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(Appearing via Zoom)

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1 JUDGE SLAVIN: Good evening, ladies and
2 gentlemen. Welcome back to the Old Lee County
3 Courthouse Main Courtroom on the Third Floor.

4 Calling out of recess Lee County Petition
5 Number 20 P 1555, Steward Creek Solar, LLC's,
6 request for a Special Use Permit to construct a
7 solar energy system in portions of Alto and
8 Willow Creek Township.

9 For the record, present this evening of
10 note are the Chairman of the ZBA, Mr. Forster,
11 ZBA Members Buhrow, Bothe, Pratt, Hughes. I do
12 not see -- unless I'm not craning my neck very
13 well, I do not see Mr. Meyer.

14 Okay. The wonderful Zoning Officer, Dee
15 Duffy, is present, as is the astute State's
16 Attorney, Mr. Boonstra, and Ms. Kennedy for the
17 Petitioner, along with some of the Petitioner's
18 agents.

19 Zach, from the Lee County IT Department is
20 present, as is Ms. Henkel. Our long-suffering
21 court reporter is with us. One, two, three --
22 four interested parties at this point appear.
23 That makes the population of this room 4, 7, 8,
24 10, 14, 17, 18 -- I think 21 people present,

1 which conforms with the governor's mandate. Who
2 knows, pretty soon we may be shut down entirely,
3 but we'll see.

4 There are no people, correct, in either
5 the first floor lobby or the back jury room; is
6 that correct, Ms. Duffy?

7 MS. DUFFY: (Nods head.)

8 JUDGE SLAVIN: For those listening,
9 obviously if you're listening on Zoom you
10 already know this, but if you happen to be
11 listening on YouTube, the Zoom meeting ID
12 remains 91539239154, and the password is 209840.

13 As to YouTube, you go -- you can watch us
14 by going to www.youtube.com, and in the search
15 bar type in "Lee County IL" -- I-L, for
16 Illinois -- "Zoning Board of Appeals," all
17 written out. No need to be concerned with upper
18 or lower case letters. Then there should be a
19 list of dates. Select the date you want, today
20 is the 20th of October, and whala.

21 Anybody needing technical assistance, feel
22 free to call for that technical assistance,
23 815.973.3449.

24 All right. That brings us up to speed.

1 When we left off, before calling the last
2 recess, Ms. Kennedy, you had a witness on the
3 stand, Mr. Lehr, and she had finished direct
4 examination, and we were about to begin
5 cross-examination of Mr. Lehr. I see Mr. Lehr
6 on the Zoom.

7 Mr. Boonstra, questions of Mr. Lehr?

8 MR. BOONSTRA: No questions, Your Honor.

9 JUDGE SLAVIN: Ms. Duffy, how about you,
10 questions?

11 MS. DUFFY: No, I don't.

12 JUDGE SLAVIN: Okay. Members of the ZBA.
13 Mr. Forster, questions of Mr. Lehr?

14 MR. FORSTER: No.

15 JUDGE SLAVIN: How about you, Mr. Buhrow?

16 MR. BUHROW: No.

17 JUDGE SLAVIN: How about you, Mr. Bothe?

18 MR. BOTHE: No.

19 JUDGE SLAVIN: Mr. Pratt?

20 MR. PRATT: Yes.

21 JUDGE SLAVIN: Sure.

22 And, Mr. Lehr, make sure you tell us if
23 you can't hear. I am sure you will, but. . .

24 MR. LEHR: Yes, I can hear you very well

1 right now.

2 JUDGE SLAVIN: You can hear me because I'm
3 swallowing the microphone, but it's tough.

4 MR. LEHR: Can you hear me okay?

5 JUDGE SLAVIN: Wonderful.

6 MR. LEHR: Okay.

7 MIKE LEHR (via Zoom),
8 having been previously duly sworn, was examined
9 and testified as follows:

10 EXAMINATION

11 BY MR. PRATT:

12 Q. Mr. Lehr, are you going to -- do you design and
13 position where the panels will be? Is this part
14 of your responsibility?

15 A. No. My -- that comes from the EPC contractor.
16 The way the process works is, I will help put
17 together the construction plan, as we discussed
18 last night, and then the EPC contractor will
19 design the project and then install -- buy the
20 material and install the project.

21 Q. EBC?

22 A. EPC. I'm sorry. It's an engineer, procure and
23 construct-type contract.

24 Q. So who does design -- they have an engineer

1 that positions the panels?

2 A. Yes. Depending on the contractor you get,
3 they -- some of them have design people inhouse.
4 If not, they would subcontract that out.

5 Q. So how will they get power from the -- say, the
6 north project to the collection point without
7 going through nonparticipating owners or
8 parcels?

9 A. So the way the solar project will work is, the
10 DC power that will come off the panel will go to
11 an inverter. That will change it to AC power.
12 The AC power would be routed underground up to
13 the substation, where the main power transformer
14 is. So all the power from the entire site, the
15 north, central, and south portions, will have
16 underground power cables that will go up to the
17 substation. That's where they tie into the
18 interconnection point on the grid.

19 Q. But surely they will have to pass through
20 nonparticipating parcels with them underground
21 cables?

22 A. If they do, there would have to be easements
23 put in place to allow that.

24 Q. So what about the tile that they -- you know,

1 if they're on a non- -- the tile guy talked
2 about everything on the project. Now we're
3 talking about nonparticipating parcels. You
4 know, the tile are not discovered there, so is
5 that your responsibility or somebody else's?

6 A. I can't speak directly to that. That would
7 come from the owners. My guess would be, if
8 they did hit tile as they were going through the
9 easement -- I would assume before you went
10 through the easement, that would be mapped, just
11 like the project site. So you would know ahead
12 of time if you hit a tile, and you would move
13 that drain tile so you can pass through that
14 easement.

15 But if they did hit an easement (sic), I
16 would let the owners respond to that, but I
17 assume they would fix that, repair that tile.

18 Q. What percentage of the 5,000 acres will
19 actually have panels on it?

20 A. I believe the site is actually a little bigger
21 than 5,000 acres. I believe the -- or at least
22 the land that's allocated to this. But the
23 5,000 acres, minus the setbacks, you know, the
24 County requirement setbacks, would pretty much

1 all be used for the -- put the solar panels in.
2 So percentage-wise, it would be 98, 97 percent.

3 MR. PRATT: Okay. No further questions.

4 JUDGE SLAVIN: Okay. Thank you.

5 I think we have run through everybody.
6 Interested party -- oh, Mr. Hughes. Thank you.
7 I have got to start going boom, boom, because
8 I --

9 MR. HUGHES: It's probably just because
10 I'm sitting off on the side here.

11 JUDGE SLAVIN: You're kind. Go ahead.

12 MR. HUGHES: Mr. Lehr, I have a few
13 questions.

14 EXAMINATION

15 BY MR. HUGHES:

16 Q. When you were giving testimony earlier, you
17 were talking about a receiving area or what I
18 would call a laydown yard. Is there going to be
19 a central laydown yard or will -- I'll leave it
20 there. Is there going to be a central laydown
21 yard?

22 A. In that manner, there will be to start the
23 project, the way -- with the project being
24 phased. So the way it would work for the

1 material, receipt and laydown, the material
2 would come in -- so on the north phase, with
3 that project area just being the first one, it
4 would be a designated storage area for when the
5 material comes in. It would go to that area,
6 and then as the project progresses, even in the
7 north area, as it progresses south, then the
8 material would be staged from that central area
9 out to where it is in the north -- north area.

10 Then as the project progresses to the
11 central portion and to the south portion, there
12 will just be a receiving -- everything will be
13 received probably again on the north side -- on
14 the north area of the site. Once it's received
15 and inspected, that material would get direct --
16 would go directly out to where it's needed in
17 the central and south project.

18 So as the project progresses, since it's
19 such a large site, the material doesn't get
20 stored in just one spot. It will get staged out
21 very quickly.

22 Q. Okay. Thank you.

23 Approximately what size will that laydown
24 or receiving area be?

1 A. It -- the initial area upfront, when they first
2 start, would not be real big. You know, it
3 might take up an acre.

4 What you'll get is, the post for the piles
5 that are coming in will come in, so you'll need
6 some room for that, and some of the solar panels
7 will start to come in. So it's not going to be
8 a huge area. It's probably an acre or less.

9 Q. Okay. You also stated that there wouldn't --
10 there probably wouldn't be any primary parking
11 area, just like there's not a true laydown yard.
12 How would the parking be handled as it moves
13 through the different stages?

14 A. So initially there would be a -- kind of a
15 central parking area that will -- again, it
16 would be on the north side of the site. So what
17 will happen is, construction trailers, temporary
18 trailers, will be brought in, and a parking area
19 will be established right by those construction
20 trailers.

21 So when the project first starts, there
22 may be 80, 90 people onsite, and they would all
23 park in that initial central parking area. Then
24 as the project progresses down to the south,

1 smaller parking areas will be designated at
2 certain portions of the project, and those would
3 be really dictated by the construction
4 contractor as he sees fit to allocate his people
5 out.

6 So you wouldn't have everybody -- once the
7 project is at its peak, let's say, crew -- crews
8 coming out to the site, you wouldn't have
9 everybody coming to that central parking area.
10 You may have some coming to that and the other
11 people, as they're -- they would go to the
12 parking areas designated for the areas that
13 they're working in, and they would move -- their
14 parking areas would move as they went south on
15 the project.

16 Q. All right. And you indicated that there would
17 be construction trailers or operations trailers?

18 A. Yeah, there will be temporary construction
19 trailers. They would come in at the start to
20 give the construction management people a place
21 to work, and they would stay throughout
22 construction, and then when construction is
23 done, those trailers get taken away. And if
24 there is a small O and M building, which I don't

1 believe has been decided at this point because
2 the project will be controlled off site, so
3 there really isn't a need for any long-term,
4 permanent structure at the site. I don't know
5 that that's been finalized, whether there will
6 be a little O and M. And it would be just a
7 small, little trailer basically, if there is
8 one.

9 Q. Okay. And then am I to assume that those
10 operational trailers, construction trailers,
11 will also move as you go through the different
12 segments of the construction or the different
13 areas -- the north, the central, the south --
14 will they move as well?

15 A. No. They typically don't, even on large
16 projects like this. Once they establish the
17 location for that, the construction trailers,
18 they stay there throughout the duration of
19 construction.

20 Q. Okay. Then how much area will that -- those
21 construction trailers and that initial or
22 primary parking area, how much acreage will that
23 encompass?

24 A. It would probably take up maybe an acre and a

1 half, two acres, something like that. The
2 construction trailers are the modular type, kind
3 of a double-wide trailer, and there might be two
4 of those on a large project like this, and then
5 you would have the parking. So, yeah, maybe --
6 maybe up to three acres probably at most.

7 Q. Okay. Will that area be gravelled as well?

8 A. Yes, the parking areas would be gravel.

9 Q. And after the construction is done, what will
10 be the process of bringing the back area back to
11 original condition?

12 A. The final methodology would be decided with a
13 construction contractor, but there's really
14 two -- two real options is, the trailers would
15 obviously get removed from the site, and they
16 really don't leave any telltale signs. I mean,
17 they get anchored down, and they're usually
18 supported on some cinder blocks. All of that
19 would get removed.

20 So the thing you would be left with would
21 be the gravel parking area --

22 Q. Yes.

23 A. -- and sometimes those stay. Again, it's kind
24 of an owner's call at the end. The gravel

1 parking area could stay if there was a use for
2 it during the long-term operation, but since
3 this project wouldn't really -- would be
4 controlled remotely, there wouldn't necessarily
5 be a need for that. So then the gravel would be
6 removed at that time, and that area would be
7 restored back to kind of its native -- you know,
8 grasses would be planted and so forth to
9 stabilize the soil.

