

**In The Matter Of:**  
*LIVINGSTON COUNTY ZONING BOARD OF APPEALS*

---

*November 24, 2014*

---

*Area Wide Reporting and Video Conferencing*

*www.areawide.net*

*scheduling@areawide.net*

*301 W. White Street*

*Champaign, IL 61820*

Original File 1124HRG.txt

**Min-U-Script® with Word Index**

1 LIVINGSTON COUNTY ZONING BOARD OF APPEALS  
2 CASE SU-7-14  
3 PLEASANT RIDGE WIND ENERGY PROJECT

4 November 24, 2014  
5 6:30 PM  
6 Walton Centre  
7 Fairbury, Illinois

8 BOARD MEMBERS

9 Michael Cornale, Acting Chair  
10 Howard Zimmerman  
11 John Vitzthum  
12 Joan Huisman  
13 Diana Iverson  
14 Tom Blakeman, Attorney for Zoning Board of Appeals

15 Charles T. Schopp, Administrator  
16 Livingston County Regional Planning Commission  
17 112 W. Madison Street  
18 Pontiac, IL 61764

19 James R. Griffin  
20 Attorney for Livingston County  
21 Schain, Banks, Kenny & Schwartz  
22 70 W. Madison Street, Suite 5300  
23 Chicago, IL 60602  
24 312.345.5700

Appearing For Applicant/Invenergy:

Michael T. Blazer  
Attorney at Law  
Jeep & Blazer, LLC  
24 North Hillside Avenue, Suite A  
Hillsaid, IL 60162  
708.236.0830  
mblazer@enviroatty.com

Appearing for United Citizens of Livingston County:

Phillip A. Luetkehans  
Attorney at Law  
Schirott, Luetkehans & Garner, LLC  
105 E. Irving Park Road  
Itasca, IL 60143  
630.760.4601  
pluetkehans@slg-atty.com

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

INDEX OF EXAMINATION

	Page
ANDREW DOWNEY.....	341
MR. LOOMIS QUESTIONS BY BOARD MEMBER HUISMAN.....	345
ANDREW DOWNEY QUESTIONS BY MR. LUETKEHANS.....	352
MR. BAKER QUESTIONS BY MR. LUETKEHANS.....	369
MR. VANDEWALLE QUESTIONS BY MR. LUETKEHANS.....	412

INDEX OF EXHIBITS

	Page
Pleasant Ridge Exhibit No. 122.....	340
UCLC Exhibit No. 15.....	351

1           CHAIRMAN CORNALE: We'll go ahead and call  
2 this meeting to order. Chuck, roll call, please.

3           MR. SCHOPP: Mike Cornale.

4           CHAIRMAN CORNALE: Here.

5           MR. SCHOPP: John Vitzthum.

6           MR. VITZTHUM: Here.

7           MR. SCHOPP: Rich Kiefer. Diane Iverson.

8           MS. IVERSON: Here.

9           MR. SCHOPP: Howard Zimmerman.

10          MR. ZIMMERMAN: Here.

11          MR. SCHOPP: Joan Huisman. Gibs Nielsen.

12 Quorum.

13           CHAIRMAN CORNALE: All right. Certainly  
14 like to welcome everybody here tonight. A change of  
15 venue. Nice place we've got here to hold these  
16 meetings. A few orders of business we need to take  
17 care of. First thing is there was a request, I  
18 guess it was by myself, of the applicant to present  
19 an exhibit. It talks about the wind energy device  
20 valuation. The county will accept Pleasant Ridge  
21 Exhibit 122. It's from the Illinois Department of  
22 Revenue.

23           Second item of business. All right, there  
24 were a few other unanswered questions from the last

1 meeting. I believe the applicant has a witness to  
2 testify to those questions this evening. Is that  
3 correct?

4 MR. BLAZER: That's correct, Mr. Cornale.  
5 You had asked -- one of the ZBA members had asked  
6 how many residences are within the project boundary  
7 and how many are within one mile of the project  
8 boundary. We have our land agent here, Mr. Andrew  
9 Downey, who's prepared to be sworn and advise you  
10 what those numbers are.

11 CHAIRMAN CORNALE: Very good, okay. If he  
12 could come forward and I'll swear him in.

13 AUDIENCE VOICE: We can't hear you over  
14 here.

15 CHAIRMAN CORNALE: You know what, please  
16 raise your right hand.

17 (Andrew Downey was duly sworn.)

18 CHAIRMAN CORNALE: Could you please fill  
19 us in on those questions with regard to those  
20 residences?

21 MR. DOWNEY: Within the project boundary  
22 there are a total --

23 MR. LUETKEHANS: Excuse me, could we have  
24 him sworn in as well as state his name, et cetera?

1 I don't know if Mr. Blazer wants to examine. Maybe  
2 it would make it quicker.

3 MR. BLAZER: He's got his notes.

4 MR. BLAKEMAN: He's been sworn in.

5 CHAIRMAN CORNALE: Can you please state  
6 your name?

7 MR. DOWNEY: My name is Andrew Downey.

8 CHAIRMAN CORNALE: Your title with the  
9 applicant is?

10 MR. DOWNEY: I'm land agent and project  
11 consultant.

12 CHAIRMAN CORNALE: Very good.

13 MR. DOWNEY: There are a total of 298  
14 residences within the project boundary. Breaking it  
15 down, there are 74 of those residences within  
16 participating parcels. The other 224 are  
17 consequently nonparticipating in the project.  
18 Further note, there are five of those 224 parcels  
19 that are under the same name as participating  
20 parcels, which means they have a residence either on  
21 the farm that was not signed up or at another  
22 location.

23 There are -- within a mile outside of the  
24 boundary of the project, there are a total of 657

1 residences, and that includes the village of  
2 Forrest.

3 CHAIRMAN CORNALE: Very good.

4 MR. BLAZER: Does that answer the  
5 questions you had, Mr. Cornale?

6 CHAIRMAN CORNALE: That does answer the  
7 questions that I had. All right.

8 MR. LUETKEHANS: Is Mr. Downey staying for  
9 the evening?

10 MR. BLAZER: Yes, he is.

11 MR. LUETKEHANS: And he'll be available  
12 for cross-examination?

13 CHAIRMAN CORNALE: All right. At this  
14 point -- at this point, we'll continue with  
15 questions from the zoning board with the hopes that  
16 we'll complete our questions. And at that point  
17 we'll continue through our order that we've  
18 described earlier with regard to counsel and the  
19 audience.

20 So with that, is there any other further  
21 questions -- let me just quickly explain, I guess,  
22 the focus of questions this evening.

23 The applicant has brought back a select  
24 group of individuals to cross-examine. Correct me

1 if I'm wrong, Mr. Blazer, but Blank is back, Blank  
2 is back for shadow flicker and how well the project  
3 fulfills the comprehensive plan.

4 MR. BLAZER: Correct.

5 CHAIRMAN CORNALE: Loomis is back to speak  
6 about the economic impact within the area or to  
7 answer questions.

8 MR. BLAZER: Correct, right.

9 CHAIRMAN CORNALE: VanDeWalle is available  
10 to talk about birds and any avian study questions.

11 MR. BLAZER: And any other animal-related  
12 questions.

13 CHAIRMAN CORNALE: Very good, okay. And  
14 Baker is back to talk about technical aspects within  
15 the project.

16 MR. BLAZER: Correct, sir.

17 CHAIRMAN CORNALE: Okay. So as we  
18 consider our questions this evening, we need to  
19 really focus on those individuals. The other  
20 individuals will be available; they're just not  
21 available this evening. Okay?

22 So with that, questions from the board at  
23 this point. We will reserve the right to come back,  
24 but we'll take any that we have right now. Howard,



1 do you have any?

2 MR. ZIMMERMAN: (Shakes head).

3 CHAIRMAN CORNALE: John, do you have  
4 anything? For those that weren't at the proceedings  
5 here earlier, our previous hearings, we have had  
6 some questions already answered by them. So, John,  
7 anything at this point?

8 MR. VITZTHUM: (Shakes head).

9 MS. HUISMAN: Joan Huisman. Were you able  
10 to bring the public act that you referenced or that  
11 Mr. Loomis referenced?

12 MR. BLAZER: That's the Exhibit 122 that  
13 Mr. Cornale identified earlier.

14 MS. HUISMAN: Okay, that's that one.

15 MR. BLAZER: Right.

16 MS. HUISMAN: Okay, is Mr. Loomis  
17 available?

18 MR. BLAZER: He's right here.

19 MS. HUISMAN: I was wondering if you could  
20 visit Table 5, tax implications and impact on our  
21 school district funding?

22 MR. LOOMIS: Yes. Was that Table 5 from  
23 the report or Table 5 from the --

24 MS. HUISMAN: From your presentation.

1 MR. LOOMIS: Okay. Yeah.

2 MS. HUISMAN: I guess specifically I was  
3 curious as to how the reduction in state aid, that  
4 column, is calculated.

5 MR. LOOMIS: Yes. The general state aid  
6 has a complicated formula. Actually there's three  
7 different formulas that are used based on the  
8 category that a school district is in. There is  
9 PTEL school districts or non-PTEL districts  
10 depending on classifications that are there, and so  
11 there's a formula. It's described in the report  
12 that -- that was an exhibit that talked about wind  
13 farms and school districts where we talked about the  
14 exact formula, but that's the formula that I used to  
15 calculate that reduction in state aid.

16 And you can see that that number, the  
17 reduction, goes down, which means that the amount of  
18 money coming from the state, all other things equal,  
19 would be going up. Because of the depreciation of  
20 the wind farm, the EAV is going to decline slightly  
21 each year, 4 percent depreciation, so the reduction  
22 in state aid would be less, or meaning you would get  
23 -- your state aid would grow, all other things  
24 equal.

1 MS. HUISMAN: Which of your exhibits is  
2 this formula included in? I haven't had an  
3 opportunity to get through all of my exhibits yet.

4 MR. LOOMIS: That's the 115. So in that  
5 -- in that Exhibit 115, if you look on -- really  
6 it's pages 16 and 17.

7 MS. HUISMAN: Is that in the references  
8 section?

9 MR. LOOMIS: No, this is in the Wind Farm  
10 Implications for School District Revenue report.

11 MS. HUISMAN: That's not 115.

12 MR. BLAZER: Oh, I'm sorry. No, I  
13 apologize, that's 121.

14 MR. LOOMIS: Okay, this is Exhibit 121.

15 MS. HUISMAN: Okay, pages 16 and 17?

16 MR. LOOMIS: Yeah, pages 16 and 17.

17 MS. HUISMAN: Okay, not to be a pain, but  
18 can you walk us through this? I think there's a lot  
19 of factors that go into this calculation for the  
20 reduction in state aid, and I'm just curious as to  
21 how this works and how -- what impact -- what makes  
22 this number come to a million dollars in that first  
23 year where there's a reduction.

24 MR. LOOMIS: Right. Sure, I can take us

1 through that. So if we look at the formula on page  
2 16, the GSA, there is a foundation level. That  
3 foundation level is set by Illinois State Board of  
4 Education. You'll see right below that formula that  
5 FL, foundation level, is \$6,119. That was for the  
6 school year 2010-2011.

7           ISBE has not raised the foundation level.  
8 In fact, they had to prorate it because they don't  
9 have enough money to give everybody the foundation  
10 level. So there's -- it's actually they've said  
11 everybody should get that foundation level, but then  
12 they prorated it or reduced it.

13           Then next in the formula is -- is a  
14 combination of two factors. It's the EAV, which is  
15 the equalized assessed value. That's really where  
16 the change comes in to being in the reduction in  
17 state aid is because that EAV goes up when a wind  
18 farm comes in, your equalized assessed value in that  
19 school district taxing area goes up. So that really  
20 becomes the key delta or difference between here's  
21 what it was before and here's what it is after.

22           So the EAV gets calculated, gets  
23 multiplied by the calculation rate, that calculation  
24 rate that's used by ISBE, and then it's the CPPRT,

1 that's the corporate personal property replacement  
2 tax, and all of that's divided by the average daily  
3 attendance, so a number of school days and  
4 attendance, and then they take that whole quantity  
5 and multiply it by the average daily attendance. So  
6 that's the general state aid formula.

7           So when you go down to the bottom of page  
8 16, you'll see the change in revenue that comes, the  
9 little delta, revenue is going to be calculated as  
10 the difference between what's the EAV, you see the  
11 little EAV with a subscript 2, that's what the  
12 equalized assessed value is after the wind farm  
13 comes in, versus EAV 1 is what the equalized  
14 assessed value is after the wind farm or before the  
15 wind farm comes in. So that's really where you get  
16 the change in general state aid.

17           MS. HUISMAN: I'm not sure if you  
18 testified to this or if one of the gentlemen from  
19 Invenergy testified that you'd be willing to discuss  
20 some kind of economic plan that would be different  
21 than -- that would not impact equalized assessed  
22 value. What would that be?

23           MR. LOOMIS: I think I had mentioned an  
24 economic benefit agreement that might be entered

1 into on top of this analysis. So my economic impact  
2 analysis and the assumption that I was using for a  
3 school district and school district revenue was just  
4 what's legally required under that public act and  
5 how we value wind farms that were there. So that  
6 may be from --

7 MR. BLAZER: If I may, Ms. Huisman, I  
8 think what you may be referring to is --

9 MR. LUETKEHANS: You know, if we wanted  
10 Mr. Blazer to testify, the questions would be  
11 directed to him and he'd be sworn in.

12 MR. BLAZER: Well, I don't have a witness  
13 here then who can testify to that other than  
14 basically Mr. Loomis. But he doesn't have the facts  
15 regarding that potential agreement.

16 MS. HUISMAN: Is there someone else that  
17 you would bring that could come back later?

18 MR. BLAZER: It would be Mr. Parzyck who  
19 would be back at the next hearing.

20 MS. HUISMAN: We can address that at a  
21 later hearing.

22 MR. BLAZER: Sure.

23 CHAIRMAN CORNALE: I believe at this time  
24 the zoning board will forego any questions. We do,

1 obviously, have the opportunity to ask questions  
2 later. What we'll do is we'll move along now.  
3 We're going to do questions from units of local  
4 government, including school districts. If there's  
5 anyone that represents those entities, you're  
6 welcome to ask any questions along the scope that I  
7 previously described.

8 All right. At this time, we'll ask  
9 questions from interested parties represented by  
10 attorneys. So I believe Mr. Luetkehans has a  
11 battery of questions. Along with that, we will  
12 accept into evidence an exhibit from the United  
13 Citizens of Livingston County, Exhibit No. 15. This  
14 is the list that Mr. Blazer had asked of Mr.  
15 Luetkehans. It's the individuals that Mr.  
16 Luetkehans is representing. So we have accepted  
17 that as an exhibit.

18 With that, Mr. Luetkehans.

19 MR. LUETKEHANS: Yes, sir.

20 CHAIRMAN CORNALE: Go ahead.

21 MR. LUETKEHANS: I would ask for  
22 Mr. Downey to take the stand then.

23 MR. BLAZER: That's as close to a stand as  
24 we're going to get.

1 MR. LUETKEHANS: Can he stand up here?

2 MR. BLAZER: No, not without a microphone.

3 MR. LUETKEHANS: That's close enough.

4 QUESTIONS BY

5 MR. LUETKEHANS:

6 Q. You said there were 653 residences within  
7 one mile of the boundary; is that correct,  
8 Mr. Downey?

9 MR. BLAZER: I believe he said 657.

10 MR. LUETKEHANS: If he did, he can testify  
11 if I said it wrong.

12 MR. DOWNEY: It's 657.

13 MR. LUETKEHANS: I don't need your  
14 representation, Mr. Blazer. Thank you.

15 MR. BLAZER: Mr. Cornale, if I may, I  
16 really don't think it's necessary to be sniping like  
17 that.

18 CHAIRMAN CORNALE: I agree.

19 AUDIENCE VOICE: We can't hear you.

20 CHAIRMAN CORNALE: Just focus, ask the  
21 question.

22 MR. LUETKEHANS: And I would ask the  
23 witness to answer the question instead of Mr. Blazer  
24 is my only point.



1 BY MR. LUETKEHANS:

2 Q. How many property lines are within one  
3 mile -- is that property lines or is that  
4 residences?

5 A. Those are residences.

6 Q. How many property lines are within one  
7 mile?

8 A. I don't have an answer to that.

9 Q. Okay. How residences are within the mile  
10 boundaries that are actually in the valley Forrest  
11 -- or village of Forrest, excuse me?

12 A. Could you repeat that?

13 Q. Yeah. Of the 657 residences within one  
14 mile of the boundary, you said a number of those  
15 were within the -- were within the village of  
16 Forrest, correct?

17 A. That's correct. I do not have a breakdown  
18 on the city of Forrest on its own.

19 Q. Okay. Do you know how many residences are  
20 within one mile of an actual turbine?

21 MR. BLAZER: I'll object, Mr. Cornale.  
22 That's beyond the scope of what this witness was  
23 asked, the information that he was asked to provide.

24 MR. LUETKEHANS: If he doesn't know, he

1 can say he doesn't know.

2 A. That -- I don't have a solid answer for  
3 that.

4 MR. BLAZER: Andrew --

5 CHAIRMAN CORNALE: I believe, yeah, if you  
6 don't know, that's acceptable. If he asks and you  
7 can jot it down and come back with it at a later --  
8 just like I asked and you guys did, that was  
9 acceptable to us.

10 Okay, so moving forward, he may not know  
11 everything. You're asking him for the specific  
12 number of homes within a village. That's hard to,  
13 hard to testify to.

14 BY MR. LUETKEHANS:

15 Q. Do you know how many residences are within  
16 1500 to 16 feet of the turbine?

17 A. Between 1500 and 1600 feet from a turbine?

18 Q. Yes, sir.

19 A. I would speculate --

20 MR. BLAZER: Don't speculate, Mr. Downey.

21 A. No. A precise number I don't know.

22 MR. LUETKEHANS: You know what, if he  
23 wants to object to his own witness, he can do that,  
24 but coaching him is just not appropriate.

1           MR. BLAZER:  And I'm not coaching him and  
2 he knows that.  And again, Mr. Cornale, I would ask  
3 you to instruct Mr. Luetkehans to stop the sniping.  
4 We're trying to get information, not engage in legal  
5 tricks.

6           MR. LUETKEHANS:  I don't really think it's  
7 sniping.  If I am, I apologize.

8           CHAIRMAN CORNALE:  Okay.  Counsel has  
9 instructed me the questions are fine.  There again,  
10 I will say if you don't know the answer, simply --  
11 if you don't know, follow it up at a later date.

12           MR. DOWNEY:  I understand.

13 BY MR. LUETKEHANS:

14           Q.  Mr. Blazer will have every chance I'm sure  
15 to ask you follow-up questions if you are doing  
16 something he doesn't wish, but I would ask that you  
17 answer my questions.

18                   Do you know how many turbines or  
19 residences are within 1600 to 1700 hundred feet of a  
20 wind turbine?

21           A.  No, I do not.

22           Q.  How about 1700 to 1800 feet?

23           A.  No, I do not know --

24           Q.  How about --

1 A. -- the precise number.

2 Q. How about 1800 to 2000 feet?

3 A. No, sir, I do not.

4 Q. How about 2000 to 2500 feet of a turbine?

5 A. No, I do not.

6 Q. How about between 2500 to 3000 feet of a  
7 turbine?

8 A. No, I do not.

9 Q. Do you know the total number of homes  
10 within a mile and a half of a turbine?

11 A. No, I do not.

12 Q. Do you know the total number of homes  
13 within a mile and a half of the property boundaries?

14 A. No, I do not.

15 Q. How did you come up with the number, 657  
16 number that you provided us?

17 A. That was provided to me by our engineer in  
18 Chicago today.

19 Q. And who is that engineer?

20 A. Fin Chang.

21 Q. Want to spell that for the court reporter,  
22 if you can?

23 A. Fin Chang, F-I-N, C-H-A-N-G.

24 Q. Who does Mr. Chang -- is it Mr. Chang?

1           A.    That is correct.

2           Q.    I'm not sure what Fin is.

3           A.    He's employed by Invenergy.

4           Q.    Okay, he's employed by Invenergy. Do you  
5 know how he came up with that information?

6           A.    He looked at the map that we have and  
7 measured distances with our present layout.

8           Q.    Okay. Were you looking at the same map as  
9 he was when he did it or did he just give you the  
10 number?

11          A.    We all have the same map, sir.

12          Q.    I understand that. My question was did  
13 you do this exercise together or --

14          A.    We did not do this exercise together.

15          Q.    Okay. I'm going to say one more thing,  
16 and I'm not trying to be rude, but you have to wait,  
17 if you can, for me to finish my question.  
18 Otherwise, she's got no chance of understanding both  
19 of us at the same time. And I'm not trying to be  
20 rude. I'm just trying to tell you because otherwise  
21 she'll kill us.

22          A.    I apologize.

23          Q.    And as soon as I give you that, I think  
24 I'm done, so give me a second.

1           What is your -- I guess I wasn't. What's  
2 your job as it relates to this project?

3           A.    Best I can answer is I'm a land agent. I  
4 work with Invenergy between the landowners and the  
5 home office in Chicago, and I have some construction  
6 experience to be able to consult for possible issues  
7 ahead.

8           Q.    And what construction experience do you  
9 have?

10          A.    I've been involved in all phases of Grand  
11 Ridge construction, phase 1 through 4, Bishop Hill  
12 construction 1 and 2, White Oak construction, and I  
13 was not involved at the Cal Ridge project. I was  
14 there on a finance capacity.

15          Q.    Okay. And I'm going to apologize ahead of  
16 time, but could you give me those again so I can  
17 write them down, because you were much faster than I  
18 was, so I apologize. The three -- you said there  
19 were three you worked on, right?

20          A.    Yes. Grand Ridge, phases 1 through 4.

21          Q.    Okay.

22          A.    After that was White Oak north of  
23 Bloomington.

24          Q.    Okay.

1           A.    After that was Bishop Hill, phases 1 and  
2    2.   And I was --

3           Q.    Go ahead, I didn't mean to cut you off.  
4    See, I do the same thing, it's a human thing, but  
5    I'll try not to as well.   Please go ahead.

