1	STATE OF ILLINOIS
2	PIATT COUNTY ZONING BOARD
3	GOOSE CREEK WIND, LLC
4	APPLICATION FOR A SPECIAL USE PERMIT December 20, 2022
5	6:00 p.m. to 10:00 p.m. Held at the Community Building, Monticello, IL
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8	PIATT COUNTY ZONING OFFICER: Ms. Keri Nusbaum
9	HEARING FACILITATOR:
10	Mr. Scott Kains, Esq.
11	PIATT COUNTY ZONING BOARD MEMBERS: Mr. Loyd Wax, Chairman
12	Mr. Jim Harrington, Vice Chairman Mr. Dan Larson
Mr. Kyle Lovin 13 Mr. William Chambers	Mr. William Chambers
14	Mr. Paul Foran
15	PIATT COUNTY BOARD MEMBERS:
16	Todd Henricks Jerry Edwards
17	Kathleen Piatt Michael Beem
18	COUNSEL FOR THE PIATT COUNTY BOARD:
19	Mr. Andrew J. Keyt, Esq.
20	COUNSEL FOR THE APPLICANT: Mr. Ben Jacobi, Esq.
21	COUNSEL FOR THE OBJECTORS:
22	MR. Phillip A. Luetkehans, Esq.
23	COURT REPORTER: Ms. Jamie J. Mumm, CSR,
24	Official Court Reporter Piatt County Courthouse
25	101 W. Washington Monticello, IL 61856 (217)762-5861/jmummreports@gmail.com

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MR. WAX: Good evening, let's call the
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    meeting to order. We'll do roll call first.
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                MS. NUSBAUM: Mr. Larson?
                MR. LARSON:
                             Here.
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                MS. NUSBAUM: Mr. Harrington?
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                MR. HARRINGTON: Here.
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                MS. NUSBAUM: Mr. Lovin?
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                MR. LOVIN: Here.
9
                MS. NUSBAUM: Mr. Wax?
10
                MR. WAX:
                         Here.
                MS. NUSBAUM: Mr. Chambers?
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                MR. CHAMBERS: Here.
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                MS. NUSBAUM: Mr. Foran?
14
                MR. FORAN: Here.
                MS. NUSBAUM: State's Attorney Perry?
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                MR. WAX: County Board Members?
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                MS. NUSBAUM: Yes. Mr. Henricks?
                MR. HENRICKS: Here.
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                MS. NUSBAUM: Mr. Edwards?
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                MR. EDWARDS: Here.
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                MS. NUSBAUM: Mr. Beem?
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                MR. BEEM: Here.
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                MS. NUSBAUM: Miss Jones? Miss Piatt?
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                MS. PIATT: Here.
                MS. NUSBAUM: Thank you.
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MR. KAINS: Thank you, Keri. Good evening, 1 2 folks. We will hear from citizens who are in opposition 3 and neutral on the Application for Special Use Permit that's been filed by Goose Creek Wind, but first the 4 5 Board has retained an Engineer to give an independent 6 analysis of this issue, and I'm going to turn the 7 questioning of the witness over to Mr. Andy Keyt. 8 MR. KEYT: Okay. Thank you. The County would 9 call Matt Minder of Patrick Engineering. 10 11 (WITNESS SWORN.) 12 матт MINDER 13 called as a witness in the above-entitled cause, having 14 been first duly sworn, was examined and testified as follows: 15 16 MR. KAINS: Sir, can you please state your 17 name, spelling your first and last names for the record. 18 MR. MINDER: My name is Matt Minder, 19 M-A-T-T, M-I-N-D-E-R. 20 MR. KAINS: Mr. Keyt, you may proceed. 2.1 22 23 24 25

EXAMINATION BY

MR. KEYT:

2.1

- Q. Mr. Minder, can you give us your professional address for the record, please?
- A. Patrick Engineering, 300 W. Edwards Street, Springfield, Illinois.
- Q. Mr. Minder, I understand you are an Engineer there with Patrick Engineering. Can you give the Board here a flavor for your background and professional experience?
- A. Yes. In brief, I have 25 years of experience in the civil and environmental engineering. I have performed review of several wind farm projects here in the State of Illinois in other counties. I've also provided construction support for the Big Sky Wind project in Bureau and Lee Counties.
- Q. And Mr. Minder, you indicated that you've done reviews of wind farm projects in the past, I assume on behalf of counties who retained you; is that true?
 - A. That's correct.
- Q. Could you tell us just generally approximately how many you've done reviews for?
- A. I believe it's on the order of six or seven different wind projects.

Q. At this time the County will tender Mr. Minder as an expert in his field.

MR. LUETKEHANS: No objection.

MR. JACOBI: No objection.

MR. KAINS: He will be received as an expert witness. Go ahead, Mr. Keyt.

MR. KEYT: Mr. Minder, I understand you've prepared a power point to walk through with the Board for your review of the application that you've seen; is that true?

A. That's correct.

2.1

- Q. Why don't you go ahead and proceed and I'll stop asking questions.
 - A. Thank you. As you have in front of you, the Board has in front of them, the attorneys, here on the wall here is the presentation. Again it's just another re-statement of my qualifications, and I'm a Registered Professional Engineer in the State of Illinois. Again, the projects I have reviewed were in Livingston, Woodford, Logan, Pike, Mason and Morgan Counties, multiple projects in a couple of those counties. Asa firm, Patrick has provided a number of different engineering services for projects, wind farm projects in multiple U.S. states as well as Canada.
 - MR. KAINS: Mr. Minder, at this time I'm

going to interrupt you. I'm going to get a microphone so you'll be able to speak into it and look at your -- or look at the wall. It might make it easier on you, rather than having your head on a swivel.

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A. I appreciate that. Thank you. So the work we performed for the County in review of the Special Use Permit Application, our scope covered a general technical review of the projects, which basically is a review of the full Application submitted by Goose Creek Wind, excuse me, except for Appendix A which was a lot of the landowner information, agreements and such.

We also performed a sound and compliance review. Basically we specifically reviewed the sound modeling report prepared that was in the Application and did our own, kind of an independent review and modeling of that as well.

We also performed a decommissioning plan review, a review of the decommissioning plan prepared by Westwood, again also located in the Appendix of the Application.

As far as our findings go for the general technical review, our review, we kind of generally saw that the Application appeared to comply with all the required conditions of the County's ordinance or indicated the intent to be in compliance with those --

with the ordinance requirements, you know, for those -the information that would have to be completed
following siting approval such as construction permits,
etc.

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The design, installation, operation information contained within the Application appeared to be consistent with the requirements of the ordinance.

The bird studies and mitigation measures appeared to be consistent with the requirements of the ordinance.

And the setbacks, the multiple setbacks involved from the list of items from corporate limits, primary residences, public roads, rights-of-way, third-party power lines, communication towers, and adjacent properties, they appeared to be met or the required waivers were contained within the Application.

Sound compliance review. Just to summarize, I know this has been gone over in the past, the report concluded there were no receptors in the vicinity of the project that would be adversely impacted in excess of the Illinois regulatory requirements for noise.

We actually performed a separate noise analysis, different simpler model. We looked at six receptors in the project area, identified in the RSG report, including specifically four locations from the RSG report itself just to provide kind of a like-to-like

comparison.

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Our noise model was in agreement with the RSG modeling, specifically we did not see that any receptors would be impacted by noise from the project in excess of the Illinois regulatory limits.

We did note the one receptor, R1104, which is located east of the proposed substation and down-gradient of several of the wind turbines appeared to be the one that was most susceptible to any sensitivity in the model results. As you know, the model results would only look at specific conditions. So you know with the possibility that increased noise transmission, or I should say sound transmission, could occur under different environmental factors. It was our opinion that the Applicants should consider some possible mitigation options to reduce the potential for excess noise at that location, or any other receptors that may be very close to the limits.

We also performed the decommissioning -- review the decommissioning plan. Specifically what we were looking at was the report for Westwood Consultants for the fifty turbines that are involved in the project. As you can see in summary, the estimate shows over nine million dollars for the cost of decommissioning, approximately a hundred eighty-three thousand dollars

per turbine. Estimate of about seven million dollars to salvage those fifty turbines for a hundred forty thousand per turbine, so then your net decommissioning costs in that case would be approximately forty-three thousand dollars per turbine.

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It was our opinion, after review of the plan, that there may be additional factors that the County and the Applicants should consider in the plan prior to being finalized.

We noted that the report indicated removal of items below grade, a four-foot depth. We pointed out that the Illinois Department of Agriculture's Agricultural Impact Mitigation Agreement, or AIMA, requires that that go to a five-foot depth. There may be some additional costs that would be required for that.

Costs of re-process. Any aggregate material that's picked up from access roadways to the turbines, that information should be factored into those road removal costs. It was unclear from our review if that was done.

We were also unclear as to whether or not the Applicant had provided sufficient area as the turbines are being brought down, sufficient area at the base of the turbine, to do the processing that would be required to get the material scrapped and loaded onto trucks and

removed from the site. Typically what we've seen in other applications is an area of roughly two acres per turbine, although that may vary. I would point out that these turbines are generally a little bit larger than what we had seen in projects in the past. I think these turbines are about a six megawatt turbine as opposed to some of the ones previously we looked at that are only two or three or four megawatts per turbine.

2.1

We also suggest that the Applicant did provide a ten percent contingency in their cost estimate. We suggested perhaps a fifteen percent contingency, maybe more, maybe suggested as just opposed to ten percent, just due to the uncertainties involved in wind farm decommissioning. Generally a lot of wind farms have gone up all across the United States, but very few have come down, and because of that lack of knowledge and experience in taking these projects down, there's not a lot of information out there in terms of, you know, whether or not the costs that are being estimated for these projects, how comparable they may be to what the costs actually wind up being.

Then some of the information is just more of a review and points more toward providing just having a little bit larger level of detail or more granularity in the decommissioning cost estimate itself. It was

unclear, you know, as far as crop loss costs that were involved, how much of that is due to crane paths and the crane paths generally tend to be the path that the cranes take as they move from turbine to turbine to disassemble and take down the wind turbine itself, because those are a very large weight as they run across they will compact the soil, and if there are any crops in the field those would have to be, of course, accounted for in terms of crop damage.

2.1

As far as the public roads and improvements, there was not information in the plan itself for us to verify how many miles of public roads there are. So it's unclear for us to identify in the estimate whether or not the number provided would be a good number.

Similarly, without a good accounting of the number of linear feet of access roads, again, it's just difficult to assess whether or not the cost estimate is giving a reasonable number for that.

Electrical system restoration costs. Since there is a substation on site, there is a transmission line to tie into the utility, and then there are also underground collection lines bringing power to the substation from each individual turbine. We just need to see -- wanted to see an accounting of that to verify if those costs are actually accounted for.

In terms of salvage value for the project, we did note the Applicant included steel costs that were fairly close to the peak scrap market value that occurred in earlier this year. Typically what we have seen and recommend in that case is a longer term average of that scrap value be considered for the project, because obviously the scrap market is very volatile and there are, you know, many highs and lows going through the projects. We often consider that a long term average may be more applicable when assessing those costs.

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Finally, the scrap pricing, we wanted to make sure that that cost did include transportation costs to remove all the scrap material. It is a very large amount, that there would be sufficient costs -- excuse me -- that there would be sufficient transportation costs accounted for to get the material to a large enough processor that could handle the volume of scrap that is required.

That's the extent of our summary of findings.

MR. KAINS: Thank you, Mr. Minder. Mr. Keyt, do you have any additional questions for the witness?

- Q. Yes, very briefly. Mr. Minder, the power point that you prepared constitutes your review of the project. Is that essentially fair?
 - A. That is fair to say, yes.

- Q. Fair that it's your report to the Board on your review at this juncture in time; is that right?
 - A. Yes.

- Q. You and I have worked in the past. Often times, if at some point in time there is an approval that comes, often times we negotiate back and forth with the developer, if I understand you correctly, you probably reserve any final discussions regarding what scrap value prices are, how much road, or any other types of review of that decommissioning plan for that time where we're actually having that discussion with the developer. Is that fair?
 - A. That is fair, yes.
- Q. And at this time I would tender Mr. Minder's report as County Exhibit Number 1 for the record, please.
- MR. KAINS: It will be received. We will take the up the admissibility of it either at the end of this evening or tomorrow evening.
- 20 MR. KEYT: I have nothing further.
- 21 MR. KAINS: Very good. Questions for
- 22 Mr. Minder from Members of the Piatt County Zoning Board 23 of Appeals? Mr. Chambers?

EXAMINATION BY

MR. CHAMBERS:

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Some questions I would have in regard to scrap Ο. value and how the numbers are come up -- how you come up with the numbers for that because we're talking about a future scrap market, and that doesn't really -- it exists, but it doesn't exist at scale yet. The example I think of in my head is, you know, when you have a newer car at market, and say one gets totaled, the scrap value of that is going to be much higher because there's not a lot of those parts out there, but when that becomes more mass produced like a Toyota Corolla or something really common, that scrap value comes down significantly, just due to the common nature of it. So, how does that factor in to determining scrap value for turbines in the future as there's going to be more and more of them that would be decommissioned around the same time?

A. Generally the way the scrap value is factored in, is basically looking at just the base metal components, so for instance the steel, the aluminum, copper, so it's not necessarily, as per your question, that it's a particular, you know, model of turbine. It's primarily just based on the base material of the turbines themselves. So again, you know as there are more and

more, as you know obviously the market will change as more scrap material comes back in, but again, it's difficult to say with any certainty what the market's going to look like, you know, in years.

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- Q. Sure. So the values that we have here are basically one hundred percent on the scrap material value, not on any sort of estimate of any component value?
 - A. I believe that is correct for the most part, yes.
- Q. Another question I would have is on the transportation side of things. So say there's that scrap element for the decommissioning, and that all has to be transported somewhere, do you actually look at our location and the nearest suitable facility to manage that, or do you -- how do you bring those numbers in for transportation?
- A. Generally what we want to see is that the Applicant is looking at, you know, a regional market, you know, there may be a small processor, you know, ten miles down the road, and someone who may not be able to accept, you know, these large volumes of material that's coming in, you know, to base the transportation costs on that is, you know, unlikely to be very accurate in the long run. So what we -- again, that was one of the points we brought up was, you know, we wanted to verify

that the Applicant is truly looking at, for the volume of steel and other components, that are going to be recycled, if they're looking at a reasonably-sized, you know, what we would call a regional recycler as opposed to something that's small scale, and your regional recyclers that may be located somewhere near Peoria or up near Chicago. So the transportation costs alone may be higher in that regard.

- Q. The last question I have. You talked about the five-foot depth for restoration here. Can you tell me again where that's based out of?
- A. That is based out of the Illinois Department of Agriculture's Agricultural Impact Mitigation Agreement. That is part of the Application as well. I don't recall which Appendix that would be in, but that is -- that agreement is required of projects that are in the State of Illinois, an agreement between the Department of Agriculture and the Applicant, that the requirements of that agreement are carried out, and one of those requirements is to take materials out to five feet below grade in cropland areas.

MR. KAINS: Thank you, Mr. Chambers. Mr. Wax?
MR. WAX: Yes.

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EXAMINATION BY

MR. WAX:

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- Q. Thank you for your presentation. I'd like to go to the sound situation. What are the -- what, in your experience, are the examples of how the sound can be mitigated from the towers that are very very close to the edge of the limit?
- A. You know, I don't have the specific experience in that regard. I did speak with our modeler, you know, just some general things that we talked about were, you know, the model is based on a total of 71 turbines, you know. One example would be if they were to remove maybe one or two of those turbines that are closely up-gradient to that site, if that would make sense, that could reduce the sound level. At the substation there could be some sort of noise barrier such as a fence or something to that regard that could help to block noise traveling in that direction. Those are just some very simple examples of ways in which noise could be mitigated.
- Q. Okay, thank you. Switch to the decommissioning.

 In your experience, does the proposal and the amount of dollars and the way they are handling this here, is this relatively consistent with other projects that you've

been involved with?

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A. Yes. It is relatively consistent. I would say in some of the projects we've seen a little bit more -- a little bit greater level of detail in the cost estimate, which we did not see in this project as yet, but again sometimes, as Mr. Keyt has alluded to, sometimes that's -- I don't want to say negotiated. As the process goes along, the estimate is revised to account for some of the issues that were brought up in the initial review.

- Q. Thank you. You have mentioned a number of particular items that should be addressed. Do you feel that these are all fairly important, or would you put some sort of a priority on these things?
- A. I think generally they're all important, you know, as to -- some may not be as much of a priority in terms of dollar amounts, but I think all of them are important to at least provide a little bit more level of detail that the County could feel more comfortable with, the total amount of -- (individuals talking over one another).
 - Q. So they need more detail?
 - A. Correct.
 - MR. WAX: Thank you.
- 24 MR. KAINS: Mr. Harrington?
- 25 MR. HARRINGTON: Thank you, sir.

EXAMINATION BY

MR. HARRINGTON:

2.1

- Q. On the sound portion you reference R1104. If I gave you a map, could you show me maybe where it was?