10 Q. Okay. You've mentioned and we have talked
11 about the timeline on the construction a variety
12 of times, and it's kind of a moving target, I
13 guess. You also mentioned that there's more to
14 the timeline than just the construction period,
15 but I'd like to get maybe a handle on what the
16 timeframe of actual construction in each phase
17 is, not the stuff leading up to it, not the
18 preparatory, but just the actual, onsite for
19 each segment.

20 A. The onsite construction would be actually about
21 21 to 24 months.

22 Q. Okay. That is -- okay.

23 Okay. I thought in your earlier testimony
24 you had indicated that that 21 to 24 months

1 would include -- includes other things,
2 preparatory things and that type of thing. So I
3 just wanted to get a better handle. Thank you.

4 A. Yeah, if -- I'm sorry.

5 Q. Go ahead.

6 A. I was alluding to the overall schedule, things
7 that came upfront up to construction. So if
8 that was confusing, I apologize. But the actual
9 construction duration is the 21 to 24 months
10 approximately.

11 Q. So then am I to assume that each segment would
12 comprise about seven to eight months?

13 A. Yeah, that's probably a fair assessment.
14 Typically on projects like this, they -- the
15 progression increases, the labor productivity
16 gets better as the project goes on, because the
17 people that you have working become acquainted
18 with exactly how to install it. So it's a
19 learning curve at the start, and then it picks
20 up. But, yeah, a good rule of thumb would be a
21 third of the time would go to each of the
22 phases.

23 Q. Okay. Thank you.

24 Going a little bit more toward the actual

1 solar panels, we have had a couple of
2 significant tornados in Lee County in the last
3 few years, and in August we had, what do they
4 call it, a derecho, winds up to a hundred miles
5 an hour.

6 What's the -- what type of force or impact
7 can those -- can the solar panels take?

8 A. The solar panels, if they get impacted, they
9 would probably crack, you know, with a rock or
10 debris or twigs or tree limbs, depending on how
11 hard they hit the panels. The panels are made
12 of tempered glass, so when they get -- they
13 don't shatter like regular glass. They would
14 crack, kind of more like your car windshield.

15 The site, when the engineering is done for
16 the design for the piles, the racking, all of
17 that takes into account the maximum wind loads
18 for the site, and so every site is different.
19 So whatever the wind loads for Lee County would
20 be, those would be used in the design for the
21 facility. So the trackers and the racking and
22 the piles should stay in place for those maximum
23 wind loads, but the panels could suffer some
24 damage based on impacts.

1 Q. Okay. And I think just one more question for
2 right now.

3 It was indicated in the application that
4 they're looking at lithium batteries, Samsung
5 batteries for backup storage, but then it was
6 also stated that that may be -- that may be
7 dictated by -- excuse me a second here -- PJM as
8 to whether they are actually needed or not.

9 But what type of storage or what type of
10 mounting would those require?

11 A. So the battery backups for utility-grade-type
12 plants, they would be pretty much -- anymore
13 they're all lithium-based batteries.

14 Q. What type of containment would they have? Are
15 they on a cement slab? Are they housed in a
16 building? What's the -- how do they get set up?

17 A. Yeah, there's a couple of ways you can do that.
18 They would be housed inside. They wouldn't be
19 outside, obviously. So there are some systems
20 where the containment is in a -- kind of like a
21 storage container, and the batteries are in
22 racks, and that would be one methodology where
23 it's inside a metal storage container.

24 The other methodology, the batteries,

1 again, are in racks, but they would be in a
2 physical building structure that's built for
3 them. Usually the building structure is only
4 built if you have a very large battery capacity.

5 So depending, as you said, what the PJM
6 requirements are, typically the battery backup
7 power here that I have seen has been more in the
8 metal storage containers.

9 MR. HUGHES: Okay. Thank you. I think
10 that's my questions.

11 JUDGE SLAVIN: Okay. Thank you.

12 Alice, does Rex Meyer show, before I --

13 MS. HENKEL: No.

14 JUDGE SLAVIN: All right. Interested
15 parties in the room first. By show of hand,
16 questions of Mr. Lehr?

17 All right. Seeing none, I will go to the
18 Zoomers. You're going to disappear for a
19 minute, or Alice is going to tell me if we have
20 got any raised hands.

21 Folks on Zoom, I know it's boring for me
22 to keep saying it, but if you have a question of
23 Mr. Lehr and you're on videoconferencing, move
24 the cursor to the bottom of the screen where it

1 says -- I think it says "participants," click on
2 "participants," up should pop a menu that
3 includes "raise hand." Click on "raise hand,"
4 and we will see your raised hand on this end.

5 If you're teleconferencing, in other
6 words, you're on your cell phone, stay on the
7 Zoom on the cell phone, but go to your keypad
8 and hit -- hit Star 9 or 9 Star.

9 MS. KENNEDY: Star 9.

10 JUDGE SLAVIN: Star 9. Forgot.

11 Star nine, and that should raise your hand
12 and we'll see that as well.

13 So I'll give you a few seconds here.

14 Anybody got any questions?

15 MS. HENKEL: (Indicating.)

16 JUDGE SLAVIN: We've now got three.

17 Okay. Ali Huss, can you hear me?

18 MS. HUSS: Yes. Yes.

19 JUDGE SLAVIN: Okay. Go ahead, ask away.

20 EXAMINATION

21 BY MS. HUSS:

22 Q. All right. How many years have you worked in
23 the energy development field?

24 A. I have got 40 years-plus in the energy

1 industry.

2 Q. Okay.

3 A. I have seen all kinds of projects.

4 Q. And how many years of that would you say have
5 been spent focusing on solar development?

6 A. Solar development's probably been over the last
7 ten years.

8 Q. Okay. And during that time, have you
9 personally worked with developing the
10 construction for a 5,000-acre-plus solar
11 project?

12 A. I have worked on construction management plans
13 for projects that size --

14 Q. Okay.

15 A. -- Yes.

16 Q. And how many have been of 5,000 acres or more?

17 A. There's been two that I have worked on that
18 have been this size.

19 Q. Okay. You also mentioned Road Use Agreements
20 in your testimony. Will those be available for
21 the public to view?

22 A. I believe so. I'm not sure the process right
23 now on that. I know the agreements are made
24 between the Townships and the County, as well as

1 the owner. I guess I can't answer that
2 directly. I don't know for sure.

3 Q. In the Road Use Agreement, if road improvements
4 are necessitated will your construction company
5 be doing that or will that be the responsibility
6 of the Township?

7 A. Again, it would be dictated by what is in the
8 agreement. So however that gets -- if the
9 agreement states that the owner has to do that,
10 then, yeah, the construction company would do
11 the improvements, but if the Township takes that
12 on -- so right now I don't know for sure which
13 way that would go.

14 Q. Okay. What is the remediation plan for erosion
15 that does happen during the construction?

16 A. So the first thing that will happen is, they'll
17 come in and do the initial grading on the site,
18 and then they'll put up the silt fencing to
19 prevent the erosion off -- the soils off of the
20 site. The roads, the side roads will be graded
21 and then gravel -- there will be gravel
22 installed on the roads. There would also be
23 speed limits for people traveling on those roads
24 to try to keep the dust down.

1 And in the end, when the project is
2 complete, the construction contractor would go
3 back if there were any areas that eroded due to,
4 say, heavy rains or something after
5 construction, they would go back and repair
6 those back to what they were originally.

7 Q. Okay. You also mentioned additional storm
8 runoff channels, correct?

9 A. If they're needed. What typically happens is,
10 there will be a hydrology evaluation of the
11 site, and that will dictate how the site gets
12 graded and whether there's going to be a need
13 for retention ponds, for stormwater runoff
14 channels. A lot of times there isn't, but that
15 doesn't mean -- every site is different. So
16 that doesn't mean there would be or wouldn't be.
17 It just isn't known right now.

18 Q. Okay. Would these additional stormwater runoff
19 channels be in easement areas?

20 A. I -- again, without the design, it would be
21 hard to say where they would end up.

22 Q. Okay. Is your company responsible for
23 installing the perimeter fencing around the
24 solar project?

1 A. No, we're not. We're not a construction
2 company.

3 Q. Okay. Will the fence be up prior to you guys
4 starting construction?

5 A. Not all of the fence. The way the project will
6 go is, the initial areas where the construction
7 trailers go in the parking lot, the fencing will
8 be -- will start being installed at that point.
9 So there will be some interior fencing if needed
10 for materials if they're brought on site and the
11 perimeter fence hasn't been completed yet.
12 They'll put up some temporary fencing around
13 materials and so forth.

14 Q. Okay. Have you observed your construction
15 projects or the construction of a solar project
16 over the span of five years?

17 A. The -- well, the solar projects -- if you're
18 asking directly about solar projects, there
19 hasn't been a solar project that spans five
20 years of construction, but to answer your
21 question --

22 Q. No, no, no. I mean, have you observed your --
23 I apologize. Have you observed, once the
24 construction has completed, five years

1 post-construction?

2 A. Oh, operation. I'm sorry, I misunderstood you.
3 I have gone out to project sites after they have
4 been constructed while they're in operation. I
5 don't know that I have visited any that have
6 been in operation for five years. I have
7 visited a lot, I just don't recall off the top
8 of my head if there's been a five-year period
9 since completed construction.

10 Q. What were your observations of the project
11 post-construction when it was -- were there any
12 things that came up that you took notes that
13 changed during construction for a next project
14 or any impacts that had not been foreseen that
15 did happen as a result of the construction
16 project?

17 A. You know, during the -- well, to answer the
18 first part of your question about what did I
19 observe after construction, the facilities are
20 in operation, they are very quiet. I mean,
21 there's no noise generated. It's -- there's --
22 if there are people on site operating, it's only
23 one or two people. There -- these plants are
24 very self-sufficient. They're not like an

1 industrial plant that you might think about. So
2 it's still very peaceful out there, if you want
3 to put it that way, because these projects are
4 usually out in rural areas like the one we're
5 talking about.

6 As far as lessons learned, usually the
7 lessons learned, from what I have seen, have not
8 been on the construction side. I mean, the
9 construction contractors, they -- it's not
10 really a lessons-learned, but they have over the
11 past five or ten years gotten very efficient on
12 installing these.

13 So they have learned lessons over that
14 time of the best way to stage their crews, how
15 many people are going to need to install the
16 racks, how many people are going to need to
17 install the piles. So there's been a good
18 learning curve on the construction perspective
19 for that, for being efficient out there during
20 construction.

21 A lot of the main lessons learned center
22 around more the -- if there's a shared
23 facilities agreement -- I know I might be
24 getting off base here, but usually -- some of

1 these projects get very complex on where they
2 tie into the grid, and there's a lot of
3 agreements in place between all the different
4 parties that might have that shared facility.
5 That's usually where the lessons learned are.
6 They are not out where there's been a big
7 mistake in engineering.

8 Q. Have there been impacts to either drainage tile
9 or soil that was not seen after construction had
10 initially been completed but later on during
11 operation?

12 A. Not that I have seen. The -- a lot of the
13 projects don't encounter -- even though they are
14 in farming areas, don't encounter the drain
15 tiles like are on these sites.

16 I would say if, you know, a drain tile
17 damage were encountered after the project was up
18 and running, you might see it in that you would
19 start seeing water at the surface if there was
20 water flowing through that damaged drain tile.
21 Although it would be difficult, there might be a
22 way you could repair that potentially. But, no,
23 I have not seen that.