6           A.    No.   I was on-site during the Cal Ridge  
7    construction, but not in a construction mode.

8           Q.    What was your responsibilities for Grand  
9    Ridge 1 through 4?

10          A.    Liaison with the landowners, any issues  
11   they may have during construction.

12          Q.    Okay.   You weren't actually performing  
13   construction though; is that correct?   Or were you  
14   overseeing construction?

15          A.    No, no.   I was simply --

16                CHAIRMAN CORNALE:   Mr. Luetkehans, you  
17   need to speak in the microphone a little bit more.  
18   They cannot hear your question.

19                MR. LUETKEHANS:   Okay, I was hearing the  
20   reverb, so I was getting it away from my mouth.   I  
21   apologize.

22          Q.    Would that be the same for White Oak and  
23   Bishop Hill?

24          A.    White Oak, I had a little more experience,

1 consequently a little more latitude to work with the  
2 landowners for moving access roads. And any issues  
3 they may have with the construction process I would  
4 relay back to Chicago. And I was also there during  
5 the financing phase of that --

6 Q. Okay.

7 A. -- with curative work, curative documents.

8 Q. And who, who built Grand Ridge?

9 A. Boldt Construction was our first  
10 contractor.

11 Q. Okay.

12 A. The phases 2 through 4 was Gemma.

13 Q. Could you spell that?

14 A. Spelled G-E-M-M-A.

15 Q. And who was the developer? What was the  
16 name of the developer?

17 A. At that time, the developer of the  
18 project's name was Michael Arndt at Grand Ridge.

19 Q. Was it a company or just Mr. Arndt? I'm  
20 just trying to figure out which company built it --

21 A. Company was Invenergy.

22 Q. -- that's all. Okay. Did Invenergy also  
23 do White Oak and Bishop Hill?

24 A. That's correct.



1 Q. Okay. And who was the contractor on White  
2 Oak?

3 A. That was -- that was Mortensen,  
4 M-O-R-T-E-N-S-E-N.

5 Q. Okay. And Bishop Hill, who was the  
6 contractor for that?

7 A. That would have been Gemma again.

8 Q. Okay. Where is Gemma located?

9 A. I believe they were in New Jersey.

10 Q. Okay, how about --

11 A. I am not certain on that.

12 Q. Clearly not in Illinois, though, you know  
13 that.

14 A. That's correct.

15 Q. Okay. If it's in New Jersey or New York,  
16 I don't think any of us are going to try to fault  
17 you for it. Just trying to get a handle on it.

18 Boldt Construction, where are they  
19 located?

20 A. I believe in the Midwest. Precisely  
21 where, I don't know.

22 Q. Not Livingston County?

23 A. No.

24 Q. How about Mortensen, where are they

1 located?

2 A. They're out-of-state as well.

3 Q. Do you recall what state?

4 A. No, I do not.

5 Q. Did Invenergy on those projects have one  
6 general contractor to your knowledge or did they  
7 have -- other than -- I should say at one time.  
8 Obviously, Grand Ridge had more than one, but never  
9 more than one at the same time I assume.

10 A. There's a sole contractor at each wind  
11 farm construction.

12 Q. Okay. So they didn't split up the  
13 construction between a general contractor and, let's  
14 say, a utility, a utility contractor.

15 A. There are -- within the scope of the  
16 general contractor, there are many subcontractors  
17 that they would bring on-site for specialized work.

18 Q. I understand. My question is, to your  
19 knowledge, were there any other contractors, other  
20 than the general contractor, that were being  
21 contracted with by Invenergy to do actual physical  
22 work?

23 A. No, not to my knowledge.

24 Q. Were you ever -- were you involved in the

1 bid packages or the process for the biddings on any  
2 of those projects?

3 A. No, sir. Above my pay scale.

4 Q. Above mine too, so... let's go back to  
5 this project. You said you were the land agent.  
6 And I know you told us, but could you give me a  
7 little description of what your role has been so far  
8 on this project?

9 A. On this project, I helped to sign  
10 individuals back in 2008 when the project was up and  
11 moving. And I was pulled back here six months ago  
12 to continue signing, signing landowners to be a part  
13 of the project.

14 Q. How long was the -- were you signing up  
15 owners -- you started -- do you remember what part  
16 of 2008 you started?

17 A. It would have been probably December 2008.

18 Q. Okay. And how long was your process that  
19 you did that for?

20 A. I believe I was there for -- here for  
21 probably ten months before pulled back to Grand  
22 Ridge for construction liaison.

23 Q. Okay. So sometime between December of  
24 2008 and approximately September, October 2009, you

1 were here?

2 A. Correct.

3 Q. Okay. Did someone take over your role, to  
4 your knowledge, in October of 2009?

5 A. There were several other land agents that  
6 were on the team that were continuing the  
7 acquisition work.

8 Q. Okay. What company are you with, did you  
9 say? I'm sorry. If you did, I apologize.

10 A. I'm a contractor.

11 Q. So you have your own company? Or I'm just  
12 trying to understand.

13 A. You're looking at Andrew Downey, LLC.

14 Q. Okay, fair enough. So there were other  
15 people who were also acting as land agents during  
16 the December of 2008 to October of 2009 period,  
17 correct?

18 A. That's accurate.

19 Q. Okay. And then you left and they  
20 continued to do the work?

21 A. That is true.

22 Q. Okay. And then you went to Grand Ridge.  
23 And what were -- Grand Ridge, you were again liaison  
24 and land agent?

1           A.    Yes.

2           Q.    And when you came back six months ago,  
3 what was your -- what were your responsibilities?

4           A.    To continue acquisition of land, to  
5 provide connectivity for the entire project.

6           Q.    Provide connectivity.  Could you explain  
7 what that means?

8           A.    I think of a checkerboard pattern on a  
9 map.  We cannot construct as such, so I was  
10 contacting the nonparticipating parcel owners to see  
11 if they would reconsider a decision to participate  
12 with the project.

13          Q.    Okay.  So you were really trying to obtain  
14 a continuity kind of thing?

15          A.    True, yes.

16          Q.    In the last six months, how many  
17 participating property owners have you added?  You  
18 may not have an exact number, but just give me an  
19 approximation, if you could.

20          A.    Approximately eight.

21          Q.    Okay.

22          A.    And for the record, I am still signing  
23 people today.

24          Q.    When's the last one you signed?

1           A.    Last one was signed probably two weeks  
2 ago.

3           Q.    How many acres was that?

4           A.    It was a 160 acre parcel.

5           Q.    What's -- that particular parcel, what's  
6 the need for that parcel?

7           A.    Connectivity.

8           Q.    Okay.  When you say connectivity, are you  
9 talking about putting a turbine on or to put  
10 something else on?

11          A.    At this point, because it was late added  
12 to the project, it would be for collection systems  
13 only, no turbine.

14          Q.    Okay.  And could you explain to us what a  
15 collection system is?

16          A.    Collection system is Invenergy's  
17 terminology for buried wire.  I never understood it  
18 myself.

19          Q.    Okay.  So it's underground wire?

20          A.    Yes, sir.

21          Q.    And that underground wire is for what  
22 purpose?

23          A.    It daisy chains, if you will, a group of  
24 12 to 18 turbines together for making the -- that

1 connects the power, the electricity generated, plus  
2 a communicative fiberoptic cable in the buried  
3 trench to take back power to our Invenergy  
4 substation.

5 Q. Okay. And how does it get from there to  
6 the Invenergy substation? Is it above ground or --

7 A. It's all underground.

8 Q. Okay. There was an above-ground  
9 transmission line here, correct?

10 A. Above-ground, correct.

11 Q. And where is that?

12 A. That goes from our substation to the Comm  
13 Ed substation.

14 Q. Okay. Could you tell me approximately  
15 where -- where your substation is?

16 A. It is approximately four miles north of  
17 Fairbury.

18 Q. Okay. And the Comm Ed substation?

19 A. Is approximately one mile south of  
20 Pontiac.

21 Q. So how many miles is that above-ground  
22 transmission line?

23 A. Our above-line transmission is, as I  
24 recall, 8.2 miles.

1 Q. Okay. And the parcel you obtained two  
2 weeks ago, the 160 acre parcel, where approximately  
3 is that at?

4 A. Do I have to answer?

5 Q. I don't think you get to ask him.

6 A. Well --

7 MR. BLAZER: Well, for the record, Mr.  
8 Cornale, if I may, I don't see how that's pertinent  
9 to these proceedings. And pursuant to paragraph 6  
10 of Public Hearing Guidelines under the ZBA's rules,  
11 I don't think it's an appropriate question.

12 MR. LUETKEHANS: I don't understand how  
13 paragraph 6 has anything to do with this. Maybe I'm  
14 missing something.

15 CHAIRMAN CORNALE: All right, counsel has  
16 advised me that is an admissible question due to the  
17 fact that it connects the project -- possibly  
18 connects the project to the grid or wherever the  
19 land -- it's either included within the project or  
20 is a connectivity piece that you have.

21 A. It is in the south half of the project.

22 Q. So it's south of Forrest?

23 A. That is correct.

24 Q. How many miles south of Forrest



1 approximately?

2 A. Approximately four miles south.

3 Q. Okay. Is it directly south?

4 A. I don't recall offhand.

5 Q. Okay. Do you recall any intersections it  
6 is near?

7 A. Not precisely.

8 CHAIRMAN CORNALE: Mr. Luetkehans.

9 MR. LUETKEHANS: Nothing further,  
10 Mr. Downey.

11 CHAIRMAN CORNALE: Thank you. You're  
12 done, Mr. Downey.

13 MR. LUETKEHANS: Do you want me to proceed  
14 or do you wish some of the audience?

15 CHAIRMAN CORNALE: Continue.

16 MR. LUETKEHANS: Okay, at this time, we  
17 would ask Mr. Baker to the stand.

18 QUESTIONS BY

19 MR. LUETKEHANS:

20 Q. Good evening, Mr. Baker. You have 136  
21 turbines on this project, correct?

22 A. Yes.

23 Q. So that means 136 towers?

24 A. Correct.

1 Q. 136 crane pads?

2 A. Correct. Yes.

3 Q. And the crane pads are used to do what?

4 A. Just during the construction, a crane pad  
5 is put in so that the large crawler crane can have a  
6 stable base on which to erect the tower.

7 Q. If at any time -- just so you know, I'm  
8 going to ask a bunch of questions about  
9 construction. I think you're capable of answering  
10 those, but --

11 A. Okay.

12 Q. -- I'm not sure if they are better for you  
13 or Mr. Parzyck. Since you're here first, I'm going  
14 to ask you and you tell me if it's not you. Fine?

15 A. Yeah.

16 Q. A crane to assemble or disassemble a  
17 turbine?

18 A. Yes.

19 Q. These cranes aren't a hundred yards away  
20 from each other, correct? I mean, that's -- the  
21 turbines are not -- that was a stupid question, I  
22 apologize.

23 The turbines are not a hundred feet away  
24 from each other, correct?

1           A.    Correct, yeah.

2           Q.    What's -- how far away are these, the  
3 average turbine from the next one? Or is there a  
4 distance?

5           A.    Well, when you do a layout, it -- the  
6 minimum spacing between each, per GE's guidance, is  
7 three rotor diameters.

8           Q.    So in that case, it's what?

9           A.    300 meters.

10          Q.    Okay. So about a fifth of a mile,  
11 approximately?

12          A.    (Nods head).

13          Q.    And when you assemble or disassemble the  
14 turbines, how do you move the crane those 300  
15 meters?

16          A.    It depends on the circumstances, so  
17 depends. Getting from point A to point B, nine  
18 times out of ten you would like to just walk the  
19 crane from one to the other, so walking it from one  
20 tower to the next. And usually we follow the same  
21 path we do with the collection line.

22          Q.    Okay. And how long does it take -- these  
23 cranes are tall obviously, correct?

24          A.    Correct.

1 Q. How tall are the cranes you use?

2 A. I can't speak to --

3 Q. They're taller than the turbines though,  
4 correct?

5 A. Correct.

6 Q. And the turbines are approximately how  
7 tall?

8 A. These are going to be 80 meters high, so  
9 265 feet to the center of the three blades.

10 Q. Okay. And how do you move a crane 300  
11 meters?

12 A. It's a crawler crane, so similar to a  
13 track type vehicle, and it can walk across -- pretty  
14 much as long as it's fairly level ground, it can  
15 walk across it.

16 Q. So it walks across the access roads?

17 A. It walks across -- it depends on the time  
18 of construction. It usually just walks across the  
19 crane path and there's usually not a permanent  
20 access road installed yet.

21 Q. Okay. When it's disassembled, how -- is  
22 it walked across the crane road or the access roads?

23 A. By disassembled, like the crane is going  
24 to leave the property or it's going to be moved?

1 Q. Yeah.

2 A. Yeah, we use the access roads.

3 Q. And how heavy is the crane?

4 A. I can't speak, I can't speak to --

5 Q. Okay. And again, you have 136 turbines,  
6 136 tower foundations, correct?

7 A. Correct.

8 Q. Okay. Does the tower design change or is  
9 it the same if you're using the GE 100 versus the  
10 103s?

11 A. I'm pretty certain it does not change.

12 Q. Okay.

13 A. The rotor diameter changes.

14 Q. Okay. What's the -- and I'm just talking  
15 about the tower right now. Stay with the tower.  
16 What's the height of the tower?

17 A. The height of the tower is -- do you need  
18 an exact dimension?

19 Q. You know, I'm not going to hold you to if  
20 you're a few meters off. Just trying to get a  
21 handle.

22 A. The height of the tower, you can subtract  
23 about two meters from the height, so 78 meters.

24 Q. Okay. And what's the material in the

1 tower?

2 A. It's mainly steel.

3 Q. When you say mainly steel, what does that  
4 mean?

5 CHAIRMAN CORNALE: Speak into the  
6 microphone.

7 Q. When you say mainly steel -- he's talking  
8 to me, not you. You're doing fine.

9 A. Mainly steel comprises the walls. Tower  
10 is steel, rolled steel.

11 Q. Okay. And is there anything -- what's  
12 inside the tower?

13 A. Inside the tower is -- as it's delivered  
14 to the site?

15 Q. Sure.

16 A. As it's delivered to the site, it also  
17 contains a platform at each, each flange where it's  
18 bolted together. There's also the busbar and  
19 cabling that runs up the tower. Busbar is either --  
20 it depends. For a while there, GE moved back to the  
21 copper, but now they're back to aluminum. So  
22 aluminum busbar for the generator. And then  
23 communication cables and then mobile hitch cables,  
24 control cables. And then various just lighting.

1 Q. Let's go through those one at a time, if  
2 you will. What's this platform you're talking  
3 about? Because you know this better than I do and  
4 everybody else in the room probably.

5 A. As you're ascending the tower, there's a  
6 ladder. As you're ascending the tower --

7 Q. I don't mean to interrupt. Is the ladder  
8 on the outside or the inside?

9 A. Inside.

10 Q. Okay. Go ahead, I apologize.

11 A. As you're ascending the tower, tower  
12 ladder, there's a platform at each connection. And  
13 then at the last section, there's actually three.  
14 It would be easier to show you on a diagram.

15 There's three sections, three platforms,  
16 one at the very top, one middle of the top section,  
17 and then one at the flange or the bolted connection  
18 of the top section. The next flange, so it's the --  
19 you have the midsection to the bottom, that flange  
20 connection. And then there's the entry platform,  
21 the platform when you walk in the door.

22 Q. Okay. So are these platforms made of  
23 steel as well?

24 A. Steel, galvanized steel.

1 Q. They're galvanized steel. And how many  
2 sections does the tower come in?

3 A. These are going to be three-section  
4 towers.

5 Q. Okay. And the tower itself, is that also  
6 galvanized steel?

7 A. No, it's epoxy.

8 Q. So it's steel with epoxy paint on the  
9 outside?

10 A. Correct.

11 Q. Okay. How -- is there a model of a tower  
12 you use? Or is there -- I mean, if I was going to  
13 look up a spec for the tower, I mean that would make  
14 this a lot easier for me down the road. GE has got  
15 100s and 103s. Is there a tower specification that  
16 you're going to use that you know of?

17 A. So with regards to a specification for --

18 Q. Okay, let me back up. Maybe I'll -- if  
19 I'm going to build -- if I'm going to build an  
20 intersection, right, I have lights.

21 A. Yes.

22 Q. The lights come from GE, a lot of those.  
23 Or if I'm building -- let's start over.

24 If I'm going down 55, you're going to see



1 lighting systems, right? The top, which I have no  
2 idea what that's called, is usually provided by GE.  
3 That's -- GE is probably the number one provider in  
4 Illinois of those things.

5 A. Yes.

6 Q. And that's got a specification from GE.

7 A. Yes.

8 Q. Underneath that, there's a tower holding  
9 that up, and that may be provided by someone else.

10 A. Yes.

11 Q. What I'm trying to figure out is that --  
12 and you know, I could tell you, I could find you the  
13 part for that tower for the light, you know, the  
14 part number from Vulcan or whoever I may be buying  
15 it from.

16 Is there a part number or a manufacturer  
17 of this tower you're going to be buying from that  
18 has a model number, expense, et cetera?

19 A. So it's part of a package. As far as what  
20 we purchase from GE, GE does have an ICC spec for  
21 the tower with regards to how it's made, but I don't  
22 know that off the top of my head.

23 Q. Okay. So you'll buy the total package  
24 from GE?

1           A.    Correct.

2           Q.    And do you know how thick the walls of the  
3 tower are?

4           A.    No, I do not.

5           Q.    Do you know how -- the diameter of the  
6 tower?

7           A.    Approximately 15 feet at the base.  And  
8 it's a conical towards the top.  I don't -- off the  
9 top of my head, it's just over a meter at the top.  
10 So --

11          Q.    And at the base -- and I assume inside the  
12 tower it gets smaller and smaller as well?

13          A.    Correct.

14          Q.    I mean the open space inside the tower  
15 where you can put a ladder, et cetera.

16          A.    Correct.

17          Q.    What's the -- what's the diameter of the  
18 open space at the bottom?

19          A.    Similar, 15 feet, but that was my  
20 approximation.  So inside diameter, a little bit  
21 less.  Those are my approximations.  We can get you  
22 the exact dimensions.

23          Q.    That would be great.  I would appreciate  
24 that.  Thank you.  And I apologize because I may

1 not -- I can't read my own writing. I was trying to  
2 keep up with you.

3           You said there was a busbar, a bus --

4           A. Busbar. The terminology, GE terminology  
5 is busbar.

6           Q. Could you explain that please?

7           A. So the generator has a rotor and stator  
8 connections, so it's three connections each. And  
9 then the busbar is what's carrying those three  
10 electrical paths on the tower.

11           For cost savings, cost reductions, they're  
12 not copper, it's just aluminum, aluminum busbar. So  
13 it's not a flexible copper wire, it's not a flexible  
14 aluminum wire; it's a solid aluminum bar.

15           Q. So --

16           A. Insulated aluminum bar on the top.

17           Q. I apologize, I thought you were done. So  
18 it's almost like a [indecipherable] going up.

19           A. Sort of. It's covered -- each bar is  
20 electrically isolated and then there's a cage around  
21 it to prevent anything from bumping into it.

22           Q. Okay. And inside those busbars is where  
23 we have these control cables, communications, et  
24 cetera?

1           A.     There's also a separate path right next to  
2 it.  As you're looking at the wall of the tower, you  
3 would see the busbar cage and then you would see the  
4 second conduit path that would be carrying those  
5 control cables.  Much smaller.  You know, the bundle  
6 of the control cables is, you know, four inches in  
7 diameter.

8           Q.     And what are those made of?

9           A.     What are they what?

10          Q.     Made of.  I'm sorry.

11          A.     They're just regular -- I can't say the  
12 spec, but similar to SO cable for power control,  
13 communication going on the tower.

14          Q.     Are they copper?

15          A.     Some are.  Some copper.  There's also  
16 fiberoptic.  And then there's some aluminum,  
17 aluminum wire.

18          Q.     Okay.  Now you -- again, you may have said  
19 this and I missed it.  What's going in the busbar  
20 then if not these cables?

21          A.     The busbar is the connection to the  
22 generator on top, so --

23          Q.     So the main cable, the main power is going  
24 to the busbar?

1           A.    Correct, yeah.

2           Q.    Okay.  And what's that main cable or power  
3 made out of?

4           A.    That's the other aluminum busbar.

5           Q.    Okay.  Is there copper inside that busbar?  
6 Or it's just all aluminum?

7           A.    It's just aluminum.

8           Q.    Okay.  For each turbine you put up, you're  
9 going to have to put a crane foundation up, correct?

10          A.    Crane, crane pads.

11          Q.    Crane pad.  It may not be permanent, but  
12 -- okay.

13          A.    Correct.

14          Q.    And do you have an average width and depth  
15 of that?

16          A.    We can get that if you want, but I don't  
17 -- it all depends on the soil type, so --

18          Q.    Okay.  Again, depending on soil.  If it's  
19 bad soil, you may have to go deeper.  If it's good  
20 clay that you can build right on top of, you may not  
21 have to go as deep.

22          A.    Yes, that's correct.

23          Q.    Have you been involved in the construction  
24 process of building other wind farms?

1           A.    Only from an operations perspective.  As  
2 construction is ramping up, we're ramping up our  
3 operations, so...

4           Q.    Okay.  So you're more on the operations  
5 side?

6           A.    That is correct, yes.

7           Q.    Who from Invenergy is more on the  
8 construction side?

9                   CHAIRMAN CORNALE:  If you know.

10          Q.    If you know.

11          A.    Ryan Schultz would be.

12          Q.    Okay.  And what's his title with  
13 Invenergy?

14          A.    Project manager.

15          Q.    And have you seen depths and widths --  
16 okay, let's -- when's the last time you were  
17 involved in gearing up for operations of a wind  
18 turbine farm that was being constructed?

19          A.    It would have been the end of last year,  
20 towards the end of last year.  Prairie Breeze out in  
21 Elgin, Nebraska.

22          Q.    Okay.  When's the last one in Illinois?

23                   CHAIRMAN CORNALE:  Mr. Luetkehans, where  
24 are you headed with this?  You already asked him.

1 He said he was operations; he wasn't in  
2 construction.

3 MR. LUETKEHANS: I'm about ready to ask  
4 him to his knowledge about certain construction and  
5 I'm trying to figure out his foundation, if he can  
6 do it or not. And we don't have Mr. Schultz here  
7 and I've got to get here somehow.