 It sounded like it was close to the substation. Is that accurate?
- A. Yes. If I recall correctly, I think it's the nearest receptor to the east of the substation.
- Q. Okay.
- MR. LUETKEHANS: Mr. Harrington, I don't know if you noted from yesterday, I think that was Mr. Gantz. That is 1104.
- MR. HARRINGTON: I assumed that it was. I was just trying to clarify, but I get where you're goin'.
- Q. I guess in regards to that, is there anything else you can tell us about, is it a combination of the noise of the substation with the turbines to the west of that, or is it just the fact that the substation is where it is and you have a residence that close, or...
- A. That's not my area of expertise. I think generally it is those factors. It's the combination of the noise sources, the turbines, and the substation.
- Q. Okay. I appreciate that. On your decommissioning

screen shot, your slide?

A. Uh-huh.

2.1

- Q. Am I looking at this right, if I say that a hundred eighty-three thousand per turbine, a hundred forty thousand even of salvage, is that separated out of the hundred and eighty-three? Is that what we're saying here?
- A. The one hundred eighty-three is the per turbine cost based on all the costs that were calculated by the Applicant. Then separately, the salvage value for all the turbines divided, you know, on a per turbine basis is the hundred and forty thousand dollars.
- Q. I getcha. So is it fair to say that if you figure out the actual costs of tearing it down is taking the hundred and forty thousand away from the one eighty, leaving us with forty-three thousand?
- A. That's if you take that full salvage value and apply it too. So that would be taking the turbine down, processing it for scraps. That would be once all that work is done, that would be your net costs.
- Q. Right, and to your point you're saying, you know, in this particular scenario, the scrap was calculated at current time relatively high due to market value, is the impression I get?
- A. That's -- that was our opinion from our view.

- Q. I understand that. I guess even at this forty-three thousand or fifty thousand or sixty thousand, pick a number, do we think that's enough to tear one down? And is that today's costs, or is that thirty years from now?
- A. The costs that were presented, were presented in today's dollars.
 - Q. Uh-huh.

2.1

- A. So if we were just to say we have one, if we were to say that there's one up right now and it would have to be torn down, the total costs involved to do that work would be the one hundred eighty-three thousand dollars, and then based on processing that, selling everything for scrap at the particular values that were estimated by the Applicant, that would garner you a hundred and forty thousand dollars back.
- Q. Right. I guess what I'm driving at, even at today's costs, it seems that forty-three thousand just to tear it down seems a little slim. I mean that's not even a new pick-up. Is that a fair statement?
- A. I don't know what the values of a pick-up are these days, (laughter in the room)...
 - Q. I understand.
- A. Yeah, I understand your -- I think I understand your question. I'm not entirely sure how I can --

Q. No, I know. You're under oath, you don't want to state something you're not certain of. I'm just trying to drive at the costs of actually tearing it down. I see what you're saying about the comment in regards to five-foot depth. Illinois Department of Agriculture, AIMA, and your reasoning for that, I imagine, is due to, what would be done with that property in the future, right? You would want to make sure there was nothing there that you would intercept with the utilities or future buildings?

2.1

- A. I think that's the reasoning that the Department of Agriculture had when they put that together.
- Q. And another item that caught my eye was the 15% contingency for the costs, estimate due to uncertainties with the size of this project, right? And I guess to that note, that's something I have concerns about is we've never seen a wind turbine or farm of this size be decommissioned. Is that fair? Do you know of any?
- A. I think I'm only aware of one that was recently decommissioned, and to be honest, I couldn't tell you where, and I do recall it was a fairly small number of turbines, I think on the order of a dozen. So, you know, there's a scale of that project compared to this one that's, you know, there's obviously a four times difference, so there's going to be some differences

involved there. But again, there isn't a publicly
available cost data associated with that project that
I'm aware of to make a direct comparison.
Q. Right. And I would assume, based on what sounds
to be the progression of the technologies, I'm just

A. More than likely, just due to the increase in size that the turbines have experienced over the course of years.

quessing those would be shorter turbines also in height?

- Q. Right. And I got your point about the number of miles of public road improvements. You felt there was not any detail, not even a number of miles listed, correct? Is that correct?
- A. That's correct. I think there's just a line item with that cost without much detail associated with it.
- Q. Right. And then as Chairman Wax pointed out, in general, just a lack of detail is -- what we're looking for is more detail. Is that true?
- A. Correct. That's our main concern with the report.
- MR. HARRINGTON: Very good. Thank you so much.
 - MR. KAINS: Any other questions from Members of the Piatt County Zoning Board of Appeals?

FURTHER EXAMINATION BY

MR. CHAMBERS:

Q. I have one more, just to clarify something here on the transportation costs for scrap. So you note here, scrap pricing should include transportation costs required to deliver the materials to a large scale facility. So, the current numbers that we're dealing with here do not include that transportation cost; is that correct?

A. It's not clear from what we've seen in the Application that it is. So we just need to be sure that that number is accounted for in the estimate.

MR. CHAMBERS: Okay. Thank you.

MR. KAINS: Any other questions for

Mr. Minder? Mr. Harrington.

FURTHER EXAMINATION BY

MR. HARRINGTON:

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- Q. This is sort of not covered in line item, but maybe you can tell us. What do they actually do with the -- I believe the fiberglass blades? What do they do with that?
- A. Generally at this point in time the fiberglass

blades, they're somewhat of a composite material. So right now there's not really a market for recycling those. Typically it's assumed that those have to be scrapped and disposed of.

- Q. Right. I guess that's the heart of my question is how do you scrap that? Do we even know of anybody that would take that?
- A. I think generally it would be a material that would have to go to the landfill. It would have to be processed down to a size where the landfill would take it.

MR. HARRINGTON: Thank you.

MR. KAINS: Any further questions from the Zoning Board? Questions from for Mr. Minder from members of units of local government including school districts? Questions from interested parties represented by licensed attorneys? Mr. Jacobi.

EXAMINATION BY

MR. JACOBI:

Q. Thank you. Thank you, Mr. Minder. A few things I think, just a couple of points of clarification. First you're an independence witness, an independent engineer hired by the County, correct?

A. That is correct.

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- Q. You're giving your opinion without influence from either side. Accurate?
 - A. That is accurate.
- Q. In fact, I don't think we've ever met me, and I don't think you've met my colleague Mark Gershon who was sitting here before. He unfortunately got the flu. But you've never met us before, right?
- A. Not to my knowledge.
- Q. On decommissioning, the ordinance requires an updated decommissioning plan every five years; is that accurate?
- A. That is -- yeah that's what I recall.
 - Q. And in fact the ordinance doesn't require a draft decommissioning plan with the Application. It only requires a final decommissioning plan prior to building permits. Is that your recollection?
 - A. I believe that's correct, yes.
- Q. And you would expect for the County and the Applicant to negotiate that final decommissioning plan prior to the issuance of building permits?
- A. That's generally been my experience on other projects I've worked on, yes.
- Q. That final decommissioning plan could, and likely would, include a number of the suggestions that you

make. That would be a possibility, right?

A. That is possible. Yes.

2.1

- Q. Some of these things are dependent on later a number of items. For example, the number of roads, number of miles of public road and linear feet of access roads. That's going to depend on whatever road use agreements are entered into, correct, with the County and the road districts?
- A. There is some uncertainty in that because currently the Applicant does have a total of seventy-one locations identified, but they only plan on utilizing fifty of those locations. So because there is that uncertainty there, yes.
- Q. To your knowledge, the Applicant hasn't entered into a road use agreement with the County yet? They haven't identified what roads they're going to use, and they haven't identified -- or negotiated with the County, you know, on how those roads would be managed during construction. Is that accurate?
- A. I'm not aware of a road use agreement at this time.
- Q. And you mentioned that, you know, seventy-one turbines were noted in the report, and that fifty will be built. I think actually seventy-one were modeled for sound, which we will get to in a second. Sixty were

applied for in the Application, and fifty will be built. But long story short, we're still determining where the actual turbines, where those fifty final will be, and once those are sited with final engineering then a road use agreement can be entered into because we'll know exactly what roads we'll need or how to get to them. Is that a fair representation?

A. Yes. I think that's a fair assessment.

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- Q. And once -- I know that was a mouthful. But once we get to that stage, and we have a road use agreement and we know how long the roads are going to be because we're going to know which roads we're using, then we can start filling in some of those line items for the final decommissioning plan that will be required prior to building permits. Is that how its's usually done?
- A. I wouldn't say that's how it's usually done, only in the sense that typically the Applicant has a little bit firmer plan in place in terms of the number of turbines and where those turbines are going to be located. But there is still that process of providing an initial plan and going through the process of revising the plan back and forth based on discussions between the two parties.
- Q. Okay. So the negotiation of the decommissioning plan, in your experience, is ongoing through the

application phase up to building permit when the site gets firmed up and the project is better defined with engineering micro siting and the specifics that go along with that. Is that fair?

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- A. I would generally say yeah. The process -- the decommissioning plan that's provided in the application is typically not the same that winds up being approved prior to the construction being performed.
- Q. If the final decommissioning plan included all your recommendations here, is that a decommissioning plan that you would recommend?

MR. KEYT: Hold on one second. I'm just going to object. I think he's already answered the essence of that question, but in the sense that if the question is, if all those issues are addressed, is it being one that he would recommend, I think it's a question of it could be several years before we get to that point. I'm not necessarily going to object to the question, but I think it has been asked and answered.

MR. KAINS: Yes, Mr. Jacobi, if you could restate the question and get to the heart of this, please.

MR. JACOBI: That's fair. I'll restate it.

MR. JACOBI: Right.

MR. KAINS: Thank you.

(Continued Examination by Mr. Jacobi).

- Q. So, I think the point was made. I have a question about the scrap value that you discussed. So you note that the scrap value of steel used in the draft decommissioning plan was the mere peak scrap value in 2022, and you recommend a long-term average be used; is that accurate?
 - A. Yes.

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- Q. If the plan is updated every five years, that long term scrap value average is going to be updated every five years? Is that what you would recommend?
- A. Ideally we would like to see the scrap value updated, yes.
- Q. The four feet versus five feet issue, bullet point number one. I have a quick question about that. AIMA allows the landowners to negotiate terms different from those included in the AIMA; is that accurate? The standard form AIMA --
- A. I don't think I know enough about the agreement to answer that.
- Q. Okay. If a landowner has agreed to removal down to four feet instead of five feet, and assume with me that the AIMA allows the landowner to do that, would you object to that or criticize that portion of the decommissioning plan?

A. It if it was something that was agreed to between the landowner and the applicant, and if that were something that the AIMA agreement allows, yes.

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- Q. A couple questions about sound. Sorry, I had to gather my thoughts. So you reviewed the sound report generated by RSG in the application?
- A. Yes, we did review those -- or I should say we reviewed that report.
- Q. You understood that that modeling by RSG assumed a number of conservative -- or included a number of conservative elements or assumptions to its model, including it added automatically an extra two decibels to the turbine sound profile. It assumes all receptors were down wind. It assumes no vegetative screening or other screening throughout the project area. It assumes 71 turbines out of the 50 that will ultimately be built. You would agree that those conservative assumptions -- you would assume that those conservative assumptions were accounted for by the RSG model?
- A. I don't recall all of the assumptions that were included, but yes, I do recall there were a number of assumptions in the model that were intended to make it a conservative model, yes.
- Q. Okay. And your ultimate conclusion, was that the project complied with all of the IPCB regulatory limits

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for all of the receptors?
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       Α.
          Yes.
           I want to ask you, so you note in your power
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       Q.
    point that you specifically looked at receptors 18, 115,
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    846 and 1104, right?
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       Α.
           Yes.
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       0.
           You selected those because they were sort of
    highlighted in the RSG report?
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       Α.
           I believe that's correct.
           And you conducted your own separate noise model
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    for six receptors and validated the accuracy of the RSG
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    model; is that accurate?
           That's correct. We generally saw the same results
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       Α.
    as what the RSG model predicted.
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       Q. Do I understand that you validated specifically
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    those four receptors and two others, but those four, 18,
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    115, 846 and 1104?
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           Specifically those four, yes.
       Α.
           Okay. I have a demonstrative exhibit.
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       Q.
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    Permission to appropriate?
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                MR. KAINS: Yes. Mr. Keyt, what are we
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    calling this exhibit?
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                MR. KEYT: I think you're on 43; is that
24
    right?
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                MR. JACOBI: I'll have to take your word for
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it. I think so. 1 2 MR. KEYT: I don't have my list here. MR. LUETKEHANS: Yeah, that's right. 3 MR. KEYT: Applicant's Exhibit Number 43. 4 5 MR. KAINS: All right, 43. Thank you. 6 right ahead, Mr. Jacobi. 7 Thank you, sir. Applicant's Exhibit 43 is two Ο. pages. For the record, it's a demonstrative exhibit. 8 It's a blow-up of and a zoom-in of the data and the maps that were presented in Appendix F-5, which is the RSG 10 11 sound report. These two pages are demonstrative of the 12 sound measurements specifically for receptor 1104, and 13 you can see, Mr. Minder, that the first page is at the five hundred hertz frequency, and the second page is at 14 15 the one kilohertz frequency. Are you following? 16 Yes. Α. You can see that the dotted line here is the IPCB 17 18 limit that is coming from the transformer from the lower 19 left-hand page, or the lower left-hand section of the 20 page. Do you see that? 2.1 Α. I do. 22 This exhibit demonstrates that the receptor 1104 23 is outside of those IPCB limits. Do you see that? 24 MR. LUETKEHANS: Objection, foundation. I 25 don't know how this witness is supposed to understand

what this is, and how this interplays. It's not his exhibit.

MR. KAINS: I'm going to sustain it. If you could ask him specifically if he has knowledge of this particular exhibit and the things it depicts.

- Q. Okay. Mr. Minder, you testified that you validated the sound for receptor 1104?
 - A. We did model that, yes.
- Q. Did your modelling generate results consistent with what this exhibit shows?
- A. Obviously our modeling did not generate this similar type of output, but in general I think what you're asking is that our model did indicate receptor R 1104 was outside, or I should say it was within the sound limits, the IPCB sound limits as we indicated in the presentation.
 - O. Consistent with the IPCB sound limits?
- A. Yes.

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- Q. Okay. This demonstrative exhibit, which is a blow-up from our sound modeling, is consistent then with your results?
- MR. LUETKEHANS: Objection.
- MR. KAINS: I'm going to overrule. If you know, is this consistent with what you guys modeled?
- 25 A. I guess what I can say is that our modeling also

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showed that receptor R 1104 was within the sound limits.

Obviously we didn't generate a similar type of model to exactly compare those two.
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- Q. Right. When you say within the sound limits, I want to make sure we know what you mean. You mean compliant with the IPCB sound limits?
- A. Correct. Consistent with the IPCB sound limits, yes.
- Q. I'd like to ask you the same questions about the other three receptors. I have demonstrative exhibits with regard to those as well. Maybe I'll just pass them out at the same time.

MR. LUETKEHANS: I don't know why we're dealing with these demonstratives. He's already answered that all three of these other ones he thinks are compliant with the IPCB limits.

MR. KAINS: I think that's the case.

MR. LUETKEHANS: I don't know what we're going on something that he can't identify.

MR. JACOBI: Well, what I'd like to do is demonstrate through these exhibits that his modeling has validated those results.

 $$\operatorname{MR.}$$ KAINS: Who don't you just ask him that and then we can go -- move on.

MR. JACOBI: But I'd like to show him --

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(Multiple individuals speaking at the same time.)
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                MR. LUETKEHANS: -- but what you're trying to
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    do is put back door into evidence something that has no
    support in the record.
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                MR. JACOBI: It's already in evidence --
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                MR. LUETKEHANS: -- no, it's not. No one can
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    read your report and see this. That's the problem.
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                MR. KAINS: All right, gentlemen. I think
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    for our purposes, and what this witness can testify to,
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    ask him specifically with respect to the other three
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    receptors. You can ask each one, is their modeling
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    result consistent -- or does their modeling result show
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    that it is compliant with Illinois Pollution and Control
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    Board Sound Regulations.
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                MR. JACOBI: I will ask that question.
    I be allowed to use my demonstrative exhibit to do so?
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                MR. LUETKEHANS: I'm going to object because
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    no one is here to lay a foundation for them, and he sure
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    can't --
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                MR. JACOBI: They're demonstrative and not
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                MR. KAINS:
                            We'll let them in for the
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    purpose of what they show, but I think we just need to
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    get to the point whether it's compliant or not.
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                MR. KEYT: I'm going to clarify an objection
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for the record, just so it's clear, I think the maps
that the applicant's attorney is showing, has references
to, I guess, lines which show a boundary of what some
sound might be. I don't think it's fair to ask the
witness whether this comports with the same as what he's
done, because it's not his map that he's been generated,
but subject to that...

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MR. KAINS: I'm going to sustain that objection. Specifically if Mr. Minder knows what this map shows, he can testify to it, but I think it's been established that Mr. Minder modeled, or his company modeled, the sound levels of these four receptors, and his testimony should be about that. But go ahead, Mr. Jacobi. We've got exhibits coming 44, 45 and 46? Is that correct? Very good. This is when you need Mr. Rayford here.