24 Q. Okay. Will your company be involved in

1 developing the deconstruction plan or
2 decommissioning?

3 A. There's already a decommissioning plan that's
4 been developed. We were not involved in
5 development of that plan.

6 Q. So as far as actually undoing the construction
7 of the -- of what you are putting in place, your
8 company will not be involved in that?

9 A. Well, in the end, I don't know. That has to
10 be --

11 Q. Okay.

12 A. -- decided with the owners. But I will tell
13 you there is a decommissioning plan that's
14 already in place.

15 Q. Has your company or have you been involved in
16 the deconstruction of a solar project?

17 A. I don't believe we have. I don't -- I'm trying
18 to think back. I don't think there have been
19 many that I can think of that have been
20 deconstructed. Now, we have been involved in
21 reviewing of plans, the decommissioning plans,
22 and we have been involved in doing cost
23 estimates and determining the best methodologies
24 to dismantle a plant, but I have not seen any

1 solar plants being decommissioned or
2 deconstructed.

3 Q. Are you aware of any studies or other accounts
4 that have studied the impact to soil, drain
5 tiles, or erosion during the actual
6 deconstruction process?

7 A. No, I'm not. I have not seen any studies on
8 that.

9 Q. Okay. You mentioned that you don't see any
10 issues on the road use, correct?

11 A. Correct. And I believe even the Townships have
12 looked at it without having any issues with it.

13 Q. Are we then to conclude that if there are
14 gravel roads marked as heavy-travel areas, that
15 those will no longer be gravel roads?

16 A. I'm not sure I follow what you're asking.

17 Q. The heavy-travel areas marked on the map that
18 was passed out, some of those roads are gravel.
19 Is it -- can -- with all of the construction use
20 and the materials that will be brought in, would
21 those roads need to be upgraded or are they
22 sufficient, based on the weight of the
23 materials?

24 A. That I can't answer. A study of those roads

1 and interface with the County and the Townships
2 would have to be done to determine if there
3 would be any detriment to those roads.

4 Typically there is not, but I can't say for
5 sure.

6 Q. Okay. So what is the weight of the materials
7 per load that would be brought in on average?

8 A. Well, you're limited basically by the -- with
9 what the trucks can handle. It's mainly semis,
10 and how -- a lot of the -- probably the biggest,
11 heaviest piece of equipment that comes in is the
12 transformers. All of the other materials that
13 come in, even the piles on the back of an
14 18-wheel truck, those loads are very, very small
15 really. And the solar panels that come in,
16 you're limited by how you can stack those
17 panels, because they come in on pallets.

18 So, again, those loads on those trucks are
19 very low compared to typical loads for machinery
20 that those trucks can handle.

21 Q. Okay. And I do think this next one may have
22 been covered, but I wasn't there in person, so
23 it was a little hard to hear. So forgive me if
24 I repeat this.

1 So the AC power from the inverters will be
2 transmitted only via underground wire to the
3 substation?

4 A. That's the plan right now, I mean, until the
5 final design is done, but the plan is to take it
6 all underground until you get to the substation.
7 There may be -- there may be something that
8 crops up where you do have to go aboveground,
9 but that's not in the plan and that's not
10 foreseen at this point.

11 Q. Okay. So when you look at other solar projects
12 that do have the equivalent to telephone posts
13 moving some of that, that's not the design for
14 this project, correct?

15 A. It's not the intent of the design. Like I say,
16 the design hasn't been completed or really even
17 started yet, but the initial would be to do it
18 underground, unless there is some obstacle which
19 caused it to be aboveground.

20 Q. Okay. You also mentioned that the panels will
21 be managed remotely; is that correct?

22 A. Correct. The plant will be operated remotely,
23 correct.

24 Q. And what form of communication will the panels

1 use to send information back to the remote
2 management?

3 A. So there's a system called SCADA. It's the
4 system that controls the whole power plant. All
5 of the links, the communication links between
6 the plant itself and where the control is, is
7 either over fiber optic links or wire cable.

8 Q. Okay. So fiber optic does not exist in this,
9 correct -- in this project?

10 A. No, there usually is fiber optic, especially
11 around where the substation is. A lot of --
12 when you tie into the grid, there's a lot of
13 communication that goes on at that point, and
14 pretty much all the grid suppliers and the
15 people that -- the companies like PJM that you
16 tie into usually have requirements for some of
17 that communication to be over fiber.

18 Q. Okay. So you will have to still run fiber
19 lines from the either -- inverters to the
20 substation?

21 A. No. Right now the technology has gotten away
22 from that. It's usually WiFi for the inverters.
23 Control of the inverters and control of the
24 trackers is by WiFi from the control system.

1 Q. So the control system and inverters will
2 require internet?

3 A. Yes.

4 Q. Is there infrastructure there that there's
5 currently internet access on the parcel?

6 A. I don't know that there is, but it would have
7 to be put in, and that's usually just a typical
8 part of the project, is installing the network
9 requirements.

10 Q. And the -- all of that will fully tie into the
11 substation and the grid that PJM manages?

12 A. For the power output, yeah. I mean, the plant
13 itself is -- has its local control, and PJM or
14 whoever is dispatching that plant also has
15 control. So PJM would also have some tie-in to
16 the control center.

17 Q. Okay. You mentioned during strong winds or
18 potentially hazardous weather what would or
19 wouldn't happen to solar panels. What is the
20 protocol for the construction workers during
21 winds or potential hazardous weather?

22 A. Yeah, that's again decided by the EPC
23 contractor. But I can tell you, every EPC
24 contractor, it would be a requirement pretty

1 much on this contract as well, have a health and
2 safety plan put together and approved before
3 construction starts. So in that health and
4 safety plan, it will define what happens if
5 there's bad thunderstorms, that everybody either
6 musters at certain places to get information and
7 then is either directed onsite or to some other
8 place. So there will be muster points around
9 the site that will be determined.

10 So any adverse weather, bad wind,
11 thunderstorms, lightning, hail, any of that,
12 tornados, that would all be handled that way.

13 Q. Okay. In the event of strong winds, with the
14 material drop sites during construction, are
15 there risks of loose fragments or debris?

16 A. No, since none of these -- none of the material
17 is very high off the ground. So the piles,
18 which would be staged, as I said, they're very
19 heavy, so the wind wouldn't blow them. The
20 panels, the solar panels, they come in in
21 crates, and they're not taken out of the crates
22 until they're actually going to be installed.

23 Q. Okay.

24 A. So there wouldn't be, like, solar panels laying

1 around that the wind could catch.

2 The trackers and the framing are the same
3 way. The trackers are very heavy, so they
4 wouldn't get blown around. The framing is in
5 pieces, but, again, it's in boxes. They are in
6 pallets, and they're only taken out when -- at
7 the point that they are actually needed. So,
8 again, there wouldn't be small pieces to be
9 caught and blown around by the wind.

10 Q. Okay. So then last -- last one or two. Are
11 you going to be working directly with Steward
12 Creek to prepare documents necessary for the
13 building permitting process?

14 A. That hasn't been decided. Right now my scope
15 of work is to support the development of the
16 construction management plan.

17 Q. Will that construction management plan need to
18 be provided for the -- do you know if that will
19 need to be provided for the building permit?

20 A. No. Typically the building permits only
21 require drawings of the site.

22 MS. HUSS: Okay. All right. Thank you
23 for your time.

24 THE WITNESS: You're welcome.

1 JUDGE SLAVIN: Thank you. I'm going to
2 stay on the top tier here. Giles Kalvelage.

3 MR. KALVELAGE: Greetings.

4 EXAMINATION

5 BY MR. KALVELAGE:

6 Q. Hello, Mr. Lehr. I'm with Willow Creek
7 Township Planning Group.

8 Some of the questions that I had have
9 already been asked. So I'll ask a couple
10 smaller questions and maybe a follow-up or two
11 on some of the others.

12 Do you know approximately how many solar
13 panels would be expected in a 5,000-acre farm?

14 A. Yeah, for property this size, being 600
15 megawatts, it's going to be around 2.1 million
16 solar panels.

17 Q. Okay. All right. And how many -- we talked
18 yesterday about pile machines probably making
19 the most noise. With that many panels, how many
20 pile machines would be -- would you expect to be
21 working at any given time?

22 A. So the actual number, again, will be dictated
23 by the construction contractor based on his
24 schedule and resource allocations, but a project

1 of this size, you would probably see maybe three
2 to four pile machines.

3 Q. Okay. Thank you.

4 Couple follow-up questions that I have got
5 with communication. So the WiFi would be
6 garnished locally, would it not be?

7 A. Well, yeah. The way these projects work with
8 the WiFi is, they would go out to somebody that
9 provides WiFi, let's say, just for talking
10 purposes, somebody like AT&T or something like
11 that, and they would have special WiFi brought
12 into the project site for that, a dedicated WiFi
13 network for the control of all the systems
14 onsite.

15 Q. Would that be using any of our contractors that
16 we would have locally here, around our area?

17 A. I can't speak for the internet provider, but
18 I -- yeah, they typically go to local internet
19 providers for that. So I would assume it would
20 be local contractors that would provide that,
21 correct.

22 Q. Okay. With approximately 2 million panels,
23 would local residents and local businesses
24 expect to see any noticeable bandwidth

1 restrictions for our normal, everyday
2 operations?

3 A. Again, I can't speak for the WiFi company, but
4 like I say, it would be a dedicated WiFi system
5 for the plant. So I wouldn't think it would
6 affect -- and I have never heard of, you know,
7 on any other solar projects, of people
8 complaining that the plant has affected their
9 WiFi. So I would tend to believe that no, it
10 wouldn't affect the local communities.

11 Q. Okay. Thank you for that answer.

12 One last follow-up question that I have
13 got on the decommissioning. You mentioned that
14 you know of no solar plants that have been
15 decommissioned.

16 A. I'm sorry, go ahead.

17 Q. Well, I'm just kind of wondering, why -- is it
18 because solar panels are too new and they have
19 not outlived their lifespan yet, or is it
20 because at the end of the project they are just
21 left?

22 A. No. To -- so the reason I haven't seen any and
23 am not aware of it is, first of all, the large
24 solar projects, utility -- basically

1 utility-grade-type projects like this, they have
2 only started within the last ten years, and
3 these project design lives and operating lives
4 are usually 30 to 40 years. So these large
5 plants are just starting in to maybe their
6 second decade, you know, on the early ones. So
7 none of them have reached the end of their life
8 to actually do the decommissioning of them.

9 And it's not that there would be any
10 plants just abandoned in place. I have never
11 seen any county or community that would allow
12 that, and I know Lee County and the local
13 townships wouldn't allow that here either.

14 So, no, there are decommissioning plans
15 for every one of those plants; they just haven't
16 reached their life -- the end of their life to
17 implement those plans.

18 MR. KALVELAGE: Okay. Well, thank you so
19 very much. That's all the questions that I have
20 at this point. Thank you.

21 JUDGE SLAVIN: Thank you.

22 Terri Voitik. Terri, can you hear me?

23 MS. VOITIK: Am I unmuted? Can you hear
24 me?

1 JUDGE SLAVIN: You are unmuted. We can
2 hear you.

3 MS. VOITIK: First off, my name is Terri
4 Voitik, from Lee, Illinois.

5 I want to thank who worked so hard on the
6 audio today. It was almost impossible to hear
7 yesterday, so it's much better today.