8 CHAIRMAN CORNALE: Then if you need the  
9 question for a particular individual, save that  
10 question for them.

11 MR. LUETKEHANS: I don't have that  
12 individual, Mr. Cornale.

13 CHAIRMAN CORNALE: Okay.

14 MR. LUETKEHANS: So I've got to get to  
15 what I can. And I think I'm trying to get to this  
16 gentleman's knowledge. If he doesn't have the  
17 knowledge, we're going to find out real quick, but I  
18 have to lay the foundation for it.

19 BY MR. LUETKEHANS:

20 Q. So when's the last one you were -- in  
21 Illinois you were involved in?

22 A. It was California Ridge project.

23 Q. In Vermilion?

24 A. Vermilion and Champaign County.

1 Q. Which is how far approximately from this  
2 one?

3 A. Approximately --

4 Q. Give or take.

5 A. -- about an hour and a half.

6 Q. Okay. Are you familiar with what the  
7 crane pads, how -- what the crane pad sizes were on  
8 that project?

9 A. No, I'm not.

10 Q. Okay. Did you ever see the approximate  
11 depth/width of those crane pads?

12 A. I saw the crane pads, but I don't know the  
13 depth.

14 Q. So you don't know what the width was on  
15 those you saw?

16 A. No.

17 Q. How big's the crane?

18 A. The crane? No, I couldn't speak to the  
19 size. Just it was a crawler thing.

20 Q. Okay. And what materials -- do you know  
21 what materials are in the pad? Is it gravel  
22 aggregate? What is it?

23 A. The top layer I saw was gravel aggregate.

24 Q. Those crane pads, are they removed after



1 construction or are they left there in case there's  
2 a problem later on?

3 A. No, we remove the crane pad after  
4 construction.

5 Q. So if you had to remove a crane -- if you  
6 had to remove a turbine at some point in the future,  
7 decommission, et cetera, you would then have to go  
8 rebuild or use cranes to remove them, right?

9 MR. BLAZER: Mr. Cornale, this is not the  
10 witness on decommissioning. Mr. Rautmann is.

11 CHAIRMAN CORNALE: All right.

12 MR. LUETKEHANS: He's talked about cranes.  
13 He's on the site.

14 MR. BLAZER: I think you already made the  
15 point, Mr. Cornale, this is not the witness for  
16 these questions.

17 CHAIRMAN CORNALE: Mr. Luetkehans, please  
18 address the questions that he's capable of. If you  
19 have a question, throw it out there. If you don't  
20 know, simply answer no. And we'll try to get it  
21 answered at a later date.

22 BY MR. LUETKEHANS:

23 Q. So the question is do you know if -- how  
24 you would remove a turbine?

1 A. I've never gone through a decommissioning.

2 Q. Okay. Have you ever had to remove one  
3 turbine?

4 A. Yes.

5 Q. Okay. What equipment did you use to  
6 remove that single turbine?

7 A. It was a crawler crane.

8 Q. Okay. And you had to put up a pad first  
9 and build it, correct?

10 A. Correct.

11 Q. Were you involved with how big that pad  
12 was?

13 A. No.

14 Q. You're familiar with foundations for  
15 towers also, correct?

16 A. General -- general knowledge, yes.

17 Q. Okay. You're familiar with the  
18 approximate width of them, correct?

19 A. Correct.

20 Q. And what is the approximate width of the  
21 foundation?

22 A. I can't speak to this project or what the  
23 soil type dictated, but on average, you know, 54 --  
24 54 to 60 feet in diameter.

1 Q. Okay. And what are they made of?

2 A. Concrete, steel rebar.

3 Q. Okay. And, again, do you know if you have  
4 to put aggregate underneath that?

5 A. No.

6 Q. You don't know?

7 A. No, you do not.

8 Q. Okay. So you would just put the concrete  
9 directly on the soil?

10 A. Yeah, it's -- it actually needs to be  
11 undisturbed earth.

12 Q. Okay. Again, it would have to depend on  
13 the soil though, correct?

14 A. Correct, that dictates the foundation  
15 design.

16 Q. Do you know if the construction plans for  
17 this project are already out to possible  
18 contractors?

19 A. I don't know that. We can get that for  
20 you, if you want.

21 Q. Who would know that answer?

22 A. Ryan Schultz.

23 Q. You know what, I might have heard you  
24 wrong. Is it Brian or Ryan?

1           A.     Ryan with an R.

2           Q.     Again, I heard you wrong.  Would Mr.  
3 Parzyck know that?

4                   MR. BLAZER:  Objection, speculation.

5           Q.     Well, let me ask you a question.  Who's  
6 Mr. Schultz report to?  Do you know?

7           A.     I think it's Art.

8                   MR. BLAKEMAN:  If you know.  If you don't,  
9 say you --

10          A.     No, I don't know that.

11          Q.     Do you know what Mr. Parzyck's role in  
12 construction is?

13          A.     I don't know that.

14          Q.     You said you were involved in California  
15 Ridge on the operations side?

16          A.     Correct.

17          Q.     Do you know who the contractor was on  
18 California Ridge?

19          A.     The general was White.

20          Q.     Out of Indiana?

21          A.     I believe so, yes.  They have an office in  
22 Illinois too, but yeah.

23          Q.     Where is their Illinois office, do you  
24 know?

1           A.    I want to say it's up, it's in the  
2 northern half of the state.  I don't know if --

3           Q.    It's up in the suburbs of Chicago?

4           A.    I don't think so, but I don't know the  
5 exact location.

6           Q.    Okay, but it's not Livingston County.

7           A.    Correct.

8           Q.    You said that was the general contractor.  
9 Are there any other contractors on that project that  
10 Invenergy contracted with directly to your  
11 knowledge?

12          A.    To my knowledge, no.

13          Q.    Okay.  To your knowledge, does Invenergy  
14 always use the single general contractor mode or do  
15 they have other contracts, such as utilities, et  
16 cetera?

17          A.    I can't speak to that.  I don't know all  
18 the contracts.

19          Q.    Okay.  Do you have -- I think it's in your  
20 report as well, but if it -- if Mr. Blazer can give  
21 you Prairie[sic] Ridge Exhibit 6.

22                   MR. BLAZER:  I don't have the exhibits,  
23 counsel.

24          Q.    Do you have your exhibits, the exhibits

1 that were attached?

2 MR. BLAZER: He doesn't haven't a report.

3 Q. Do you have your Power Point?

4 CHAIRMAN CORNALE: As a reminder, you  
5 guys, if we could go ahead and turn our cell phones  
6 off please.

7 BY MR. LUETKEHANS:

8 Q. Do you have the documents that were in  
9 your Power Point, Mr. Baker?

10 A. The Power Point itself.

11 MR. SCHOPP: Here's the Power Point  
12 itself.

13 MR. BAKER: Is that the Power Point?

14 MR. LUETKEHANS: Give me a second. This  
15 isn't a very good example. Let me get you another  
16 one.

17 CHAIRMAN CORNALE: I think this is a good  
18 opportunity to take a ten minute recess. Why don't  
19 we take ten minutes, hit the bathroom. I've got  
20 7:35. So why don't we try to be back about 7:45,  
21 7:48, somewhere in there. Okay? Thank you.

22 (Recess at 7:35 p.m. to 7:48 p.m.)

23 CHAIRMAN CORNALE: Mr. Luetkehans, I spoke  
24 with everybody briefly and asked them to speak into

1 the microphones. We did work on trying to turn up  
2 the volume. If you guys are still having a hard  
3 time hearing, let us know and we'll work on it  
4 again. We'll try our best. We want everybody to  
5 hear what's going on. All right?

6 With that, Mr. Luetkehans, go ahead.

7 BY MR. LUETKEHANS:

8 Q. Mr. Baker, I have in front of you or I  
9 think you still have in front of you --

10 A. Yes.

11 Q. -- Pleasant Ridge Exhibit No. 4?

12 A. Correct.

13 Q. Okay. And that's Figure 3-2 of -- I don't  
14 know if it was the application or the supplement to  
15 the application, but that was the one put into  
16 evidence with Mr. Parzyck. Do you know where -- can  
17 you show or see on there where the temporary batch  
18 plant is going in?

19 MR. BLAZER: Objection, Mr. Chairman. Mr.  
20 Luetkehans just pointed out the witness for this  
21 exhibit was Mr. Parzyck not Mr. Baker.

22 MR. LUETKEHANS: If he knows, he can  
23 answer.

24 MR. BLAZER: Well, then I'll expect if he

1 can answer it, we won't hear the same questions for  
2 Mr. Parzyck when he comes back.

3 MR. LUETKEHANS: No promises.

4 MR. BLAKEMAN: If he knows.

5 BY MR. LUETKEHANS:

6 Q. You can see where the temporary batch  
7 plant is shown on the exhibit, correct?

8 A. Yes.

9 Q. Do you know where the local, the current  
10 local batch plant is in comparison?

11 A. I do not.

12 Q. Okay. Do you know the purpose of putting  
13 in the temporary batch plant?

14 A. Just for the volume of concrete that will  
15 be used on the project.

16 Q. Okay. Do you have any reason to believe  
17 that the current batch plant in the area cannot  
18 handle the volume of concrete that will be necessary  
19 for the project?

20 MR. BLAZER: Objection, beyond the scope  
21 of this witness's original testimony.

22 MR. LUETKEHANS: If he knows, he knows.

23 MR. BLAKEMAN: If he knows.

24 A. I don't know.



1 Q. Okay. Let me take that back from you  
2 because that's my only one of that.

3 Okay, Mr. Baker, could you explain to this  
4 -- or could you tell me what the acronym LNTE blade  
5 stands for?

6 A. Low noise trailing edge.

7 Q. And the original filing back in August had  
8 zero LNTE blades, correct?

9 A. I don't know about the original filing.

10 Q. Okay. Do you know how many are currently  
11 scheduled for the project?

12 A. I have to double-check my numbers.  
13 Approximately 15.

14 Q. Okay. And were you involved in the  
15 process in deciding there should be 15?

16 A. I was not.

17 Q. Okay. Who was involved in that process,  
18 to your knowledge?

19 A. Off the top of my head, I don't remember.

20 Q. Okay. Do you know how many were in the  
21 filing on October 15th, 2014?

22 A. I do not know.

23 Q. Can you tell us where the 15 are located?

24 A. I can give you the numbers. I can't give

1 you the GPS coordinates.

2 Q. Okay. And if I have the numbers, how  
3 would I go about finding the GPS coordinates?

4 A. You would have to reference to our map,  
5 the project map.

6 Q. Okay. Can you give me the numbers for the  
7 15?

8 A. Yeah. You want them again?

9 Q. Please.

10 A. 4, 10, 22, 49, 68, 73, 76, 109, 126, 129,  
11 and 136. Those are for the 100 meter rotor.

12 Q. Okay.

13 A. The 103 meter rotor is 68, 73, 126 and  
14 129.

15 Q. And what figure would I use to determine  
16 where those are located?

17 A. I don't know off the top of my head.

18 Q. You don't know what table I would use to  
19 do that?

20 A. No.

21 Q. Do you know why these locations were --  
22 were decided to be used for the LNTE blades?

23 A. It was based on the sound study for the  
24 site.

1 Q. Do you know how high the sound -- the  
2 decibel level would have had to have been for you to  
3 change those blades to the -- those turbines to the  
4 LNTE blades?

5 A. I don't know that off the top of my head.

6 Q. Do you know how much more expensive an  
7 LNTE blade is versus another blade?

8 A. I don't know that.

9 Q. Who would know that?

10 A. I think probably Kevin.

11 Q. Kevin Parzyck?

12 A. Kevin Parzyck.

13 Q. Did you attend a meeting at -- at  
14 Livingston County on or about October 1st, 2014,  
15 with the county board president and a couple of the  
16 county's attorneys?

17 A. I did not.

18 Q. Did you know about that meeting?

19 A. I heard of it, but that was it.

20 Q. Who did you hear was in the meeting from  
21 Invenergy?

22 A. Just some Invenergy folks. I didn't  
23 actually hear names.

24 Q. Okay. Are you familiar with what the

1 construction staging area is going to look like?

2 A. Yeah, I have a general concept. You mean  
3 the laydown yard or do you --

4 Q. I don't know. I think I saw on the plan  
5 what was called construction staging area. So are  
6 there more than one area?

7 A. Just different terminology, I think, for  
8 the same area.

9 Q. Okay. Is there just one area?

10 A. Usually.

11 Q. Okay.

12 A. Depending on the project.

13 Q. To your knowledge, is there more than one  
14 area in this project?

15 A. To my knowledge, no.

16 Q. And what is done at the construction  
17 staging area?

18 A. Various activities. It's usually the  
19 muster area in the morning for the contractor,  
20 usually the temporary offices.

21 Q. So they'll bring in their temporary  
22 trailers?

23 A. Uh-huh, yes.

24 Q. You've got to say yes. She can't

1 handle --

2 A. I caught myself.

3 Q. You did. I'm just trying to remind you.

4 Do you know how big this construction  
5 staging area is in this case?

6 A. I do not.

7 Q. Is it usually on gravel or is it usually  
8 just in a dirt pit, dirt area? What is it?

9 A. Usually gravel.

10 Q. And I'm sorry, did you tell me you know  
11 where this construction staging area is going to be  
12 on this project?

13 A. I do not, no.

14 Q. And how long does the construction staging  
15 area stay in place usually?

16 A. Usually for the term of the project.

17 Q. Okay.

18 A. Construction phase, sorry.

19 Q. Can you tell me -- you have 136 turbines.

20 A. Uh-huh.

21 Q. We have 15 LNTes and -- or forget the 15  
22 LNTes. Can you tell me what the breakdown of 100s  
23 versus 103s are?

24 A. I don't have that actually.

1 Q. Okay. Do you know why one was suggested  
2 rather than the other?

3 A. I don't know that off the top of my head.

4 Q. Who would know that?

5 A. Probably Mr. Parzyck.

6 Q. Do you know what the cost difference is  
7 between the 100 and the 103?

8 A. I do not.

9 Q. Again, that would be something for Mr.  
10 Parzyck?

11 A. Mr. Parzyck, yeah.

12 Q. Let's go to Pleasant Ridge Exhibit 26  
13 which is your Power Point.

14 A. Okay.

15 Q. Do you have that in front of you? Let's  
16 start with page 4. In the second, what I'll call  
17 second box, there's three bullet points in there.  
18 Do you see that?

19 A. Yes.

20 Q. Okay. And one of them talks about repair  
21 of a fault. Do you see that?

22 A. Yes.

23 Q. What types of faults have you seen the  
24 need to be repaired?

1           A.    Can be any -- any number, any different  
2 areas of the turbine systems, anything dealing with  
3 the pitch system, the generator, the gearbox. Can  
4 be an electrical issue in the top box, which is the  
5 controller at the top, or in the converter that's at  
6 the base of the tower.

7           Q.    So the electrical issue could be either in  
8 the top or in the converter, is that what you're  
9 saying?

10          A.    Correct. Could be an electrical or  
11 mechanical issue, correct.

12          Q.    Would it also include blade breakage?

13          A.    It could be.

14          Q.    On the projects you've worked on, has  
15 blade breakage ever occurred?

16          A.    Yes.

17          Q.    How often?

18          A.    In the frequency of --

19          Q.    Let's just start with general numbers  
20 first. Let's just go there and maybe we can figure  
21 out frequency afterwards.

22          A.    In the projects within my region, we've  
23 had -- we've had five such instances.

24          Q.    Okay. And over what time period?

1 A. From 2008 to 2013.

2 Q. None in 2014 or just -- I guess I'm trying  
3 to figure out why you made the break and stopped at  
4 2013 versus current?

5 A. No, you're right, there was one -- there  
6 were two actually in 2014, sorry.

7 Q. So is it five plus two or five including  
8 this?

9 A. Five plus two.

10 Q. Okay, so we have seven. And over how many  
11 projects.

12 A. Over the five projects, Grand Ridge, Cal  
13 Ridge, Bishop Hill, Forward, Pleasant Ridge or --

14 Q. Do you know if --

15 A. Prairie Breeze.

16 Q. -- there's a phase 2 that's in the  
17 planning stage for this project?

18 A. I do not know.

19 Q. And the two that occurred in 2014, where  
20 did those occur?

21 A. Out in Elgin, Nebraska.

22 Q. And when we say blade breakage, what's  
23 included in that?

24 A. Just the blade that attaches to the hub.



1 Q. Does what?

2 A. I guess I don't understand your question.

3 Q. When you say the blade that attaches to  
4 the hub, what types of breaks have occurred? I  
5 mean, does that mean just a nick in the blade or  
6 does that mean that the blade has fallen off? What  
7 does it mean?

8 A. I took your question to mean catastrophic  
9 failures that --

10 Q. That's fine. I'm just trying to make sure  
11 we're on the same page.

12 A. Yes.

13 Q. So when you say catastrophic, it means the  
14 blade comes down?

15 A. Correct, yeah.

16 Q. Or at least a portion of it does.

17 A. Correct.

18 Q. To date, no one's been hurt by that,  
19 correct?

20 A. Correct.

21 Q. Okay, let's go to page 12 of your Power  
22 Point. And let me thank you for numbering it  
23 because some of the other ones I've actually had to  
24 number myself and it's -- this makes it a lot easier

1 for us, for you and I to get to the same place.

2 In the second box let's call it again,  
3 failures are detected by.

4 A. Yes.

5 Q. It says one of the things you're going to  
6 do is you're going to visually review or view the  
7 site at least -- or once a month to ensure all  
8 lights are synched together?

9 A. Correct, yeah.

10 Q. Is there any reason you know of that the  
11 ZBA should not make that a condition of the special  
12 use permit?

13 A. I don't know.

14 Q. Okay. Who would I talk to to ask that  
15 question to? Who would be able to answer that?

16 A. I think it would be Kevin.

17 Q. Okay. You also say -- it's not in here,  
18 but I think your testimony was you do a functional  
19 test three times a year?

20 A. Correct. That's the second -- under that  
21 second box.

22 Q. And it just didn't say three times a year  
23 in the box --

24 A. Oh.

1 Q. -- but I think you testified three times a  
2 year.

3 A. Yeah, yes.

4 Q. She's going to kill us.

5 A. Talking over, I'm sorry.

6 Q. And I'm not blaming you; I'm blaming me  
7 just as much. I'm trying to remind myself as well.

8 Again, I assume, making that a condition  
9 of this permit is beyond your purview?

10 A. That's correct.

11 Q. Again, that would be Kevin's?

12 A. Correct.

13 Q. I think one of the things you talked about  
14 was that you have filed an application with the FAA?

15 A. Correct.

16 Q. Was that in your direct? I don't remember  
17 it being in the Power Point, but I thought I  
18 remember you testifying about it.

19 A. Yeah.

20 Q. And I don't know if it's in there or not.

21 A. Yeah.

22 Q. But you did say and I just want to make  
23 sure. What did you file -- do you know what you  
24 filed with the FAA? Was that your responsibility or

1 somebody else's? You know, let me back up because  
2 that's two questions and that's not fair to you. So  
3 let's start over.

4 Was it your responsibility to file  
5 something with the FAA or was it somebody else's?

6 A. It was not my responsibility.

7 Q. Do you know whose responsibility that was?

8 A. Not off the top of my head.

9 Q. Okay. Well, you're the only person that's  
10 talked about it tonight, so I'm going to ask you at  
11 least a couple questions and see what you know or  
12 what we know together and figure it out.

13 Do you know, was that application a Part  
14 77 application with the FAA?

15 A. I don't know that.

16 Q. Okay. Do you know what a Part 77  
17 application is?

18 A. No, I do not.

19 Q. Okay. Where's the nearest airport to a  
20 turbine here?

21 A. I don't know that off the top of my head.

22 Q. Okay. Do you know how many emergency  
23 response plan -- excuse me, do you know how many  
24 departments, fire departments, fire protection

1 districts, et cetera, the emergency response plan  
2 was sent to?

3 A. I don't know the exact number off the top  
4 of my head.

5 Q. Okay. Would it be about seven?

6 A. I'm not going -- not -- don't know the  
7 exact count.

8 Q. Okay. But they're all in what I would  
9 call the October 15th part of the application, do  
10 you recall that?

11 A. I don't recall that particular part of the  
12 application.

13 Q. Okay. Do you know how many you received  
14 back of those?

15 A. That was the three I mentioned.

16 Q. Okay. So anything not mentioned that's in  
17 the application you have not received, so if -- and  
18 it's a hypothetical, but trust me, I at least know  
19 how to count to seven usually.

20 If there were seven sent out in the  
21 application, that would mean four have not been  
22 received back, correct?

23 A. If that was the total number.

24 Q. Go to page 15 of your Power Point, which

1 is Pleasant Ridge Exhibit 26. In there, you talk  
2 about the IAAA, which is the Illinois Agricultural  
3 Aviation Association, correct?

4 A. Correct.

5 Q. Okay. Has -- it says in there that  
6 Invenergy has reached out to the IAAA to discuss the  
7 marking of our temporary meteorological towers, MET,  
8 and providing the GIS coordinates of the wind towers  
9 and permanent MET tower when the project is  
10 constructed. Do you see that?

11 A. Yes.

12 Q. Have you received a written response from  
13 the IAAA?

14 A. I don't know that off the top of my head.

15 Q. Were you responsible for reaching out to  
16 the IAAA?

17 A. No, I was not.

18 Q. Do you know who was?

19 A. Not off the top of my head.

20 Q. We have these temporary MET towers. How  
21 temporary -- are you -- I'm trying to understand  
22 what they're doing, what their process is.

23 A. They're put up before a project is  
24 constructed. And then usually during the course of

1 construction, they're taken down. A permanent MET  
2 tower is usually put up.

3 Q. Would the permanent MET towers also have  
4 these -- let me back up.

5 The temporary MET towers that you've shown  
6 on page 15 has, I'll call them, red balls. I don't  
7 know if they're -- they look circular to me, so I'll  
8 call them balls.