MR. JACOBI: I know. Everybody has the flu. Mr. Keyt, which one are you marking 44?

MR. KEYT: I was going to mark 44 as R 18, and then 45 would be the one that has receptors 115 and 815. And 46 would be the one showing receptor R 846.

- Q. Did you catch that, Mr. Minder?
- 23 A. Yes. I have them in order.
- Q. Mr. Minder, did your modeling validate the results demonstrated on Applicant's Demonstrative

Exhibit Number 44, that receptor 18 is outside or --1 2 MR. LUETKEHANS: I ob --MR. JACOBI: -- pliant with the IPCB sound 3 limits? 4 MR. LUETKEHANS: -- ject to the form of the 5 6 question. If he wants to ask whether it's outside that's 7 one thing, but to conform with this, he has no idea. He's already said that a number of times, and Mr. Keyt's 8 actually objected to it, and I think it was sustained. 10 MR. KAINS: Yeah, I'm going to sustain that. 11 Did your modeling validate the results of the RSG 12 study that receptor 118 is compliant with IPCB regulations? 13 14 Α. Yes. Okay. Did your modeling validate the results of 15 Q. the RSG study that receptors 115 and 815 are compliant 16 with the IPCB regulations? 17 18 Α. Yes. Did your study validate the results of the RSG 19 Q. 20 study that receptor 846 is compliant with the IPCB 2.1 regulations? 22 Α. Yes. 23 I won't pass these out. Did your study validate 24 the results of the RSG -- strike that. Did your modeling 25 validate the result of the RSG study that receptor 120

is compliant with the IPCB regulations?

- A. Our study -- I prefer not to go through this for each receptor.
 - Q. I only have two more.

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- A. I would have to say yes, because although I don't recall the specific location for the receptor that you mentioned, our study did conclude that the RSG model which showed that all the receptors were compliant with the IPCB regulations with regard to the project.
- Q. Your model validated that all receptors are compliant, that all receptors modeled through the RSG study are compliant including 120 and receptor 631?

MR. KEYT: I'm just going to object. I think this issue has been resolved at this point.

MR. KAINS: Yeah. It's been asked and answered and the answer is, yes, it's compliant.

- Q. All right. I was trying to get that last one in, 631, but that's okay. You discussed mitigation efforts earlier. I think you mentioned building a fence would be one mitigation effort?
- A. Those were examples, correct.
- Q. Would another example be like a vegetative buffer of evergreens or a tree buffer? Would that help mitigate sound?
- 25 A. I'm not an expert on that, but I believe that

would serve similar to a barrier. 1 2 MR. JACOBI: Thank you. I don't have 3 anything further. MR. KAINS: Thank you, Mr. Jacobi. 4 Mr. Luetkehans, questions for the witness? 5 6 7 EXAMINATION BY MR. LUETKEHANS: 8 9 10 Q. You didn't do a deep dive into this application, 11 correct? I mean you have a lot of appears to be, 12 appears to be consistent, appears to be met. You didn't go through with a fine tooth comb and try to determine 13 14 that all the provisions were met in this application, did you? 15 16 A. We did try to do that, yes, but specifically 17 myself, I did not. I am relying on the work of others. 18 But you have a lot of the appears to be met? 0. 19 Α. Yes. 20 Q. And a lot of appears to be consistent, correct? 2.1 Α. Correct. 22 So let's talk about the sound. One thing you say Q. 23 is no receptors would be impacted by noise coming from 24 project turbines, correct? That's the exact words in

your power point, the page before?

- A. Can you repeat the question?
- Q. Yeah. One of the things you say is quote, no receptors would be impacted by noise coming from project turbines in substation in excess of Illinois regulatory limits, correct?
 - A. Yes.
 - Q. And those receptors are a point on a map.

Correct?

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- A. Correct.
- 10 Q. That's where you modeled. Nowhere else, correct?
- 11 A. Correct.
- Q. Because those were the measurements given to you by RSG in the report. Correct?
 - A. Yes. We relied on their report, yes.
 - Q. You did this -- I think you said you did this same type of analysis in Livingston County, correct?

 Same type of review. Not this particular analysis, but you did an overall review in Livingston County, something similar to what you've done here?
 - A. I believe in Livingston we looked at a few specific portions of the -- portions of the application, and I believe sound was one of those. Yes.
- Q. Okay. And I didn't mean to limit it to sound.

 But you did a whole report in Livingston County,

 correct?

A. Yes.

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MR. KAINS: Mr. Keyt, what number is this?

MR. LUETKEHANS: I've shown the witness what
has been listed as Objectors' Exhibit 15. One of those,
Andy, I may have given some of those the wrong ones.

Anybody that gets a highlighted one, yell at me, would
you? Maybe I have them. Don't worry about it. I do
have it. Thank you. Sorry. Okay. Showing you what's
marked as Objectors' Exhibit Number 15. Do you recognize
this?

- A. I do recognize this as being a report that Patrick prepared, yes.
- 13 Q. In fact you signed it, correct, on page 15?
- 14 A. I did, yes.
- Q. And did you do the presentation for Livingston? I think you did, correct? Or was that Chris Burner who did that?
 - A. I believe -- it was not me.
 - Q. Okay. But this is Patrick Engineering's report related to its review of decommissioning costs in particular as it related to the Livingston County project in 2015, correct?
 - A. Yes.
- Q. Okay. I think a quick review of my firm's web site would tell everybody that I have represented, and

often times do represent Patrick Engineering; however, I don't know that you and I have ever met before tonight, correct?

- A. Correct.
- Q. And did you know when you were preparing this report that I had any involvement in this hearing?
- A. I was aware that you were involved in this hearing. Yes, I did.
- Q. Okay. It did not affect your opinions one way or the other thought, correct?
- 11 A. No.

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- Q. Okay. Have you and I ever previously discussed this opinion of yours related to this project?
 - A. No.
 - Q. One of the items that you mentioned here is that the aggregate -- related to the aggregate used for access roads, correct? In your report in this case -- I'm sorry. Not in that case. We won't talk about that for a while. We'll stay on this case.
 - A. Okay.
 - Q. One of the things that you mentioned here in your power point is the aggregate used for access roads, correct?
- 24 A. Yes.
- 25 Q. And the number of feet of access roads is, I've

heard tonight for the first time, is still to be determined. Is that how you heard it?

- A. Correct.
- Q. And this is under the Applicant's power, how many feet of access roads they have, correct?
 - A. Correct.
- Q. And access roads, just so we're all on the same page, is that area between the public road and the wind turbine, correct?
- 10 A. Yes.

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- Q. Okay. The other night, I have to admit,

 Mr. Carlson said the access roads locations were already

 determined. So I'm a little confused tonight. You said,

 or I think, the Applicant normally has this location of

 access roads usually in place at this stage, correct?
 - A. They usually have them placed out pretty well.
- 17 Q. Okay.
 - A. Yes.
- Q. I also noticed some hesitancy, and I'm not trying to put words into your mouth, but you were asked about when the decommissioning plan was acquired, whether it was not or at the building permit stage under the Piatt County ordinance. I noticed some hesitancy. Are you sure one way or another?
- 25 A. I don't recall specifically.

- Q. And that's fine. I just wanted to make sure that you, um -- okay. Let's go back to the access roads. Do you recall that section 3.1.5 of the decommissioning plan, that the Applicant submitted, discusses reusing the aggregate on public roads. Do you remember that?
 - A. Yes, I do.

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- Q. You may not remember the section, but the comment per say or in particular. We heard earlier in the hearing that this aggregate would be CA6. That would make sense, correct?
- A. CA6 is the typical used for a road base, yes.
- Q. I think we would agree that that's normal. We heard that in the hearing with Mr. Carlson. That's the normal kind of gravel, CA5, CA6, that would be used, correct?
- A. CA6, yes.
- Q. CA6 refers to the size, the six refers to the size of the gravel?
 - A. The CA6 is -- refers to IDOT's designation for that particular size of gravel.
 - Q. And let's talk about IDOT specs for a second. You cannot use dirty IDOT specs -- or dirty CA6 under the IDOT specs, correct? It has to be clean?
- A. Generally, yes. It is intended to be clean in most cases, yeah.

- Q. And you talk about reprocessing or disposal costs should be included in the removal costs for that exact reason, right? I mean you wouldn't put dirty CA6 back on a public road.
- A. Correct. You would generally want to have it, as you say, be a clean material that meets the spec, because when it's laid down, over the course of time, other dirt material's going to get in there, and as you pull it out it's not going to be the same material as it was when the it was laid down.
- Q. And you're familiar with the fact that IDOT actually has people who go to the plant, the material plants, and say -- and actually review the CA6 to make sure it's compliant before it leaves the site?
- A. Typically, there is testing involved to make sure that the aggregate meets IDOT specification.
- Q. IDOT certifies it before it goes out in that essence?
- 19 A. As I understand, yes.

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- Q. That's my understanding too. So what we don't know today is, we cannot tell, can we, if those reprocessing costs or the costs to haul away the CA6 are more expensive than the actual value of the CA6 sold? We don't know that, do we?
- A. No, we don't know.

- Q. Also in order to determine the costs to haul or reprocess the aggregate from the access roads, another thing you need to know is the length of the access roads, correct? That's why you pointed it out?
 - A. Yes.

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- Q. And transportation costs often times are one of the heaviest costs related to -- or excuse me, one of the greatest costs related to aggregate. How far do I have to take it? Often times it's much more expensive than the ton of aggregate, correct?
- A. I'm not sure I follow.
 - Q. That was an awful question. So let's move on from that. Let's try it again. The costs of CA6 itself, is somewhere five, six, seven -- times six, seven dollars a ton. Is that a fair statement, or somewhere in that range?
- A. I can't say.
 - Q. But often times, let's assume it's six, seven, ten. Often times the costs to transport that may be equal to or more than the costs of the tonnage, depending on how far you have to go?
 - A. That depends.
- Q. If I have to travel a hundred miles to get rid of it, it's going to cost more than it would to -- more than it's worth to sell. Would that be fair to say or

1 no?

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- A. Again, I'm not sure I follow.
- Q. Okay. Forget it. It's not that important. The point is, what we don't know right now is, whether this aggregate has a value, or whether it's a cost by what you have in front of you, correct?
- A. Yeah. What we don't understand at this point is how much material we're talking about and how far it would need to be moved.
- Q. And those are the two things you need to know, to know whether there's a value or not to the aggregate when it's pulled up and all those things that go with it?
 - A. Yes.
- Q. And one of the other things when you pull up aggregate besides if you're cleaning it, you've got to have a bulldozer to pull it up, you have to have that loaded into a truck, correct?
- 19 A. Yes.
 - Q. Also, I think you said, we can't tell whether the scrap metal price includes transportation costs, can we, by what we have in front of us in the decommissioning plan?
 - A. Yes, it was unclear to us.
- 25 Q. Again, the costs to haul the scrap metal may even

- exceed the amount paid for the scrap depending on how far you have to transport?
- A. Correct, yes. The costs of transportation will vary.
 - Q. Yeah. And do you know what a union truck driver is charging -- costing these days to an aggregate hauler?
 - A. I do not.
- 9 Q. But we don't know either by the face of this 10 report, correct?
- 11 A. Correct.

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- Q. Would you agree that with the detail given here,
 there's not enough information provided to determine to
 a reasonable degree of engineering certainty whether the
 cost estimates on the last page provided in the
 decommissioning plan is going to be sufficient to
 actually cover the costs of decommissioning?
 - A. I think that's a true statement.
 - Q. I want to go to your decommissioning report,
 Objector 15, if you can go to it real quick. I'll just
 point to a couple pages.
 - A. This here?
- 23 Q. Yeah, the one from 2015.
- MR. JACOBI: I object. What's the relevance of reviewing the Livingston County report for a project

that was vastly different, from seven years ago? 1 2 MR. KAINS: Mr. Luetkehans? MR. LUETKEHANS: The point is, this is the 3 kind of detail -- if we had this detail, we would be 4 able to make the kind of determinations made in 5 Livingston County, and we're gonna show in about three 6 7 questions how off one is if one sees that detail that one can receive. 8 MR. JACOBI: The Livingston County ordinance 10 is different from the Piatt County ordinance. 11 County ordinance doesn't require a building 12 decommissioning plan at this state. It doesn't require one until the building permits. So to try to 13 demonstrate that the decommissioning plan here is 14 insufficient is irrelevant to the determination in the 15 first place --16 MR. LUETKEHANS: And I don't think it's been 17 18 determined, at least to my satisfaction, when the decommissioning plan is to be filed. I have a different 19 20 opinion which we'll talk about in closing as to when the 2.1 decommissioning plan's required. 22 MR. JACOBI: Well it's certainly required after this stage. 23 24 MR. KAINS: I'm going to overrule the 25 objection. Mr. Luetkehans, you said you had

approximately three questions with respect to the seven-year-old Livingston County situation.

- Q. Yeah, it'll be quick. If you can go to page twelve, the second paragraph, in the summary, in that report you found the actual costs to be 71% higher than the decommissioning estimate provided by the wind company in that case, correct?
 - A. Yes.

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- Q. Okay, in looking at page thirteen, that estimate only included removing, if you look down at the bottom the third, I guess it's the fourth asterisk at the bottom, the fourth note.
- 13 A. Okay.
- Q. That plan estimate only included removing 50% of the access roads, correct?
 - A. Our estimate did.
 - Q. And that was -- I don't know if you recall this, but it came out in the testimony that that was because Livingston County asked you to just do 50%. Do you recall that?
 - A. I don't recall.
- Q. Okay. But this was just based only on a 50% removal of access roads, right?
- A. It appears to be, yes.
- 25 Q. One second, but I don't think I have anything

else. Nothing further. Thank you. 1 2 MR. KAINS: Very good. Thank you, 3 Mr. Luetkehans. Mr. Minder has been on the hot seat for over an hour. You get half a water. 4 (Laughter in the room.) 5 Α. Thank you very much. 6 7 MR. KAINS: Are there questions for this witness from members of the -- I need to ask if there 8 are any other licensed attorneys in the room with questions for Mr. Minder. Questions from other 10 11 interested parties, members of the public, whatever side 12 you're on, or if you're not on a side, are there any 13 questions for this witness with respect to his testimony this evening? Very good. Questions from Piatt County 14 staff and consultants? Re-direct, Mr. Keyt? 15 16 MR. KEYT: Nothing further. 17 MR. KAINS: Nothing. Very good. Final 18 questions come from members of the Zoning Board of 19 Appeals. 20 MR. JACOBI: Mr. Kains, I did have one. Can 2.1 I be allowed one follow-up? 22 MR. KAINS: Okay. You can have one 23 follow-up clarification of something that Mr. Luetkehans raised. Yes. 2.4 25

FURTHER EXAMINATION BY

MR. JACOBI:

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- Q. Mr. Minder, would reviewing the Piatt County WECS ordinance help refresh your recollection as to when the decommissioning plan is required in this county, if I showed it to you?
 - A. I'm sorry. Could you repeat that please?
- Q. If I showed you the WECS ordinance provision relevant to when the decommissioning plan is required in this County, would that refresh your recollection?
- 12 A. I believe so.
- 13 Q. Okay.

MR. KAINS: Go right ahead. I think we all want to know.

(Laughter in the room.)

- A. First paragraph says, WECS project must provide a decommissioning plan to ensure that the WECS equipment is removed and land is restored to its previous use upon the end of the project's life before a construction permit is issued.
- Q. Thank you. Mr. Minder, does that refresh your recollection that the decommissioning plan is required before a construction permit is issued?
- 25 A. Yes.

Would you agree with that statement? 1 Q. 2 Α. Yes. MR. JACOBI: Thank you. No further 3 4 questions. MR. KAINS: Mr. Luetkehans, anything else? 5 MR. LUETKEHANS: No. 6 7 MR. KAINS: Board? Very good. Mr. Minder, thank you very much. You may step down and you are 8 excused. We appreciate your testimony. 10 (WITNESS EXCUSED.) 11 12 MR. KAINS: Now the Piatt County Zoning 13 Board of Appeals had requested the opportunity to recall certain witnesses who have previously testified. The 14 15 following three witnesses will be called. They have already been -- they've already given their 16 17 presentation. They've already testified. They've been 18 cross-examined thoroughly by counsel, by the Board, by 19 the folks in the room. Now they're being recalled for 20 the purpose of having questions received by them from 2.1 Members of the Zoning Board of Appeals. And the first 22 witness that will be called is Dr. David Loomis. 23 Dr. Loomis, where would you like to be? Do you want to be at the table? 2.4 25 DR. LOOMIS: Sure.