8 JUDGE SLAVIN: Good to hear.

9 EXAMINATION

10 BY MS. VOITIK:

11 Q. My first question is about the topography of
12 the area. This is a pretty special area as far
13 as farmland, with rolling. It's not your
14 normal, flat, boring farmland like Central
15 Illinois.

16 My question for Mr. Lehr is, would the --
17 how much are you going to change the topography
18 as you progress through this project?

19 A. That -- you know, to fully answer that
20 question, that hasn't been decided yet. The way
21 that process works is, a hydrology study is done
22 to verify or get where all the stormwater flows
23 are. So that factors into the topography of
24 what the plant is going to end up with, as well

1 as when they lay out in the initial design for
2 the solar plant itself and they run the solar
3 models to verify that the plant can meet the
4 output requirements, the 600 megawatts.

5 So those things all interact to determine
6 what that final topography is going to look
7 like. So that -- those points haven't been hit
8 yet.

9 I will say, you know, most solar plants
10 try to maintain the topography as much as
11 possible. I mean, I have seen solar plants,
12 large solar plants, built on the side of
13 mountains. So it doesn't necessarily mean that
14 the area that you put the plant in has to be
15 flat. Rolling hills, I have seen plants put in
16 on sites that have rolling hills.

17 So like I say, the goal, you know, it's a
18 target, is to try to maintain the topography as
19 close to what it currently would be.

20 Q. Okay. And so should you change the topography
21 significantly, which I -- you know, I think all
22 of us would hope that it would not be done, when
23 you decommission, would you replace it and
24 restore it to the way that it was left from the

1 glacial days?

2 A. Yeah, you know, that's kind of a good question.
3 Like I say, typically -- and I would make the
4 assumption here that the topography here would
5 stay pretty much the way it is. There may be a
6 few areas for drainage or if there's some
7 shaving that may get filled in or cut out to
8 either affect the drainage better or to provide,
9 you know, the sunlight the panels need. But
10 those are usually local -- you know, local areas
11 in this whole project.

12 Now, you know, I wouldn't guess that the
13 project would get flattened and then at the end
14 the project would come back and put the rolling
15 hills back in, so I believe that's part of the
16 reason why they maintain the topography as close
17 to what it is right now.

18 Q. Thank you.

19 I don't know if this question was -- or
20 this issue was addressed yesterday because I
21 couldn't hear when we had the environmental
22 person, Scott Billings. But regarding any ESI,
23 are you going to have one done or has one been
24 done, and who is going to do it?

1 A. An ESI, I'm not the environmental guy, so I
2 don't know that I can answer that question.

3 MS. VOITIK: Okay. Do you know -- does
4 anyone know, was it answered yesterday?

5 JUDGE SLAVIN: We've got a witness on the
6 stand and he's under oath. At this time it's
7 for questions of him.

8 MS. VOITIK: Okay.

9 Q. (By Ms. Voitik:) Last question is, okay, when
10 we're ready to decommission in today's dollars,
11 have you guys adjusted it for inflation for 35
12 years from today so that you aren't out of money
13 when you're ready to decommission?

14 A. Yeah, the decommissioning assessment hasn't
15 been done yet. It gets done prior to the
16 issuance of the building permit.

17 But the way those cost estimates go are,
18 yeah, they're figured in today's dollars, and
19 you can escalate them out to what you're going
20 to need at the end of the life of the project,
21 but then every -- the frequency varies from
22 county to county, but every so often that
23 estimate gets revisited over the life of the
24 project to make sure that it gets updated and

1 compared to what's being set aside to make sure
2 there is enough money at the end.

3 Q. So that should be factored in when the
4 agreement is done?

5 A. I'm not sure which agreement you're talking
6 about.

7 Q. Well, when we -- when you get final approval,
8 will that be part of the agreement?

9 A. The cost estimate will be in the
10 decommissioning plan, correct. I don't know --
11 I'm not sure what agreement you're talking
12 about. The cost estimate has to be in the
13 decommissioning plan prior to the issuance of
14 the building permit.

15 Q. Okay. And my last question, the pylon machines
16 -- or pile machines, how much vibration, if any,
17 in the ground?

18 A. Yeah, you know, they're hammering the piles in
19 basically, so there is local vibration around
20 the machine. But you get 10 feet away, you
21 can't really feel it. You'll hear it a little
22 bit, but -- and the noise goes down
23 substantially as you get away from that unit as
24 well.

1 So, yeah, you don't feel the vibration.
2 Because I have stood, you know, within 30, 50
3 yards of them, and you don't feel it. If you're
4 right next to it you would, but that's about it.

5 MS. VOITIK: Thank you. That's all I
6 have.

7 JUDGE SLAVIN: Thank you. Ms. Voitik, to
8 answer your question, there are a couple ways
9 you can find out what questions were asked and
10 answered. One is, probably laborious, going to
11 YouTube and pulling up yesterday, October 19th's
12 session, and maybe fast-forwarding through it to
13 get to whatever you're looking for. Or, either
14 presently or not too far in the future, the
15 court reporter's transcript will be available on
16 the website, and you can page -- that's probably
17 easier, paging your way through the transcript.

18 Okay. All right. Thank you, Mr. Lehr.
19 You're excused.

20 And it's time for a break. We'll resume
21 at five after 8.

22 (A recess was taken at 7:57 p.m.
23 and proceedings resumed at
24 8:07 p.m.)

1 JUDGE SLAVIN: All right, ladies and
2 gentlemen. Resume your positions, please.

3 All right. Ms. Kennedy, you may continue
4 to produce evidence.

5 MS. KENNEDY: Thank you. I would like to
6 call Andrew Lines.

7 JUDGE SLAVIN: By Zoom; is that right? I
8 think I saw his name up there.

9 MS. KENNEDY: That is correct.

10 JUDGE SLAVIN: Mr. Lines, a couple
11 technical questions. First, can you hear me
12 right at the moment?

13 MR. LINES: I can hear you. Can you hear
14 me?

15 JUDGE SLAVIN: Yup, sure can.

16 MR. LINES: Great.

17 JUDGE SLAVIN: All right. Want to raise
18 your right hand please for me?

19 (Andrew Lines was duly sworn.)

20 JUDGE SLAVIN: Okay. You may inquire.

21 MS. KENNEDY: Thank you.

22 ANDREW LINES,
23 having been previously duly sworn, was examined
24 and testified as follows:

DIRECT EXAMINATION

BY MS. KENNEDY:

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

A. Sure. Andrew Lines, L-I-N-E-S.

Q. And could you briefly describe your educational background for us?

A. I have a bachelor's degree from Syracuse University, and I have a certified general commercial real estate appraisal license in the state of Illinois, and I hold the MAI designation, which means I'm a member of the Appraisal Institute.

Q. And what did you have to do to get that MAI designation?

A. About ten years of post-secondary study, classes at the Appraisal Institute, including over 3500 hours of commercial appraisal experience, as well as a demonstration report and a four-part two-day examination.

Q. And how are you presently employed?

A. I'm a principal at CohnReznick.

Q. And what does CohnReznick do?

A. CohnReznick is a national advisory, assurance,

1 and tax firm, and there's a specialty in real
2 estate. I serve as a partner and help oversee
3 our valuation division.

4 Q. And what are your job duties as a principal?

5 A. I help manage our appraisal staff, I help
6 manage workflow that goes in and out the door, I
7 try to get new work and provide world class
8 service to our clients.

9 Q. And how long have you been in that position?

10 A. I have been a principal for four years and I
11 have been with the firm for nine.

12 Q. Do you have any other relevant work experience?

13 A. I worked for a year with Equity Residential
14 Properties starting in the year 2000, and
15 generally have been a real estate appraiser for
16 the last 18 years.

17 Q. And have you performed any research related to
18 solar energy systems?

19 A. I have.

20 Q. And could you tell us a little bit about that?

21 A. Sure. For the last three and a half years or
22 so, my team and I and one of the partners I work
23 with have been investigating existing solar
24 arrays around the country, including Hawaii, to

1 see whether or not there's any negative impact
2 to adjacent property values as caused by
3 proximity to the solar farm itself.

4 Q. And are you familiar with Steward Creek Solar?

5 A. I am.

6 Q. And are you aware that it's a proposed
7 600-megawatt solar farm on about 5,000 acres?

8 A. I am.

9 Q. And what materials, if any, did you review in
10 conducting your analysis for Steward Creek
11 Solar?

12 A. I examined the application packet that I
13 believe was submitted to Lee County with regards
14 to the solar project itself. In addition, I've
15 reviewed studies, other impact studies, on
16 solar, as well as various pieces of literature
17 that discuss methodology or preparing impact
18 studies.

19 Q. And could you tell us in layman's terms what a
20 paired sales analysis is?

21 A. Sure. This is one of the approaches that's
22 noted in an Appraisal Institute textbook called
23 Real Estate Damages. This is written by
24 Dr. Randy Bell, who's also an MAI like myself.

1 Dr. Bell discusses a number of approaches, one
2 of them is paired sales analysis, and at the
3 most basic level, it's when you compare one
4 property with one other property, with the only
5 difference being one variable. So by looking at
6 a price differential or what have you between
7 those two transactions, you can identify whether
8 or not one of them may have been impacted by
9 what some people would call its presupposed
10 view.

11 Q. And so you mentioned other approaches to assess
12 impacts to real estate. What are those other
13 approaches?

14 A. You can do what's called a regression analysis,
15 which just means that you're using multiple
16 variables. That type of analysis requires a lot
17 of data and a big computer, and, you know, that
18 reporting is a different way of using logs and
19 other mathematic applied sciences to determine
20 and to help qualify whether or not there might
21 be an impact.

22 There's also grouped pairs, which is
23 another tactic that appraisers can use in
24 measuring impacts.

1 What we prefer to do is to do a slight
2 variation on a single paired sales. So what we
3 do is, we look at one test sales or a group of
4 test sales and compare them to a group of
5 controlled sales. We eliminate all
6 subjectivity. There aren't any adjustments made
7 for physical characteristics. We feel that this
8 is really the best way to help isolate that
9 particular variable that we're looking for,
10 which in this case is proximity.

11 Q. And that would be proximity to the solar farm,
12 correct?

13 A. For our impact study it is, yes.

14 Q. Is the paired sales analysis an industry
15 standard approach for analyzing the impact of
16 solar farm development?

17 A. It's certainly an approach for impact studies
18 as an appraiser would use. Again, regression is
19 another tactic.

20 There's been a lot of studies that have
21 been performed on wind. Solar, although it's
22 been around for a long time, there are very few
23 studies that have been produced on a national or
24 global basis. I'd like to think that we're one

1 of the leaders in the field.

2 Q. Are there any factors that affect the price
3 paid for a piece of property?

4 A. There are a number of different variables and
5 factors. They can be physical. Obviously
6 people know about location, location, location,
7 and that certainly is an overwhelming reason why
8 someone pays the amount that they do. Certainly
9 for residential property, being in a
10 highly-rated school district is one of the most
11 important, but there are a number of factors as
12 to why someone may pay a little bit more for
13 this house and a little bit less for another.

14 Q. So how do you account for these factors so that
15 it doesn't skew the results of your analysis?

16 A. So our analysis starts with just identifying
17 all the properties that are around an existing
18 solar array. We'll use public records for
19 identifying whether or not any of those
20 properties, or whatever kind of residential
21 properties or agricultural, commercial, may have
22 sold.

23 Once we have identified those sales and
24 can prove that those transactions are market

1 transactions -- so they're not bankruptcy sales
2 or trustee sales or the result of a divorce --
3 and they were arms' length between a willing
4 buyer and a willing seller, we clarify those and
5 call them test subjects or test sales.