9 A. Orange.

10 Q. Okay, orange or red.

11 A. Yeah.

12 Q. How big are those, do you know?

13 A. I don't know. Approximately two -- almost  
14 two feet in diameter.

15 Q. And the temporary -- each temporary MET  
16 would have four of them, is that what I'm seeing?  
17 Or is that just --

18 A. Four at the base and four up top.

19 Q. Okay. So each line, there would be four  
20 wires coming down. And one would be up at the top  
21 and one at the bottom of each wire?

22 A. There's actually more wires than you can  
23 see in the picture, but it just marks the top wire.

24 Q. Okay. Now I'm lost.

1           A.    There's multiple wires that are coming  
2 down to support the tower. It just marks the top  
3 one that goes towards -- the connections are at the  
4 top, so there's actually one -- it's three more that  
5 are connected, in the middle of the tower and then  
6 at the base of the tower.

7           Q.    And so how many balls are at the bottom?

8           A.    The four that you see there on the  
9 outline.

10          Q.    Okay. And then four up top?

11          A.    Correct.

12          Q.    So there's wires that don't have balls, is  
13 that what you're saying?

14          A.    Correct.

15          Q.    That sounds worse than I meant it, I'm  
16 sorry. And then when the permanents go up, will  
17 they have these same cylindrical balls?

18          A.    No. They will be -- usually it's a  
19 self-supporting tower similar to a cell tower that  
20 -- self-supporting lattice tower.

21          Q.    And how tall are these towers?

22          A.    Usually at hub height, so 80 meters.

23          Q.    Okay. And the purpose is to determine  
24 wind direction?



1           A.    Wind speed, wind direction on-site.

2           Q.    Okay.  And how many of these permanent  
3 meteorological towers will there be?

4           A.    I don't think we have a final count.  
5 Typical is one to two.

6           Q.    So typically there would be one MET for  
7 every two turbines?

8           A.    No, no.  One MET tower, one to two per  
9 project.

10          Q.    Oh, so you're thinking one -- so there  
11 will be one or two of these on the entire 32,000  
12 acres --

13          A.    Correct.

14          Q.    -- or 56,000 acres, whatever it is?

15          A.    The project.

16          Q.    Okay.  And how will those be marked?

17          A.    They -- I can't speak to how these will be  
18 marked.  In the past, they've been marked with white  
19 flashing during the day and red flashing at night.

20          Q.    At the tip?

21          A.    At the top, yeah.

22          Q.    And what -- what are these towers made of?

23          A.    The temporary MET towers or the permanent?

24          Q.    The permanent, I'm sorry.

1 A. The permanent is steel lattice.

2 Q. Any idea on how much steel?

3 A. I don't know off the top of my head.

4 Q. And you said the GIS, the locations for  
5 the finals have not been determined yet to your  
6 knowledge?

7 A. To my knowledge, no.

8 Q. How many temporary METs will there be?

9 A. Currently we have five.

10 Q. Okay. And I assume we'd have no problem  
11 making balls being put on there as part of the  
12 special use? Or is that beyond your purview?

13 A. That's outside.

14 Q. Again, that would be a question for Kevin?

15 A. Mr. Parzyck, yeah.

16 Q. In your presentation of your Power Point,  
17 and it's kind of signified on page 16 with a big,  
18 I'll just call it a speaker or something, gramophone  
19 or whatever you want to call it.

20 A. Yeah.

21 Q. But that was a video of a crop duster at  
22 Bishop Hill, correct?

23 A. Correct.

24 Q. Do you know who -- what the name of the

1 crop duster was or the company?

2 A. No, I do not.

3 Q. Do you know if that operator charged more  
4 to crop dust near the turbines?

5 A. I don't know that.

6 Q. One moment. Can you go back to your Power  
7 Point, page 6 of Pleasant Ridge Exhibit 26? The  
8 LNTE turbines are, I guess they're shown maybe in  
9 purple, pink, something like that?

10 A. Yes, purple, purple outline.

11 Q. Okay. And I'll be honest with you, my  
12 eyesight isn't that good, but I'm not sure whose is  
13 good to see it that size.

14 A. I would agree.

15 Q. Do you have one that's a larger size that  
16 you could provide to us?

17 MR. BLAZER: It was already provided for  
18 the county, counsel. 20 copies of it were provided,  
19 full size.

20 MR. LUETKEHANS: As exhibit what?

21 MR. BLAZER: You have to ask the county.

22 MR. LUETKEHANS: Mr. Schopp, did you put  
23 that as a county exhibit?

24 MR. SCHOPP: We'll make sure you get a

1 copy of it.

2 MR. LUETKEHANS: Thank you. I guess if  
3 there were other exhibits that were provided to the  
4 county that have not been put into evidence, I would  
5 ask that those be provided as well.

6 CHAIRMAN CORNALE: All right. We'll make  
7 sure that you get that.

8 MR. LUETKEHANS: I have nothing further  
9 for Mr. Baker at this time.

10 CHAIRMAN CORNALE: Mr. Luetkehans, you're  
11 free to address any other questions with their  
12 witnesses.

13 MR. LUETKEHANS: Yeah, I would ask  
14 Mr. VanDeWalle to come to the stand.

15 QUESTIONS BY

16 MR. LUETKEHANS:

17 Q. Mr. VanDeWalle, what other sites have you  
18 studied for Stantec in the Midwest?

19 A. You want a list of all the sites in the  
20 Midwest?

21 Q. Correct, that you've studied particularly  
22 for Stantec.

23 A. Sure. Well, it's a rather lengthy list,  
24 but we'll give it a try here.

1 Q. And you know, here, if you miss one, we're  
2 not going to -- it's -- we're not trying to do a  
3 memory test. I'm just trying to get a grasp.

4 A. Sure.

5 MR. BLAZER: Sounds like a memory test to  
6 me.

7 A. You want the names of the sites or you  
8 want numbers by state? Actually I'm not sure either  
9 one is easier.

10 Q. Let's start with the names of sites.  
11 Let's start there.

12 A. In Illinois would be, of course, Pleasant  
13 Ridge, Big Sky, Cardinal Point, Walnut Ridge,  
14 Pioneer Trail, Settlers Trail, Blue Ridge, Eco  
15 Grove. Let's see, there was a Whispering Pines.

16 Q. Okay, we'll stop there. We'll try --  
17 since you got that many, we won't go to the whole  
18 Midwest; we'll stay with Illinois for now.

19 A. Okay.

20 Q. When did you start with Stantec?

21 A. Well, I worked for a company that was  
22 acquired by Stantec, so I started with that company  
23 in 2006 and we were acquired by Stantec in 2010.

24 Q. Okay. And what was the name of that

1 company you worked for in 2006 to 2010?

2 A. Natural Resources Consulting.

3 Q. Okay. And with -- there were a bunch of  
4 studies done here that you put into evidence in  
5 2009, a large number of them. I'm not trying to say  
6 it was all of them, but there were three or four or  
7 five that were put into evidence from 2009. Were  
8 you involved in those studies at Natural Resources  
9 or just after -- after they were acquired by  
10 Stantec?

11 A. No, we were not involved with those. As I  
12 mentioned in my testimony, we -- Stantec was not  
13 responsible for conducting all of those studies. We  
14 conducted the raptor nest search in 2014.

15 Q. We'll get into the particular studies.  
16 I'm just trying to get a handle on that. In these  
17 studies that you've done in Illinois, which was  
18 approximately nine or ten -- I may not have written  
19 them all down.

20 A. There's 13 total. I think I gave you nine  
21 as I was counting on my fingers.

22 Q. 13 total. Did you ever find a problem  
23 significant enough to stop the wind turbine  
24 development in your mind?

1           A.    No.

2           Q.    In the other studies outside of Illinois,  
3 did you ever find problems significant enough to  
4 stop the wind turbine development in your opinion?

5           A.    No.

6           Q.    In the mist netting, that was done for  
7 bats, right --

8           A.    Correct.

9           Q.    -- could you tell me the number of total  
10 bats that were caught?

11          A.    The total number of bats? Can I grab --

12          Q.    Absolutely. Please. And do me a favor,  
13 just tell me what you're looking at so we can all be  
14 looking at the same time.

15          A.    Sure, this is the Bird and Bat  
16 Conservation Strategy. I believe it's --

17          Q.    Do you have on yours the Pleasant Ridge  
18 exhibit number?

19          A.    I don't on my copy.

20               MR. BLAZER: It's 108.

21               MR. LUETKEHANS: Thank you.

22          A.    And looks like page 34. Let's see, I'm  
23 going to have to do a little math here. I'm sorry,  
24 looks like 56 total bats.

1 Q. Okay. Over how long a time period?

2 A. From -- they netted from June 30th through  
3 July 20th, although that's probably not every night  
4 I would guess. 26 net nights it looks like.

5 Q. Okay. And that's actually -- that  
6 number's actually in a different report, correct?  
7 And that's --

8 A. It would also be in the mist netting  
9 report, yes, correct.

10 Q. One second. I think you testified that  
11 the BBCS -- would you explain what the BBCS is  
12 again?

13 A. Yes, that's the Bird and Bat Conservation  
14 Strategy.

15 Q. And that was submitted to the U.S. Fish  
16 and Wildlife, correct?

17 A. Correct.

18 Q. When was that submitted?

19 A. I believe it was in October or maybe  
20 November. I -- I'd have to look back.

21 Q. Sometime in the last month and a half  
22 then?

23 A. Yes. Actually it was November, I recall  
24 that.



1 Q. Okay. So sometime this month?

2 A. Yes.

3 Q. And I think you said you don't have a  
4 response yet?

5 A. Yes, we had -- we have the technical  
6 assistance letter.

7 Q. From the U.S. Fish and Wildlife?

8 A. Correct, yes.

9 Q. And was that put into evidence?

10 A. Yes, it was.

11 Q. Okay.

12 MR. BLAZER: 109.

13 Q. One of the things you said -- and I don't  
14 know if it was in the Power Point or your direct --  
15 was that bats need a thousand foot buffer?

16 A. Not that they need a thousand foot buffer,  
17 but the U.S. Fish and Wildlife Service considers a  
18 thousand foot buffer from woodlands as avoidance of  
19 summer habitat. So that's a U.S. Fish and Wildlife  
20 Service buffer.

21 Q. And I think you said bats weren't on trees  
22 in the winter?

23 A. That's right. The bats around here, yeah.  
24 The bats form maturity colonies under the bark of

1 trees in the summer, but then they go somewhere else  
2 for the winter.

3 Q. Okay. So they go south like my parents?

4 A. Some of the bats follow your parents,  
5 probably, yes. Some stay around here.

6 Q. Okay. So some stay around here?

7 A. They do, but they'll --

8 MR. BLAZER: They follow you.

9 A. It'll be in caves or -- caves or mines or,  
10 in some cases, in buildings, old buildings like this  
11 for the real common --

12 Q. So they try to get to enclosed spaces is  
13 what you're saying?

14 A. They try to get somewhere warm, yeah,  
15 because they are -- they do hibernate.

16 Q. Again, like my parents, huh?

17 A. Yes.

18 Q. You also I think in your report or Power  
19 Point say, quote, no reports of whooping crane --  
20 whooping cranes, excuse me, if I can read my  
21 notes -- mortality due to collisions with wind  
22 turbines.

23 A. That's correct.

24 Q. Okay. I'm assuming that means there are

1 other avian species that do have mortality because  
2 of collisions with wind turbines; is that correct?

3 A. Yes.

4 Q. Any particular types more than others  
5 or --

6 A. Yeah, it's -- it's been shown that the  
7 night migrating passerines or songbirds are the ones  
8 that have the highest mortality, and typically  
9 that's during the fall migration period, but that  
10 also depends on where the wind farm is located in  
11 relation to a flyway. You know, birds migrate along  
12 flyways, large rivers, Mississippi, Illinois River,  
13 things like that. So in general, wind farms that  
14 are located closer to larger rivers, you know, have  
15 the potential to have higher mortality of birds.  
16 They don't always have.

17 Q. Do you have a mortality rate you would  
18 expect of this particular wind farm?

19 A. No, there's not a good way to calculate  
20 that.

21 Q. Okay. I think we'll talk about that in a  
22 few minutes, but that's a pretty wide variation,  
23 mortality rates around wind turbines.

24 A. It is, and it depends on where the site is

1 located in relation to habitat or flyways, things  
2 like that.

3 Q. Okay. I saw that you reviewed studies  
4 related to livestock and wind turbines, do you see  
5 that? You put that in your Power Point.

6 A. I reviewed one, the one study.

7 Q. Just the one study?

8 A. Correct.

9 Q. The study wasn't one of your exhibits that  
10 you put into evidence, correct?

11 A. I don't think, no.

12 Q. Okay. Exhibit 103, let's start with that  
13 one. And I'll tell you what it is so you don't have  
14 to guess. Exhibit 103 is the Final Report on  
15 Wildlife Baseline Studies for the Pleasant Ridge  
16 Wind Farm, and it's dated between March 5, 2009, to  
17 March 2nd of 2010. Do you see that? Please take  
18 your time and tell me when you arrive. I apologize.

19 A. Sure. Okay, got that one.

20 Q. Okay, great. This study and a few other  
21 studies, the first four, you entered into evidence.  
22 And I think you mentioned this. They weren't  
23 performed directly by Stantec; is that correct?

24 A. That's correct.

1 Q. Were they performed for Stantec or for  
2 Invenergy directly?

3 A. They were not. This company was not a  
4 subconsultant to Stantec, so I -- to my knowledge,  
5 they were directly contracted by Invenergy.

6 Q. Okay. So you weren't involved in the  
7 study. All you were really doing was telling us  
8 what's in it?

9 A. That's correct.

10 Q. And when was Stantec hired for this  
11 project, do you know?

12 A. Well, Stantec has been involved in several  
13 different areas of this project. For the wildlife  
14 work, it would have been probably in March or April  
15 of 2014 when we started the -- started reviewing the  
16 studies and then we did the raptor nest search.

17 Q. Okay. Stay with us and we'll -- let me  
18 just ask this question. I'll try and do it in one  
19 so it's a little quicker.

20 Pleasant Ridge Exhibit 103 we talked  
21 about. 104 is the bat acoustics study dated July  
22 15th to October 21st, 2009. That was done by West,  
23 correct?

24 A. Yes.

1 Q. Okay. So again, Stantec didn't contract  
2 with West or didn't do the study themselves?

3 A. No.

4 Q. And then Pleasant Ridge Exhibit 105 is the  
5 -- I'm not sure I can say this -- Chiropteran risk  
6 assessment?

7 A. Yes.

8 Q. Did I come anywhere close?

9 A. You were close, Chiroptera.

10 Q. And that's from February 2009?

11 A. Yes.

12 Q. Again, that was performed by BHE  
13 Environmental?

14 A. Yes.

15 Q. And was not -- Stantec wasn't involved in  
16 that actual study, et cetera?

17 A. No, they weren't.

18 Q. And then I think the last one of these is  
19 the Pleasant Ridge Exhibit 106, Summer Indiana Bat  
20 Studies, Final Report, June 30th of 2011 through  
21 July 20th, 2011. That's the one we were just  
22 talking about it was like 15 nights or something or  
23 20?

24 A. That's correct, that's the mist net.

1 Q. And again, that was done by West?

2 A. Correct.

3 Q. And Stantec did not have any involvement  
4 in the preparation of that, et cetera?

5 A. No, did not.

6 Q. Okay. Who actually -- Pleasant Ridge  
7 Exhibit 107, that's Stantec report -- and I'll give  
8 you the title -- Fixed Wing Aerial Straight Line  
9 Transect Bald Eagle and Raptor Nest Survey. You're  
10 not going to need to know the specifics yet, I'll  
11 get to that --

12 A. All right.

13 Q. -- so you don't have to go find it.

14 A. Okay.

15 Q. Who -- who actually prepared this report?  
16 Was this you or someone on your staff or --

17 A. I would actually -- so I was the project  
18 manager for that one. And so we had staff who went  
19 out and actually flew in the plane and then, yes,  
20 one of my staff prepared the report.

21 Q. And who on your staff actually prepared  
22 the report?

23 A. Molly Gillespie.

24 Q. Okay. Now you're going to need the actual

1 report. And we'll start with the same order we did  
2 before, which was the West study, March 2nd, 2010,  
3 Wildlife Baseline Study.

4 A. Okay.

5 Q. If you go to page -- I'll call it  
6 Romanette 4, it's iv, it's the first page 4.

7 A. Okay.

8 Q. This -- I guess it's the second full  
9 paragraph. It starts, "Based on fixed point bird  
10 use data." Do you see that?

11 A. Yes.

12 Q. Okay. The last line in there says,  
13 "Raptor use at the PRWF --" that's the Prairie Ridge  
14 Wind Farm, correct?

15 A. Pleasant Ridge.

16 Q. Pleasant Ridge, excuse me "-- was lower  
17 than at other wind energy facilities where raptor  
18 fatality rates have been highest." Correct? Do you  
19 see that?

20 A. Yes, I do.

21 Q. Can we tell by -- I mean, does that -- it  
22 says they're lower than where they've been the  
23 highest. Does that mean they're above the average,  
24 below the average? What does that mean? Just that



1 they're below the highest?

2 A. The -- you know, I would say it means  
3 below average, yes. The studies that this report is  
4 referring to, those highest raptor rates are  
5 probably studies out west actually, not Midwestern.  
6 Again, unless you're along like the Mississippi  
7 River.

8 Q. But it does not say that they are below  
9 the average. It just says they're below the  
10 highest.

11 A. This is the executive summary.

12 Q. Okay.

13 A. So possibly if we look in the body of the  
14 report, it might. I don't know for sure.

15 Q. Okay. So you don't know for sure whether  
16 it does or not?

17 A. Not without looking through the report.

18 Q. Okay. Below, if you go to page 31, it's  
19 the first full paragraph, second paragraph on the  
20 page.

21 A. Okay.

22 Q. It says in there, doesn't it, that the  
23 last sentence, "Some potential exists for  
24 infrastructure to be located within nonagricultural

1 land cover types or at stream crossings, and  
2 construction activities have some limited potential  
3 to impact individual state-listed species should  
4 occupied habitats be impacted." Do you see that?

5 A. Yes.

6 Q. Let's go to the Pleasant Ridge Exhibit  
7 104, which is the bat acoustics study from, I'll use  
8 the final date because it's easier for me, October  
9 21st, 2009.

10 A. Okay.

11 Q. Go to page 23, if you would. I think it's  
12 Table 5.

13 A. All right.

14 Q. Okay. Could you -- I really want you to  
15 kind of explain the chart to me, but we'll take it  
16 one step at a time because you know it way better  
17 than I'm ever going to know it. On the left is the  
18 wind energy facilities that they compare to, right,  
19 that's listed in the tables is the best way to say  
20 it.

21 A. That's right, these are wind energy  
22 facilities for which there are mortality data.

23 Q. Okay. A lot of the wind energy  
24 facilities, there is no mortality data, correct?

1           A.    At least it's not publicly available,  
2   that's correct.

3           Q.    Correct.  Companies may just -- they may  
4   have it, but they haven't published it or they  
5   haven't made it available to others, correct?

6           A.    Well, it's -- it may have been provided to  
7   either a state resource agency or more likely the  
8   Fish and Wildlife Service, but it may not have been  
9   released publicly.

10          Q.    Okay.

11          A.    So the agencies might have it.

12          Q.    The only one listed here is Crescent  
13   Ridge, Illinois.  The only one in Illinois, I should  
14   say, is Crescent Ridge.

15          A.    That's correct, yes.

16          Q.    And just so -- this chart actually goes on  
17   two pages, so I don't want you to -- but I can read  
18   that there's none other in Illinois, I'll tell you  
19   that.

20          A.    Okay, yes, you're right.

21          Q.    Mortality estimate -- and I think the  
22   chart actually kind of goes on to page 25 too.  The  
23   legend is kind of on page 25.  The mortality  
24   estimate, let's just use Crescent Ridge as an

1 example because it's, you know, in Illinois. It  
2 says the mortality estimate is 3.27. And then if I  
3 go to the legend on the last -- on page 25, it says  
4 B, which is mortality estimate, right, is number of  
5 bat fatalities, and I guess that's per megawatt per  
6 year?

7 A. That's correct, yeah.

8 Q. Okay. So -- and if I go through to the  
9 next column, it says number of turbines at Crescent  
10 Ridge is 33 and the total megawatts is 49.5 at  
11 Crescent Ridge. So if I was going to determine the  
12 bat mortality for Crescent Ridge, the estimate from  
13 their published data, I would just multiply 3.27  
14 times 49.5?

15 A. That's a crude way of doing it. It's  
16 probably not the most accurate though, but -- it's  
17 more complicated, but --

18 Q. Okay.

19 A. But the bats per megawatt is really an  
20 index and that's how we -- that's how -- what we can  
21 use to compare sites. Because they have --  
22 different sites have different numbers of turbines  
23 and things like that, so --

24 Q. Well, what would the total number of bat

1 mortality be for Crescent Ridge by this chart?

2 A. I can't calculate a number based on the  
3 data that are in this table.

4 Q. Okay. So we have no idea as we sit here  
5 today?

6 A. No.

7 Q. Do you know who the developer or owner of  
8 Crescent Ridge is?

9 A. I don't know now, no.

10 Q. Okay. Like I said, if you don't know, you  
11 don't know. It's not an Invenergy site to your  
12 knowledge, is it?

13 A. Not to my knowledge, no.

14 Q. Okay. And Invenergy has how many  
15 properties in Illinois, do we know, currently in  
16 operation?

17 A. I don't know that I know that.

18 CHAIRMAN CORNALE: Mr. Luetkehans,  
19 remember -- hold on. Remember, you're asking him  
20 about bird and bat studies, the information that  
21 he's presented, not how many properties Invenergy  
22 owns in the state.

23 MR. LUETKEHANS: I'm getting to tie this  
24 up. It's just one foundation question to tie up to

1 the next one, so I'm trying to figure out if he has  
2 any idea.

3 A. I don't know the total.

4 Q. Okay. They have multiple, correct?

5 A. Yes.

6 Q. Okay. But they have not made any -- they  
7 did not make that -- did not provide that  
8 information to West? Or at least West decided not  
9 to put that in the report if they did, correct?

10 A. This study was conducted in 2009 and I  
11 don't know if those data were available for other  
12 sites in 2009. Some of those may have been -- in  
13 fact, I'm fairly confident some of those sites were  
14 constructed after 2009.