MR. KAINS: That's fine. Dr. Loomis, would 1 2 you raise your right hand and be sworn. 3 (WITNESS SWORN.) 4 DAVID LOOMIS 5 6 recalled as a witness in the above-entitled matter, 7 having been first duly sworn, was examined and testified 8 as follows: 10 MR. KAINS: And you are David Loomis, 11 correct? 12 Α. Correct. 13 MR. KAINS: Remind us again of your 14 expertise just in a nutshell. I have a Ph.D. in Economics. I've been a 15 Professor at Illinois State University in the Economics 16 17 Department for 25, 26 years, and I have been involved in 18 renewable energy, wind energy for at least the last 19 fifteen, twenty years. 20 MR. KAINS: And Dr. Loomis, you gave 2.1 testimony on November 22nd, 2022 with respect to an 22 economic analysis report that you prepared? 23 Α. That's correct. 24 MR. KAINS: Very good. All right. Members of the Board, questions for Dr. Loomis. Mr. Harrington. 25

EXAMINATION BY

MR. HARRINGTON:

2.1

- Q. Unfortunately I wasn't here the evening you presented, but something I had an interest in was how far did your study or findings get into the tax base of this proposed wind farm?
- A. Pretty extensive in terms of the property taxes that would be collected.
- Q. To that effect, could you maybe walk through say one turbine as to how you calculated that?
- A. Sure. So there is a State law that provides a valuation on a per megawatt basis. So it will depend on, you know, the size of the turbine here. I did it in aggregate, and then broke it out by taxing jurisdiction. So it was by county, by township, by school district, and so forth, those numbers. So I don't have them on a per turbine basis, but in general what I did was take that megawatt of equalized assessed value, and then I used the current tax rates for each of the taxing jurisdictions. In order to be conservative in terms of that tax revenue, I didn't assume that the millage rate increased, so I kept the millage rate constant over the life of the project. And I also used what I considered to be a conservative assumption in terms of inflation,

because the formula that's given by the State mandates a depreciation schedule which is 4%a year, but also takes into account inflation over time, so I needed to have a future forecast of inflation, and I used 2.8% as my forecasted inflation, and assumed that that was constant throughout the time period of the project.

2.1

Q. I understand. So if I'm hearing you right if the State mandates 4% depreciation annually, and you're applying a 2.8% inflation rate, is it fair to say that the value of the structure drops annually?

A. That's correct, and that was shown both on the slides that I presented initially, or in the previous time, as well as in the report, and that's why I like to step out each year so that it's not just, you know, say the starting value, but I also provided kind of the total over the thirty years, and an estimated annual average. I will say with the depreciation it's 4% a year until the project has 70% depreciation. So in other words, 30% of its original value so it doesn't depreciate all the way down to zero where it would have no value. There's a limit to how much depreciation they take. And so what happens is you see a declining value until it hits that maximum, and then you start seeing the taxable value increase after that point, because you still have inflation, but you've taken the maximum

amount of depreciation that you can.

2.1

- Q. Good to know. So it bottoms out at 70%, correct?
- A. Yeah, you can take more than 70% or 30% of the original value has to be the value that's retained at it's bottom.
- Q. Correct me, it sounds like your study looked at the entire farm's productivity of tax, not an individual tower, correct?
- A. Correct. Although so when we did the analysis, we took -- in the final version it was taking the exact turbine locations with the fifty primary locations in the analysis. So we looked at the exact location of that turbine, what the taxing districts would be for that turbine, but then we aggregated it up to say how many turbines are in this school district, how many turbines are in that school district in order to get an estimate for each year.
- Q. Very good. So that being said, you can't give me an annual accrual for one turbine because you didn't figure it that way. I understand.
 - A. Right.
- Q. I guess the only other thing I would have with regard to tax is, I was curious if any of these accrued property taxes for this particular project displace any other federal or state funding to these taxing bodies?

A. Yes. So the one -- the only one that I am aware of that has the potential kind of -- to kind of crowd out, as you say, other funding sources, is with school districts. So as we look at school districts, the State aid formula does take into account the local area taxing base, when it considers the State aid. But in this particular situation, given the school districts that are involved in this project, and given the school funding formula, it will not impact their State aid, given the current circumstances and funding formula. So these school districts won't experience that kind of crowding out. They won't get less in terms of State aid for the fact that the wind farm comes into existence.

Q. Why is that?

2.1

A. Because each of the school districts that we have in this situation are what's called Tier 4 school districts, meaning that in the school district the school funding formula, they have four tiers, depending on their local resource adequacy. So they look at their tax base and they look at their student population and go into detailed calculations of, you know, how many of the student population are English language learners and what's your daily attendance, all of those kind of factors to build this up to say this is what it takes to educate this student population, here's your local

resource, and how much is it adequacy. And so the Tier 1 gets cut off at 68% adequacy. Tier 2 is 90%. Tier 3 is 100%, and Tier 4 is greater than 100%. So according to the State formula, I know the school superintendents wouldn't agree with this assessment necessarily, but according to this formula, they have adequate local resources to educate the population.

2.1

- Q. I see. You said the current situation. Is there something about that that leads me to believe it could change?
- A. Well, I think it was -- it's been at least four years, five years since we're under this new funding program. So when I was starting to look at these, we had a different funding formula, and that was a big deal for the State to change the way we're going to take State revenues to fund school districts. So I have no knowledge of plans to, you know, change anything, but there was kind of a major shift in the funding formula. So what had happened say under the old formula that was in effect five, six years ago is different than what's in effect in the current funding formula.
- Q. I see. Who is it by chance at the State level that determines Tier 1, Tier 2, Tier 3, Tier 4?
- A. So, the Illinois State Board of Education, ISBE, puts together a spread sheet that you can go out and

down load that has their, you know, all the statistics for every school district in the State, and then their funding formula with all the details, you know, by school district and say what's their local resource adequacy, and what did they get in new monies that are allocated or potentially allocated by the State legislature and so forth. So that's available. So the funding formula is in law, but the State Board of Education, you know, is the one responsible for gathering all of the statistics and putting all of the numbers together.

- Q. So essentially the State association that assesses or gives each school district this tear rating?
 - A. That's right.

2.1

- Q. So in your example where apparently other school districts have, as you described it, crowding out, could you maybe go a little further and tell me, it simply displaces free appropriated funds? Or how does that work?
- A. So, in the law there is a provision that's called the hold harmless agreement, a provision that says no school district gets less funding than they got the previous year. So there's not, under this law, a decrease. So you don't have a crowding out ever, saying I got, you know, nine million last year and now I'm only

getting eight million. That never happens. If you got nine million this year, the minimum you're gonna get is nine million and into the future. The issue comes with new money. So this is over and above. It would be the State legislature allocates in the State budget additional money over and above what the Board of Education had gotten to distribute, and there was supposed to be ten million dollars of new money each year for ten years so that we would have an additional hundred million dollars over time allocated to school districts. That new money is what gets disproportionately allocated to the poorest school districts. So everybody gets something of the new money. Nobody gets nothing. But the Tier 4 school districts get a very low percentage. It's less than 1% of the new money. It may even been one tenth of a percent, but I don't recall that for sure, but it's definitely less than one percent. And so everybody gets a piece of the pie of this new money out, but the Tier 4 school districts that already have adequate resources get a very very slim piece of the pie, and the tear districts that were the poorest, the Tier 1 at 68%, they get on the order of about half of the money, of this new money, and Tier 2 gets about half of the money, and there's fewer Tier 2 ones. So it goes less around. Tier 3

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which is the 100% cut-off gets on the order of about 1% and the Tier 4 get a tenth of a percent. So it's really going to say we want this new money to go toward the poorest school districts in the State.

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Q. So would it be fair to say that in regards to the new money or additional appropriations, there's where the additional tax base could crowd that out or basically take its place; is that correct?

Well, in this case, if you're a Tier 4 school Α. district, you don't have any crowding out. You're just more of a Tier 4 school district, you know, your resource adequacy goes from a hundred and four percent say of that to a hundred and eight percent or a hundred and ten percent. So you're still getting a really thin slice of the pie. So there's no crowding out. You still get a thin slice of the pie. So that's why I said it's pretty definitive in this case that there's no crowding out, because they're already in the highest tier. The example might be if you were in a Tier 4 school district with low resource adequacy and the wind farm comes in, or Tier 1, yeah Tier 1, the lowest level, if you then had more local resources, you might not -you might experience crowding out, but in this case you're not -- it's definitive that you're not going to experience that.

I understand they're not applicable. In regards 1 2 to the taxing assessment by the State. If by chance a 3 wind farm would change the size of that turbine, meaning the megawatt, I assume it refers to it on the main 4 5 blade, if they would change that, does that change the value of it? 6 7 Α. So it's based -- excuse me, it's based on megawatt capacity. They can't, in a sense, change the 8 megawatt rating of a turbine. It will be what it is. But 10 there have been cases of re-powering in the State where 11 they would take and replace turbines and put up larger 12 turbines. In that case, they would then be subject to 13 higher taxation because they have higher megawatt 14 turbines and the wind farm would be having to pay more 15 taxes. 16 MR. HARRINGTON: Very good. That's all I 17 have. 18 MR. KAINS: Very good. Thank you, 19 Mr. Harrington. Mr. Chambers? 20 2.1 22 23 24

EXAMINATION BY

MR. CHAMBERS:

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Mr. Loomis, -- Dr. Loomis, sorry. Some of the Ο. questions I have are in relation to the employment impact part of your report, on page 14, and then following that, the total earnings impact, on page 16. So this is part of the report that I've tried to get my mind around the numbers here, so just to review a little bit of the numbers here. So this is, of course, using what's referred to as the JEDI model here to model these numbers. But for Piatt County, in the construction phase, the projection of new local jobs during construction in total is five hundred eighty-five, and then for the long-term outlook, excluding construction, the total job impact is modeled at thirty local jobs with only eight of those being a permanent employee on site. So with my knowledge of Piatt County, basically just the thinking about the population, population density, this is where I had trouble with these numbers, Mansfield's population is somewhere between nine hundred and a thousand. Deland's population is under five hundred. Then you have, you know, sparse population in the surrounding rural area which, you know, I can't really guess to what that population would be, but I

have a hard time believing that there's enough places in the area for that five hundred eighty-five jobs to go to, because that's a very significant percentage of the population as a whole for this area of the County. So the questions I would have for you are, is there any -- for the modeling for the JEDI model specifically, is there any sort of validation process for that where you get -- you get different reports and post, you know, post modeling survey done that can speak to the, you know, that mix there of those employment estimates?

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A. Yeah, there's not kind of a post model survey there that provides that validation of the results. The numbers are Piatt County specific, that come even though it's the JEDI model that's coming from IMPLAN which provides county specific numbers that look at all the, you know, industry inner relationships and so forth, and those do get updated, um, so there's updated statistics that come out annually for those numbers, um, associated with that. So those get regularly updated, but it's not kind of project specific to, you know, to this project or to this wind farm.

Q. I guess a question for you, with this modeling data and the population of the County and it being more sparsely populated, more rural, do you view that these estimates in here as, you know, for example the 585

Piatt County jobs during construction and the thirty
permanent long-term jobs during construction, do you
view that as a high estimate compared to what you would
just assume by examining the demographics of the County?

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I think I acknowledged, you know, when I did the presentation, and it's in, um, in my report earlier that shows kind of the, you know, employment by industry. It's on page eight that, um, you know, this would be, um, large employment numbers by County employment standards for Piatt County, um, that are there, and even if we look at, um, you know, the current employment in construction for Piatt County, in that table, is, um So you'd have to see an increase in construction 356. employment, um, to be able to fulfill the number of positions that would be here. I will note though that all of those 585 jobs are not all construction jobs as we think about those. That would really be the 239 jobs that would be primarily, um, you know, on-site labor that we would think of as construction jobs, and so the other jobs aren't necessarily in the construction sector, but they would be in -- they could be in some construction lines, but could be in other industry segments.

Q. Okay, thank you. Follow-up questions to what we talked about, you know, let's assume for a moment that

that 585 is high, and thirty long-term is high compared 1 2 to, uh, whatever -- whatever would really occur. Do the numbers in the total earnings report, are they 3 correlated to -- to the results in table three? 4 5 other words, are the total economic impact numbers based 6 on the bodies that would be represented by the 7 employment numbers in table three? Yeah, table three and table four are related to 8 Α. 9 each other, are linked together, so those earnings in aggregate would correspond with that number of jobs. 10 11 So if one goes up or down, the other goes up or down? 12 13 A. Yes. MR. CHAMBERS: Okay. That's all I've got. 14 15 Thank you. MR. KAINS: Very good. Thank you, 16 17 Mr. Chambers. Any other questions for Dr. Loomis from 18 the Zoning Board of Appeals? Doctor Loomis, thank you for coming back and testifying. You're excused. 19 20 Α. Thank you. 2.1 MR. KAINS: We're going to take a break. 22 After the break, Adam Carlson will testify, then Scott 23 Koziar, and then we will get back to folks who are 24 opposed to the supplemental use permit application. 25 It's 7:43, I believe. Let's come back at 7:53.

1 Mr. Jacobi? 2 MR. JACOBI: Is Dr. Loomis released? 3 MR. KAINS: Yes. Let's come back at 7:53, please. 4 5 (RECESS TAKEN.) 6 MR. KAINS: Okay folks, if you could find 7 your seats, please. All right. Jamie, we're back on 8 the record. The Piatt County Zoning Board of Appeals has requested that a Mr. Adam Carlson, Construction Project 10 Manager be recalled for questions from the Zoning Board. 11 Mr. Carlson previously testified on December the 6th of 12 2022, was subject to -- he gave presentation, and was 13 subject to cross-examination by a number of interested 14 parties and also by the Board. The Board has additional questions. Mr. Carlson, could you please raise your 15 16 right hand and be sworn. 17 (WITNESS SWORN.) 18 19 20 2.1 22 23 24 25

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A D A M C A R L S O N
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    recalled as a witness in the above-entitled cause,
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    having been first duly sworn, was examined and testified
    as follows:
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                MR. KAINS: Would you please state your name,
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    spelling your first and last names for the record.
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                MR. CARLSON: Adam Carlson. A-D-A-M,
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    C-A-R-L-S-O-N.
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                MR. KAINS: And you are employed by Apex; is
11
    that correct?
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                MR. CARLSON: Correct.
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                MR. KAINS: And what is your title?
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                MR. CARLSON: Project manager.
                MR. KAINS: And are you going to be the
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    project Manager on this particular project?
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                MR. CARLSON: Yes, sir.
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                MR. KAINS: Very good. Questions for
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    Mr. Carlson from the Piatt County Zoning Board of
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    Appeals? Go ahead, Mr. Harrington.
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EXAMINATION BY

MR. HARRINGTON:

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- Q. So at last when you presented, one of the items of concern for us was the agreeance of local and effective drainage districts?
 - A. Yes.
 - Q. And written consent.
 - A. Yes.
- Q. Have you made any progress or do you know of any further additional information there?
- A. Yes, we've made progress since I last testified.

 We have the drainage agreements that were supplied by

 Deland and Trenkle Slough completed, all of the exhibits

 completed, and have been in communication with Amy

 Rupiper on submitting all that electronically and hard

 copies. The thing we were waiting for the was the next

 draw for our checks for the permit application fees.

 That goes out on Thursday of this week. So those are the

 two largest districts. We know exactly where the

 crossings are, and -- well and the same for all the

 other drainage districts. We know where all the

 crossings are located, and I've been in contact with all

 the drainage commissioners for the locations of where

 our collection line crosses. We've actually made access

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road changes to minimize any going over district
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    drainage tile. There's only one location where we
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    couldn't do that, but that is, um -- we have
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    communicated with the drainage district on that
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    location. Um, so for the Goose Creek Districts, we've
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    supplied our drainage district agreement. Their lawyers
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    have that. What I'm expecting is once we submit
    everything to all of the drainage districts come this
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    Thursday, we'll be getting more correspondence back from
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    all of the drainage districts.
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       Q. So if I understand you right, you have submitted
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    your proposal to these districts. You haven't gained
    written consent from them yet?
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           We have not gained written consent for any
       Α.
    districts.
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       Q. That's what I was looking for. I getcha.
17
    getcha. Right. You've communicated with them, but you
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    haven't heard back?
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       A. Yes.
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                MR. HARRINGTON: I gotcha. That's all I've
2.1
    got.
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                MR. KAINS: Any other questions for
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    Mr. Carlson from Members of the Zoning Board of Appeals?
    Mr. Chambers?
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EXAMINATION BY

MR. CHAMBERS:

2.1

- Q. The question I would have, since we've talked today about the depth for restoration, that four foot versus five foot discussion there. On the construction side or deconstruction side of things, how much more difficult is it to restore to five foot on those bases rather than four foot?
- A. It depends on the specific foundation design and how deep the pedestal is, but I can't answer that question right now.
- Q. So you're not sure specifically how deep the pedestal is as designed now, if that would be five foot?
- A. No. The foundation design will be completed the second week of January, and then that will be submitted with the stamped license from the State of Illinois as part of the building permit. So every one will be able to see that. Yes.

MR. CHAMBERS: Thank you.

MR. KAINS: Any other questions for

Mr. Carlson? Yes, Mr. Harrington.