6 Once we have identified those test sales,
7 we then canvas the marketplace in a larger area
8 by making sure that none of those sales are in
9 any close range to the solar farm itself, so far
10 enough away that no one could say that, Well,
11 the solar farm is still influencing that
12 particular property. We made sure that our
13 group selection of control sales bracket,
14 subject test sales, with regards to house size,
15 acreage, and year built, just to make sure that
16 we're still comparing apples to apples.

17 It's not unlike what you might see a
18 single appraiser do when they come and appraise
19 your home. Might be looking at your home and
20 they grab a group of sales in your area to
21 measure that against.

22 What we don't do is do any adjustments for
23 the physical characteristics. We make sure that
24 there is a small adjustment made for market

1 conditions as it relates to the date of sale.
2 So we're trying to get our sales to be
3 consistent as to when that specific test subject
4 sold. And then we would compare the median
5 prices per square foot of the test sales and the
6 controlled sales and measure whether or not
7 there's any difference.

8 If there is an overwhelming negative
9 difference and that is repeatable in multiple
10 solar, then we might be able to conclude that
11 there's some influence derived from the solar
12 arrays themselves. But what we've found in over
13 two dozen solar farms that we have studied
14 nationwide is, there is no measurable and
15 repeatable indication of any negative loss in
16 value.

17 Q. Sure.

18 So if I understand correctly, a paired
19 sales analysis is where you compare the sale
20 prices of a property with a feature of interest,
21 or in this case the proximity to a solar farm
22 development, and you compare that to the price
23 of a similar property sold recently without that
24 feature?

1 A. Not just one house, but a group of homes.

2 Q. Do you consult anyone in conducting your
3 analysis?

4 A. So my partner, Patricia McGarr, has been a real
5 estate appraiser here in the state of Illinois
6 for over 25 years. She also serves as the vice
7 chairman of the Illinois Board of Appraisers,
8 where she helps set the rules that govern
9 appraisers like myself. We have also discussed
10 our methodology with other appraisers in the
11 field, including Kirkland Appraisals, which is
12 in North Carolina, and has been producing their
13 own studies on solar farms and their impact to
14 adjacent real estate. We have also discussed
15 our methodology with SEA, which is the Solar
16 Energy Association. It's an industry energy
17 association nationally.

18 Q. Have you ever contacted an assessment officer?

19 A. Absolutely. I would say that we have conducted
20 interviews with close to 60 or 70 different
21 county tax assessors and municipal assessors
22 across the country. We specifically asked
23 assessors who have solar arrays within their
24 taxing districts because they have the

1 transactional data around them to quantify
2 whether or not there might be an impact from an
3 existing solar farm.

4 In all the interviews that we have
5 conducted, we haven't identified a single
6 assessor who states that they believe there is
7 an impact, nor have we heard any assessor claim
8 that anyone has protested their tax assessment
9 strictly due to the presence of the solar farm
10 in their area.

11 Q. Does the same ring true for real estate agents?

12 A. We have interviewed real estate brokers who
13 have been party to transactions near solar
14 arrays, and the interviews that we have
15 conducted are consistent. Almost all brokers
16 that we have spoken to don't believe that solar
17 farms impact the property that they have helped
18 sell in any way, and that the marketing times
19 and the sale prices they believe have been
20 consistent with the market, and that includes
21 brokers that we have spoken with here in
22 Illinois.

23 Q. So is it a fair statement that when you conduct
24 your analysis, you don't just hop on the

1 internet, go on Zillow, and look at the list
2 price of a property; is that fair?

3 A. No, one of the first things they teach you in
4 Appraisal Institute classes is that a list price
5 is really nice, but it isn't a fact. A fact is
6 when a sales and a transaction happens, and
7 that's why we measure sale prices and not just
8 list prices. That's a very important part of
9 being a real estate appraiser.

10 Q. Are there factors of a sale that could perhaps
11 make that sale an outlier in your analysis?

12 A. Absolutely. As I mentioned before, it's really
13 critical when we use -- when we're looking for
14 test and control data that we remove any
15 outliers that may have been caused by an
16 atypical sales transaction. So if it's a
17 bankruptcy or short sale or if it was related
18 parties, those situations may require some kind
19 of adjustment. So instead of doing an
20 adjustment, we just remove it from any
21 consideration because they don't uphold to the
22 definition of market value.

23 Q. Jumping to this project at hand, did you
24 prepare a report for Steward Creek Solar?

1 A. We did.

2 Q. And when I thumbed through the report, it looks
3 like your study includes research and analyses
4 of existing solar farms in Illinois, Minnesota,
5 Indiana, Michigan, New York, North Carolina, and
6 Virginia; is that correct?

7 A. That's correct.

8 Q. And why did you select those areas
9 specifically?

10 A. So, again, while solar has been around for a
11 while, large-scale, utility-scale solar projects
12 are not as ubiquitous, especially not in the
13 Midwest. I have a couple exhibits within the
14 report which show the number or the placement of
15 existing solar farms that are in excess of a
16 hundred megawatts, and then also existing farms
17 that are in excess of 200 megawatts, and they
18 are very sparse. The only one really in the
19 Midwest that's a hundred megawatts is in
20 Minnesota; otherwise, you have to go to the
21 southeast or the far southwest.

22 We tried to identify as large a solar
23 array that we could find that had residential
24 property immediately adjacent to offer test

1 subjects for us to measure. We can't just
2 create data. And so there were some solar farms
3 that may have been large enough for us to study
4 but didn't have any data around them, and so we
5 couldn't study them.

6 These, we felt, were the best fit and had
7 the largest amount of data for us to try to
8 measure whether or not there was an impact. In
9 most cases, these were similar agricultural
10 communities that had, you know, small,
11 four-bedroom, two-bath homes on, you know, two
12 to five acres. And in some circumstances, they
13 are in areas where the property values are very
14 high, and in some there are a couple areas where
15 the property values are very low.

16 We made sure we understand what property
17 values were in Lee County, and we did our best
18 to make sure we had a study that had consistent
19 prices with fairly consistent-looking homes.
20 And I do feel that the study in Minnesota is
21 probably the best. It is also the largest one
22 that we identified. But overall, I think we did
23 the best that we possibly could.

24 Q. That leads me to my next question then. So the

1 largest solar farm that you have included in
2 your report for this project is the North Star
3 Solar Farm in Chisago County, Minnesota?

4 A. Yes.

5 Q. And that's a hundred-megawatt solar farm on
6 about a thousand acres; is that correct?

7 A. That's correct.

8 Q. So obviously that's significantly smaller than
9 the proposed size of Steward Creek Solar?

10 A. It is, but, again, these solar arrays in
11 almost -- most of their fashion, they are not
12 created as a one perfect rectangle. It's only
13 in the smaller senses, you know, 10- to 25- or
14 30-megawatts, where you might see it in one
15 solid rectangle. So there's no case where
16 you're going to have a single adjacent property
17 that's going to be in view of the entire 600
18 megawatts at once. It's spread out; it has to
19 be because it's a lot of land.

20 And so I don't feel that the studies that
21 we performed and the site selection that we did
22 in identifying these sites for study are
23 inconsistent with what I would call scattered
24 sites. You basically have a number of parcels

1 that are fairly contiguous where the number of
2 megawatts for that particular acreage might be,
3 you know, in the two to ten category on it. So
4 it's just an assemblage of those over, you know,
5 a land swath.

6 In this case, and I'm sure -- I have heard
7 solar developers say this, they are really bound
8 by, you know, landowners who want to cooperate
9 and be part of that development.

10 Q. And so if I understand this correctly, you have
11 included the North Star Solar Farm in your
12 report because the surrounding area is similar
13 to the surrounding area at Steward Creek Solar;
14 is that right?

15 A. That's correct.

16 Q. What about the topography of the North Star
17 Solar Farm, is that similar to this area?

18 A. Yeah, I wouldn't call it extremely flat. It
19 may not have, you know, quite the contours that
20 this area, you know, just east of I-39, has,
21 which is really wonderful, but certainly there
22 is a little bit of topography there.

23 And then we have other sites that we have
24 included in the report, one is in North Carolina

1 and Virginia, which do have even larger contours
2 and steeper topography.

3 Q. Have you ever investigated a solar farm in
4 excess of 100 megawatts?

5 A. We did look at some very large, established
6 solar arrays. This includes the Topaz Solar
7 Farm, which is in San Luis Obispo County in
8 California. That one is 585 megawatts. It
9 generally was developed in an environmentally-
10 sensitive area of the dessert and pretty far
11 away. It's over an hour drive from any town or
12 city. There is very limited residential
13 development nearby. It is not really as
14 consistent with regards to climate that is in
15 the Midwest. Ultimately, because of the data
16 and because of some of the physical
17 characteristics, it wasn't a solar farm that we
18 opted to study.

19 Q. So is it fair to say that it's not that there
20 aren't any large solar farms, it's just they are
21 not in an area comparable to this area here
22 proposed in the Steward Creek Solar Project?

23 A. There are large solar farms, as I showed in my
24 exhibit, in my report. They are fundamentally

1 all in the southwest, but ultimately I'm bound
2 and can only study solar farms that have
3 existing sales data immediately around them.

4 Q. With the properties that you have analyzed in
5 your report and with your experience in this
6 field specifically, do you believe that a
7 project of this magnitude will negatively impact
8 surrounding land values?

9 A. I do not believe it will negatively impact
10 surrounding land values.

11 Q. And why?

12 A. I'm sorry, please repeat.

13 Q. Why is that?

14 A. Based on our study, the ten studies that were
15 included in the report, an additional 15 to 20
16 solar farms and smaller studies we have
17 conducted nationwide and in Hawaii, we have not
18 seen any consistent and measurable negative
19 impact as caused by being next to a solar farm.
20 And, again, this is substantiated with our own
21 data, our own measurements, studies conducted by
22 other appraisers, studies conducted by county
23 assessors and their own information inhouse, as
24 well as interviews that we have had with local

1 real estate brokers and residents. We have gone
2 door to door and interviewed residents that live
3 immediately adjacent to solar farms. In all of
4 those cases, none of them seemed to indicate
5 that there should be a concern.

6 Q. Have you ever seen a solar farm system where it
7 surrounds an adjacent property on all four
8 sides?

9 A. In Minnesota, there are four homes that are
10 right next to each other. You know, they are
11 three-, four-, five-acre sites, long and narrow.
12 So there's a group of them that have solar on
13 all four sides. There's also a residence across
14 the street which has it on three sides. Those
15 setbacks, I want to say, are about a hundred
16 feet from the property line, so fairly close.

17 There aren't a lot of examples of a single
18 residence having four solar arrays right around
19 it and within a hundred feet. But I don't
20 think, based on the data that we have seen and
21 interviews that we have conducted, that there's
22 a cause for concern, especially not when we're
23 talking about the proposed and with the really
24 large setbacks that Hexagon is planning for this

1 particular development.

2 Q. So would you agree that the further the setback
3 from the residence, the less likely it will
4 negatively impact that adjacent residence?

5 A. Again, I don't believe that there would be an
6 impact, but certainly I think that's going to
7 put the existing property owner more at ease.
8 Whether or not a buyer would consider that in
9 their pricing, again, I don't believe that
10 there's an impact. But certainly for existing
11 residents, I think that's a real nicety and
12 probably a benefit.

13 Q. So in your experience, Mr. Lines, when do you
14 tend to see a negative impact to property
15 values?

16 A. We have done impact studies on a number of
17 different kinds of uses that people are
18 concerned about. That includes big box retail,
19 landfills, waste transfer stations, transmission
20 lines, zoning districts, truck terminals. We
21 have looked at a lot of different kinds of real
22 estate.