15 Q. Has that information been provided to you?

16 A. No.

17 Q. Okay. So would you think that information  
18 is useful for the purpose of your studies?

19 A. It would provide -- just like any other  
20 site in Illinois, it would provide, you know, a  
21 comparison, I guess. But the problem is we -- for  
22 Pleasant Ridge, we have no idea what the mortality  
23 will be.

24 Q. It would provide additional data for you,

1 correct?

2 A. Would provide additional data for wind  
3 farms in Illinois, yes, correct.

4 Q. Correct. But of the wind farms listed on  
5 Table 5, to your -- I mean, none of the wind farms  
6 are Indiana, correct?

7 MR. BLAZER: Objection, relevance.

8 CHAIRMAN CORNALE: Mr. Luetkehans, I just  
9 want to remind you we're not following the rules of  
10 evidence, so you don't need to lay the foundation.  
11 Ask the question. Whatever the question might be,  
12 just ask the question.

13 MR. LUETKEHANS: I am asking the question  
14 the way I want to ask it. So I don't think there's  
15 any reason or right or obligability to object to  
16 that question because it's not objectionable.

17 CHAIRMAN CORNALE: Okay, let me remind  
18 you, we're here -- we're the Zoning Board of  
19 Appeals. We look at these conditions to make sure  
20 they fulfill special use requirements, okay? Bring  
21 the questions in so that they're relevant to what  
22 we're trying to accomplish here.

23 MR. LUETKEHANS: My question is relevant  
24 to the mortality rate, which obviously Invenergy

1 thought was relevant enough to submit these reports  
2 to.

3 CHAIRMAN CORNALE: Ask that question.

4 MR. LUETKEHANS: Well, that's what I'm  
5 asking.

6 CHAIRMAN CORNALE: Ask the question.

7 MR. LUETKEHANS: I will ask the question  
8 that I think is relevant and I will proceed.

9 BY MR. LUETKEHANS:

10 Q. Are there any properties or any of these  
11 projects closer to Pleasant Ridge other than the  
12 Crescent Ridge one, which I don't know where  
13 Crescent Ridge is, are any of these properties  
14 closer to this project in location than the other  
15 Invenergy sites you're aware of in Illinois?

16 MR. BLAZER: Objection, relevance.

17 CHAIRMAN CORNALE: What's the line of  
18 questioning here? What's the point?

19 MR. LUETKEHANS: The point is the fact  
20 that Invenergy did not provide him the numbers of --  
21 that they did not use Invenergy numbers for this  
22 study or any other study on bat mortality when they  
23 obviously have it, and, instead, we're looking at  
24 numbers that are Minnesota, Wisconsin, Ohio, top of



1 Iowa, that are further away in location.

2 MR. BLAZER: I have two responses, Mr.  
3 Chairman. Number one, the Livingston County wind  
4 ordinance doesn't even call for bat information; it  
5 only calls for bird information.

6 Number two, we've provided the Bird and  
7 Bat Conservation Study which specifically relates to  
8 this project, not any other projects, which has been  
9 reviewed by the U.S. Fish and Wildlife Service which  
10 led to the technical assistance letter.

11 So if Mr. Luetkehans wants to ask  
12 questions about this project, I will concede they  
13 are relevant. If he wants to ask questions about  
14 every other project in the Midwest, they are clearly  
15 not.

16 MR. LUETKEHANS: If bats are not relevant,  
17 then they shouldn't have submitted the study.  
18 They've admitted the relevance by submitting the  
19 study. We're spending more time arguing this issue  
20 than we are answering the question.

21 MR. BLAZER: I think we all know what  
22 we're spending time on here, Mr. Chairman.

23 CHAIRMAN CORNALE: I agree that we just  
24 need to answer the question, but we need to get to

1 the question. We've laid foundation for half an  
2 hour now. We need to ask the questions that you  
3 have that are relevant to Livingston County, the  
4 bird and bat study that's in evidence.

5 BY MR. LUETKEHANS:

6 Q. So I guess my question is -- and I'd ask  
7 it again -- are any of these sites closer to  
8 Livingston County? I mean we've heard there's a  
9 difference out west, correct?

10 MR. BLAZER: Objection, relevance.

11 CHAIRMAN CORNALE: All right. Counsel has  
12 advised me that the question has been asked and been  
13 answered. We need to move on.

14 MR. LUETKEHANS: Where was the answer?

15 MR. BLAZER: Now he's arguing with you.

16 CHAIRMAN CORNALE: We can review the  
17 transcript.

18 MR. LUETKEHANS: I'd like to know the  
19 answer. If it was given, I will stand corrected.

20 CHAIRMAN CORNALE: Let's just move on.

21 BY MR. LUETKEHANS:

22 Q. Let's go to Pleasant Ridge Exhibit 105.

23 A. Which one is that?

24 Q. I'm sorry, that's the Chiropteran risk

1 assessment.

2 A. Okay.

3 Q. Okay. Section 3.1 on page 10.

4 A. I'm sorry, page 10?

5 Q. Yeah.

6 A. Okay.

7 Q. Again, we have a statement that much of  
8 the information available regarding mortality caused  
9 by collisions with moving turbine blades as  
10 contained in technical reports completed for wind  
11 site owners/developers is unpublished and is often  
12 difficult to obtain, correct?

13 A. Correct.

14 Q. Okay. But again, Invenenergy has not  
15 provided you that information, correct?

16 MR. BLAZER: Objection, relevance.

17 CHAIRMAN CORNALE: We'll allow it.

18 A. So you're asking me if they've provided me  
19 with information from their other facilities?

20 Q. Yes.

21 A. No.

22 Q. Okay. And the next paragraph, about  
23 halfway through, it says, "Average mortality in  
24 these 21 studies ranges from .1 to 69.6 bats killed

1 per turbine per year." Do you see that?

2 A. I do.

3 Q. That's a pretty broad range, would you  
4 agree?

5 A. It is a broad range, but it covers a broad  
6 range of sites and many different habitats.

7 Q. Okay. Going to page 12, second full  
8 paragraph I believe, might be the third -- I guess  
9 it's the third. Paragraph that starts, "Many of the  
10 nine species."

11 A. Okay.

12 Q. The last sentence of that paragraph says,  
13 "Based on these findings, we expect these three  
14 species --" and they mean quarry bats, silver-haired  
15 bats and Eastern red bats, correct?

16 A. That's correct.

17 Q. We expect the majority of mortality "-- we  
18 expect these three species to account for a majority  
19 of the mortality associated with the proposed  
20 Pleasant Ridge project."

21 A. That's right.

22 Q. Okay. If you go to page 16.

23 A. Would you like to know why?

24 Q. No.

1           MR. BLAZER: I think he's entitled to  
2 answer the question.

3           MR. LUETKEHANS: You know what, there's no  
4 question. I think Mr. Blazer has every chance --

5           CHAIRMAN CORNALE: There was no question.  
6 Continue with your questions. Thank you for  
7 answering only what he asks.

8           Q. Page 16.

9           A. Okay.

10          Q. If I go to the second full sentence, it  
11 says, does it not, data do not exist. I guess I  
12 don't know if it's do or does, but data do not exist  
13 to dismiss the risk of such disturbance or  
14 displacement; is that correct?

15          A. That's correct. The first half of the  
16 sentence anyway, yes.

17          Q. Okay. But that's for bats, correct?

18          A. I'm sorry, repeat that.

19          Q. I'm sorry. And that's for bats, correct?  
20 That's what this paragraph is talking about?

21          A. Yes, that's correct.

22          Q. Let's go to Pleasant Ridge Exhibit 108.  
23 And that's the Bird and Bat Conservation Strategy  
24 that you did in November of 2014.

1 A. Okay.

2 Q. Let's go to page 40.

3 A. That was 40?

4 Q. Yeah, 4-0.

5 A. All right.

6 Q. Second sentence in the first paragraph  
7 says, "For wind projects in the Midwestern United  
8 States, overall bat mortality estimates have ranged  
9 from approximately 1.88 to 2. -- excuse me, 27.23  
10 bats per megawatt per year."

11 A. That's correct.

12 Q. Okay. And how many megawatts do we have  
13 on this project?

14 A. I'm not sure I know that.

15 Q. Okay. Let's say it's 200 because I don't  
16 remember the exact number either. But again, we  
17 have a very significant range even in the Midwest,  
18 correct, for mortality rates for bats?

19 A. We do, although I can tell you that the  
20 upper range is really driven by two sites primarily  
21 that are located very close to winter hibernating.

22 Q. And if I took those two sites out, what  
23 would the next -- the third highest site be? What  
24 number?

1           A.    I'm not sure I know the third highest  
2 site.

3           Q.    Okay.  Do you have your Power Point  
4 presentation?

5           A.    No, I'm sorry, I don't.

6           Q.    Could someone provide that to him  
7 possibly?  Pleasant Ridge Exhibit 113.

8           A.    All right.

9           Q.    You've got it?

10          A.    Yes.

11          Q.    Okay.  I kind of numbered the pages, they  
12 were not on there, but hopefully we can kind of keep  
13 going together.

14          A.    Sorry I didn't do that for you.

15          Q.    Yeah.  There's -- about page 6, it says  
16 Preconstruction Avian and Bat Studies.  Tell me when  
17 you're at that page.

18          A.    Okay, yes.

19          Q.    Okay.  The top, Summary of Findings, it's  
20 called Bird Use Surveys.  You see that one?

21          A.    Yes.

22          Q.    The third Power Point, it says "Northern  
23 harrier only sentient species observed in the rotor  
24 swept zone."  What's the rotor swept zone?

1           A.    Okay, I'm sorry, you're looking at --

2           Q.    No problem.  The heading says  
3    Preconstruction Avian and Bat Studies, and then it  
4    says Summary of Findings, Avian Surveys.

5           A.    Okay, right.  Now I'm on the right page.

6           Q.    Okay, my apologies.  Again, the third  
7    bullet point under the first bird use survey talks  
8    about no Northern harriers were found in the rotor  
9    swept zone.

10          A.    Correct.

11          Q.    Could you explain to the ZBA what the  
12    rotor swept zone is?

13          A.    So the rotor swept zone is the area that  
14    would be encompassed by the blades of the turbine.  
15    So if you think of it as a wheel, let's say, the  
16    area inside that wheel.

17          Q.    So we would have 136 rotor swept zones is  
18    what you're talking about?

19          A.    Yes.

20          Q.    So if a -- if a Northern harrier was found  
21    100 feet or, let's say, 500 feet away from one of  
22    the turbines, that would not be included in the  
23    rotor swept zone?

24          A.    That's correct, because again, if you



1 think about it as a wheel, it's got a diameter, but  
2 its thickness, you know, is not as -- you know, as  
3 wide, correct.

4 Q. Okay.

5 A. Now in this case, I will just say that  
6 when we talk about where we measure the birds,  
7 whether they're in the rotor swept zone or not,  
8 we're just looking at the height of that, of where  
9 that bird was flying.

10 So since there aren't any turbines out  
11 there right now, if that bird is flying within the  
12 area that would be encompassed by those blades,  
13 that's when the surveyor would have said it's within  
14 the rotor swept zone, but it has to be above a  
15 certain height.

16 Q. Okay. So in this case, they were found  
17 underneath that height?

18 A. Underneath the lowest tip of the blade,  
19 you know, when the blade was at six o'clock.

20 Q. Okay. So how low is the blade at six  
21 o'clock?

22 A. I don't know. I don't know the number.

23 Q. Okay. So if the blade's lowest at a  
24 hundred feet, let's say -- and I'm not saying, just

1 using it as a hypothetical -- and the harrier was  
2 sitting at 80 feet above ground, it would not -- it  
3 would be considered to be not in the rotor swept  
4 zone, correct?

5 A. That's correct.

6 Q. Okay. Let's go to what I have as page 8.  
7 Actually it can't be because I -- yeah, it's page 8.  
8 No wonder I messed you up earlier, because that was  
9 actually page 5. So three pages later. Again, I  
10 can't read my own writing.

11 A. So the title on this page is --

12 Q. Bird and Bat Conservation Strategy.

13 A. Okay.

14 Q. Indiana Northern -- the heading underneath  
15 this is Indiana and Northern long-eared bat  
16 conservation measures.

17 A. Okay.

18 Q. You talked a long time the other day --  
19 not a long time, that's not a fair statement, but a  
20 significant period of time about cut-in speed?

21 A. Yes.

22 Q. What I never heard you explain was what is  
23 cut-in speed?

24 A. Okay. Well, I did explain it, but I'll

1 explain it again.

2 Q. Well, at least not enough that I could  
3 understand it, so do it slower.

4 A. Yeah. So the cut-in speed is the wind  
5 speed at which the turbine begins to generate power  
6 and send it to the grid.

7 Q. So that's at 6.9 meters per second?

8 A. That's what's proposed for this project,  
9 yes.

10 Q. And when you say feathered blades below  
11 the cut-in speed, what's that mean?

12 A. So the blades will be turned so that  
13 they're parallel to the wind so that the blades are  
14 not freewheeling below the cut-in speed. The blades  
15 may still turn, but very slowly if at all.

16 Q. Go to the next page that I have as page 9.  
17 It's titled BBCS and it's monitoring of the adaptive  
18 management plan.

19 A. Okay.

20 Q. We have -- we talk about the American  
21 golden plover monitoring. Do you see that?

22 A. Yes.

23 Q. Okay. We've got migration monitoring to  
24 determine the timing of use. And then carcass

1 monitoring. And what's the purpose of those?

2 A. The migration monitoring. As I stated  
3 last week, American golden plovers do not nest here  
4 in Illinois, but they migrate through, and  
5 principally in the spring. And so the purpose of  
6 the migration study here is to determine the timing  
7 of that migration. So the study will be done to  
8 see, you know, approximately what times or, you  
9 know, what weeks of the month or which weeks of the  
10 spring the plovers arrive here so we get an idea of  
11 when, you know, the potential risk might be.

12 Q. And who do you -- do you provide that  
13 study to anyone after it's done?

14 A. It will be provided to the Fish and  
15 Wildlife Service as part of the -- that's a  
16 condition of the technical assistance letter.

17 Q. And what is done if you found they do  
18 migrate through there?

19 A. We already know they migrate through  
20 there. They were found during the original American  
21 golden plover survey that was done. So we know that  
22 they're there. The timing issue is really just to  
23 provide more data to -- you know, frankly so that  
24 Illinois DNR, U.S. Fish and Wildlife Service would

1 have more data as they collect them at these sites  
2 around the state to know when the birds arrive in  
3 the state.

4           Again, for this project, you know, it  
5 would inform us a little about what the potential  
6 risk is.

7           Q.    And when you find that potential risk,  
8 what, if anything, is Invenergy proposing to do?

9           A.    Well, there are no -- you know, there's no  
10 requirements by either agency for anything, anything  
11 in particular other than we do -- the  
12 post-construction monitoring that was requested was  
13 to do the migration timing studies and then the  
14 carcass searches that will be done for all birds and  
15 all bats.

16           You know, during those searches, of course  
17 they'll be looking for American golden plover as  
18 well.

19           Q.    So does that mean that Invenergy will not  
20 take any action based on this study or this is just  
21 data collection for IDNR?

22           A.    If the -- I assume you're talking about --

23           Q.    U.S. Fish and Wildlife, sorry.

24           A.    Based on the migration study?

1 Q. Yes.

2 A. Yeah. No, there may not be an action  
3 that's required. You know, again we know they occur  
4 in the area. If we find them in the area, again  
5 that doesn't necessarily require any action.

6 Q. Okay. And unless U.S. Fish and Wildlife  
7 Service requires an action, Invenergy wouldn't take  
8 any action, correct?

9 A. Well, it's difficult because the birds are  
10 not listed as threatened or endangered either state  
11 or federally. So the agencies have asked for the  
12 survey. The question is what do they do with the  
13 information once they have it.

14 Q. And my question is is Invenergy going to  
15 -- do you have any information that Invenergy is  
16 going to do anything with that information other  
17 than just turn it over to the U.S. Fish and  
18 Wildlife?

19 A. I don't have any information what they'll  
20 do with it.

21 CHAIRMAN CORNALE: Mr. Luetkehans, not to  
22 interrupt, but are you winding down with this  
23 gentleman or are you -- have you got quite a bit  
24 more? We're getting to about the nine o'clock hour.

1 We need to kind of decide whether we're going to try  
2 to get done with him or --

3 MR. LUETKEHANS: I probably need about 15  
4 more minutes.

5 CHAIRMAN CORNALE: Okay. We'll allot 15  
6 minutes, if you can try to wrap it up.

7 MR. LUETKEHANS: I will.

8 BY MR. LUETKEHANS:

9 Q. Let's go to page 11, U.S. FWS Technical  
10 Assistance Letter.

11 A. All right. Well, the first or second page  
12 of that?

13 Q. I think it's probably the second page.  
14 It's the one -- the first bullet point is --

15 A. Okay.

16 Q. Going down to Indiana bat and Northern  
17 long-eared bat, again, we got implement -- I'm at  
18 the last bullet point on that page. "Implement  
19 three years of fall carcass monitoring and less  
20 intensive monitoring every three years for the  
21 length of the project."

22 A. Yes.

23 Q. Okay. Again, is there any -- once that  
24 monitoring is done, where's that go?

1           A.    Well, the results are submitted to the  
2 Fish and Wildlife Service.

3           Q.    And unless the Fish and Wildlife Service  
4 requires any action, you're not aware of any  
5 Invenergy action that will be taken based on that,  
6 correct?

7           A.    Well, there are adaptive management  
8 measures in the Bird and Bat Conservation Strategy  
9 if a listed species, so if an Indiana bat or a  
10 Northern long-eared bat were to be taken.

11          Q.    Okay.  So let's say an Indiana bat was  
12 taken.  What would occur at that point?

13          A.    The -- well, first of all, let's say that,  
14 you know, at that 6.9 meters per second cut-in  
15 speed, Fish and Wildlife Service considers that  
16 avoidance.  So Fish and Wildlife Service is not  
17 expecting there to be any take.

18                If there was, though, Invenergy would need  
19 at that time to initiate consultation with the Fish  
20 and Wildlife Service, you know, regarding what  
21 measures would come next.  You know, because Fish  
22 and Wildlife Service considers that 6.9 avoidance,  
23 they don't really have anything, any guidance for  
24 what happens if you take a bat at 6.9.



1           So what would happen is consultation with  
2 the Fish and Wildlife Service to determine what the  
3 next steps would be.

4           Q.    Let's go to the IDNR consultation letter,  
5 comments starting on page 12. Start with  
6 recommendation number one, just so we're on the same  
7 page.

8           A.    Okay.

9           Q.    They make a recommendation here, and then  
10 at the bottom -- the top is the recommendation  
11 language out of the IDNR letter, correct?

12          A.    That's correct.

13          Q.    At the bottom there are the bullet points  
14 that are either Invenergy or your comments  
15 afterwards, correct?

16          A.    A response, correct, yes.

17          Q.    And you say the recommendation is not  
18 necessary for recommendation number one.

19          A.    That's correct.

20          Q.    But the IDNR disagrees with you, correct?

21          A.    Well, they say -- their recommendation  
22 states the county should consider it.

23          Q.    Okay. And you don't think the county  
24 should consider it?

1           A.    We, meaning Stantec and Pleasant Ridge  
2 together that is involved with this, discussed this  
3 with Fish and Wildlife Service as to whether these  
4 -- actually any of these surveys needed to be  
5 repeated since they were done some years ago. And  
6 Fish and Wildlife Service concurred that there  
7 really was not a need to repeat the studies because  
8 nothing regarding habitat has changed within the  
9 area. So we would expect that we would get the same  
10 numbers of species, maybe not the same abundance,  
11 total numbers.

12                    But more importantly, for the bats,  
13 Northern long-eared bats and Indiana bats, Pleasant  
14 Ridge is already assuming presence of both Indiana  
15 bats and Northern long-eareds.

16           Q.    And you made that statement to the IDNR in  
17 your original application, correct?

18           A.    I don't know what was in the application.

19           Q.    You don't know what was in the -- you  
20 don't know what was in the document that this was  
21 responding to, that the IDNR was responding to?

22           A.    I do know it was in that document.

23           Q.    Okay.

24           A.    That document was just an information

1 request.

2 Q. Okay. So you provided that information to  
3 IDNR and they came up with this recommendation  
4 number one, correct?

5 A. You know, the only -- the only information  
6 that we provided to IDNR that listed their response  
7 was a request for records of threatened or  
8 endangered species within the project area. That's  
9 done as part of their EcoCAT program. So what  
10 happened is the original request for that  
11 information was back in 2008, 2009.

12 Because that had been five or six years  
13 and there could be new records that have come to  
14 light in that time, we asked -- or we asked the  
15 Illinois DNR for an update for new records. That's  
16 the only information request. The IDNR responded  
17 with those records and then included these  
18 recommendations.

19 Q. Okay. The IDNR letter reads, "The  
20 Department has received from Stantec Consulting a  
21 submission on behalf of the Pleasant Ridge Wind  
22 Energy, LLC, for the purpose of consultation between  
23 the Department and Livingston County." Do you  
24 recall that letter?

1           A.    Just a second.  I have the DNR's letter.  
2    Yes, that's correct.

3           Q.    Okay.  And that's what they say, correct?

4           A.    It -- yes.

5           Q.    Again, recommendation number two from the  
6    IDNR letter, you also think that this is not  
7    necessary, correct?

8           A.    We do because this recommendation is  
9    asking for uncurtailed operations during the first  
10   year.  So although, again, it's not specifically  
11   stated, what's implied in this recommendation is  
12   that during the first year of operation, the wind  
13   farm -- the turbines would have the cut-in speed of  
14   3.0, 3 meters per second, the manufacturer's rated  
15   cut-in speed.

16          Q.    Where is that implied in this  
17   recommendation because I don't see it?

18          A.    Right.  It's implied because the  
19   recommendation says that -- so the recommendation  
20   reads, "The county should consider a requirement  
21   that the applicant conduct at least one bat activity  
22   season through October, post-construction bat  
23   mortality monitoring, to establish a baseline for --  
24   for the scale of bat mortality due to normal wind

1 farm operations and to identify the species  
2 sustaining mortality."