FURTHER EXAMINATION BY

MR. HARRINGTON:

2.1

- Q. In regards to your proposed map, you have multiple locations, and your underground connection line, right? Collection line may be how you referred to them. We were wondering: (A) you are taking that into account in regards to the drainage I assume?
- A. Yes. That's the main consideration, because we have to bore under district drain tile. That's what we're proposing to do to minimize effectiveness.
- Q. Another question in hand there in regards to that, the last time we talked, I had asked a few questions about that map, and you said well you know this and that wasn't necessarily set in stone. As that changes, how are you communicating to those drainage districts?
- A. Yes. That's a good point. I think it's communication with several different groups. So first working with the drainage districts letting them know that there's a change and incorporating that into design. So then I'd be communicating that with our engineering teams and while at least developing the collection system design. But I already went through one round of that here. Once we -- we had to make a minor

change as to our collection cable crossing U.S. 150, just combining all of those collection cables into one run, and there was going to be some IDOT work going on in the future there that the IDOT group had communicated to us. So that was one example where, you know, we made that change, incorporated for that ditch that just runs south of there, parallels U.S. 150, just south of there.

Q. Uh-huh.

2.1

- A. So, we updated that, updated our exhibits, and that will be a location that we will be submitting on Thursday.
- Q. Another item in regards to those collection lines, the question had been asked, so when you install those -- go ahead, Kyle, what was it you wanted to know if they pulled the cable, or if they buried it, direct burial.

MR. LOVIN: Are you pulling it through conduit or is it just one big cable going in the ground?

A. It would be a triplex bundle, so you have the three collection cables and then there's a fiber that's there too, so that would be the fourth cable. Unless you're going underneath like a railroad or pipe line or into like a county road, then you wouldn't have a conduit or a sheath to the collection cable.

(Continued Examination by Mr. Harrington.)

Q. What's your estimated depth?

2.1

A. It's sixty inches, so five feet. That's the minimum depth across the board and then we bore deeper than that usually.

MR. LOVIN: So if this is all said and done, say there is a decommissioning, are you pulling that all back out of the ground or are you cutting wire and that's it?

A. The intention would not to be taking that out of the ground because of the depth requirement from AIMA and the ordinance, so five feet or deeper you can leave the collection cable in the ground. Now I wouldn't say that that would minimize the agricultural impact. If you're taking it out, you could be impacting drainage tile and you could impact farming operations. So it would be prudent to leave it in the ground. The decommissioning plan explains that and says that. Just the fact that the cable's in the ground, it's not going to be impacting the soil for the long term.

MR. LOVIN: Another question that pops in my head is, this is in the ground, um, somebody wants to tile their property, um, I have to work with you obviously. Do they have to have on-site people there as the project's going on so that way you have an inspector

there all the time?

So this would be, if -- that's a really good question. I actually just had a discussion with a tenant farmer yesterday, about two days ago about this, because they have plans for future drainage, they're asking me the exact same thing. So if there's no restrictions for a farmer or a tenant farmer to be building new drainage tile around our collection cable, but we need to communicate and go through the proper channels. So working with the site team at the operations and maintenance building, calling in Julie tickets, because we'll want to have tickets prior to digging because we're going to have to de-energize that line for the safety of everybody around. So more than likely there would be a site rep from Apex out there talking with everybody while they're -- it's not necessarily overseeing work. It's just overseeing in the terms of safety, making sure that no one's hurt.

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(Continued Examination by Mr. Harrington)

- Q. A good question. How would a future, we don't know who, will put tile in the future, how would they contact anybody? How would they know who to get ahold of?
 - A. That would be at the operations and maintenance

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building. Anybody can go by there and...
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       Q. Do we know -- have you settled on that yet? Do
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    we know where that's gonna be?
       A. Yes, that's the same parcel as the substation,
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    just north of the substation.
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       Q. So it's gonna be -- (two individuals talking at
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    the same time)
       A. -- not right now --
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           -- right. You say the substation. So I assume
       Q.
    that's where your high line comes out and is gonna head
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    east to the peaker plant?
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       Α.
          Yes.
           So you're sticking with that for now?
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       Q.
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       A. Yes.
                MR. KAINS: Any other questions for
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    Mr. Carlson? Yes, Mr. Foran.
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                        EXAMINATION BY
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                          MR. FORAN:
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2.1
       Q. We've heard the term re-power used?
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       Α.
           Yes.
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       Q.
           Can you walk us through what that would look like
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    potentially?
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       A. I haven't been -- I haven't been in a project
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where we completed a re-power. I can't answer much on that or walk you through it. It just seems like a more likely situation than decommissioning. Do you mean like how -- like if we would disassemble a turbine and then reconstruct a turbine? Is that your question?

Q. I guess what parts would we re-use, which parts would be scrapped?

A. That's a really good question. There's too many

A. That's a really good question. There's too many variables and it's too far out for me to be able to explain it. Scott Koziar is next and could answer that as well.

MR. KAINS: Any other questions for Mr. Carlson from the Board? Yes, Mr. Lovin.

EXAMINATION BY

MR. LOVIN:

2.1

- Q. I might have missed this, but the preliminary
 ADLS tower, can you describe what that's all about? I
 know it's for the lights, but what size and all that
 kind of stuff?
- A. So, it's a one hundred foot tall lattice tower, and there's a radar that spins on the top. We have it -- the setback is two hundred feet from the road, I think it's 2400 N. There's a little pink diamond --

1 MR. CHAMBERS: On 2750 East -- Sorry, 27 E. 2750 N. Road. 2 3 That's where it's going, or do we know? Q. That's where it will be, yes. So there's fiber 4 5 that runs to the nearest turbine that connects to the 6 rest of the collection cable. 7 MR. KAINS: Mr. Harrington. 8 9 FURTHER EXAMINATION BY 10 MR. HARRINGTON: 11 12 In regards to the -- is it ADMS or ADLS? Q. ADLS. 13 Α. 14 We heard from other night from a neighboring 0. 15 county that their ADLS malfunctions or doesn't operate properly, for quite some time. What assures can you give 16 17 these folks that yours is gonna work, and also how many 18 lights are there on yours? Is it one or two? 19 That's a good question. So there's two lights Α. 20 per tower and -- or per turbine. Due to the height, FAA 2.1 requirements, one assurance I can give you, we have a 22 different manufacturer for this ADLS system. That's 23 something. That's the only assurance I can give you. 2.4 MR. HARRINGTON: All right. 25

FURTHER EXAMINATION BY 1 2 MR. LOVIN: 3 Q. Do they come on -- is there a different color 4 5 during the day than white, or is there no --It's the same color. 6 Α. 7 Q. Same color? Yeah. 8 Α. 9 Does weather factors, fog, anything like that, Q. determine if they should be on? Or is it just aircraft? 10 11 It's just aircraft. Just what the radar is 12 picking up. 13 MR. KAINS: Very good. Any other questions 14 for Mr. Carlson from the Board? Mr. Larson. 15 16 EXAMINATION BY 17 MR. LARSON: 18 19 Q. Are these just two lights right next to each other type thing, or why -- I don't get why there's two 20 2.1 instead of one bigger one, or is it one up here 22 (indicating) and one a little further down? 23 Α. It's two on the top of the turbine. 24 Q. Right next to each other? 25 Α. Yes.

What's the purpose? Just so it's more visible? 1 Q. 2 I don't know the exact purpose. I can look it up 3 after. I have an assumption, but I maybe don't want to 4 state that assumption. 5 MR. LARSON: Okay. Thanks. 6 7 FURTHER EXAMINATION BY MR. CHAMBERS: 8 9 Q. You may not know this either, but if there are 10 11 two lights, are those alternating flashes, or are they 12 on the same frequency, same strobe? It would usually be on the same strobe like you'd 13 Α. see on any other wind farm around central Illinois. It's 14 15 usually just one. 16 Q. So it's not more frequency, it flashes --17 Both of those lights connect to one lighting control module. They wouldn't connect to two separate 18 19 ones. 20 MR. CHAMBERS: Okay. 2.1 MR. KAINS: Anything else for Mr. Carlson 22 from the Board? Very good. Thank you, Mr. Carlson. You 23 are excused. 2.4 (WITNESS EXCUSED.)

MR. KAINS: Mr. Koziar. And again, Mr.

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Kozair testified under oath on December 8th of 2022. He
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    is a Senior Vice-president with Apex, and he was
    cross-examined by the Board and by a member of the
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    public, and he has been recalled by the Board to offer
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    additional testimony. Actually I believe, and
6
    Mr. Koziar can correct me if I am wrong, he is Mr. Alan
7
    Moore's boss, and Mr. Moore was not able to be here, so
    Mr. Koziar's here in his stead. Sir, can you please
8
9
    raise your right hand and be sworn.
10
                              (WITNESS SWORN.)
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12
                    SCOTT
                                 K O Z I A R
13
    recalled as a witness in the above-entitled cause,
14
    having been first duly sworn, was examined and testified
    as follows:
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16
                MR. KAINS: Sir, could you please state your
    name, spelling first and last names for record?
17
18
                MR. KOZIAR:
                             Scott Koziar, S-C-O-T-T,
19
    Koziar, K-O-Z-I-A-R.
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                MR. KAINS: And was I correct that you are a
2.1
    Senior Vice-president of Apex?
22
                MR. KOZIAR: You are correct, yes.
23
                MR. KAINS: And Mr. Moore's supervisor?
24
                MR. KOZIAR: Yes. And he's on a family
25
    vacation.
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MR. KAINS: Probably well deserved. All right. Mr. Koziar, questions from Chairman Wax.

EXAMINATION BY

MR. WAX:

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Q. Yes. Mr. Koziar, thank you for being here. We talked earlier about the sound situation in a certain receptor. There seemed to be a general agreement that the sound from this receptor 1104 was still -- is close to, but under the Illinois Pollution Control Board. Should you decide that it's closer than you'd like it to be and you want to play it safe, what kind of measures could you take to mitigate the sound?

A. Yeah. That's a good question. So I will start that I think there was, you know, either four or five receptors that were called out by either Patrick
Engineering or by previous testimony from some of the public or Mr. Luetkehans. So in those situations, I mean the first thing is, and I think every one has clarified, but to clarify, the study that they did was based on 71 turbines. So all 71 were running at the same time, you know, there was not any kind of environmental like trees or cover taken into consideration.

So first of all we believe it's an extremely

conservative view of the sound levels. Beyond that, our application, so when we first did the project, we looked at 71 sites. As we got through the process and we actually submitted our application, we said let's narrow that down to 60. So immediately right there you're going to lose 11 turbines from that study that's coming on, so there are going to be sound levels that are going to be reduced. There are specifically -- one of the receptors on that list of four or five, the sound that was being caused that was close to that property, three of those turbines were ten of -- of one of the ten that we are removing. So that was receptor 120. So if you look at receptor 120, there was three turbine sites, a part of the 71 that were in the study, that we didn't even apply for in our application that couldn't even be built because we didn't apply for those locations. Getting further into your question, take receptor 1104 that you talked about that was closer to the substation and had some other turbines around it. So as we get to the final 50 that will actually be built, we will re-run, and this is something that we have volunteered to do, we will re-run the final analysis at 50 and present that. We expect that some of those levels will drop. If that specific receptor is still at a certain level, there are things that we can do. One of those was, you know, we

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would be willing to do basically a post-construction survey for that site. So basically after the project is built, we put a receptor out there for a certain period of time, and we can tell, you know, are we meeting the standard or are we not meeting that standard. If it gets to that point where we say hey this receptor is somehow in violation, then that's a discussion that we would most likely to somehow curtail that turbine, you know, during that time, it it's a two-week or a three-week receptor study, they can tell us, you know, what's the wind direction, what's the wind speed that's causing the violation, and you can curtail a turbine during that time to reduce that noise.

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Further things were talked about specifically about that receptor, but on the substation, you know, we talked about is there things like tree cover or a fence, you know, an earthen berm or things like that, that can actually reduce the potential of that, and I think that those would be all mitigation options that we would have, if it got to the point that, you know, we did that post-construction monitoring and it was showing violation. I will say that we expect that it won't. It will be dropping even further below what our model is saying once we get to the 50 versus the 71, but that's the process we would go through.

MR. WAX: Okay. Thank you. I had another question. I looked at the web site of the company that makes your turbines, and I see there are several options listed. I'm curious if you would explain the Vestas shadow flicker control system. What's that consist of?

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Yeah, that's a question -- so the turbine -turbine manufacturer has several different options that they provide to, you know, potential owners. One of them is like a cold weather package, so anything that's north of a certain latitude/longitude line, you're going to have a cold weather package. There are things that you can do with the blades, you know, for speed and for -- I don't want to say alerts, but for sensors that can tell you what's going on. One of the things that Vestas has been looking at is basically kind of like a third -- I don't want to say a third party, but an off-site, which means it's not on a turbine sensor, that you can try and actually measure real time, what shadow flicker may be, you know, they have produced these, you know, in the U.S. I don't think any have been installed, to my knowledge. Typically, they will put them on the turbine them self. They may put one or two on either side of like the entire wind farm, and that will give you like a model that you can predict and say, you know, what's the shadow flicker occurring, you know, then you can

interpret that across the entire wind farm.

- Q. Okay. I notice one other thing on this thing that's kind of interesting. They claim to have a Vestas bat protection system. How did that work?
- A. That's a good question. They -- there is, again, I would assume one of these more earlier stages, I think when we talked last, and there are some new technologies that are coming out, I would put this at an earlier -- earlier version of that, but there are certain like sounds and things that can be emitted from the turbine itself to try and, you know, detract a bat from being, you know, in the area, or getting into the wind swept area.

MR. WAX: Okay. Thank you.

MR. KAINS: Very good. Thank you, Chairman Wax. Additional questions? Yes, Mr. Larson.

EXAMINATION BY

MR. LARSON:

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Q. Say post-construction and post-operation or whatever, during operation, say someone close has a problem, say they're getting sick or what not, and you put a receptor out there. And it still came in less than the allowed, you know, the maximum, do you guys have any

plans to try to appease these people? Or is it just tough luck, we're still within limits, or...

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- A. Yeah, so I'll answer that, that we want to do what is right by the community. Um, if we go out and we build it, and there is an issue that someone is complaining about it or has, we will go out and investigate that. If it's specifically to a sound issue, typically the Illinois Board of Control will get involved as well. So if there's a claim that hey this is not meeting the sound limits, typically those reports are going to be involved with them. Um, if it's found that those noise limits are still within the acceptable limit, yes, I mean I would say we will still work with that person, that family to try and figure something out that would work.
- Q. Like before, there's a way to kind of manipulate the turbine that would maybe --
- A. There is, yeah. If someone's saying hey it's occurring at seven o'clock in the morning, you know, I'm having this issue with the sound or something, you know, there's ways that maybe we try for a week and say, hey look we're going to shut that turbine down for an hour at seven a.m. for that week, and you know let's see if that resolves the issue.
 - Q. So there is plans in place that kind of help

that?

A. Yeah, and it would be, you know, Adam spoke a little bit about it. If we do set up, there's going to be basically an eight hundred number. It's probably a local number, you know. If people don't want to come necessarily into the operation and maintenance building, they can certainly call and then, you know, that gets logged into our system of here's what's going on, you know, someone on site will come out, talk to that landowner, and we will try and resolve that issue.

MR. LARSON: Okay, thanks.

MR. KAINS: Thank you, Mr. Harrington. I don't think you were in the sound engineers' union out of Decatur like Kenny and Sara over there (laughter in the room). All right. Are there additional questions for Mr. Koziar? Yes, Mr. Harrington.

EXAMINATION BY

MR. HARRINGTON:

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- Q. One quick reference, Mr. Luetkehans, did you tell me earlier that 1104 is Mr. and Mrs. Gantz?
- MR. LUETKEHANS: Yes, sir.
- Q. So a little bit playing off of Dan's question

 because the playing off of Dan's question

have substation and proposed high line coming out of there that will be relatively close to their property.

A. Uh-huh.

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- Q. I don't know how far to take this, but would you be willing to communicate with them directly and to figure out a different route in regards to that since this is their primary residence?
- Um, so to answer your question, yes, we would be Α. more than happy to sit down with them and talk about it. As far as like any visual effects dealing with that line, right? So I think it measured like point 27 or point 28 miles from their house to the corner of where that line takes us to the corner. Yeah, I mean we would be happy to sit down, look at options. Is it as simple as, you know, a planting of a tree buffer that would work. If it's not, is it sitting down and trying to re-route the line? We could certainly do that. There's quite a bit more involvement in that. I think the Board knows that this project is a 100% volunteer. We don't have eminent domain rights, so we can only go on property that is participating, you know, and so looking at how we come out and come down, yes, we are willing to look at all those options.
- Q. That's good to hear. I guess the reason I ask is when I look at your map I'm sure there's multiple

dynamics to this layout, but I would question for no more information that I have, maybe you can just go a different direction and not go in front of their home.

Yeah, I mean so we do look at that, and one of the considerations is AIMA. And so AIMA specifically asks us to be on property lines, you know, to not impact farming, you know, to use models. So when we design it and we look at it, it's basically running down the middle of a quarter section instead of going against a road or what you would typically see out there. The other consideration is Ameren itself, like where we can cross their line. Obviously their line being there probably since the 70's, you know, whenever it was built, you know, we have to work with them to cross at a certain location. So there's a lot of complexities, but yes we are willing to sit down and look at it. Going to the west, you know, it's the same consideration, are there homes there, are there other environmental issues that we want to avoid. But yes, I would certainly like to sit down with them and see if we can come up with a solution.

 $$\operatorname{MR.}$$ HARRINGTON: Very good. That's all I've got for now.