23 What we normally see are, when there is a
24 physical impact to an adjacent residence or an

1 adjacent property, that's typically where you're
2 going to see the most impact. If you're living
3 next to a quarry and that quarry is doing
4 blasting and the ground shakes and dirt is
5 thrown into your yard, that is certainly a
6 situation that most people are not going to be
7 able to tolerate. So they will tend to leave
8 their homes as soon as they can, and they end up
9 selling at a pretty low value or a pretty low
10 price.

11 We see it again if your home is located,
12 you know, 10 feet from a roadway and now you
13 have a lot of heavy trucks that are moving by,
14 shake the ground, rattle your house, that's
15 another example if it's continued and ongoing
16 where you might see some real impact. Where
17 something crosses onto your property, it becomes
18 an encroachment, that certainly can be
19 destructive to value.

20 That's usually where we see the most
21 impact. We don't see an impact for passive
22 uses, especially not ones like this which are
23 really quiet, where you don't have anybody
24 really coming to the property, which you can't

1 see in the evenings at all or probably not even
2 midday if you have got an effective screening
3 around it. I can't see that this is a
4 particular use that's going to have a real
5 negative impact.

6 Q. So that's leading me to my next questions. Can
7 you smell a solar energy farm?

8 A. I mean, there's people out there that smell
9 metal really well. I have been to them, and I
10 haven't smelled anything unreasonable.

11 Q. And to the best of your knowledge, does a solar
12 farm cause any objects to be ejected onto an
13 adjacent property owner's land?

14 A. Not that I have seen.

15 Q. Is there any shadow flicker associated with a
16 solar energy farm?

17 A. No. My understanding is, the single access
18 trackers move really, really slowly.

19 Q. What about any vibration?

20 A. Not that I'm aware of.

21 Q. And what about the noise level of a solar
22 energy farm?

23 A. You know, some of the inverters and the
24 transformers that they put on site, I think they

1 can have some kind of sound, like an air
2 conditioner, within 150 feet, but outside of 150
3 feet, in the studies that I have seen -- and I'm
4 not a sound expert, but my understanding is that
5 there's no noise that can be heard outside that
6 distance.

7 Q. And so through your research, do you believe
8 that this proposed solar farm, do you believe
9 that it will have any negative impact on
10 adjacent property?

11 A. I do not.

12 Q. And it's my understanding that you have
13 prepared a PowerPoint presentation for tonight?

14 A. I have, if it's of interest to the Board and
15 individuals present.

16 Q. And you have also prepared an actual report for
17 the ZBA; is that correct?

18 A. That's correct.

19 MS. KENNEDY: Judge, I would like to mark
20 the impact study as an exhibit. I forget what
21 number we're on.

22 JUDGE SLAVIN: That's the one -- the
23 shorter one?

24 MS. KENNEDY: This one would be the longer

1 one, I believe.

2 JUDGE SLAVIN: I'm not trying to be
3 difficult. There's one with his picture on the
4 front.

5 MS. KENNEDY: Sure.

6 JUDGE SLAVIN: And there's one without his
7 picture on the front. So which one do you want
8 to mark first?

9 MS. KENNEDY: It doesn't matter. We can
10 mark the one with his picture on it first.

11 JUDGE SLAVIN: Okay. That would be, I
12 think, 8, but let me check. Yes, this would be
13 Petitioner's 8.

14 (Petitioner's Exhibit Number 8
15 marked for identification.)

16 MS. KENNEDY: And then the next one would
17 be Petitioner's Exhibit 9.

18 JUDGE SLAVIN: That's correct.

19 (Petitioner's Exhibit Number 9
20 marked for identification.)

21 Q. (By Ms. Kennedy:) Mr. Lines, did you
22 personally prepare both the report and the
23 PowerPoint presentation?

24 A. I am a signator of the report and I prepared

1 it. We do have some additional staff that helps
2 with some of the research and putting things
3 together. My partner and I, Pat McGarr, oversee
4 the production, all of the data, we review all
5 the data and put it all together, so yes.

6 MS. KENNEDY: Judge, at this time I'd like
7 to admit them into evidence.

8 JUDGE SLAVIN: Not until he testifies
9 about them, but that's -- I'll reserve that.

10 MS. KENNEDY: What's that? I missed that.
11 I am sorry.

12 JUDGE SLAVIN: I'm sorry. I said, I'll
13 reserve that because there's no foundation laid
14 for them yet.

15 MS. KENNEDY: Sure.

16 Q. (By Ms. Kennedy:) I'm going to have you go
17 through your PowerPoint presentation, now, if
18 you will.

19 A. Okay. Is this something you want me to do
20 using Zoom?

21 Q. Yes, if you could share your screen, that would
22 be appreciated.

23 A. Hold on one second here. Okay. Let me know
24 when you can see it.

1 Q. Yup, we can see it.

2 A. Great.

3 Again, here is my background. We have
4 kind of gone over that.

5 This is Pat McGarr, who is my partner and
6 who also signed the report.

7 It's always helpful to understand the
8 market for solar. And so the state of Illinois
9 has a national ranking, based on existing
10 capacity, of 30th. And so obviously the former
11 governor had instituted some policies to help
12 encourage some of that development, and that's
13 one of the reasons why we're seeing a lot of
14 applications and a lot of solar development
15 happening in our state. I think that's always
16 good to understand kind of the baseline of that.

17 You know, existing developments that we
18 have been able to study, well, we studied the
19 largest one that is here and erected, and that's
20 the Grand Ridge Solar Farm. There's a couple
21 other ones, there's one in Chicago, in the city,
22 that was developed by Exelon. There's a smaller
23 one by U of I.

24 Rockford has one that's immediately

1 adjacent to the airport. We have studied it.
2 It's not large enough, and there really isn't a
3 good quality of data right there.

4 But that's a good education of kind of
5 amount of the solar and renewable energy that's
6 scheduled to be in the state.

7 So does proximity next to solar farms
8 impact values? Again, our methodology comes
9 from the textbook Real Estate Damages by
10 Dr. Randy Bell. We have reviewed studies that
11 have been published, we have interviewed market
12 participants, and we have prepared paired sales
13 analyses to compare these potentially-impacted
14 properties.

15 Again, we're looking at test areas, which
16 are homes and land that's located immediately
17 adjacent to the solar array, and then comparing
18 them with control areas, with control subjects,
19 which are removed from any influence of the
20 solar farm that are consistent in terms of
21 physical characteristics.

22 We have also conducted a before-and-after
23 analysis to track differences in unit sale
24 prices. We have done that for a couple of the

1 solar farms, not every one but enough that we
2 can safely say that there isn't any difference
3 between sales that were occurring before the
4 solar development was announced or after it was
5 erected.

6 Again, what Dr. Bell says is that, If
7 there's a legitimate detrimental condition,
8 there will likely be a measurable and consistent
9 difference between the two sets of market data.
10 So we need to see it multiple times in order to
11 really declare that there is an influence.

12 We have done this research on what I'm
13 about to show you, and we have looked at range
14 of sale prices, differences in unit sale prices,
15 time on the market, overall marketability. We
16 studied rates of appreciation, and we have
17 looked to see whether or not solar impacts new
18 development on existing pieces of land that are
19 next to it. In all the research that we have
20 conducted, we haven't been able to find that
21 quantifiable and consistent detrimental impact.

22 As I mentioned before with large-sale
23 solar, we understand that this is really large
24 development, really large proposed development,

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1 and we wanted to make sure that we were
2 attending to that for the County Board and for
3 the county residents.

4 You see two maps here that are courtesy of
5 seia.org, S-E-I-A. You're welcome to go on
6 there and take a look at where all the solar
7 farms are across the county.

8 There's two maps here, one of a hundred
9 megawatts and over and one of 200 megawatts and
10 over. As you can see, there's only one here in
11 the Midwest. They are all -- most of them are
12 in pretty dessert and super remote areas. And
13 for 200 megawatts, it's even fewer.

14 So, again, we tried to identify solar
15 arrays that we thought would provide some
16 meaningful data. I'm going to take you through
17 a few of them, not all of them, just for brevity
18 purposes.

19 The first one here in Illinois, this is in
20 LaSalle County. This is the Grand Ridge Solar
21 Farm. This is a 20-megawatt solar farm that
22 opened in 2013, some time ago. There is a home
23 in the corner. You see it's labeled Number 12.
24 What we can do, if you're curious, is we'll go

1 onto GIS and we'll identify, using the tax maps,
2 each property that's immediately adjacent. So
3 you see these numbers from 1 to 14. We don't
4 look at the ones that are removed. It's got to
5 be touching to some degree. It might be right
6 across the street, but it's effectively touching
7 on the tax maps. Then we'll go and we'll look
8 through public records to identify whether or
9 not any of those have sold, if they have sold
10 multiple times, and see if any of the
11 transactions have been during the existence of
12 the solar farm itself.

13 So in this one, on 12, it was a small
14 house on a pretty small lot, and so we compared
15 this home with five other homes in the general
16 community within the township but outside of any
17 possibly seeing the solar array. So well over,
18 I believe, a quarter mile away from this
19 existing solar farm.

20 In this particular instance, this is about
21 479 feet, we found that the controlled sales had
22 a median sale price that was actually a little
23 bit less than the sale price of the test subject
24 itself; meaning that there was no negative

1 impact from being located immediately next to
2 the Grand Ridge Solar Farm.

3 The next one I'll talk about is the one in
4 Minnesota, which I think is very applicable.
5 Here you can see the group of homes that I
6 mentioned that are flanked by solar on all four
7 sides, including one here that's flanked on
8 three sides.

9 This is an interesting story. The
10 developer believed that he was going to use
11 these homes that were within the project, he was
12 going to use them for temporary employment
13 housing and possibly he might tear them down and
14 erect solar in their stead. What he did is, he
15 had them all appraised, and then he individually
16 negotiated sale prices with each one of the
17 owners to force sale on the homes. He overpaid
18 for the homes to get them out.

19 What he realized after building the
20 project is, he didn't need them anymore. He put
21 them all back on the market with one broker, and
22 the broker noted that all of them sold within 60
23 days and all at market prices that were above
24 the original appraisals. This is a really good

1 indication that this doesn't deter people from
2 living near these. In fact, one of the homes
3 was reoccupied and bought back by one of the
4 original owners who ended up being able to
5 pocket some cash on that one. So, again,
6 somebody who was living there, left, came back.

7 This is a greater map of the entire
8 thousand acres with all the development. You
9 can see how it is a little bit scattered. So
10 you have homes that are nearby and immediately
11 adjacent.

12 We found some homes, again, that were
13 market prices and were able to compare them to
14 controls that were outside, again, right near
15 them. We found that there was very little
16 difference here; 0.43 percent. This particular
17 solar farm had the local county assessor do his
18 own before-and-after analysis. This was
19 released to the public. You can find it on the
20 internet.

21 We repeated the study, just to make sure
22 it was accurate, and it is. So we feel that we
23 have got multiple studies here that show that
24 there wasn't any impact on any of the

1 residences. And, again, this is the largest one
2 that we were able to study, and it's here in the
3 Midwest.

4 The third, which had a lot of data for us
5 to look at, was just south of the Indianapolis,
6 Dominion Indy Solar. We looked at agricultural
7 land. We looked at, as you see Number 2 here on
8 the side of the screen, which was -- you know,
9 it was about an 80-acre parcel.