3 So the only way to establish a baseline  
4 mortality due to normal wind farm operations would  
5 be to operate uncurtailed at the manufacturer's  
6 rated cut-in speed, but by doing so, you have the  
7 highest risk for bat mortality.

8 Q. Doesn't this also imply that you --  
9 couldn't you also read this to say that you should  
10 do a baseline study at 6.9 meters per second cut-in?

11 A. Well, you could read it, but that's  
12 exactly what Invenergy is going to be doing.  
13 They're doing three years of monitoring at 6.9.

14 Q. So Invenergy is going to be doing it;  
15 they're just doing it at 6.9.

16 A. Yeah, correct.

17 Q. Okay. So is the 6.9 cut-in speed from  
18 August 1st to October 7th, is that going to be a  
19 condition that is going to be part of this permit in  
20 your mind?

21 A. It's a condition of the technical  
22 assistance letter, and it's my understanding that  
23 that technical assistance letter is part of the  
24 application.

1 Q. Okay. So at no point during this  
2 operation of Pleasant Ridge wind farm will a cut-in  
3 speed be below 6.9 meters per second, is that your  
4 statement, for August 1st through October 7th?

5 A. I'm sorry, restate that question.

6 Q. In your opinion, at no time between August  
7 1st and October 7th is Invenergy ever going to have  
8 a cut-in speed lower than 6.9 meters per second.

9 A. Based on the current proposal for the  
10 project and the current Bird and Bat Conservation  
11 Strategy and the technical assistance letter, that  
12 is correct.

13 Q. So in your opinion, if they were to change  
14 that and go down to 4.5 meters per second, they  
15 would have to come back to the county for approval?

16 A. I -- I actually don't know the answer to  
17 that, if they'd have to come back to the county or  
18 not. They'd have to go to the Fish and Wildlife  
19 Service.

20 Q. Okay. Go to page 18. It's recommendation  
21 number seven. Second bullet point at the bottom  
22 says "U.S. FWS confirmed an ESA incidental take  
23 permit is not needed." Where did they do that?

24 A. An incidental take permit would be a

1 Section 10 permit of the Endangered Species Act  
2 which allows for incidental take or permits  
3 incidental take. That was -- that confirmation came  
4 as part of the meeting with the Fish and Wildlife  
5 Service.

6 Q. Have you received that in writing?

7 A. I'm not sure if it was in writing or not.  
8 I was at the meeting where it was discussed. I'm  
9 not really sure if they've gotten that in some  
10 correspondence that I haven't seen.

11 Q. Okay. But to your knowledge, that has not  
12 been submitted to the county?

13 A. Yeah, I guess that's true, if it exists.

14 Q. If it doesn't exist, I'm assuming it  
15 hasn't been submitted as well.

16 A. That's correct.

17 Q. Okay. Let's go to recommendation number  
18 12. Again, another recommendation that you do not  
19 believe is necessary, correct?

20 A. That's correct.

21 Q. Okay. Just so I'm clear, the IDNR is an  
22 independent government agency, correct?

23 A. Independent?

24 Q. Well, it's not hired -- it's not hired by

1 -- it's not paid for by Invenergy like you are,  
2 correct?

3 A. That's correct.

4 Q. It's not paid for by me or my clients or  
5 anything like that, correct?

6 A. That's correct. They are a state agency.

7 Q. Okay, so they're not, they have no -- they  
8 have no skin in this game, for lack of better words,  
9 as relates to what the county puts in other than  
10 what they think is best for the State of Illinois in  
11 this area, correct?

12 CHAIRMAN CORNALE: Mr. Luetkehans, as you  
13 continue through this, I just want to remind you,  
14 one thing that I did preference all these questions  
15 with was please listen to questions from other  
16 people as they were asked. A zoning board member  
17 asked a question about recommendation 12. He stated  
18 that, in fact, it was about aquatic noise. There  
19 are no lakes within this -- within this proposed  
20 turbine area. So what's the relevance to your  
21 question?

22 MR. LUETKEHANS: My question relates to  
23 not only, at this point, recommendation 12, but to  
24 recommendation 13, 13, 14, 15. It's just trying to



1 get a handle on --

2 CHAIRMAN CORNALE: Again, 13 was  
3 addressed. It was another mussel/aquatic/amphibian  
4 question. 14 -- without reading through it exactly,  
5 but 12 and 13 were asked. I ask that you listen to  
6 the questions and take the answers from the  
7 individual.

8 MR. LUETKEHANS: And I'm aware of the  
9 individual's answers, Mr. Chairman. I think I'm  
10 asking a different question, and my question relates  
11 to whether IDNR in any of its recommendations has  
12 any, you know, any reason not to -- not to have as  
13 its purpose protecting the State of Illinois and  
14 Livingston County and the area in general.

15 MR. BLAZER: Mr. Chairman, if I may, just  
16 following up on what you just said, again I'm  
17 looking at Section 6 from the Public Hearing  
18 Guidelines that addresses undue repetition. I think  
19 that not only applies to repeated -- repeatedly the  
20 same questions from the same questioner, but also  
21 repeating the same question by different people.

22 The record does reflect that the board  
23 last week asked these questions. If he wants to  
24 keep asking this witness whether or not the IDNR is

1 a state agency, we all know the IDNR is a state  
2 agency. That has nothing to do with what we're  
3 doing here. It is repetitive. And I'd ask that Mr.  
4 Luetkehans be directed to move on to something  
5 that's relevant.

6 MR. LUETKEHANS: And I would ask that he  
7 answer this one particular question.

8 CHAIRMAN CORNALE: We're going to allow  
9 the objection. We need to move on, Mr. Luetkehans.

10 BY MR. LUETKEHANS:

11 Q. Domestic geese, you talked about a 2013  
12 study.

13 A. Yes.

14 Q. You say the results suggest a negative  
15 effect in the immediate vicinity, 50 meters of a  
16 wind turbine, on stress parameters compared to birds  
17 raised 500 meters from a turbine. Do you recall  
18 that?

19 A. Yes.

20 Q. Bringing your attention to UCLC Exhibit  
21 10, is this the study you were discussing?

22 A. We're okay with --

23 CHAIRMAN CORNALE: Answer that question.

24 A. Okay. Yes.

1 Q. Okay. Do you see -- going to page, it's  
2 labeled 684.

3 A. Okay.

4 Q. Okay. Do you know what cortisol is?

5 A. I do.

6 Q. What's cortisol?

7 A. It's a stress hormone.

8 Q. Okay. And if you go to about halfway  
9 through the -- about halfway through the second part  
10 of the page, the right side, do you see the  
11 statement, "All three successive measures of  
12 cortisol concentration showed a higher concentration  
13 of stress hormones in birds kept at a distance of 50  
14 meters from the turbine. The lower cortisol  
15 concentration in animals kept at a distance of 500  
16 meters may indicate that this distance is safer for  
17 animals but still not safe enough as mentioned  
18 below." Do you see that?

19 A. I do.

20 Q. And then at the bottom of that same page,  
21 it says, "This information suggests infrasound noise  
22 may be a very serious source of stress." Do you see  
23 that?

24 A. I do.

1 Q. Go to the next page. The second full  
2 paragraph starts off, "Furthermore, a change in the  
3 animal's behavior was observed." Do you see that?

4 A. Yes.

5 Q. Okay. And then if I go down two  
6 paragraphs later, about halfway through that  
7 paragraph it says, "The effect of the stress source  
8 on cortisol secretion has been confirmed in other  
9 species, including sheep." Do you see that?

10 A. Let's see, so which paragraph?

11 Q. Third full paragraph, second sentence.

12 A. I do see the sentence, yes.

13 Q. Okay. And then the sentence after that  
14 says, "The increased secretion of cortisol may be  
15 harmful to the health of geese as steroid hormones  
16 suppress the immune system resulting in increased  
17 susceptibility to infections or bacteria from  
18 endogenous origin." Do you see that?

19 A. Yes.

20 Q. If I go to the second -- or excuse me, the  
21 last sentence on that side of the page, it says, "At  
22 the end of the study, the differences in the body  
23 weights between birds from both groups were found to  
24 be statistically significant." Do you see that?

1           A.    Well, that sentence is cut off in this  
2 copy I have, but I see the first part of that  
3 sentence.

4           Q.    Okay.  Where is yours cut off?  I'm sorry.

5           MR. BLAZER:  Same place mine's cut off.

6           MR. LUETKEHANS:  You know what, I'm asking  
7 the question.  Just try to understand, Mr. Blazer.

8           A.    It's -- what I can see is, "At the end of  
9 the study, the difference in the --"

10          Q.    Okay.  So "body weights between birds for  
11 both groups" is cut off?

12          CHAIRMAN CORNALE:  It's cut off in all the  
13 copies.

14          MR. LUETKEHANS:  Okay, I'll provide an  
15 updated one.

16          CHAIRMAN CORNALE:  Thank you.

17          Q.    And then the next sentence says, "Animals  
18 kept near the wind turbine had about 10 percent  
19 lower body weight than those kept at a distance of  
20 500 meters from the turbine."  Do you see that?

21          A.    Yes.

22          Q.    Okay.  And if I go to the last paragraph  
23 on that page, it says -- first sentence says,  
24 "Results indicate negative impact in the immediate

1 vicinity of wind turbines on food consumption,  
2 weight gain and cortisol concentration in blood."  
3 Do you see that?

4 A. Yes.

5 Q. Back to page -- to the last page of your  
6 Power Point, you say, "Veterinarians working with  
7 herds in the vicinity of Illinois wind farms," and  
8 you said, "No adverse effects have been reported or  
9 observed." Who did you contact?

10 A. Dr. Kimberly Stevens, DVM.

11 Q. Okay. And do you know how close Dr.  
12 Kimberly Stevens's clients are to turbines?

13 A. Her letter indicates that she has -- just  
14 trying to look here, she indicates that she has  
15 several of the farms that she works with that are  
16 located within a wind farm.

17 Q. Okay. Do you know how far she is from any  
18 wind turbine, how far they are from any wind  
19 turbines?

20 A. She says most of the farms do not have a  
21 wind turbine directly on their farm, but within  
22 one-half mile of their farm --

23 Q. Okay.

24 A. -- is a turbine.

1           MR. LUETKEHANS: I would ask Mr. Blazer to  
2 make that available to the entire board. Or at  
3 least to me, I should say.

4           MR. BLAZER: No.

5           MR. LUETKEHANS: Okay. I would ask the  
6 board, since he's reading from a document, that I  
7 actually get a copy of that document.

8           MR. BLAZER: This?

9           CHAIRMAN CORNALE: I think you -- he  
10 testified to the fact that he's spoken to  
11 veterinarians. And you forced him to read the  
12 letter, so he testified to the fact you forced the  
13 letter, the evidence.

14          MR. LUETKEHANS: I didn't force him to  
15 read anything.

16          CHAIRMAN CORNALE: Mr. Luetkehans, the  
17 point has been made and you're over your 15 minutes.  
18 With that, we're through for the evening. All  
19 right.

20                 We're going to talk about some scheduling.  
21 We have down the next meeting to be December the 8th  
22 at 6:30. It's expected to be back here at this  
23 location, all right? December the 9th, that's a  
24 Tuesday, again at this location at 6:30. We're

1 going to talk some more about some additional dates,  
2 but for sure, right now, we've got Monday, December  
3 the 8th, at 6:30 and Tuesday, December the 9th, at  
4 6:30.

5 So if you're interested in finding out  
6 about more dates, you're welcome to stay. If not,  
7 you could go and keep it down so we can talk up here  
8 please. We'll discuss who's going to be available  
9 at the next meetings right now.

10 (Discussion off the record.)

11 CHAIRMAN CORNALE: For everybody that's  
12 interested, Monday and Tuesday, December the 8th and  
13 9th, the applicant has made available or will  
14 attempt to make available VanDeWalle, that's the  
15 avian and bat study; Mr. Loomis, he's from Illinois  
16 State, he's the economic impact; Mr. Parzyck, he  
17 introduced the project, kind of the overview of the  
18 project; Mr. Rautmann will be available, he spoke  
19 about the decommissioning plan; and Blank will be  
20 available yet again for shadow flicker,  
21 comprehensive plan questions. 8th and 9th at 6:30  
22 back here.

23 After the 8th and 9th meeting, we're going  
24 to look at December 15th and December 17th for dates



1 for meetings. The hope will be to be back here. We  
2 may after some -- if we can't get the sound system  
3 working to everybody's satisfaction, we may end up  
4 moving back around. So with that, December 15th and  
5 December 17th probably at 6:30. We may look at some  
6 times on those, but we'll let you know more as we  
7 get closer. Fair enough?

8 Can I get a motion to recess? John  
9 Vitzthum makes a motion, Joan Huisman seconds. All  
10 in favor?

11 ALL MEMBERS: Aye.

12 (Adjourned at 9:20 p.m.)

13

14

15

16

17

18

19

20

21

22

23

24

1 STATE OF ILLINOIS )  
 )SS  
2 COUNTY OF FORD )

3

4 I, June Haeme, a Notary Public in and for  
5 the County of Ford, State of Illinois, do hereby  
6 certify that the following Livingston County Zoning  
7 Board of Appeals, Case SU-7-14 hearing was taken at  
8 the Pontiac Township High School, 1100 Indiana  
9 Avenue, Pontiac, Illinois, on November 24, 2014.

10 That the said deposition was taken down in  
11 stenograph notes and afterwards reduced to  
12 typewriting under my instruction and that the  
13 deposition is a true record of the testimony given.

14 I do further certify that I am a  
15 disinterested person in this cause of action; that I  
16 am not a relative, or otherwise interested in the  
17 event of this action, and am not in the employ of  
18 the attorneys for either party.

19 IN WITNESS WHEREOF, I have hereunto set my  
20 hand and affixed my notarial seal this 1st day of  
21 December, 2014.

22

23

24

25

JUNE HAEME, CSR  
NOTARY PUBLIC

26

27 "OFFICIAL SEAL"  
28 June Haeme  
29 Notary Public, State of Illinois  
30 My Commission Expires:  
31 September 27, 2016

32

33

34

35

	<b>activities (2)</b> 396:18;426:2	<b>agencies (2)</b> 427:11;446:11	<b>344:11</b>	<b>Arndt (2)</b> 360:18,19
<b>§</b>	<b>activity (1)</b> 452:21	<b>agency (6)</b> 427:7;445:10; 455:22;456:6;458:1,2	<b>animals (3)</b> 459:15,17;461:17	<b>around (7)</b> 379:20;417:23; 418:5,6;419:23; 445:2;465:4
<b>\$6,119 (1)</b> 348:5	<b>actual (4)</b> 353:20;362:21; 422:16;423:24	<b>agent (5)</b> 341:8;342:10; 358:3;363:5;364:24	<b>animal's (1)</b> 460:3	<b>arrive (3)</b> 420:18;444:10; 445:2
<b>[</b>	<b>Actually (29)</b> 346:6;348:10; 353:10;359:12; 375:13;387:10; 395:23;397:24;400:6; 401:23;407:22;408:4; 413:8;416:5,6,23; 423:6,15,17,19,21; 425:5;427:16,22; 442:7,9;450:4; 454:16;463:7	<b>agents (2)</b> 364:5,15	<b>answered (3)</b> 345:6;385:21; 434:13	<b>Art (1)</b> 388:7
<b>[indecipherable] (1)</b> 379:18	<b>Adaptive (2)</b> 443:17;448:7	<b>aggregate (3)</b> 384:22,23;387:4	<b>apologies (1)</b> 440:6	<b>ascending (3)</b> 375:5,6,11
<b>A</b>	<b>added (2)</b> 365:17;366:11	<b>ago (5)</b> 363:11;365:2; 366:2;368:2;450:5	<b>apologize (12)</b> 347:13;355:7; 357:22;358:15,18; 359:21;364:9;370:22; 375:10;378:24; 379:17;420:18	<b>aspects (1)</b> 344:14
<b>able (3)</b> 345:9;358:6;402:15	<b>address (3)</b> 350:20;385:18; 412:11	<b>agree (4)</b> 352:18;411:14; 433:23;436:4	<b>Appeals (1)</b> 431:19	<b>assemble (2)</b> 370:16;371:13
<b>Above (6)</b> 363:3,4;367:6; 424:23;441:14;442:2	<b>addressed (1)</b> 457:3	<b>agreement (2)</b> 349:24;350:15	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>assessed (5)</b> 348:15,18;349:12, 14,21
<b>above-ground (3)</b> 367:8,10,21	<b>addresses (1)</b> 457:18	<b>Agricultural (1)</b> 406:2	<b>application (13)</b> 391:14,15;403:14; 404:13,14,17;405:9, 12,17,21;450:17,18; 453:24	<b>assessment (2)</b> 422:6;435:1
<b>above-line (1)</b> 367:23	<b>Adjoined (1)</b> 465:12	<b>ahead (9)</b> 340:1;351:20; 358:7,15;359:3,5; 375:10;390:5;391:6	<b>applies (1)</b> 457:19	<b>assistance (7)</b> 417:6;433:10; 444:16;447:10; 453:22,23;454:11
<b>Absolutely (1)</b> 415:12	<b>admissible (1)</b> 368:16	<b>aid (9)</b> 346:3,5,15,22,23; 347:20;348:17;349:6, 16	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>associated (1)</b> 436:19
<b>abundance (1)</b> 450:10	<b>admitted (1)</b> 433:18	<b>airport (1)</b> 404:19	<b>application (13)</b> 391:14,15;403:14; 404:13,14,17;405:9, 12,17,21;450:17,18; 453:24	<b>Association (1)</b> 406:3
<b>accept (2)</b> 340:20;351:12	<b>adverse (1)</b> 462:8	<b>allot (1)</b> 447:5	<b>applies (1)</b> 457:19	<b>assume (5)</b> 362:9;378:11; 403:8;410:10;445:22
<b>acceptable (2)</b> 354:6,9	<b>advise (1)</b> 341:9	<b>allow (2)</b> 435:17;458:8	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>assuming (3)</b> 418:24;450:14; 455:14
<b>accepted (1)</b> 351:16	<b>advised (2)</b> 368:16;434:12	<b>allows (1)</b> 455:2	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>assumption (1)</b> 350:2
<b>access (5)</b> 360:2;372:16,20, 22;373:2	<b>Aerial (1)</b> 423:8	<b>almost (2)</b> 379:18;407:13	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attached (1)</b> 390:1
<b>accomplish (1)</b> 431:22	<b>afterwards (2)</b> 399:21;449:15	<b>along (5)</b> 351:2,6,11;419:11; 425:6	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attaches (2)</b> 400:24;401:3
<b>account (1)</b> 436:18	<b>again (44)</b> 355:2,9;358:16; 361:7;364:23;373:5; 380:18;381:18;387:3, 12;388:2;391:4; 394:8;398:9;402:2; 403:8,11;410:14; 416:12;418:16;422:1, 12;423:1;425:6; 434:7;435:7,14; 438:16;440:6,24; 442:9;443:1;445:4; 446:3,4;447:17,23; 452:5,10;455:18; 457:2,16;463:24; 464:20	<b>aluminum (12)</b> 374:21,22;379:12, 12,14,14,16;380:16, 17;381:4,6,7	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attempt (1)</b> 464:14
<b>accurate (2)</b> 364:18;428:16		<b>always (2)</b> 389:14;419:16	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attend (1)</b> 395:13
<b>acoustics (2)</b> 421:21;426:7		<b>American (4)</b> 443:20;444:3,20; 445:17	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attendance (3)</b> 349:3,4,5
<b>acquired (3)</b> 413:22,23;414:9		<b>amount (1)</b> 346:17	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attention (1)</b> 458:20
<b>acquisition (2)</b> 364:7;365:4		<b>analysis (2)</b> 350:1,2	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>attorneys (2)</b> 351:10;395:16
<b>acre (2)</b> 366:4;368:2		<b>Andrew (5)</b> 341:8,17;342:7; 354:4;364:13	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>AUDIENCE (4)</b> 341:13;343:19; 352:19;369:14
<b>acres (3)</b> 366:3;409:12,14		<b>animal-related (1)</b>	<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>August (4)</b> 393:7;453:18; 454:4,6
<b>acronym (1)</b> 393:4			<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	<b>available (15)</b> 343:11;344:9,20, 21;345:17;427:1,5; 430:11;435:8;463:2; 464:8,13,14,18,20
<b>across (6)</b> 372:13,15,16,17,18, 22			<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	
<b>act (3)</b> 345:10;350:4;455:1			<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	
<b>acting (1)</b> 364:15			<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	
<b>action (7)</b> 445:20;446:2,5,7,8; 448:4,5			<b>applicant (6)</b> 340:18;341:1; 342:9;343:23;452:21; 464:13	