MR. KAINS: Mr. Chambers.

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EXAMINATION BY

MR. CHAMBERS:

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- Q. A question I have for you in relation to sound levels and final siting, which I know you can't tell us where you're at with final siting, but my question is, is that what factors you're using in determining that final siting, and are sound levels part of that, say the receptors that are on the higher end of the spectrum in the report?
- A. Sure.
- Q. Would you be looking at final siting and maybe eliminating some of those problem areas?
- A. Sure. That's a good question. So final siting, you know, like I say, you can see when we originally we started this, this was like 71. We went through whether it's land, when I say land issues I mean like leases and things like that, like with the private landowners there are certain requirements we have that we can meter or can't meter, we can put facilities on or can't put facilities on. So that knocks out, you know ten. We get down to like 60 locations that we actually applied for. The final 50, yes, I mean, I would say that it does, you know, sound, shadow, a big one is, you know, final geotech. So we can go out and we do geotech on all

of our sites, but anyone in construction knows that until you actually go out there and dig the entire area that you're removing, you don't know necessarily what you're going to get, right? You may dig down and it may fill in with water and you can't use it. So that's why we apply for 60 even though we're only going to build 50. So in that case, yes, there would be some consideration of, you know, we look at it and say these are the 50 best sites, you know, for wind production, for, you know, cost of everything, and then we'll look at it and say hey, this is one receptor, can we drop that one and, you know, if that's one of the ones that's, you know, causing an issue. So yes, it is a part that of that process.

- Q. So is the primary consideration more of a cost analysis, or is it -- (multiple people speaking at the same time.)
- A. No. The --

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- Q. -- leaning more that way than it is the other factors?
- A. The largest factor is geotech just because it has to be constructible. But beyond that I would say it's all the same.
- 24 MR. CHAMBERS: Okay. That's all I've got.
- MR. KAINS: Very good. Thank you,

Mr. Chambers. Questions from the Zoning Board?
Mr. Foran.

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EXAMINATION BY

MR. FORAN:

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Q. Could you speak to re-power?

Α. Yes. So re-powering, I guess how it would work is typically at the end of a life of the project, and that is typically around 30 years. So I would say probably in year 25, 26, 27, we would start working with landowners, one because our leases may need to be amended or changed. We would then work with our engineering company to say here is our, you know, 50 turbines that we have, here's the foundations, design. Can we re-power this, and they may say you can re-power with these two or three models because when you put that new nacelle on top with new blades obviously there is a certain weight, there are certain things they have to take into consideration for the foundation. So they will go through a full engineering review and plan certification. And when we would do that, we would then have to come back to the Board, obviously that is a new permit that is a new, you know, I guess project, and typically when that happens, you know, if we have 50

turbines today at six megawatts, you know, more than likely down the road maybe it's eight megawatts or ten megawatts say, so you're going to drop from 50 turbines maybe down to 40 or 35, and so a certain segment of those would then be fully decommissioned, and then the remaining ones typically, you know, you're taking down the nacelle, you're taking down the blades, and that's what's being replaced. In some of the older wind farms where maybe the turbines are, you know, five hundred feet or around five hundred feet, they can actually add a new section and then put the new nacelle and blades on. So there's a couple different options. The driving force though is the engineering on the foundation to make sure, you know, engineering-wise that it actually can be built for the new re-power.

Q. And that is a good point just for clarification too. Our permit would be for 50 turbines up to three hundred megawatts. We also have an injection limit on the inner connection system, so if it was re-powered so would you have to be -- you would have to come back anyway to the Board to get a new approval for that re-power.

MR. KAINS: Any other questions from the Board? Yes, Mr. Larson.

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FURTHER EXAMINATION BY

MR. LARSON:

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- Q. So if you did come to another thing, I mean you would probably just apply for a bigger megawatts system and put the best you could, right?
- A. Yeah, I would -- I mean there's obviously going to be a limit at some point --
 - Q. Right.
- A. -- but I mean common sense tells you that the industry has been going larger.
 - Q. Okay.
- A. There obviously will be a certain height limitation at some point. Honestly, you know, the things that are now, which are slowing down the growth of turbines is the blade size and being able to get that blade, you know, through roads and turning radiuses, you know, you get to a certain limit and you just can't make the radius itself. Industry is looking at, do we do like two-part turbine blades so that you can bring them in this two sections and then put them together, but yeah, in theory you're going to have a larger turbine and fewer of them.

MR. LARSON: Okay.

EXAMINATION BY 1 2 MR. LOVIN: 3 Q. So are you going to have to run more transmission 4 lines under ground --5 Α. Yeah, in that case, no. 6 7 MR. LOVIN: -- push to higher megawatts? So each circuit, it's kind of like, you know 8 Α. No. your house, or a string of Christmas lights, you can -typically you're allowed thirty megawatts per circuit. 10 11 So in that case if we re-power -- so today if we have 12 five turbines of six megawatts, then that's thirty megawatts on that circuit. If we come back with say a 13 ten-megawatt turbine, you're gonna have three turbines 14 on that circuit, so two of them, in that case, are 15 16 decommissioned off that circuit. 17 MR. KAINS: Anything else for this witness 18 from the Board? Very good. Thank you, Mr. Koziar, 19 you're excused. 20

(WITNESS EXCUSED.)

MR. KAINS: And that concludes the recalled witnesses, witnesses recalled by the Zoning Board of Appeals.

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Now on to our next witnesses. Witnesses in opposition to the Application for Special Use Permit.

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Miss Lori Stalter. Miss Stalter, are you going to want
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    to testify, or just a three-minute public comment?
       Α.
           It's more than three minutes.
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                COURT REPORTER: How are you spelling Lori?
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                MS. STALTER: L-O-R-I.
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                MR. KAINS: Yes, ma'am. Then could you
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    please raise your right hand and be sworn.
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9
                                   (WITNESS SWORN.)
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                    LORI
                               STALTER
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    called as a witness in the above-entitled cause, having
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    been first duly sworn, was examined and testified as
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    follows:
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                MR. KAINS: Ms. Stalter, you already spelled
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    Lori. How do you spell Stalter?
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                MR. STALTER: S-T-A-L-T-E-R.
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                MR. KAINS: Very good. Ms. Stalter, what is
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    your address?
2.1
                MS. STALTER: Mansfield, Illinois. 30
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    Shoreline in Mansfield, Illinois, Piatt County.
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                MR. KAINS: That lies in Piatt County,
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    that's the question, and you gave the answer. You have
25
    45 minutes. Go ahead, please.
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MS. STALTER: I would like to preface that I am not an expert. This is my personal testimony. Before I begin, I would like to dedicate my testimony to Dave Oliger. Dave has been a champion in the midst of a battle against Goose Creek Wind Farms. He has been diligent, and I for one am grateful for all that he has invested in Piatt County.

2.1

I would also like to show my appreciation for Mr. Kains and Mr. Keyt, for their oversight of these many meetings. I have been impressed with there decorum and concern for all parties involved.

And I would be remiss if I did not thank Chairman Wax and all the Members of the Zoning Board. It has been obvious to me that you have done your due diligence in reading the reports and charts and asking pertinent questions. And thank you to our court reporters. You have been troopers. And speaking of troopers, thank you to the members of our law enforcement. I can't help but be grateful that we live in a safe place, safe enough that you could be here and not out patrolling the streets and roads. Thank you all very much.

How did I get involved with this issue? Last
April my friend and neighbor Sandy Coil attended the
monthly Village Board meeting in Mansfield. At that
meeting, she first heard of Apex and the Goose Creek

Wind Farm, and learned that Apex requested a variance that would allow them to place wind turbines within the one and a half mile restriction. We live in a neighborhood that is surrounded by farm land, and she realized that this could mean wind turbines in our back yard. Sandy and I talked, and expressed our concern to each other, and then realized that our neighbors probably were not aware of the situation as we were not. We acquired petitions that we could present to our neighbors for their signatures. As we had thought, they were unaware of the variance Apex had filed and were more than willing to sign the petition and even appear at the next Village Board meeting to express their concerns. We are fortunate in that Apex withdrew their request indicating they had enough sites without having to invade Mansfield.

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What about the rest of northern Piatt County? We were unaware of the location of the proposed wind turbines. Were other residents also unaware? Sandy and I made fliers and petitions and went to the neighborhood of Sand Lake. We went door-to-door asking if the residents there would be interested in signing a petition against the wind farm. At least ten to one signed our petition. It was at that time I first heard about the corn mill and that Piatt County was willing to

extend a variance for. The residents of Sand Lake fought it diligently because it would have been impacted the quality of life in their neighborhood. The noise, the truck traffic, the noise, the smell. Fortunately for them, the company withdrew the request when they realized their prospective neighbors were so strongly opposed to it. We could only hope for that in this case.

2.1

A few weeks after visiting Sand Lake, Sandy and I took petitions to the Mansfield Homecoming celebration. We were impressed with the response there. Again, the vast majority of the people we asked to sign our petition were more than happy to sign it. In September we attended the White Heath celebration, and again, most of the people we approached signed our petition. I have brought copies of these petitions tonight along with signatures on petitions others have collected. I will submit them, the originals, to the County Board when they meet to vote on whether or not Apex will be allowed to construct the wind farm.

With my interest in the wind turbine issue, I began to attend not only my Village Board meetings, but also the County Board meetings. I must say I have been impressed with our County Board. At the August meeting the Zoning Board brought several variance requests for

properties in the County. One of those requests was regarding an apple orchard. I appreciated the denial of the apple orchard variance due to an ordinance passed several years ago protecting the farm land of Piatt County, as we've heard, some of the most productive farm land in the State, if not the nation. The twenty-acre restriction keeps that farm land in production. Their decision to deny a subdivision of less than twenty acres demonstrates their integrity in upholding current ordinances.

2.1

Another issue that was brought up before the Zoning Board and the County Board was the proposed solar farm near Cerro Gordo, which was brought up again last night. I was impressed by the attention to detail both the Zoning Board and the County Board considered in making their decision.

Piatt County has rich soil. It has a beautiful, peaceful landscape. Even Laura Bragg said as much at the December 7th Zoning Board meeting. Her husband Braxton stated that she doesn't want to live in Champaign or Urbana. She loves living in the country. I do too. But what happens to our beautiful peaceful countryside when it's impacted wind turbines? I appreciated Sarah Livesay's testimony also on the 7th. Sarah stated that she represents Grand Prairie Friends,

an organization that received Apex grants and works to restore the prairie lands of Illinois back to their original beauty. That's commendable. Her example was a prairie in an old cemetery. An old cemetery in an obscure corner of Ford County.

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Others gave testimony regarding their family history. My family has a farming history, as well. My great great grandparents came across the prairie lands of Illinois and settled in Ford County north of Gibson City. I have the actual ox yoke they used when they came across. The stories I have heard of their journey includes how marshy the ground was, how tall the grasses were, and I could take you to the barn they built using the boulders from the fields for the foundation. Boulders. They dug drainage ditches, they tiled the land, they cut the grasses, they planted crops that had never before grown there. They changed the land. Was this a good thing or a bad thing? I'm sure all the farmers here would say it was good. My ancestors farmed that land for over a hundred years. If we still owned it, it would be a hundred and fifty years. Now that there is a wind farm up there close to that farm, it will never look the same to me. It has been changed in my opinion, and not for the good.

Sandy Coil brought up the topic of phone lines

that are buried under ground today, as is fiberoptic cable. When I drive in the country and scan the landscape, I see grain elevators and water towers, I see power lines and cell towers and other towers used for radio transmission and such. Speaking for myself, I consider these things essential for our daily lives. Farmers have to have a place to store their crops, after all the soil is very productive. I really want to be able to use my phone and my radio, and I cannot live without power and water, but I'm pretty sure that if Piatt County says no to an industrial wind company, I will still be able to turn on my lights and heat my home.

2.1

My point, thirty, forty, fifty years from now I don't want someone like Sarah Livesay to be trying to recreate the prairie, the fertile fields and rolling hills of Piatt County back to how it was before wind turbines invaded us. Please let us keep the beauty of our County for the generations to come.

Another concern I have is regarding the wildlife of northern Piatt County. I live on a lake and have enjoyed the birds that are attracted to the lake. We have geese, of course, but ducks, blue herons, kingfishers, seagulls and hawks, swallows, hummingbirds, and gold finches an all of the other common variety of

birds in this area. We even get migrating fowl every year. Loons, snow geese, even swans occasionally. Will they come if the turbines are there? We have also been visited by eagles. I understand that they would probably avoid flying into a turbine blade, but what if one was killed? What a tremendous loss that would be to this area. They mate for life, so there would be no eaglets in the nest, and would another pair set up nest near the turbines? I doubt it.

2.1

I drive north of Mansfield toward Bellflower once a week, headed to Gibson City, and twice a week I drive west to Bloomington. I'm appalled at the number of turbines erected in McLean County. They are as far as the eye can see and too numerous to count. McLean County has the most wind turbines of any county in Illinois.

John Jordan made that point on the 15th. At this point, let them have them all.

Mr. Jordan commented about McLean County and all the money that has gone to the schools in Bloomington Normal because of the wind turbines. I have a family members whose children attend Normal schools and she works in the school district. I asked her if she has seen improvements in her schools, new resources, more supplies, additional staff, an increase in her salary. Her answer was no. In fact, she recently visited another

school building in the Bloomington district and the administrator she spoke with showed her a new technology program they had just received. Of course she asked how they got it. He told her it was with a ten thousand-dollar grant he had written and filed with the State. A State grant, not wind farm money. Also the Normal School District put a twelve million-dollar referendum on the ballot last month. It failed. Maybe that's because property taxes in Bloomington and Normal went up this year, and that might be attributed to a thirteen point four million-dollar tax levy in Bloomington to fund the pensions of emergency personnel. Where has all the wind farm money gone?

2.1

I also have concerns about the -- Oh, I wanted to make one point as the expert regarding economics. I asked him about the tiers, the one, two, three, four tiers, and Blue Ridge, Deland-Weldon, and Monticello Schools are in Tier 1, which would also include schools such as Buffalo Grove, Lake Forest, and Highland Park. We are in the same tier as those school districts. I was appalled, but that was me.

I also have concerns about the decommissioning of these turbines. It has been brought up tonight. When I drive through the country I'm always seeing old silos and corn cribs and barns and out buildings that look a

bit scary, leaning a bit. Why are they still standing? Could it be the costs of tearing them down? When I'm told that these turbines will work for twenty to thirty years I ask myself, who's going to take them down. We know how expensive they are to put them up. I doubt taking them down would be less expensive than taking down an old silo. We are told there will be money in a trust to pay for the decommissioning. Apex has already sold the Ford County Wind Farm that they started up just this past spring. How long will that company hold title to the turbines? How many times could Goose Creek Wind Farm be sold in twenty to thirty years? Who will be overseeing the trust for the decommissioning, and will that money actually cover the costs of today's prices compared to prices in thirty years? Will there be a place where these old turbines can go? Another question I have, will they have to use big cranes to take them down? I think we've heard that tonight. Will the cranes break the field tiles again? Will the roads, the great roads Apex has fixed have to be fixed again? Will the cranes compact the soil? Will they remove the top soil before the cranes come in? Will the soil ever be the same? The amazing fertile soil of Piatt County. At the County Board meeting in June, Eric Sebring, our Road Commissioner was questioned regarding

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the engineering of the County and Township roads for this project. I love the phrase that he used. He said, and I quote, "a project of this magnitude". Yes, this is huge, and it will impact us for the rest of our lives. And for what? A small percentage of energy we use each day? What is the point of putting these monstrosities up? Several years ago the University of Illinois decided to go green. They put in a solar field. They contracted to buy wind energy from Tazewell and Logan Counties, but they still have their coal fired plant. I read just recently that they have fired up the coal plant because of the financial benefit of selling energy. Wow.

2.1

You know, if we need more clean energy, this is my opinion, let's build another nuclear power plant. At least they would be able to generate enough electricity to actually pay for the costs of building one. The energy.gov website states that nuclear energy is the workhorse of our power grid providing one half of clean energy produced in the United States, and it works all the time, not just on windy and sunny days. And the amount of nuclear waste is miniscule in comparison to the amount of waste when one, just one of these turbines is decommissioned. And there is a disposal site for nuclear waste.

And let's look at the jobs. When Clinton Nuclear Plant was built, it took over ten years. Good paying union jobs for ten years, not eight months, and I'm not sure but I would say that there are a lot more permanent jobs at Clinton than the eight jobs Goose Creek will provide.

2.1

And let's consider the conservation issue. Is there a better conservation area in this part of Illinois than Clinton Lake? It provides boating, fishing, swimming, hunting, camping, hiking, wildlife and a beautiful natural landscape. And it's in our back yard. To me, that is much more preferable than a wind turbine in my back yard. But, we're not here to talk about nuclear energy.