10 We looked at farmland values, just to make
11 sure. This is a little bit near the trend of
12 development. So you might be concerned that if
13 you had some farmland that you weren't going to
14 be able to sell it for redevelopment because now
15 you're next to a solar farm. Well, that's not
16 the case.

17 But it also was immediately adjacent to a
18 production home subdivision, where a lot of the
19 homes were the same. For a real estate analyst
20 like myself, that's great, because now I have a
21 lot of data that backs up to the solar farm, and
22 I can compare that to very similar production
23 homes that are in the same community but are
24 located much further away and see if there's any

1 difference.

2 We grouped these into time periods because
3 there was a bit of a spike, and what we found
4 was that the homes that back up here across the
5 street, where you can see the solar from the
6 backyards, that there wasn't any difference in
7 price.

8 We also did that before-and-after analysis
9 that I mentioned. So we looked at these target
10 homes before and after the solar farm was
11 announced and constructed. We found that the
12 trend lines were similar with the control areas.
13 We also mapped it across the FHFA house price
14 index for east, north, central, which includes
15 this area of Indiana. And as you can see, both
16 the parabolas here follow the trend line that
17 was happening on a larger basis and nationally,
18 as many of us probably remember it going down
19 and then things coming back up again, which was
20 nice.

21 One interesting tidbit to note is that
22 there was a 10-acre, very long parcel. You can
23 see here in the middle of the picture, it was
24 obviously used for row crops. Somebody built a

1 pretty magnificent home with a huge inground
2 pool, and that home is literally 150 feet away
3 from the solar farm. This, to us, is a really
4 important piece of data, because it shows that
5 someone is willing to develop and invest a lot
6 of money into a really nice home that is
7 immediately adjacent to solar panels. In this
8 case, it was about 150 feet. There was some
9 natural screening there, mostly deciduous trees,
10 but it's still 150 feet away.

11 This is probably the last one I'll show
12 you. I don't need to probably go through all
13 ten. But this one is in Lapeer, Michigan.
14 Again, Midwest. These were two, kind of,
15 side-by-side solar farms. We found a test sale,
16 one on Turrill, on the right, and then three on
17 Demille, which is on the left.

18 When we looked at those home prices
19 compared with controlled sales located in Lapeer
20 but away from these two solar farms, we didn't
21 find a large difference. And, in fact, both of
22 those cases, it favored the homes that were
23 closer to the solar farm itself.

24 Here's a conclusion of all of the studies

1 that we did, all ten. This includes some -- a
2 couple of the land prices, as well as the home
3 prices. The range was as low as negative 3.5
4 percent to a high of 13.4 percent. While there
5 was one negative, that's probably a pretty good
6 indication that we're doing our job correctly,
7 and it's not amazingly large.

8 At the end of the day when you look at the
9 average variance and sale prices between the
10 test and controlled sales, we came up with about
11 3.5 percent that favored the homes next to the
12 solar arrays.

13 And, you know, a lot of county boards have
14 asked as well, Are you saying that by putting a
15 home next to a solar that it's going to do
16 better? And we don't necessarily think that the
17 solar farm panels are having a significant
18 influence, but what we do know about residential
19 home prices is that people will pay more to be
20 in well-funded and highly-ranked school
21 districts. And certainly a lot of these solar
22 arrays will contribute to the economic
23 consideration of an entire community, and that
24 can be really, really helpful for everybody 's

1 home value.

2 Ultimately, based on our research and
3 analysis, we have concluded that there is no
4 consistent negative impact that has occurred to
5 adjacent property that can be attributed to
6 proximity of the adjacent solar farm. Again,
7 this conclusion has been confirmed by interviews
8 with numerous county assessors who also
9 investigated these potential impacts and found
10 none, as well as interviews that we have had
11 with numerous market participants, brokers, and
12 buyers and sellers of these homes.

13 I think I'll end there and turn it back
14 over to you, Courtney.

15 Q. Thank you.

16 Mr. Lines, could you pull up the actual
17 report you performed for Steward Creek Solar?

18 A. Okay.

19 Q. Could you share your screen with us?

20 A. Okay.

21 Q. And is this, in fact, the report you prepared
22 for the Steward Creek Solar Farm here in Lee
23 County?

24 A. I believe it is.

1 Q. And did you summarize the contents of this
2 report in your PowerPoint presentation?

3 A. I did.

4 MS. KENNEDY: Judge, I would like to admit
5 this into evidence as well.

6 JUDGE SLAVIN: All right. Done, both.

7 (Petitioner's Exhibits Number 8
8 and 9 admitted into evidence.)

9 MS. KENNEDY: I have no further questions.

10 JUDGE SLAVIN: All right. Questions of
11 this witness, Mr. Boonstra?

12 MR. BOONSTRA: No, Your Honor.

13 JUDGE SLAVIN: Ms. Duffy?

14 MS. DUFFY: No, thank you.

15 JUDGE SLAVIN: Okay. How about ZBA?
16 You're first, Mr. Hughes.

17 MR. HUGHES: No questions.

18 JUDGE SLAVIN: Mr. Forster?

19 MR. FORSTER: Me?

20 JUDGE SLAVIN: Yes.

21 MR. FORSTER: No questions.

22 JUDGE SLAVIN: Mr. Buhrow?

23 MR. BUHROW: Yes, sir.

24 JUDGE SLAVIN: Microphone.

EXAMINATION

1
2 BY MR. BUHROW:

3 Q. Looking at the various properties that you've
4 looked at, did you notice very many of the
5 residences had barriers or landscaping next to
6 them, dealing with the solar farms, or not?

7 A. That's a great question, and it really varied.
8 There are some solar farms that we studied that
9 all they had was a simple fence, there wasn't
10 much of a barrier, and you could peer right in
11 to see the arrays and some of the grass lines
12 that were there. There were others that had,
13 you know, fairly large arbor vitae and other
14 trees. And there was a mix of solar developers
15 planting them and then property owners planting
16 and screening for themselves, so it was a mix.

17 Q. So you didn't -- did you notice any difference
18 in the values that you could tell then?

19 A. No. For the most part, the studies all had
20 fairly similar results. So we didn't see a
21 spike for ones that had a bunch of arbor vitae
22 versus ones where you could peer right in,
23 without any screening at all.

24 MR. BUHROW: Okay. Thank you.

1 JUDGE SLAVIN: Mr. Bothe?

2 MR. BOTHE: No questions.

3 JUDGE SLAVIN: Mr. Pratt?

4 MR. PRATT: No questions.

5 JUDGE SLAVIN: All right. Interested
6 parties in the room first, by a show of hands,
7 questions of Mr. Lines.

8 Mr. Lusz, pick one of the mics in the
9 middle and have a seat.

10 MR. LUSZ: Adam Lusz, from Eldena.

11 JUDGE SLAVIN: Thank you.

12 EXAMINATION

13 BY MR. LUSZ:

14 Q. I have just got a question. Why wouldn't you
15 consider an alteration of view shed as a part of
16 your study?

17 A. I just want to make sure I heard you. You're
18 wondering why I did not look at the degradation
19 of the view shed as part of my study?

20 Q. Correct, as it pertains to solar, yes.

21 A. So our study incorporates all of the factors
22 that individual buyers would recognize when
23 they're acquiring a particular home. And,
24 frankly, when you're looking at buying a home

1 for yourself, there are, as I discussed earlier,
2 many variables. View shed is certainly one of
3 them, but it may not be as high on the priority
4 list as one might think, and, you know,
5 depending on market to market, it may be a lot
6 lower.

7 So certainly when you have a home that's
8 on the lake and you have got some of that
9 lakefront or maybe you're just set back from the
10 lake and you get to look out on it, we have seen
11 markets where you can demand a premium for that.
12 But what we're not seeing in some of the
13 agriculture communities is the necessity that
14 the view shed is automatically providing that
15 value.

16 If it were, then we would see markedly
17 negative results from our studies.

18 MR. LUSZ: Very good. That's all.

19 JUDGE SLAVIN: Okay. Anybody else,
20 question, by raise of hand?

21 Yes, sir.

22 MR. GUASTO: Loren Guasto, Steward.

23 EXAMINATION

24 BY MR. GUASTO:

1 Q. How much residential development have you seen
2 next to a solar industrial plant of this
3 magnitude?

4 A. Can somebody help me repeat that question? I'm
5 sorry, I'm having a little trouble hearing.

6 Q. Okay. Sorry.

7 How much new residential development have
8 you seen next to a solar industrial plant of
9 this magnitude?

10 A. So, again, I provided an example of a \$450,000
11 home with a big inground pool that was developed
12 next to a solar array. And, you know, depending
13 on where it's located, obviously this is in a
14 more remote area, where the trend of development
15 doesn't necessarily exist and you may not see a
16 lot of homes pop up immediately afterwards.

17 But we have seen and studied solar arrays
18 that exist both in fairly dense suburban areas,
19 as well as in more agricultural communities, but
20 what we're not seeing or hearing from any market
21 participants is that it's dissuading individuals
22 from building or making additional housing
23 nearby.

24 Q. Do people generally ask to look at homes or buy

1 homes in the middle of an industrial solar
2 plant?

3 A. I think people buy homes for a lot of reasons,
4 and some of it has to do with location; you want
5 to be near your parents, your grandparents; you
6 want to be near your aunts or your uncle, your
7 friends. So you look for the best fit, given
8 your own particular budget and your own
9 lifestyle and close to where that is. Some
10 people move for jobs and need to be located in a
11 particular area.

12 I think it just -- it goes with the
13 saying, you know, everybody has their own
14 preference. And so certainly there are people
15 who are not going to prefer to live near the
16 solar panels, but there may be buyers who do
17 prefer it or aren't concerned about it. I think
18 that's what the data shows.

19 MR. GUASTO: Okay. Thank you.

20 JUDGE SLAVIN: Thank you. Anybody else in
21 the room, by show of hand?

22 Yes, sir.

23 MR. HUSS: My name is Andrew Huss, outside
24 of Lee.

EXAMINATION

1
2 BY MR. HUSS:

3 Q. Andrew, I guess, same name?

4 JUDGE SLAVIN: That's fine.

5 MR. HUSS: Just for the record.

6 A. It's a great name.

7 Q. (By Mr. Huss:) So would you personally buy a
8 property around -- being surrounded on all four
9 sides, you personally?

10 A. Sure. And, you know, I have seen a lot of
11 different parcels in a lot of different places,
12 and you know what, the first thing that a lot of
13 people do when they buy homes, even in
14 agricultural communities, you know, build these
15 forts against their property lines because they
16 don't want to look at anything. They want to
17 look at what they want to look at. So you see
18 that happening.

19 And I don't have a problem with this,
20 especially in consideration that a lot of these
21 solar farms will hire ranchers to bring sheep to
22 eat a lot of the grass, which kind of cuts down
23 on some of the mowing that has to happen,
24 especially in the first couple of years. And

1 how wonderful that not only can I live next to a
2 renewable energy source, but I could also get to
3 see a whole bunch of sheep. I think that's
4 pretty cool, and yeah, I wouldn't mind.

5 Q. Okay. So based on that comment, so the sheep
6 that are being brought in by these ranchers,
7 would they more than likely mow down all the
8 grass so that there would be erosion issues?

9 A. No. I think they eat the grass to control the
10 grass. I'm not a herbologist or an
11 environmental person, but from the best I can
12 understand is that the sheep are there to help
13 graze. So they graze the grass that needs to be
14 trimmed down to keep it below the height of the
15 panels, and at the same time they are helping
16 the land itself grow fallow over time and help
17 rejuvenating it from where it may have been just
18 strictly row crops for a long time.

