2
8 in the Joint Stipulation. Do you see the reference
9 there to the preconstruction conference?

10 A. Yes, I do.

11 Q. Do you expect that you will be the person
12 in charge of that preconstruction conference?

13 A. For the Staff, yes, I would be in that
14 preconstruction conference.

15 Q. Okay. So you would participate in the
16 conference.

17 A. Correct, I would.

18 Q. Would you be the lead Staff person with
19 regard to that conference?

20 A. Yes, I would.

21 Q. Okay. Do you know whether that
22 preconstruction conference is going to be open to the
23 public for its attendance?

24 A. Generally the preconstruction conferences
25 are not open to the public. It's for the Applicant.

1 The Applicant holds the conference and it's to -- for
 2 the Applicant to direct its contractors and
 3 subcontractors to make sure that they follow the --
 4 are aware of the terms of the Certificate and abide
 5 by that Certificate.

6 But in my past experience, members of the
 7 public have not been invited, except for law
 8 enforcement and first emergency responders.

9 MR. VAN KLEY: I have no further
 10 questions.

11 ALJ SCHABO: Any redirect?

12 MS. BAIR: I have nothing.

13 ALJ SCHABO: All right. Thank you,
 14 Mr. Conway.

15 Ms. Bair.

16 MS. BAIR: Yes. I would like to move
 17 Staff Exhibit 11 and 12 into evidence.

18 ALJ SCHABO: Are there any objections?

19 MR. SETTINERI: No.

20 ALJ SCHABO: Hearing none, Staff
 21 Exhibit 11 and 12 will be admitted into the record.

22 (EXHIBITS ADMITTED INTO EVIDENCE.)

23 ALJ SCHABO: Let's go off the record for
 24 a moment.

25 (Discussion off the record.)

1 ALJ SCHABO: Let's go back on the record.
 2 Ms. Bair, that concludes your
 3 case-in-chief?

4 MS. BAIR: Thank you, Your Honor. Yes,
 5 we have no more witnesses to call on direct.

6 ALJ SCHABO: Okay. I believe we'll be
 7 adjourned for the day to reconvene on Monday, August
 8 the 12th at 10:00 a.m.

9 Mr. Settineri and Ms. Bair wanted to
 10 reserve their right to present rebuttal --

11 MR. SETTINERI: That is correct --

12 ALJ SCHABO: -- following the conclusion
 13 of Mr. Van Kley's case.

14 MR. SETTINERI: That is correct, Your
 15 Honor. Thank you.

16 ALJ SCHABO: Okay.

17 MR. VAN KLEY: Yes, Your Honor, and we
 18 would also like to reserve the right of rebuttal to
 19 any rebuttal cases put on by the Staff or by the
 20 Applicant.

21 ALJ SCHABO: I've never heard of rebuttal
 22 on the challenging side, but I'll think about it.

23 MR. VAN KLEY: Okay.

24 ALJ SCHABO: And we can discuss it again
 25 on the 12th.

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MR. VAN KLEY: Okay.

ALJ SCHABO: All right?

MR. VAN KLEY: All right.

ALJ SCHABO: Anything further?

MS. WEST: No, Your Honor.

ALJ SCHABO: Thank you very much. We're
adjourned.

(Thereupon, the proceedings concluded at
2:47 p.m.)

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CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Thursday, August 1, 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 II - In the Matter of the Application of Angelina Solar I, LLC for a Certificate of Environmental Compatibility and Public Need, hearing held on August 1st, 2019 electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Burke, Carolyn