<p><b>average (10)</b> 349:2,5;371:3; 381:14;386:23; 424:23,24;425:3,9; 435:23</p> <p><b>avian (6)</b> 344:10;419:1; 439:16;440:3,4; 464:15</p> <p><b>Aviation (1)</b> 406:3</p> <p><b>avoidance (3)</b> 417:18;448:16,22</p> <p><b>aware (3)</b> 432:15;448:4;457:8</p> <p><b>away (6)</b> 359:20;370:19,23; 371:2;433:1;440:21</p> <p><b>Aye (1)</b> 465:11</p>	<p>452:23;453:3,10</p> <p><b>basically (1)</b> 350:14</p> <p><b>Bat (32)</b> 415:15;416:13; 421:21;422:19;426:7; 428:5,12,24;429:20; 432:22;433:4,7; 434:4;437:23;438:8; 439:16;440:3;442:12, 15;447:16,17;448:8,9, 10,11,24;452:21,22, 24;453:7;454:10; 464:15</p> <p><b>batch (5)</b> 391:17;392:6,10, 13,17</p> <p><b>bathroom (1)</b> 390:19</p> <p><b>bats (24)</b> 415:7,10,11,24; 417:15,21,23,24; 418:4;428:19;433:16; 435:24;436:14,15,15; 437:17,19;438:10,18; 445:15;450:12,13,13, 15</p> <p><b>battery (1)</b> 351:11</p> <p><b>BBCS (3)</b> 416:11,11;443:17</p> <p><b>becomes (1)</b> 348:20</p> <p><b>begins (1)</b> 443:5</p> <p><b>behalf (1)</b> 451:21</p> <p><b>behavior (1)</b> 460:3</p> <p><b>below (11)</b> 348:4;424:24; 425:1,3,8,9,18; 443:10,14;454:3; 459:18</p> <p><b>benefit (1)</b> 349:24</p> <p><b>Best (4)</b> 358:3;391:4; 426:19;456:10</p> <p><b>better (4)</b> 370:12;375:3; 426:16;456:8</p> <p><b>beyond (4)</b> 353:22;392:20; 403:9;410:12</p> <p><b>BHE (1)</b> 422:12</p> <p><b>bid (1)</b> 363:1</p> <p><b>biddings (1)</b> 363:1</p> <p><b>big (5)</b> 386:11;397:4;</p>	<p>407:12;410:17; 413:13</p> <p><b>big's (1)</b> 384:17</p> <p><b>Bird (15)</b> 415:15;416:13; 424:9;429:20;433:5, 6;434:4;437:23; 439:20;440:7;441:9, 11;442:12;448:8; 454:10</p> <p><b>birds (11)</b> 344:10;419:11,15; 441:6;445:2,14; 446:9;458:16;459:13; 460:23;461:10</p> <p><b>Bishop (7)</b> 358:11;359:1,23; 360:23;361:5;400:13; 410:22</p> <p><b>bit (3)</b> 359:17;378:20; 446:23</p> <p><b>blade (14)</b> 393:4;395:7,7; 399:12,15;400:22,24; 401:3,5,6,14;441:18, 19,20</p> <p><b>blades (12)</b> 372:9;393:8; 394:22;395:3,4; 435:9;440:14;441:12; 443:10,12,13,14</p> <p><b>blade's (1)</b> 441:23</p> <p><b>BLAKEMAN (4)</b> 342:4;388:8;392:4, 23</p> <p><b>blaming (2)</b> 403:6,6</p> <p><b>Blank (3)</b> 344:1,1;464:19</p> <p><b>BLAZER (62)</b> 341:4;342:1,3; 343:4,10;344:1,4,8, 11,16;345:12,15,18; 347:12;350:7,10,12, 18,22;351:14,23; 352:2,9,14,15,23; 353:21;354:4,20; 355:1,14;368:7; 385:9,14;388:4; 389:20,22;390:2; 391:19,24;392:20; 411:17,21;413:5; 415:20;417:12;418:8; 431:7;432:16;433:2, 21;434:10,15;435:16; 437:1,4;457:15; 461:5,7;463:1,4,8</p> <p><b>blood (1)</b> 462:2</p> <p><b>Bloomington (1)</b></p>	<p>358:23</p> <p><b>Blue (1)</b> 413:14</p> <p><b>board (10)</b> 343:15;344:22; 348:3;350:24;395:15; 431:18;456:16; 457:22;463:2,6</p> <p><b>body (4)</b> 425:13;460:22; 461:10,19</p> <p><b>Boldt (2)</b> 360:9;361:18</p> <p><b>bolted (2)</b> 374:18;375:17</p> <p><b>both (4)</b> 357:18;450:14; 460:23;461:11</p> <p><b>bottom (9)</b> 349:7;375:19; 378:18;407:21;408:7; 449:10,13;454:21; 459:20</p> <p><b>boundaries (2)</b> 353:10;356:13</p> <p><b>boundary (7)</b> 341:6,8,21;342:14, 24;352:7;353:14</p> <p><b>box (5)</b> 398:17;399:4; 402:2,21,23</p> <p><b>break (1)</b> 400:3</p> <p><b>breakage (3)</b> 399:12,15;400:22</p> <p><b>breakdown (2)</b> 353:17;397:22</p> <p><b>Breaking (1)</b> 342:14</p> <p><b>breaks (1)</b> 401:4</p> <p><b>Breeze (2)</b> 382:20;400:15</p> <p><b>Brian (1)</b> 387:24</p> <p><b>briefly (1)</b> 390:24</p> <p><b>bring (5)</b> 345:10;350:17; 362:17;396:21; 431:20</p> <p><b>Bringing (1)</b> 458:20</p> <p><b>broad (3)</b> 436:3,5,5</p> <p><b>brought (1)</b> 343:23</p> <p><b>buffer (4)</b> 417:15,16,18,20</p> <p><b>build (4)</b> 376:19,19;381:20; 386:9</p> <p><b>building (2)</b></p>	<p>376:23;381:24</p> <p><b>buildings (2)</b> 418:10,10</p> <p><b>built (2)</b> 360:8,20</p> <p><b>bullet (6)</b> 398:17;440:7; 447:14,18;449:13; 454:21</p> <p><b>bumping (1)</b> 379:21</p> <p><b>bunch (2)</b> 370:8;414:3</p> <p><b>bundle (1)</b> 380:5</p> <p><b>buried (2)</b> 366:17;367:2</p> <p><b>bus (1)</b> 379:3</p> <p><b>busbar (14)</b> 374:18,19,22; 379:3,4,5,9,12;380:3, 19,21,24;381:4,5</p> <p><b>busbars (1)</b> 379:22</p> <p><b>business (2)</b> 340:16,23</p> <p><b>buy (1)</b> 377:23</p> <p><b>buying (2)</b> 377:14,17</p>
<b>B</b>				
<p><b>back (37)</b> 343:23;344:1,2,5, 14,23;350:17,19; 354:7;360:4;363:4, 10,11,21;365:2; 367:3;374:20,21; 376:18;390:20;392:2; 393:1,7;404:1; 405:14,22;407:4; 411:6;416:20;451:11; 454:15,17;462:5; 463:22;464:22;465:1, 4</p> <p><b>bacteria (1)</b> 460:17</p> <p><b>bad (1)</b> 381:19</p> <p><b>Baker (9)</b> 344:14;369:17,20; 390:9,13;391:8,21; 393:3;412:9</p> <p><b>Bald (1)</b> 423:9</p> <p><b>balls (6)</b> 407:6,8;408:7,12, 17;410:11</p> <p><b>bar (3)</b> 379:14,16,19</p> <p><b>bark (1)</b> 417:24</p> <p><b>base (6)</b> 370:6;378:7,11; 399:6;407:18;408:6</p> <p><b>based (9)</b> 346:7;394:23; 424:9;429:2;436:13; 445:20,24;448:5; 454:9</p> <p><b>Baseline (5)</b> 420:15;424:3;</p>	<p>415:7,10,11,24; 417:15,21,23,24; 418:4;428:19;433:16; 435:24;436:14,15,15; 437:17,19;438:10,18; 445:15;450:12,13,13, 15</p> <p><b>battery (1)</b> 351:11</p> <p><b>BBCS (3)</b> 416:11,11;443:17</p> <p><b>becomes (1)</b> 348:20</p> <p><b>begins (1)</b> 443:5</p> <p><b>behalf (1)</b> 451:21</p> <p><b>behavior (1)</b> 460:3</p> <p><b>below (11)</b> 348:4;424:24; 425:1,3,8,9,18; 443:10,14;454:3; 459:18</p> <p><b>benefit (1)</b> 349:24</p> <p><b>Best (4)</b> 358:3;391:4; 426:19;456:10</p> <p><b>better (4)</b> 370:12;375:3; 426:16;456:8</p> <p><b>beyond (4)</b> 353:22;392:20; 403:9;410:12</p> <p><b>BHE (1)</b> 422:12</p> <p><b>bid (1)</b> 363:1</p> <p><b>biddings (1)</b> 363:1</p> <p><b>big (5)</b> 386:11;397:4;</p>	<p>407:12;410:17; 413:13</p> <p><b>big's (1)</b> 384:17</p> <p><b>Bird (15)</b> 415:15;416:13; 424:9;429:20;433:5, 6;434:4;437:23; 439:20;440:7;441:9, 11;442:12;448:8; 454:10</p> <p><b>birds (11)</b> 344:10;419:11,15; 441:6;445:2,14; 446:9;458:16;459:13; 460:23;461:10</p> <p><b>Bishop (7)</b> 358:11;359:1,23; 360:23;361:5;400:13; 410:22</p> <p><b>bit (3)</b> 359:17;378:20; 446:23</p> <p><b>blade (14)</b> 393:4;395:7,7; 399:12,15;400:22,24; 401:3,5,6,14;441:18, 19,20</p> <p><b>blades (12)</b> 372:9;393:8; 394:22;395:3,4; 435:9;440:14;441:12; 443:10,12,13,14</p> <p><b>blade's (1)</b> 441:23</p> <p><b>BLAKEMAN (4)</b> 342:4;388:8;392:4, 23</p> <p><b>blaming (2)</b> 403:6,6</p> <p><b>Blank (3)</b> 344:1,1;464:19</p> <p><b>BLAZER (62)</b> 341:4;342:1,3; 343:4,10;344:1,4,8, 11,16;345:12,15,18; 347:12;350:7,10,12, 18,22;351:14,23; 352:2,9,14,15,23; 353:21;354:4,20; 355:1,14;368:7; 385:9,14;388:4; 389:20,22;390:2; 391:19,24;392:20; 411:17,21;413:5; 415:20;417:12;418:8; 431:7;432:16;433:2, 21;434:10,15;435:16; 437:1,4;457:15; 461:5,7;463:1,4,8</p> <p><b>blood (1)</b> 462:2</p> <p><b>Bloomington (1)</b></p>	<p>358:23</p> <p><b>Blue (1)</b> 413:14</p> <p><b>board (10)</b> 343:15;344:22; 348:3;350:24;395:15; 431:18;456:16; 457:22;463:2,6</p> <p><b>body (4)</b> 425:13;460:22; 461:10,19</p> <p><b>Boldt (2)</b> 360:9;361:18</p> <p><b>bolted (2)</b> 374:18;375:17</p> <p><b>both (4)</b> 357:18;450:14; 460:23;461:11</p> <p><b>bottom (9)</b> 349:7;375:19; 378:18;407:21;408:7; 449:10,13;454:21; 459:20</p> <p><b>boundaries (2)</b> 353:10;356:13</p> <p><b>boundary (7)</b> 341:6,8,21;342:14, 24;352:7;353:14</p> <p><b>box (5)</b> 398:17;399:4; 402:2,21,23</p> <p><b>break (1)</b> 400:3</p> <p><b>breakage (3)</b> 399:12,15;400:22</p> <p><b>breakdown (2)</b> 353:17;397:22</p> <p><b>Breaking (1)</b> 342:14</p> <p><b>breaks (1)</b> 401:4</p> <p><b>Breeze (2)</b> 382:20;400:15</p> <p><b>Brian (1)</b> 387:24</p> <p><b>briefly (1)</b> 390:24</p> <p><b>bring (5)</b> 345:10;350:17; 362:17;396:21; 431:20</p> <p><b>Bringing (1)</b> 458:20</p> <p><b>broad (3)</b> 436:3,5,5</p> <p><b>brought (1)</b> 343:23</p> <p><b>buffer (4)</b> 417:15,16,18,20</p> <p><b>build (4)</b> 376:19,19;381:20; 386:9</p> <p><b>building (2)</b></p>	<p>376:23;381:24</p> <p><b>buildings (2)</b> 418:10,10</p> <p><b>built (2)</b> 360:8,20</p> <p><b>bullet (6)</b> 398:17;440:7; 447:14,18;449:13; 454:21</p> <p><b>bumping (1)</b> 379:21</p> <p><b>bunch (2)</b> 370:8;414:3</p> <p><b>bundle (1)</b> 380:5</p> <p><b>buried (2)</b> 366:17;367:2</p> <p><b>bus (1)</b> 379:3</p> <p><b>busbar (14)</b> 374:18,19,22; 379:3,4,5,9,12;380:3, 19,21,24;381:4,5</p> <p><b>busbars (1)</b> 379:22</p> <p><b>business (2)</b> 340:16,23</p> <p><b>buy (1)</b> 377:23</p> <p><b>buying (2)</b> 377:14,17</p>
<b>C</b>				
			<p><b>cable (4)</b> 367:2;380:12,23; 381:2</p> <p><b>cables (7)</b> 374:23,23,24; 379:23;380:5,6,20</p> <p><b>cabling (1)</b> 374:19</p> <p><b>cage (2)</b> 379:20;380:3</p> <p><b>Cal (3)</b> 358:13;359:6; 400:12</p> <p><b>calculate (3)</b> 346:15;419:19; 429:2</p> <p><b>calculated (3)</b> 346:4;348:22;349:9</p> <p><b>calculation (3)</b> 347:19;348:23,23</p> <p><b>California (3)</b> 383:22;388:14,18</p> <p><b>call (11)</b> 340:1,2;398:16; 402:2;405:9;407:6,8; 410:18,19;424:5; 433:4</p> <p><b>called (3)</b> 377:2;396:5;439:20</p>	

<p><b>calls (1)</b> 433:5</p> <p><b>came (4)</b> 357:5;365:2;451:3; 455:3</p> <p><b>Can (55)</b> 342:5;346:16; 347:18,24;350:13,20; 352:1,10;354:1,7,23; 356:22;357:17;358:3, 16;370:5;372:13,14; 373:22;378:15,21; 381:16,20;383:5,15; 387:19;389:20; 391:16,22;392:1,6; 393:23,24;394:6; 397:19,22;399:1,3,20; 407:22;411:6;415:11, 13;418:20;422:5; 424:21;427:17; 428:20;434:16; 438:19;439:12;447:6; 461:8;464:7;465:8</p> <p><b>capable (2)</b> 370:9;385:18</p> <p><b>capacity (1)</b> 358:14</p> <p><b>carcass (3)</b> 443:24;445:14; 447:19</p> <p><b>Cardinal (1)</b> 413:13</p> <p><b>care (1)</b> 340:17</p> <p><b>carrying (2)</b> 379:9;380:4</p> <p><b>case (5)</b> 371:8;385:1;397:5; 441:5,16</p> <p><b>cases (1)</b> 418:10</p> <p><b>catastrophic (2)</b> 401:8,13</p> <p><b>category (1)</b> 346:8</p> <p><b>caught (2)</b> 397:2;415:10</p> <p><b>caused (1)</b> 435:8</p> <p><b>caves (2)</b> 418:9,9</p> <p><b>cell (2)</b> 390:5;408:19</p> <p><b>center (1)</b> 372:9</p> <p><b>certain (4)</b> 361:11;373:11; 383:4;441:15</p> <p><b>Certainly (1)</b> 340:13</p> <p><b>cetera (9)</b> 341:24;377:18; 378:15;379:24;385:7;</p>	<p>389:16;405:1;422:16; 423:4</p> <p><b>chains (1)</b> 366:23</p> <p><b>CHAIRMAN (68)</b> 340:1,4,13;341:11, 15,18;342:5,8,12; 343:3,6,13;344:5,9, 13,17;345:3;350:23; 351:20;352:18,20; 354:5;355:8;359:16; 368:15;369:8,11,15; 374:5;382:9,23; 383:8,13;385:11,17; 390:4,17,23;391:19; 412:6,10;429:18; 431:8,17;432:3,6,17; 433:3,22,23;434:11, 16,20;435:17;437:5; 446:21;447:5;456:12; 457:2,9,15;458:8,23; 461:12,16;463:9,16; 464:11</p> <p><b>Champaign (1)</b> 383:24</p> <p><b>chance (3)</b> 355:14;357:18; 437:4</p> <p><b>Chang (4)</b> 356:20,23,24,24</p> <p><b>C-H-A-N-G (1)</b> 356:23</p> <p><b>change (9)</b> 340:14;348:16; 349:8,16;373:8,11; 395:3;454:13;460:2</p> <p><b>changed (1)</b> 450:8</p> <p><b>changes (1)</b> 373:13</p> <p><b>charged (1)</b> 411:3</p> <p><b>chart (4)</b> 426:15;427:16,22; 429:1</p> <p><b>checkerboard (1)</b> 365:8</p> <p><b>Chicago (4)</b> 356:18;358:5; 360:4;389:3</p> <p><b>Chiroptera (1)</b> 422:9</p> <p><b>Chiropteran (2)</b> 422:5;434:24</p> <p><b>Chuck (1)</b> 340:2</p> <p><b>circular (1)</b> 407:7</p> <p><b>circumstances (1)</b> 371:16</p> <p><b>Citizens (1)</b> 351:13</p> <p><b>city (1)</b></p>	<p>353:18</p> <p><b>classifications (1)</b> 346:10</p> <p><b>clay (1)</b> 381:20</p> <p><b>clear (1)</b> 455:21</p> <p><b>Clearly (2)</b> 361:12;433:14</p> <p><b>clients (2)</b> 456:4;462:12</p> <p><b>close (6)</b> 351:23;352:3; 422:8,9;438:21; 462:11</p> <p><b>closer (5)</b> 419:14;432:11,14; 434:7;465:7</p> <p><b>coaching (2)</b> 354:24;355:1</p> <p><b>collect (1)</b> 445:1</p> <p><b>collection (5)</b> 366:12,15,16; 371:21;445:21</p> <p><b>collisions (3)</b> 418:21;419:2;435:9</p> <p><b>colonies (1)</b> 417:24</p> <p><b>column (2)</b> 346:4;428:9</p> <p><b>combination (1)</b> 348:14</p> <p><b>coming (3)</b> 346:18;407:20; 408:1</p> <p><b>Comm (2)</b> 367:12,18</p> <p><b>comments (2)</b> 449:5,14</p> <p><b>common (1)</b> 418:11</p> <p><b>communication (2)</b> 374:23;380:13</p> <p><b>communications (1)</b> 379:23</p> <p><b>communicative (1)</b> 367:2</p> <p><b>Companies (1)</b> 427:3</p> <p><b>company (10)</b> 360:19,20,21; 364:8,11;411:1; 413:21,22;414:1; 421:3</p> <p><b>compare (2)</b> 426:18;428:21</p> <p><b>compared (1)</b> 458:16</p> <p><b>comparison (2)</b> 392:10;430:21</p> <p><b>complete (1)</b> 343:16</p>	<p><b>completed (1)</b> 435:10</p> <p><b>complicated (2)</b> 346:6;428:17</p> <p><b>comprehensive (2)</b> 344:3;464:21</p> <p><b>comprises (1)</b> 374:9</p> <p><b>concede (1)</b> 433:12</p> <p><b>concentration (4)</b> 459:12,12,15;462:2</p> <p><b>concept (1)</b> 396:2</p> <p><b>Concrete (4)</b> 387:2,8;392:14,18</p> <p><b>concurred (1)</b> 450:6</p> <p><b>condition (5)</b> 402:11;403:8; 444:16;453:19,21</p> <p><b>conditions (1)</b> 431:19</p> <p><b>conduct (1)</b> 452:21</p> <p><b>conducted (2)</b> 414:14;430:10</p> <p><b>conducting (1)</b> 414:13</p> <p><b>conduit (1)</b> 380:4</p> <p><b>confident (1)</b> 430:13</p> <p><b>confirmation (1)</b> 455:3</p> <p><b>confirmed (2)</b> 454:22;460:8</p> <p><b>conical (1)</b> 378:8</p> <p><b>connected (1)</b> 408:5</p> <p><b>connection (4)</b> 375:12,17,20; 380:21</p> <p><b>connections (3)</b> 379:8,8;408:3</p> <p><b>connectivity (5)</b> 365:5,6;366:7,8; 368:20</p> <p><b>connects (3)</b> 367:1;368:17,18</p> <p><b>consequently (2)</b> 342:17;360:1</p> <p><b>Conservation (8)</b> 415:16;416:13; 433:7;437:23;442:12, 16;448:8;454:10</p> <p><b>consider (4)</b> 344:18;449:22,24; 452:20</p> <p><b>considered (1)</b> 442:3</p> <p><b>considers (3)</b></p>	<p>417:17;448:15,22</p> <p><b>construct (1)</b> 365:9</p> <p><b>constructed (4)</b> 382:18;406:10,24; 430:14</p> <p><b>construction (37)</b> 358:5,8,11,12,12; 359:7,7,11,13,14; 360:3,9;361:18; 362:11,13;363:22; 370:4,9;372:18; 381:23;382:2,8; 383:2,4;385:1,4; 387:16;388:12;396:1, 5,16;397:4,11,14,18; 407:1;426:2</p> <p><b>consult (1)</b> 358:6</p> <p><b>consultant (1)</b> 342:11</p> <p><b>consultation (4)</b> 448:19;449:1,4; 451:22</p> <p><b>Consulting (2)</b> 414:2;451:20</p> <p><b>consumption (1)</b> 462:1</p> <p><b>contact (1)</b> 462:9</p> <p><b>contacting (1)</b> 365:10</p> <p><b>contained (1)</b> 435:10</p> <p><b>contains (1)</b> 374:17</p> <p><b>continue (7)</b> 343:14,17;363:12; 365:4;369:15;437:6; 456:13</p> <p><b>continued (1)</b> 364:20</p> <p><b>continuing (1)</b> 364:6</p> <p><b>continuity (1)</b> 365:14</p> <p><b>contract (1)</b> 422:1</p> <p><b>contracted (3)</b> 362:21;389:10; 421:5</p> <p><b>contractor (14)</b> 360:10;361:1,6; 362:6,10,13,14,16,20; 364:10;388:17;389:8, 14;396:19</p> <p><b>contractors (3)</b> 362:19;387:18; 389:9</p> <p><b>contracts (2)</b> 389:15,18</p> <p><b>control (5)</b> 374:24;379:23;</p>
--	--	---	--	--