Most of the people who have spoken in favor of the wind farm were landowners and union workers. Most of the arguments for Goose Creek involve money. Look at the money it will bring to Piatt County, to our schools, to our economy, the nursing home, the fire and police departments. Look at all the money that has already gone to the non-profits. Why? Apex has been here in Piatt County for four years sharing the wealth they've already acquired from other projects completed and sold and let's not forget, the government subsidies. It appears to me that they have been trying to buy votes. There

are ways to support our non-profits in our County. Tom

Scott shared his testimony on December 7th, and referred

to his involvement with the Railroad Museum. My good

friend Tim Crouch was a volunteer with the museum also.

Tim spearheaded a project that has provided a

considerable amount of money to support the museum. He

and other members laid several miles of railroad track

that has been used to store rail cars that are not in

use. Companies like ADM rent that space for a fee. It's

been a great money maker for the museum, and there are

other creative ways for organizations to raise money.

2.1

December 7th. He is the land agent for Apex, and probably met with a lot of the landowners here in Piatt County. I have known Denny Jordan for many years. He's a good man. Our mothers were cousins. He rented the farm land my family owned north of Gibson City. I was surprised to see him at our Zoning Board meeting. It had been a lot of years since I saw him last, but I enjoyed talking with him and hearing about his experience with Apex. Denny mentioned the conversation he had with Apex when they offered him the job. He indicated he wasn't interested in working for a company, he had a farm to run. But when they mentioned the money he would make, how could I turn that down, he said.

I wish I had the money that Apex has. The last time the lottery went over a billion dollars I made my husband promise that if we won we would give Piatt County five million dollars with no strings attached to counter Apex's offer. No, we did not win, and no we do not have money to give like Apex, but all I could give you would be a bag of homemade caramels. But I can give my time. I can attend board meetings and take petitions throughout the county and express my humble opinion on matters such as this, and I can hope and pray that my message is heard and measured with the same consideration as Apex and their deep pockets.

2.1

I believe I have expressed my concerns about

Goose Creek Wind Farm, the lasting change it will make
to the landscape of Piatt County, the potential impact
on our fertile soil, potential impact on birds,
waterfowl and bats, the inefficiency of wind power,
possible health effects. I know there are those who
already have health issues just from living in dread of
the turbines coming; also, the lack of oversight by
Apex. They are going to sell these turbines. But I am
also concerned about the impact the wind farms could
have on the value of our home. We are retired, living
on a fixed income, watching retirement investments go
south because of our economy and the markets. Our home

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is a huge part of our investment. Losing twenty to
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    thirty percent of its value would be very hard to
    swallow. Perception does equal value as we learned from
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    Mr. Morose. I do not want to live across the street from
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    a blue house or a purple house or a wind turbine.
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    suspect a future buyer of our home would feel the same
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    way.
           Please help us keep the beauty of our county for
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    the generations yet to come. Thank you forgiving me this
    opportunity to speak, and I would like to give the Board
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    copies of the signed petitions I have in my possession.
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                MR. KAINS: Mr. Keyt, what we going to mark
    this?
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                           These are all one copy of all of
                MR. KEYT:
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    the signatures you've gathered?
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                MS. STALTER: Yes.
                MR. KEYT: So I don't have any repeats in
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18
    here?
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                             No. And we're going to give
                MS. STALTER:
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    the originals to the County, to Jennifer Harper.
2.1
                MR. KEYT: Okay. Fair enough. Why don't we
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    label them Stalter Group Exhibit Number 1.
23
                MR. KAINS: Very good. Stalter Group
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    Exhibit 1 has been received. We'll take up the
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    admissibility of it tomorrow night. Questions for Miss
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Stalter from Members the Piatt County Zoning Board of
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    Appeals? Very good. Questions for Miss Stalter from
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    members of units of local government including school
    districts? Questions from licensed attorneys?
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    Mr. Jacobi?
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 6
                MR. JACOBI: Thank you, Miss Stalter. No.
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                MR. KAINS: Very good. Thank you. Questions
    from other interested parties, members of the public in
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    support of or neutral on the Application for Special Use
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    Permit? Questions from Piatt County staff and
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    consultants? Very good, Miss Stalter. Thank you.
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                              (WITNESS EXCUSED.)
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14
                MR. KAINS: The next witness is Colleen
    Kidd.
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                    (No swearing requesting by Mr. Kains.)
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                    COLLEEN
                                      KIDD
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    presented public comment in the above-entitled matter
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    as follows:
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2.1
                MR. KAINS: Good evening, Miss Kidd. Are you
22
    planning on giving a three-minute public comment?
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                MS. KIDD: Yes.
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                MR. KAINS: Three-minute public comment. Very
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    good. Could you please state your name spelling your
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first and last names for the court reporter?
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                MS. KIDD:
                           Sure. My name is Colleen Kidd.
    C-O-L-L-E-E-N, last name Kidd, K-I-D-D.
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                MR. KAINS: All right. Very good, ma'am.
                MS. KIDD:
                           My address is 925 N.E. 3rd Street
5
    in Deland, Illinois, Piatt County.
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                MR. KAINS: Yes, ma'am. And would you like
    three minutes?
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                MS. KIDD:
                           Yes.
                MR. KAINS: Go right ahead.
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                MS. KIDD:
                           Thank you. I first want to
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    address the Zoning Board as the Administrator of the
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    Piatt -- Mahomet Valley Water Authority. Sorry, I'm
    nervous. I'm not used to getting up in front of people.
14
15
    Mr. Carlson was being questioned by Amy Rupiper, the
    attorney for the Mahomet Valley Water Authority, and she
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17
    had asked him if they had contacted me personally about
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    the wells that needed to be drilled, and he said he had
    not contacted me, but that someone from his team had.
19
20
    And I just want you to know that I have not talked to
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    anybody from Apex or from the wind farm people.
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           So my second thing that I would like to address
23
    is, as a resident of Goose Creek Township, and the
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    Village of Deland, unlike Mansfield, the Deland Board
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    voted to let Apex within three quarters of a mile of the
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Village. That's better than the quarter of a mile that
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    they had originally asked for, but it's not the mile and
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    a half that was recommended. This was done with the
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    promises to the Board that there would be money there to
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    fix the water plant and there would be money in their
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    pockets when the wind farm wind on line. From the maps
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    that I have seen, the wind turbines, if they're
    approved, I will have them on the north, east and south
8
    sides of my home, and the view out my picture window
10
    will be a wind turbine. I will probably hear the noise
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    from the patio on the back side of my house. I also own
12
    a home at 2620 N. 1200 E. Road in Mansfield, and my son
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    lives there, and I believe from the maps that I've seen
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    that he will have wind turbines on all four sides of
    him. Some of them -- a couple of them look like they're
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    going to be pretty close. So I just would ask the Board
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    to respectfully consider rejecting the Special Use
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    Permit. Thank you.
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                MR. KAINS: Thank you, Miss Kidd.
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    appreciate your comments. Mr. Calvin Teubel.
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    Mr. Teubel, are you wishing to speak to testify or a
22
    three-minute public comment?
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                MR. TEUBEL:
                             Testify.
24
                MR. KAINS: All right. Very good.
                                                     If you
    could please raise your right hand and be sworn.
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(WITNESS SWORN.)

2.1

C A L V I N T E U B E L

called as a witness in the above-entitled cause, having been first duly sworn, was examined and testified as follows:

MR. KAINS: Would you state your name, spelling your first and last names for the record.

MR. TEUBEL: C-A-L-V-I-N, T-E-U-B-E-L.

MR. KAINS: Where do you reside?

MR. TEUBEL: 3234 N. 1300 E. Road,

Mansfield, Piatt County.

MR. KAINS: Piatt County. Very good. If you'd like, you my have 45 minutes under the Board rules. Go right ahead.

MR. TEUBEL: To start off, I want to echo what so many have said, the appreciation for the Board and the way that this has been conducted. I think the humility and the resources that you've gathered around you for this process is exceptional. It takes some reflection and planning for that. So I really want to say thanks. For the questions you've asked, the objectivity that you're going about this with to consider all of your constituents and their input. The public comment opportunity time period is very generous.

In your shoes I'm not sure if I would go the 45 minutes, but I want to say thank you. I think that really goes a long way that you're no wanting to ramrod it through, and I think that goes a long way for everybody.

We live a quarter of a mile from T 7, just to the southwest. I know Mr. Harrington has asked that on several folks, so I figure I would say that.

MR. HARRINGTON: Good job.

MR. TEUBEL: I've been neutral throughout
the evenings. I've really enjoyed it, I've gone home
energized and had a lot of discussions with my wife.

I've learned a lot. There are many perceptions,
assumptions and conflictions that have been dispelled
for me through the process from Apex, from the
opposition, and it's been very informative, and am very
thankful for how those things have been brought out.

The EBF system, the changing in education funding, I did not know that. We have six young kids so that's very impactful, and had I not attended and taken the investment for the many nights of being away from my family to learn that. So, I'm thankful.

The ADLS option. The lessons learned from the S. Dakota farm and the impact of an organized local constituency and involved Board. Very helpful.

Learning that Illinois has a very robust

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forum for wind development with the set appraisal and depreciation scheduled and noise pollution rating system. Very helpful. Tip the hat to Illinois for those pieces that have reduced some of the concerns and conflictions that I had heard and been informed of.

2.1

While there's no documented local macro negative impact, and I would say reasonable demonstration of at least some increased contribution to the local economy outside of taxes.

That local value of Piatt County jobs does seem to be overstated and perhaps should be called revenue versus value.

With the requirement of using unions, and no qualifying unions being in Piatt County for any of the work, it would seem that there would be truncated local value.

It was stated that there were no plans to sell the project once completed, and I believe Apex.

Even though the web page of Apex says that six thousand megawatts of production is in the current management, it says it's also financed eight thousand megawatts. We heard about the sale from Ford County. No company plans to sell, shut down, go bankrupt, merge, et cetera until they do. When that happens, going from eight folks managing the towers, that seems like a lot. I sure hope

they don't need that much management, but maybe the new company would say we need one person. Maybe the new company will be stationed out of Ohio and will send somebody when there's a need. There's opportunity for that value that's even intended to be removed pretty quickly, especially if a sale happens in less than a year. Then if that happens, those shadow jobs may also disappear to reduce that local value that would be presented, all say in good faith, from the outset.

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The best legal language can't foresee the future, and maybe while well intentioned changes occur, such as the LyondellBasell Equistar Chemical plant in Douglas County, Illinois, had similar (inaudible) that work there say they've been shutting that plant down. They had similar deconstruction requirements that they signed with Douglas County, fifty, sixty years ago. That was before many of the FDA regulation changes, the strong inflation, and the numerous changing of ownership hands that made the decommissioning really untenable.

The surest economic piece is the temporary tax revenue generation, but all that glitters is not gold. I think that's where I transitioned in the recent past in my position. With the position that the County is in, in the median income, the number of factors that we have locally, I don't think we need the tax revenue. It's

tempting to see this as an opportunity to fund items that we can't or don't currently prioritize to offer in our local schools or local communities. With EDF changes it further reduces the concerns of needing additional reliable funding sources if the State is going to abide by the laws that they currently have in The road specs that we have today. Can we have better roads? We have roads that meet our needs for today. If we build better roads for the turbines, that exceeds the needs of what we have today, so we wouldn't necessarily need the improved roads. Funds don't hurt, but when it isn't needed it puts the County in a stronger position to clearly evaluate the local impact and real value versus revenue. It took me a while to parse out the presentation from Apex's pitch to the Board from the full county impact maybe I'll say, including those, you know, in town with much larger setbacks than those in the country, but the opposition really presented a case from those most impacted and who will see the least or no value. With the town setbacks, if I lived in town I probably wouldn't really see the turbines and definitely wouldn't hear them. It would be mostly outside. For those living in the middle of the turbines, they would not see real significant positive impact. They would experience all the outlier impact -

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more noise, nuisance and flicker than they experience today. This minority impact isn't denied by Apex or their experts, but it's stated as statistically insignificant.

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Those living in the country have chosen to do so intentionally and specifically: as it is. As my wife and I know with our now six children and our zoo of animals. I thought it interesting that the average home ownership in the US is about eight years, but rural communities see much higher ownership over renting and outright ownership without mortgages and a longer tenure of living in those locations. We heard about a lot of generational folks. How will this rootedness we've heard from several generational folks here with a local community and county culture of rural folks, farmers and non farmers be weighted juxtaposed to the constituents the higher urban transience? To be clear, those most disparately impacted are those who have been here and will be here for a long time. The increased land value for the ground with a turbine reduces the capability for local land ownership if that is of value to our community.

Initially I had thoughts of sharing how our local resource of wind could be better exploited to be better negotiated. If possible, in the recommendation from the

ZBA to the County Board, leveraging our position to negotiate the terms for better local value to all constituents, participating and non-participating alike. Potentially soliciting other companies such as a bladeless turbine company like Vortex, or perhaps discussions with applicable power suppliers to broker a measure of power to stay local --

(Court Reporter verbally requests speaker to slow down.)

2.1

MR. TEUBEL: Potentially soliciting other companies, such as a bladeless turbine company like

Vortex, or perhaps discussions with the applicable power suppliers to broker a measure of power to stay local in order to reduce power costs for all those in the local area with a term rate lock, maybe explore negotiating which of the sites would be the primary ones of avoidance, partnering with a local internet carrier to place better service receptors on a turbine in northern Piatt County since there is a strong direct correlation with population health and employment with internet and cell coverage. But instead, I've landed on the following: If increased local funding is desired, we could choose other methods as a county for doing those things with some of the items mentioned from others that

have come up (inaudible due to coughing in room) consideration and approval.

2.1

While Apex joined the local Rotary Club and put forward an appearance of interest in local community, I largely took them in good faith at face value.

I read about Apex on the web site that Apex is focused about utility priorities -- start that over. Apex focuses on what utilities prioritize most including access to transmission, exceptional wind resources, and strong relationships with landowners and surrounding communities. Under our core values, Apex lists professionalism, no matter what we are doing, we need to do it right. Integrity. Apex is always up front with its partners and investors, even if the news isn't the most positive. This transparency and trust ensures that our business becomes a repeat business.

I would say I lost that good faith in learning about the communications and grant practices that Apex has engaged in, which would seem to be utilitarian ethics versus deontological ethics which I think is more appreciated from the local constituents, which would seem to directly belie the above values.

Rural folks who like peace and quiet may not have a town name like Mansfield, but we are a community. We

may not meet when parking our car in the front of our apartment or grilling on our back patio, but we meet when buying hay from each other, or talking over taking our wandering animals back to their rightful owner.

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While not all here are farmers, I think the unadulterated rural life desired and enjoyed by the opposition is echoed in a quote that I'll read from Leo Tolstoy: "All the sages and the poets of the world have always placed the ideal of human happiness amid conditions of agricultural work. All the workers whose habits are unperverted have always preferred, and still prefer agrarian labor to any other."

If we think this is a strong local value, not revenue, then let's do it. But if not, let's not cause harm to the conditions and locations where long-term residents have chosen to live for reasons that will be impacted with the implementation of Goose Creek.

Thank you.

MR. KAINS: Thank you, Mr. Teubel. Questions for Mr. Teubel from Members of the Zoning Board of Appeals? Very good. Questions from members of local government including school districts? Licensed attorneys. Mr. Jacobi?

MR. JACOBI: Thank you. No questions.