19 MR. HUSS: Okay. Thank you.

20 JUDGE SLAVIN: Thank you.

21 Anybody else in the room, before I turn to
22 the Zoomers?

23 Okay. Zoomers, questions, raise your
24 hand. Sharon Bennefield.

EXAMINATION

BY MS. BENNEFIELD:

Q. Yeah, you had said something about you had spoken to some of the homeowners in this project.

JUDGE SLAVIN: Sharon, Sharon, stop.

Q. (By Ms. Bennefield:) How many did you speak to?

JUDGE SLAVIN: Sharon, we know your name, but would you state it and what community you consider yourself living in?

MS. BENNEFIELD: Sure. Sharon Bennefield, and I live in Steward.

JUDGE SLAVIN: Okay. Now ask your question of Mr. Lines.

Q. (By Ms. Bennefield:) You had said that you spoke to some of the homeowners in this project area. How many did you speak with?

A. I did not speak to residents in the project area.

Q. Oh, I'm sorry. I thought you said something that you did.

A. I spoke to residents who live around solar now. So in some of the different solar impact studies

1 that we have done across the country, I had the
2 chance to, you know, ring doorbells and ask,
3 Hey, does this bother you? Was it an issue when
4 you bought the house? Was it here when you
5 moved in? So different residents across the
6 country.

7 Q. Okay. And how many residents do live in this
8 project area, do you know?

9 A. Oh, that is a good question. I remember going
10 through the file with Hexagon when they first
11 asked me to prepare an impact study, and I want
12 to say I saw at least 50 to 60 different
13 residents, you know, generally around the
14 project area.

15 MS. BENNEFIELD: Okay. Thank you.

16 JUDGE SLAVIN: Is that it then, Sharon?

17 MS. BENNEFIELD: Yes. Thanks.

18 JUDGE SLAVIN: Okay. Thank you.

19 Ali Huss?

20 MS. HUSS: Hello. My name is Ali Huss.
21 I'm in Lee.

22 EXAMINATION

23 BY MS. HUSS:

24 Q. So you mentioned several times you struggled to

1 find comparable studies; is that correct?

2 A. I didn't say I struggled to find them. I said
3 that the very, very large ones are in areas that
4 I didn't necessarily believe were comparable or
5 didn't have the amount of data that was
6 necessary for us to utilize them as a specific
7 study.

8 Q. Does that mean that the very large ones
9 comparable to this project didn't have homes of
10 this magnitude inside the project, or that those
11 homes had just not sold?

12 A. They are -- the one that I mentioned earlier,
13 the Topaz Solar, literally doesn't have a single
14 house immediately adjacent to it. There's a
15 subdivision that's located about 10 or 15 miles
16 south of it. Then there were others where we
17 thought we found a couple homes, but when we
18 went to investigate them, they didn't sell or
19 just weren't transactions that we could use.

20 It's not an easy job. It's gets a little
21 frustrating from time to time.

22 Q. Okay. Were there outliers -- in the data that
23 you did present tonight as comparables, were
24 there outliers that you did remove?

1 A. Yeah, from study to study we're going to find
2 some transactions that we can't use. You know,
3 there -- I know there was one in Indiana that
4 was next to the Indy Solar Farm where there was
5 a transaction -- because there was a small
6 2-acre house that was part of a larger 40-acre
7 tract that was actually sold to develop the
8 solar, and then that particular sale had gone on
9 to be placed under a land contract for what we
10 believe is a related party to the original
11 seller. That land contract lasted three years,
12 and then it sold to the market for a lower
13 amount.

14 And so when we investigated it, it
15 appears that the assessor had marked the sale as
16 not a market transaction, and so we had to
17 remove it from our study even though it was
18 adjacent.

19 Q. And even though it did sell on the market and
20 not to a related party?

21 A. We were not able to verify whether or not it
22 was a related party. We believe that it was.
23 We used all of the efforts we could, but I'm not
24 going to put data in my study that isn't fully

1 verified.

2 Q. In your study you did display one that did have
3 a negative impact. Is that the only sample that
4 you have found with a negative impact?

5 A. That's one of them. I want to say in the 25 or
6 30 that we have done, I think there's maybe been
7 one other that had a small negative. And when I
8 say "small negative," within 5 percent. But
9 what we're not seeing is a consistent negative
10 impact with all of the studies that we found.

11 Q. Okay. So given that the studies that you were
12 able to present are much smaller in scale -- and
13 you have drawn a positive conclusion about
14 property evaluations, correct?

15 A. Yes.

16 Q. Would it also be possible to conclude that due
17 to the limited data, the impact is actually
18 unknown, not that the impact is not negative?

19 A. No. Because then we wouldn't have county
20 assessors and individuals in the market that we
21 have discussed also confirm our results. Not
22 only that, we have multiple others, county
23 assessors, other appraisers, who have done very
24 similar work and also have found very comparable

1 results.

2 Q. Of those assessors that you have contacted,
3 have you contacted assessors that are local,
4 within Lee County?

5 A. Yeah, we talked to Illinois assessors and, you
6 know --

7 Q. Inside of Lee County?

8 A. We have talked to individuals in Lee County.
9 We talk to Lee County individuals about wind,
10 for obvious reasons, and we have conducted an
11 impact study of wind turbines in Lee County, and
12 there isn't a fear from the assessors that we
13 have spoken to.

14 Q. So you would -- you actually spoke with Lee
15 County assessors, not "the" Lee County assessor,
16 but assessors inside of Lee County regarding the
17 solar project?

18 A. I believe so. That's a good question. That's
19 a good question. I'll have to get back to you
20 on that. If you ask your next question, because
21 I know you have more, I'll see if I can find
22 that in the report.

23 Q. And any of the other assessors that you have
24 spoken with nationwide, you have not heard any

1 assessor in their estimations to say they have
2 appraised a property with a lesser evaluation
3 due to solar?

4 A. No. The ones that we have spoken to have not
5 indicated that they have seen any negative
6 impact that's caused by solar.

7 There was a study that was done at the
8 University of Texas, and that study did a
9 geospatial analysis which helped prove that
10 solar developers like to be in remote areas
11 where there's inexpensive land that's away from
12 residents.

13 The second half of that study was a survey
14 that they had conducted via email of other
15 assessors, and of the 440 that they had sent
16 out, I think they had a response of about 10
17 percent, so about 40 assessors.

18 Of the assessors that responded to their
19 email, and you can look this up, 90 percent of
20 them did not believe that there was an impact
21 that's directly caused by solar. A couple that
22 did not have any solar in their actual districts
23 responded that they thought there could be but
24 that they also noted they didn't have any data

1 to support that.

2 So based on the market interviews that we
3 have done and we have concluded, we don't think
4 assessors who have solar in their areas believe
5 that there's a negative impact.

6 Q. Referencing that study, there were assessors
7 referenced in that study that had assessed
8 inside a solar district that did find negative
9 valuations, correct?

10 A. No, I don't believe that that's accurate. At
11 least that's not my memory of the study.

12 Q. Okay. If they had responded that they had done
13 this assessment near solar, was there a
14 differentiation in the negative impact between
15 small-size solar and utility-size solar?

16 A. I don't remember that being a question in that
17 particular study.

18 Q. You don't believe the study studied the
19 different megawatts of solar between 1.5
20 megawatts, 20 megawatts, and 102 megawatts?

21 A. You're cajoling my memory, so that is -- if
22 that is the case, then they may have responded
23 to that.

24 Q. Okay. So if respondents in that study had

1 studied solar and responded that there was a
2 negative impact to large-scale solars in
3 relation to residences, how did that not get
4 included in the presentation?

5 A. Again, our assessment of that particular
6 analysis was that most of the respondents that
7 had solar in their counties did not see a
8 negative influence, and that is confirmed by all
9 of the interviews that we conducted. All of the
10 interviews and all of the persons that we spoke
11 with are within the back of our report that
12 takes up three pages.

13 Q. Okay. And in that report there are people that
14 you have spoke to inside of Lee County or not?

15 A. No, I'm looking in here, and, you know, Lee
16 County we did for the wind but not for the
17 solar.

18 We spoke with Vicki Crouch, who is the
19 township assessor in LaSalle County. That's the
20 one with the Grand Ridge Solar Farm. We spoke
21 with Ken Crowley, Rockford Township Assessor in
22 Winnebago County. That's one of the Rockford
23 solar farms that I previously mentioned.

24 Q. So you did speak with people inside of

1 Illinois, just not specifically Lee County?

2 A. That's correct.

3 Q. And that was in regards to solar, not just
4 wind?

5 A. Correct.

6 MS. HUSS: Okay. All right. Thank you
7 for your time.

8 JUDGE SLAVIN: All right. Thank you.

9 All right. I'm looking for more Zoomers
10 with hands up. Give you a few seconds here to
11 find your cursor or punch your keypad.

12 There's one. Terri Voitik. Can you hear
13 me, Terri?

14 You need to unmute her, Alice.

15 MS. HENKEL: I'm working on it.

16 JUDGE SLAVIN: Oh, sorry.

17 MS. VOITIK: Am I unmuted now?

18 JUDGE SLAVIN: You are unmuted now.

19 MS. VOITIK: Terri Voitik, Lee, Illinois.

20 EXAMINATION

21 BY MS. VOITIK:

22 Q. I just have one question of the speaker this
23 evening. I would like his highest truth.

24 Should he be living in his home, the home that

1 he lives in that exists today, and a
2 600-megawatt power -- -megawatt solar farm came
3 to be next to him, would he want to live next
4 door to it?

5 A. The highest truth, yes. And the reason is that
6 they make great neighbors, they don't throw
7 parties, they don't throw something --

8 Q. Neither --

9 A. -- they don't throw anything on your yard.

10 Q. Neither do --

11 JUDGE SLAVIN: Terri --

12 Q. (By Ms. Voitik:) -- soybeans and cornstalks.

13 JUDGE SLAVIN: Ms. Voitik, you asked the
14 question. Let him answer the question.

15 MS. VOITIK: All right. Sorry.

16 THE WITNESS: It's okay.

17 A. I understand that anyone who has a new
18 development going up next to them, that they are
19 concerned, and that's the right for every human
20 being that lives in this great country.

21 JUDGE SLAVIN: Let's not give a speech
22 now. Let's just you answer the question.

23 A. I don't have any problems with living next to a
24 large solar development.

1 MS. VOITIK: Thank you.

2 JUDGE SLAVIN: Okay. That's it,
3 apparently.

4 Others? Again, another ten seconds for
5 Zoomers to raise their hand.

6 All right. That concludes it. And,
7 Mr. Lines, you are -- you may quote-unquote step
8 down.

9 THE WITNESS: Thank you.

10 JUDGE SLAVIN: And that will conclude --
11 it's ten after 9. We'll conclude for this
12 evening.

13 There was some talk about picking up
14 tomorrow night, but I have been convinced that
15 we'll stick with the available dates that we
16 announced first; and, that is, we will recess
17 tonight's session until Thursday. That's 48
18 hours from now, or 46 hours from now. Here at
19 the Old Lee County Courthouse beginning at 7,
20 Thursday, the 22nd.

21 Have a good one, everybody. Be safe.

22 (The hearing was recessed at
23 9:15 p.m.)

24

1 On this 20th day of October, A.D., 2020, I do
2 signify that the foregoing testimony was given
3 before the Lee County Zoning Board of Appeals.
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6
7

8 Bruce Forster, Chairman
9

10
11
12 Dee Duffy,
13 Zoning Enforcement Officer
14

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