MR. KAINS: Thank you. Other interested

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parties, persons in the public in support of or neutral
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    on the Application? Piatt County staff and consultants?
    Very good. Mr. Teubel, thank you.
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                              (WITNESS EXCUSED.)
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                MR. KAINS:
                           We're going to do one more.
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    Miss Kelly Vetter. I take it from the technology, Miss
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    Gallagher is getting ready to use, that you're wishing
    to speak for more than three minutes? Could you please
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    raise your right hand and be sworn by the court
10
    reporter.
11
                              (WITNESS SWORN.)
12
                MR. KAINS: Jamie, do you want to take a
    ten-minute break?
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14
                              (RECESS TAKEN.)
15
                MR. KAINS: Okay, folks. Let's find our
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    seats, and your sleeping bags. (Laughter in the room.)
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                MR. KAINS: That was not directed at you,
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    Miss Vetter. That was directed at the whole kit and
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    caboodle. Folks, we will have Miss Vetter testify, and
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    then I think there's going to be a couple of folks.
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    Reed, are you wishing to testify tomorrow?
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                MR. REED: Yes, I signed up under the
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    neutral list.
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                MR. KAINS: Yes. I've got you and
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Mr. McKanic tomorrow night. Mr. McKanic explained to me that there is a possibility he might a few minutes late, so Mr. Reed, you might be going right at six o'clock even though you are neutral and Mr. McKanic is in opposition. We're going to make the best use of our So, you two gentlemen will testify tomorrow and then we will get into the lawyering up here with the admission of exhibits, discussion on that, and counsel, if you could rather than going exhibit by exhibit by exhibit, if you could just raise -- be prepared to raise whatever objections you have to any exhibits, then we can take it that way. And then, I will be reading correspondence submitted, the written comments that have been submitted to Miss Nusbaum in the Zoning Administrator's office. I will be reading those into the record, and then we'll have any Piatt County staff reports or comments, and then we will have closing statements from the Applicant and from Mr. Luetkehans on behalf of his clients in opposition, and then there will be also a time for a rebuttal, brief rebuttal closing statement from the Applicant's counsel. Mr. Jacobi, it looks like you've got something to say. MR. JACOBI: I might have missed it, but did you say you're reading in the statements? MR. KAINS: I am going to read in the

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statements.
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                MR. JACOBI: Okay.
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                MR. KAINS: And I will take a page from Mr.
    Teubel's book and slow down, because I read just as fast
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    as you, Calvin. (Laughter in the room). I sound an
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 6
    like an auctioneer half the time. All right.
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                MR. JACOBI: We might have more to submit
    then tomorrow. We were going to submit them anyway, but
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    I just don't want -- I want you to be able to judge your
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    time accordingly.
                MR. KAINS: Yeah. I'll read them in. You're
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    not going to have twenty or thirty more, are you?
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                MS. NUSBAUM: I received several today.
                MR. KAINS: Yeah, we have about twenty in
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    support, fifteen or twenty in support, about the same
    amount in opposition.
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                MR. JABRIXIO: I don't think we'll have more
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    than ten.
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                MR. KAINS: Okay. Very good. And what is
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    your name, sir?
2.1
                MR. JABRIXIO: Sorry. I'm Max Jabrixio.
22
    I'm employed with Apex.
23
                MR. KAINS: Spell your last name for the
24
    court reporter.
25
                MR. JABRIXIO: J-A-B-R-I-X-I-O.
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MR. KAINS: Thank you, sir. So, yeah, if
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    you haven't testified, and wish to testify, there's
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    still the opportunity, but I want to stress that folks
    can submit written comments tonight and tomorrow night,
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5
    via e-mail to the Zoning Administrator, Miss Nusbaum.
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    All right. So that's the road map for tomorrow night.
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    And now the final hitter in the batting order, Miss
    Vetter.
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                    KELLY VETTER
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    called as a witness in the above-entitled cause, having
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    been first duly sworn, was examined and testified as
    follows:
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                MS. VETTER: Kelly Vetter. Do I need to
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    spell that for you?
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                MR. KAINS: First raise your right hand and
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    be sworn.
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                MS. VETTER: I already did that.
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                MR. KAINS: Oh, you've already been sworn.
                MS. VETTER: Do I need to be sworn twice?
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                MR. KAINS:
                            I just don't want you to swear
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    at me twice. (Laughter in the room).
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                MS. VETTER: Okay.
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                MR. KAINS: V-E-T-T-E-R. And ma'am, where
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do you reside? MS. VETTER: Near the down town, Monticello. MR. KAINS: Piatt County? MS. VETTER: Yes, sir. MR. KAINS: Then you have 45 minutes. MS. VETTER: Okay. MR. KAINS: You may proceed. MS. VETTER: First of all, I do want to thank the Board. I understand what it takes to do this

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kind of thing, because my husband and I were both elders, not elders, aldermen in Homer, and we served four years there. We had to fight because our community wanted us to fight against a landfill, that Champaign wanted to put out by us. We did a lot of work to make

that happen, and I commend you for what you're doing and I understand it.

Okay. I also am very thankful for the testimony and the comments from our rural neighbors, because the Board has the chance to see the faces of the folks who are losing their way of life and to hear their cry for help. Some can lose everything and be forced to move, and I speak to that, because I am fighting in Champaign County because my daughter has a two-and-a-half acre farm in neighboring Champaign County, and they're putting -- NextEra is putting in there, and she has

photosensitive epilepsy and we will have to sell the family farm and move. So I totally understand you could lose everything.

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It's kind of a David against Goliath story. They have all the money, the lawyers, the time, the resources, and lots of people paying to do the work for them. We have scraped together, some their life savings, to have one lawyer. Phil, you're good, but, you know, I feel bad for you. (Laughter) We also have given our time to attend meetings and done research on our own, and we're trying bring people back together. I hope that the Zoning Board understands the gravity of their decisions. I'm sure they do.

Okay. Now on to what I have behind me. This question was asked tonight, so I was really excited that I am addressing this. This proposed project that Apex will be inserting a hundred fifty blades, that's 50 turbines, the average turbine blade weight is 5,200 pounds, for a blade that measures between 78 and 128 feet. This number increases exponentially, I guess I've got to stay here, as the side of the blade increases. And we know these turbines are much bigger. But suppose that this is a two-ton blade, that's 50 turbines, that's at least a hundred tons off to the landfill. And that might happen twice in the life of one turbine, because

after twenty years unless they have beefed up the technology, they have to replace the blades. This waste is also not just any waste, but toxic waste. The wind turbine blades are amalgam of unique composites like fiberglass, epoxy, polyvinyl chloride foam, polyethylene terephthalate foam, balsa wood, and polyurethane coatings. So basically, there is just too much plastic composite-composite-epoxy crapola that isn't worth recycling. Even though there are a few small recycling centers for wind turbine blades, it isn't economical to do it on a large scale. The numbers of turbines are increasing enormously. When will we say this is enough? Okay. Do we want to be a part of this? Okay, next slide.

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I wonder where this is going. So excuse me while I move my papers. There are two main causes of wind turbine failures. Fires in the gear box, and blade failures. Catastrophic failure of wind turbines are not new and they are not rare. In 2007, Spiegel Online published The Dangers o Wind Power, where the authors cited the thousands of mishaps and accidents involving wind turbines and opined that facilities may not be as reliable and durable as producers claim.

In 2011, the LA Times published The Dark Side of Solar and Wind Power Projects, in which reporter Tiffany

Hsu explained how turbine accidents were surging. Recent experience shows not much has changed in the ensuing years.

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According to Fire Trace International: failure, they talk about, as the demand for renewable energy grows, the wind industry is finding ways to boost the energy output of wind turbines. One way to increase energy from turbines is to increase the size of the rotor blades. Larger blades produce more power. Rotor blade arcs are now reaching up to 262 feet or 90 meters. With the sizes of blades increasing, it can put additional pressure on the structure and other components in the turbine. It is estimated that there are 3,800 incidents of blade failure each year. Common flaws to look for include debonding, joint failure, splitting along fibers, gel coat cracks and erosion. Contributing factors for blade failures include a lightning strike, which you see behind you, oh wait a minute. Do I have to go on to another one? Yeah, there you are. I have to keep on track here. Material or power regulator failures, damage from foreign objects. I wonder if a bird would classify as a foreign object. And poor design. Blade failure is the most common failure in wind turbines and can lead to costly repairs and revenue loss from being shut down, which means

they've got to bring in more blades.

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2. Generator Failure. The generator in a wind turbine is responsible for creating the electricity by converting mechanical energy into electrical energy. When the generator fails, no power is produced, costing the wind farm operator valuable revenue. There are several reasons why generators can fail, including wind loading, weather extremes, and thermal cycling. Mechanical or electrical failure of the bearings, excessive vibration, voltage irregularities, and cooling system failures can lead to excessive heat and fire. Lastly, manufacturing or design faults, improper installation, lubricant contamination, and inadequate electrical insulation can also cause the generator to fail. A comprehensive maintenance and repair program will improve the reliability and longevity of the generator avoiding costly shutdowns and unexpected repairs.

The third one is, gear box failure. While gear boxes are designed to meet the harsh operational conditions, most do not make it past ten years, falling short of their twenty-year design live span. Each year they are approximately 1,200 gear box failures. The bearings and gears make up 96% of the failing components within the gear box. Some contributing factors of

failure include, dirty or water-contaminated lubrication, improper bearing settings, significant temperature fluctuations, which I think we're going to have this weekend. Improper or infrequent maintenance and servicing, and transient loads leading to sudden accelerations and load-zone reversals. When a gear box fails, it is a costly incident. The gear box is 13% of the overall cost of the turbine and is an expensive component to replace. Also, during replacement the turbine will be taken offline for as little as a few days, or it could be a couple of months, based on the availability of parts, and don't forget all the hiccups we have right now in the supply chain, and I think they're only going to get worse. Any time the turbine is not spinning means it is not generating revenue. remember, I'm not the expert here, just in case you're wondering.

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beyond the industry's preferred 1.1x turbine height to neighboring property lines have faced costly legal challenges with the industry claiming larger setbacks are nothing more than veiled attempts to stop projects from being built. So they're trying to sue us for making ordinances that protect our people, but with each smoldering tower and shredded blade, communities are

less willing to accept Big Wind's definition of safe.

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I don't probably need to remind the County Board of tornadoes, high winds, icing, snow blizzards. If just one of these turbines catches fire, we will have a serious prairie fire, and we will need an evacuation plan for staying out of the path of toxic smoke. Common sense should rule the day on that one.

I won't address infra sounds and shadow

flickering and the health and issues to neighbors and

their family and farm animals that's been touched on

quite a bit. I won't even touch on the miles and miles

of high power lines below and above the ground and how

it will affect farm animals, unless you request it from

me in the future, and I will be glad to give you some

more information. All right.

So, Deena Carico said he saw two eagles in the field north of Route 10 on the west side of the road just last week. Brian Anderson seen this fall Piatt County line just north of I-74 and the project in his back yard. Josh Beck, he saw four eagles on Saturday, just south of Route 10, but he could only get two in the picture. I have a picture there. And these last two pictures of the eagles in the field were seen by Melissa Goodbee who's also near some of these sightings. And my friend came last night and sat beside me, lives in town

here, she was driving off the highway on Bridge Street, and just as she got into town there was an eagle, a bald eagle, sitting in a tree. Apex has assured us there are no eagles in the vicinity of the proposed wind farm. Ha! Maybe, they're just talking about eagles' nests. I don't know. But do we believe our neighbors or a corporation like Apex whose only interest is money.

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So this is a picture, if you can't identify, of a bunch of eagles in bags. Since 1995, over 66,000 eagle carcasses have been secretly shipped off to Denver Eagle Repository. About 3,000 are shipped each year and their origin remains a green secret. Most collected from wind farms.

The Smithsonian Magazine reports -- that's my last picture. Um, so, The Smithsonian Magazine, it's a wind energy magazine -- I mean, not wind energy, sorry. They report that the wind energy company ESI Energy, Inc. is a subsidiary of NextEra Energy, Inc. NextEra Energy is the company wanting to come into Champaign County where my daughter's hobby farm is. They have to pay more than eight million in fines and restitution and serve a five-year probation after pleading guilty to violating the Migratory Bird Treaty Act, according to a statement released by the United States Department of Justice. The company deliberately elected not to apply

for proper permits for any unavoidable takes of eagles in Wyoming and New Mexico, per the DOJ. This is what they require. Under the Migratory Bird Treaty Act, the killing, capturing, selling, trading and transport of protected migratory bird species without prior authorization by the Department of the Interior US Fish and Wildlife Service is prohibited. The company acknowledged the deaths of at least a hundred fifty bald and golden eagles, at fifty of its one hundred and fifty-four wind energy facilities since 2012. Of those deaths, one hundred and thirty-six were attributed to the eagle being struck by a turbine blade. This is what they have to do, they just apply for a take with the Department of Interior Fish and Wildlife Service. I say, Apex assured us that there are no eagles in the vicinity of the proposed wind farms. Do we believe them, or do we believe our neighbors?

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I do want to bring your attention to the future of wind turbines as they are currently made. The wind turbines have failed Germany, and I tell you why I bring you to this, in an insanely costly debacle. German power prices have rocketed, blackouts and load shedding are the norm, and idyllic rural communities are now industrial wastelands. I speak of Germany because they were the front runners in this race and they had hoped

to prove that it could be done right. Reported August 13th, 2018. Germany provided the perfect opportunity to prove that a modern, industrial economy could run on sunshine and breezes and, therefore, ditch fossil fuels altogether. However, the wind and solar industries are shrinking as subsidies are slashed. Old coal-fired power plants are being refurbished and dozens of new coal-fired power plants are being built. Hundreds of billions of euros have been squandered on subsidies to wind and solar, all in an effort to reduce carbon dioxide emissions. However, that objective has failed too. CO2 emissions continue to rise. There is -- I can provide you with the paper that speaks to the woes of the tale that they have in Germany at a later date, so you don't have to do it as evidence.

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Okay. I also wanted to talk about the situation that they call in Germany as paradoxical, because they are at the point where they are moving from this, what they consider clean energy, to coal energy, and they just can't sustain it. So three coal-fired lignite units that were previously on standby were returned to the electricity market schedule in October.

Somehow from all of this I feel like we are the human experiment on a grand scale. Just put those turbines out there, bigger and lots of them across the

countryside. The companies are willing to risk multiple side effects even if it costs them money because after all, part of it's the taxpayer money that helps them stay in business.

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First the wind industry needs to get their act together before planting a giant wind turbine in our back yards. They need to be way more environmentally friendly, as we saw with our first slide, not use our tax dollars, but the entrepreneurial spirit our country strives on. We are tired of big corporations getting their foot in the door and then selling off many times and more often than not to foreign companies who then eventually own these farms. Foreign companies of foreign lands, some of them not our allies, right here in our back yard.

American citizens are looking for a way to decentralize their energy, not pay out to more corporations. We are on the horizon of many new innovations. Just the other day, cold fusion was brought out and pushed into the limelight of how this energy can keep us with cheap and reliable energy and an alternative with no repercussions. This is as green as it gets. Yes it's a little more time before it's ready, but guess what, we still have oil and gas that has been a stable commodity, and it's not about coal here.

Investors Business Daily reports in 2015. Ever since M King Hubbert in the 50s convinced a lot of people with his peak oil theory that production would collapse and we'd eventually exhaust our crude supplies, well I quess the clock has been running and running, and it will continue to run for some time, as technology and new discoveries show that there's still an ocean of oil under our feet. Engineering and Technology Magazine reported this week that BP, the company that once wanted to be known as Beyond Petroleum rather than British Petroleum, I don't why I had to say that, but anyway, is saying that the world is no longer at the risk of running out of resources. Thanks to investment into supercomputers, robotics and the use of chemicals to extract the maximum from available reservoirs, the accessible oil and gas reserves will almost double by 2050. Engineering and Technology also said that a BP official told the magazine that energy resources are plentiful. Concerns of running out of oil and gas have disappeared. Things are so good, in fact, that Engineering and Technology says, the use -- with the use of innovative technologies, available fossil fuel resources could increase from the current 2.9 trillion barrels of oil equivalent to 4.8 trillion by 2050, which is almost

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twice as much as the protected global demand. That number could even reach 7.5 trillion barrels if technology can exploration techniques advance faster. This information backs up the idea that the earth is actually an oil-producing machine. We call energy sources such as crude oil and natural gas fossil fuels based on the assumption that they are the products of decaying organisms, maybe even dinosaurs themselves, but the label is a misnomer. Research from the last decade found that hydrocarbons are synthesized abiotically.

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In other words, as Science Magazine has reported, the data implies that hydrocarbons are produced chemically from carbon found in the earth's mantle.

Nature Magazine calls the product of this process an unexpected bounty of natural gas, building blocks of oil products as well.

So, don't feel guilty about exploiting this bounty. There seems to be plenty to go around, and there will probably still be a lot left when technology, not hurried by government mandates and subsidies but guided by market forces, produces practical and affordable renewable energy. But for now, enjoy our cheap, abundant, and efficient fossil fuel. They call them fossil fuels.

So I say, should we believe we have time to make

new discoveries before big corporations come in and force their way upon our land, use our tax dollars, and commit atrocities to the animal kingdom and our rural neighbors? We should protect our farmlands against purveyors of lies. We need to band together and know there is a better future. Stop the special use permit. Re-write the ordinances to protect our land and our people. We have a right and the time to wait for better options to come along. Why should we be in a hurry to sign on for thirty to fifty years when technology can change tomorrow and we are stuck for generations. about what kind of legacy this Board will leave behind. We are counting on you to do the right thing. Thanks. MR. KAINS: Thank you, Ms. Vetter. Questions for Ms. Vetter from the Zoning Board of Appeals? good. Questions from members of units of local government including school districts? Questions from licensed attorneys. Mr. Jacobi? Thank you, Miss Vetter. MR. JACOBI: I do not have any questions. MR. KAINS: Very good. Questions from other interested parties, members of the public in support of or neutral on the Application? Questions from Piatt County staff and consultants? Very good. Thank you, Miss Vetter. You are excused.

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(WITNESS EXCUSED.)

MR. KAINS: And again, tomorrow night we will have Mr. McKanic and Mr. Reed in some order, and if there's anybody else with a burning desire to sign in, in opposition or neutral to testify, we will consider that as well. And then the attorneys will take up the matter of the admission of exhibits, reading of written comments and closing statements from the attorneys in this matter. The Board is in recess until six o'clock tomorrow night in this very building, in this very room.

(PROCEEDINGS CONCLUDED THIS DATE.)

1	I, Jamie J. Mumm, an Official Court Reporter and 146
2	Certified Shorthand Reporter in and for the Sixth
3	Judicial Circuit of the State of Illinois, do hereby
4	certify that I transcribed from shorthand notes the
5	foregoing proceedings and that the foregoing is a true
6	and correct transcript to the best of my ability.
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12	Jamie J. Mumm, CSR
13	Official Court Reporter CSR #084-002330.
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