<p>380:5,6,12  <b>controller (1)</b>                  399:5  <b>converter (2)</b>                  399:5,8  <b>coordinates (3)</b>                  394:1,3;406:8  <b>copies (2)</b>                  411:18;461:13  <b>copper (6)</b>                  374:21;379:12,13;                  380:14,15;381:5  <b>copy (4)</b>                  412:1;415:19;                  461:2;463:7  <b>CORNALÉ (74)</b>                  340:1,3,4,13;341:4,                  11,15,18;342:5,8,12;                  343:3,5,6,13;344:5,9,                  13,17;345:3,13;                  350:23;351:20;                  352:15,18,20;353:21;                  354:5;355:2,8;                  359:16;368:8,15;                  369:8,11,15;374:5;                  382:9,23;383:8,12,13;                  385:9,11,15,17;390:4,                  17,23;412:6,10;                  429:18;431:8,17;                  432:3,6,17;433:23;                  434:11,16,20;435:17;                  437:5;446:21;447:5;                  456:12;457:2;458:8,                  23;461:12,16;463:9,                  16;464:11  <b>corporate (1)</b>                  349:1  <b>corrected (1)</b>                  434:19  <b>correspondence (1)</b>                  455:10  <b>cortisol (7)</b>                  459:4,6,12,14;                  460:8,14;462:2  <b>cost (3)</b>                  379:11,11;398:6  <b>counsel (6)</b>                  343:18;355:8;                  368:15;389:23;                  411:18;434:11  <b>count (3)</b>                  405:7,19;409:4  <b>counting (1)</b>                  414:21  <b>county (23)</b>                  340:20;351:13;                  361:22;383:24;389:6;                  395:14,15;411:18,21,                  23;412:4;433:3;                  434:3,8;449:22,23;                  451:23;452:20;                  454:15,17;455:12;                  456:9;457:14</p>	<p><b>county's (1)</b>                  395:16  <b>couple (2)</b>                  395:15;404:11  <b>course (3)</b>                  406:24;413:12;                  445:16  <b>court (1)</b>                  356:21  <b>cover (1)</b>                  426:1  <b>covered (1)</b>                  379:19  <b>covers (1)</b>                  436:5  <b>CPPRT (1)</b>                  348:24  <b>crane (28)</b>                  370:1,3,4,5,16;                  371:14,19;372:10,12,                  19,22,23;373:3;381:9,                  10,10,11;384:7,7,11,                  12,17,18,24;385:3,5;                  386:7;418:19  <b>cranes (6)</b>                  370:19;371:23;                  372:1;385:8,12;                  418:20  <b>crawler (4)</b>                  370:5;372:12;                  384:19;386:7  <b>Crescent (10)</b>                  427:12,14,24;                  428:9,11,12;429:1,8;                  432:12,13  <b>crop (3)</b>                  410:21;411:1,4  <b>cross-examination (1)</b>                  343:12  <b>cross-examine (1)</b>                  343:24  <b>crossings (1)</b>                  426:1  <b>crude (1)</b>                  428:15  <b>curative (2)</b>                  360:7,7  <b>curious (2)</b>                  346:3;347:20  <b>current (5)</b>                  392:9,17;400:4;                  454:9,10  <b>currently (3)</b>                  393:10;410:9;                  429:15  <b>cut (6)</b>                  359:3;461:1,4,5,11,                  12  <b>cut-in (13)</b>                  442:20,23;443:4,                  11,14;448:14;452:13,                  15;453:6,10,17;454:2,                  8</p>	<p><b>cylindrical (1)</b>                  408:17    <p style="text-align: center;"><b>D</b></p> <p><b>daily (2)</b>                  349:2,5  <b>daisy (1)</b>                  366:23  <b>data (13)</b>                  424:10;426:22,24;                  428:13;429:3;430:11,                  24;431:2;437:11,12;                  444:23;445:1,21  <b>date (4)</b>                  355:11;385:21;                  401:18;426:8  <b>dated (2)</b>                  420:16;421:21  <b>dates (3)</b>                  464:1,6,24  <b>day (2)</b>                  409:19;442:18  <b>days (1)</b>                  349:3  <b>dealing (1)</b>                  399:2  <b>December (12)</b>                  363:17,23;364:16;                  463:21,23;464:2,3,12,                  24,24;465:4,5  <b>decibel (1)</b>                  395:2  <b>decide (1)</b>                  447:1  <b>decided (2)</b>                  394:22;430:8  <b>deciding (1)</b>                  393:15  <b>decision (1)</b>                  365:11  <b>decline (1)</b>                  346:20  <b>decommission (1)</b>                  385:7  <b>decommissioning (3)</b>                  385:10;386:1;                  464:19  <b>deep (1)</b>                  381:21  <b>deeper (1)</b>                  381:19  <b>delivered (2)</b>                  374:13,16  <b>delta (2)</b>                  348:20;349:9  <b>Department (3)</b>                  340:21;451:20,23  <b>departments (2)</b>                  404:24,24  <b>depend (1)</b>                  387:12  <b>depending (3)</b></p> </p>	<p>346:10;381:18;                  396:12  <b>depends (7)</b>                  371:16,17;372:17;                  374:20;381:17;                  419:10,24  <b>depreciation (2)</b>                  346:19,21  <b>depth (2)</b>                  381:14;384:13  <b>depth/width (1)</b>                  384:11  <b>depths (1)</b>                  382:15  <b>described (3)</b>                  343:18;346:11;                  351:7  <b>description (1)</b>                  363:7  <b>design (2)</b>                  373:8;387:15  <b>detected (1)</b>                  402:3  <b>determine (6)</b>                  394:15;408:23;                  428:11;443:24;444:6;                  449:2  <b>determined (1)</b>                  410:5  <b>developer (4)</b>                  360:15,16,17;429:7  <b>development (2)</b>                  414:24;415:4  <b>device (1)</b>                  340:19  <b>diagram (1)</b>                  375:14  <b>diameter (8)</b>                  373:13;378:5,17,                  20;380:7;386:24;                  407:14;441:1  <b>diameters (1)</b>                  371:7  <b>Diane (1)</b>                  340:7  <b>dictated (1)</b>                  386:23  <b>dictates (1)</b>                  387:14  <b>difference (5)</b>                  348:20;349:10;                  398:6;434:9;461:9  <b>differences (1)</b>                  460:22  <b>different (11)</b>                  346:7;349:20;                  396:7;399:1;416:6;                  421:13;428:22,22;                  436:6;457:10,21  <b>difficult (2)</b>                  435:12;446:9  <b>dimension (1)</b>                  373:18</p>	<p><b>dimensions (1)</b>                  378:22  <b>direct (2)</b>                  403:16;417:14  <b>directed (2)</b>                  350:11;458:4  <b>direction (2)</b>                  408:24;409:1  <b>directly (7)</b>                  369:3;387:9;                  389:10;420:23;421:2,                  5;462:21  <b>dirt (2)</b>                  397:8,8  <b>disagrees (1)</b>                  449:20  <b>disassemble (2)</b>                  370:16;371:13  <b>disassembled (2)</b>                  372:21,23  <b>discuss (3)</b>                  349:19;406:6;464:8  <b>discussed (2)</b>                  450:2;455:8  <b>discussing (1)</b>                  458:21  <b>Discussion (1)</b>                  464:10  <b>dismiss (1)</b>                  437:13  <b>displacement (1)</b>                  437:14  <b>distance (5)</b>                  371:4;459:13,15,                  16;461:19  <b>distances (1)</b>                  357:7  <b>district (6)</b>                  345:21;346:8;                  347:10;348:19;350:3,                  3  <b>districts (5)</b>                  346:9,9,13;351:4;                  405:1  <b>disturbance (1)</b>                  437:13  <b>divided (1)</b>                  349:2  <b>DNR (2)</b>                  444:24;451:15  <b>DNR's (1)</b>                  452:1  <b>document (5)</b>                  450:20,22,24;                  463:6,7  <b>documents (2)</b>                  360:7;390:8  <b>dollars (1)</b>                  347:22  <b>Domestic (1)</b>                  458:11  <b>done (18)</b>                  357:24;369:12;</p>
--	---	--	---	---

<p>379:17;396:16;414:4, 17;415:6;421:22; 423:1;444:7,13,17,21; 445:14;447:2,24; 450:5;451:9 <b>door (1)</b> 375:21 <b>double-check (1)</b> 393:12 <b>down (18)</b> 342:15;346:17; 349:7;354:7;358:17; 376:14,24;401:14; 407:1,20;408:2; 414:19;446:22; 447:16;454:14;460:5; 463:21;464:7 <b>Downey (16)</b> 341:9,17,21;342:7, 7,10,13;343:8; 351:22;352:8,12; 354:20;355:12; 364:13;369:10,12 <b>Dr (2)</b> 462:10,11 <b>driven (1)</b> 438:20 <b>due (4)</b> 368:16;418:21; 452:24;453:4 <b>duly (1)</b> 341:17 <b>during (13)</b> 359:6,11;360:4; 364:15;370:4;406:24; 409:19;419:9;444:20; 445:16;452:9,12; 454:1 <b>dust (1)</b> 411:4 <b>duster (2)</b> 410:21;411:1 <b>DVM (1)</b> 462:10</p>	<p>413:14 <b>EcoCAT (1)</b> 451:9 <b>economic (5)</b> 344:6;349:20,24; 350:1;464:16 <b>Ed (2)</b> 367:13,18 <b>edge (1)</b> 393:6 <b>Education (1)</b> 348:4 <b>effect (2)</b> 458:15;460:7 <b>effects (1)</b> 462:8 <b>eight (1)</b> 365:20 <b>either (10)</b> 342:20;368:19; 374:19;399:7;413:8; 427:7;438:16;445:10; 446:10;449:14 <b>electrical (4)</b> 379:10;399:4,7,10 <b>electrically (1)</b> 379:20 <b>electricity (1)</b> 367:1 <b>Elgin (2)</b> 382:21;400:21 <b>else (5)</b> 350:16;366:10; 375:4;377:9;418:1 <b>else's (2)</b> 404:1,5 <b>emergency (2)</b> 404:22;405:1 <b>employed (2)</b> 357:3,4 <b>enclosed (1)</b> 418:12 <b>encompassed (2)</b> 440:14;441:12 <b>end (5)</b> 382:19,20;460:22; 461:8;465:3 <b>endangered (3)</b> 446:10;451:8;455:1 <b>endogenous (1)</b> 460:18 <b>energy (6)</b> 340:19;424:17; 426:18,21,23;451:22 <b>engage (1)</b> 355:4 <b>engineer (2)</b> 356:17,19 <b>enough (9)</b> 348:9;352:3; 364:14;414:23;415:3; 432:1;443:2;459:17; 465:7</p>	<p><b>ensure (1)</b> 402:7 <b>entered (2)</b> 349:24;420:21 <b>entire (3)</b> 365:5;409:11;463:2 <b>entities (1)</b> 351:5 <b>entitled (1)</b> 437:1 <b>entry (1)</b> 375:20 <b>Environmental (1)</b> 422:13 <b>epoxy (2)</b> 376:7,8 <b>equal (2)</b> 346:18,24 <b>equalized (5)</b> 348:15,18;349:12, 13,21 <b>equipment (1)</b> 386:5 <b>erect (1)</b> 370:6 <b>ESA (1)</b> 454:22 <b>establish (2)</b> 452:23;453:3 <b>estimate (5)</b> 427:21,24;428:2,4, 12 <b>estimates (1)</b> 438:8 <b>et (9)</b> 341:24;377:18; 378:15;379:23;385:7; 389:15;405:1;422:16; 423:4 <b>even (2)</b> 433:4;438:17 <b>evening (7)</b> 341:2;343:9,22; 344:18,21;369:20; 463:18 <b>everybody (7)</b> 340:14;348:9,11; 375:4;390:24;391:4; 464:11 <b>everybody's (1)</b> 465:3 <b>evidence (11)</b> 351:12;391:16; 412:4;414:4,7;417:9; 420:10,21;431:10; 434:4;463:13 <b>exact (8)</b> 346:14;365:18; 373:18;378:22;389:5; 405:3,7;438:16 <b>exactly (2)</b> 453:12;457:4 <b>examine (1)</b></p>	<p>342:1 <b>example (2)</b> 390:15;428:1 <b>Excuse (7)</b> 341:23;353:11; 404:23;418:20; 424:16;438:9;460:20 <b>executive (1)</b> 425:11 <b>exercise (2)</b> 357:13,14 <b>exhibit (30)</b> 340:19,21;345:12; 346:12;347:5,14; 351:12,13,17;389:21; 391:11,21;392:7; 398:12;406:1;411:7, 20,23;415:18;420:12, 14;421:20;422:4,19; 423:7;426:6;434:22; 437:22;439:7;458:20 <b>exhibits (7)</b> 347:1,3;389:22,24, 24;412:3;420:9 <b>exist (3)</b> 437:11,12;455:14 <b>exists (2)</b> 425:23;455:13 <b>expect (6)</b> 391:24;419:18; 436:13,17,18;450:9 <b>expected (1)</b> 463:22 <b>expecting (1)</b> 448:17 <b>expense (1)</b> 377:18 <b>expensive (1)</b> 395:6 <b>experience (3)</b> 358:6,8;359:24 <b>explain (11)</b> 343:21;365:6; 366:14;379:6;393:3; 416:11;426:15; 440:11;442:22,24; 443:1 <b>eyesight (1)</b> 411:12</p>	<p><b>facts (1)</b> 350:14 <b>failures (2)</b> 401:9;402:3 <b>fair (4)</b> 364:14;404:2; 442:19;465:7 <b>Fairbury (1)</b> 367:17 <b>fairly (2)</b> 372:14;430:13 <b>fall (2)</b> 419:9;447:19 <b>fallen (1)</b> 401:6 <b>familiar (4)</b> 384:6;386:14,17; 395:24 <b>far (6)</b> 363:7;371:2; 377:19;384:1;462:17, 18 <b>farm (20)</b> 342:21;346:20; 347:9;348:18;349:12, 14,15;362:11;382:18; 419:10,18;420:16; 424:14;452:13;453:1, 4;454:2;462:16,21,22 <b>farms (10)</b> 346:13;350:5; 381:24;419:13;431:3, 4,5;462:7,15,20 <b>faster (1)</b> 358:17 <b>fatalities (1)</b> 428:5 <b>fatality (1)</b> 424:18 <b>fault (2)</b> 361:16;398:21 <b>faults (1)</b> 398:23 <b>favor (2)</b> 415:12;465:10 <b>feathered (1)</b> 443:10 <b>February (1)</b> 422:10 <b>federally (1)</b> 446:11 <b>feet (17)</b> 354:16,17;355:19, 22;356:2,4,6;370:23; 372:9;378:7,19; 386:24;407:14; 440:21,21;441:24; 442:2 <b>few (5)</b> 340:16,24;373:20; 419:22;420:20 <b>fiberoptic (2)</b> 367:2;380:16</p>
<b>E</b>		<b>F</b>		
<p><b>Eagle (1)</b> 423:9 <b>earlier (4)</b> 343:18;345:5,13; 442:8 <b>earth (1)</b> 387:11 <b>easier (5)</b> 375:14;376:14; 401:24;413:9;426:8 <b>Eastern (1)</b> 436:15 <b>EAV (7)</b> 346:20;348:14,17, 22;349:10,11,13 <b>Eco (1)</b></p>	<p><b>end (5)</b> 382:19,20;460:22; 461:8;465:3 <b>endangered (3)</b> 446:10;451:8;455:1 <b>endogenous (1)</b> 460:18 <b>energy (6)</b> 340:19;424:17; 426:18,21,23;451:22 <b>engage (1)</b> 355:4 <b>engineer (2)</b> 356:17,19 <b>enough (9)</b> 348:9;352:3; 364:14;414:23;415:3; 432:1;443:2;459:17; 465:7</p>	<p><b>everybody (7)</b> 340:14;348:9,11; 375:4;390:24;391:4; 464:11 <b>everybody's (1)</b> 465:3 <b>evidence (11)</b> 351:12;391:16; 412:4;414:4,7;417:9; 420:10,21;431:10; 434:4;463:13 <b>exact (8)</b> 346:14;365:18; 373:18;378:22;389:5; 405:3,7;438:16 <b>exactly (2)</b> 453:12;457:4 <b>examine (1)</b></p>	<p><b>FAA (4)</b> 403:14,24;404:5,14 <b>facilities (5)</b> 424:17;426:18,22, 24;435:19 <b>fact (7)</b> 348:8;368:17; 430:13;432:19; 456:18;463:10,12 <b>factors (2)</b> 347:19;348:14</p>	

<p><b>fifth (1)</b> 371:10</p> <p><b>figure (9)</b> 360:20;377:11; 383:5;391:13;394:15; 399:20;400:3;404:12; 430:1</p> <p><b>file (2)</b> 403:23;404:4</p> <p><b>filed (2)</b> 403:14,24</p> <p><b>filing (3)</b> 393:7,9,21</p> <p><b>fill (1)</b> 341:18</p> <p><b>Fin (3)</b> 356:20,23;357:2</p> <p><b>F-I-N (1)</b> 356:23</p> <p><b>final (4)</b> 409:4;420:14; 422:20;426:8</p> <p><b>finals (1)</b> 410:5</p> <p><b>finance (1)</b> 358:14</p> <p><b>financing (1)</b> 360:5</p> <p><b>find (7)</b> 377:12;383:17; 414:22;415:3;423:13; 445:7;446:4</p> <p><b>finding (2)</b> 394:3;464:5</p> <p><b>findings (3)</b> 436:13;439:19; 440:4</p> <p><b>fine (4)</b> 355:9;370:14; 374:8;401:10</p> <p><b>fingers (1)</b> 414:21</p> <p><b>finish (1)</b> 357:17</p> <p><b>fire (2)</b> 404:24,24</p> <p><b>First (19)</b> 340:17;347:22; 360:9;370:13;386:8; 399:20;420:21;424:6; 425:19;437:15;438:6; 440:7;447:11,14; 448:13;452:9,12; 461:2,23</p> <p><b>Fish (22)</b> 416:15;417:7,17, 19;427:8;433:9; 444:14,24;445:23; 446:6,17;448:2,3,15, 16,19,21;449:2;450:3, 6;454:18;455:4</p> <p><b>five (9)</b> 342:18;399:23;</p>	<p>400:7,7,9,12;410:9; 414:7;451:12</p> <p><b>Fixed (2)</b> 423:8;424:9</p> <p><b>FL (1)</b> 348:5</p> <p><b>flange (4)</b> 374:17;375:17,18, 19</p> <p><b>flashing (2)</b> 409:19,19</p> <p><b>flew (1)</b> 423:19</p> <p><b>flexible (2)</b> 379:13,13</p> <p><b>flicker (2)</b> 344:2;464:20</p> <p><b>flying (2)</b> 441:9,11</p> <p><b>flyway (1)</b> 419:11</p> <p><b>flyways (2)</b> 419:12;420:1</p> <p><b>focus (3)</b> 343:22;344:19; 352:20</p> <p><b>folks (1)</b> 395:22</p> <p><b>follow (4)</b> 355:11;371:20; 418:4,8</p> <p><b>following (2)</b> 431:9;457:16</p> <p><b>follow-up (1)</b> 355:15</p> <p><b>food (1)</b> 462:1</p> <p><b>foot (3)</b> 417:15,16,18</p> <p><b>force (1)</b> 463:14</p> <p><b>forced (2)</b> 463:11,12</p> <p><b>forego (1)</b> 350:24</p> <p><b>forget (1)</b> 397:21</p> <p><b>form (1)</b> 417:24</p> <p><b>formula (9)</b> 346:6,11,14,14; 347:2;348:1,4,13; 349:6</p> <p><b>formulas (1)</b> 346:7</p> <p><b>Forrest (7)</b> 343:2;353:10,11, 16,18;368:22,24</p> <p><b>forward (3)</b> 341:12;354:10; 400:13</p> <p><b>found (6)</b> 440:8,20;441:16;</p>	<p>444:17,20;460:23</p> <p><b>foundation (14)</b> 348:2,3,5,7,9,11; 381:9;383:5,18; 386:21;387:14; 429:24;431:10;434:1</p> <p><b>foundations (2)</b> 373:6;386:14</p> <p><b>four (12)</b> 367:16;369:2; 380:6;405:21;407:16, 18,18,19;408:8,10; 414:6;420:21</p> <p><b>frankly (1)</b> 444:23</p> <p><b>free (1)</b> 412:11</p> <p><b>freewheeling (1)</b> 443:14</p> <p><b>frequency (2)</b> 399:18,21</p> <p><b>front (3)</b> 391:8,9;398:15</p> <p><b>fulfill (1)</b> 431:20</p> <p><b>fulfills (1)</b> 344:3</p> <p><b>full (7)</b> 411:19;424:8; 425:19;436:7;437:10; 460:1,11</p> <p><b>functional (1)</b> 402:18</p> <p><b>funding (1)</b> 345:21</p> <p><b>Further (5)</b> 342:18;343:20; 369:9;412:8;433:1</p> <p><b>Furthermore (1)</b> 460:2</p> <p><b>future (1)</b> 385:6</p> <p><b>FWS (2)</b> 447:9;454:22</p>	<p><b>geese (2)</b> 458:11;460:15</p> <p><b>Gemma (3)</b> 360:12;361:7,8</p> <p><b>G-E-M-M-A (1)</b> 360:14</p> <p><b>general (16)</b> 346:5;349:6,16; 362:6,13,16,20; 386:16,16;388:19; 389:8,14;396:2; 399:19;419:13; 457:14</p> <p><b>generate (1)</b> 443:5</p> <p><b>generated (1)</b> 367:1</p> <p><b>generator (4)</b> 374:22;379:7; 380:22;399:3</p> <p><b>gentleman (1)</b> 446:23</p> <p><b>gentleman's (1)</b> 383:16</p> <p><b>gentlemen (1)</b> 349:18</p> <p><b>GE's (1)</b> 371:6</p> <p><b>gets (3)</b> 348:22,22;378:12</p> <p><b>Gibs (1)</b> 340:11</p> <p><b>Gillespie (1)</b> 423:23</p> <p><b>GIS (2)</b> 406:8;410:4</p> <p><b>given (1)</b> 434:19</p> <p><b>goes (7)</b> 346:17;348:17,19; 367:12;408:3;427:16, 22</p> <p><b>golden (4)</b> 443:21;444:3,21; 445:17</p> <p><b>good (11)</b> 341:11;342:12; 343:3;344:13;369:20; 381:19;390:15,17; 411:12,13;419:19</p> <p><b>government (2)</b> 351:4;455:22</p> <p><b>GPS (2)</b> 394:1,3</p> <p><b>grab (1)</b> 415:11</p> <p><b>gramophone (1)</b> 410:18</p> <p><b>Grand (10)</b> 358:10,20;359:8; 360:8,18;362:8; 363:21;364:22,23; 400:12</p>	<p><b>grasp (1)</b> 413:3</p> <p><b>gravel (4)</b> 384:21,23;397:7,9</p> <p><b>great (2)</b> 378:23;420:20</p> <p><b>grid (2)</b> 368:18;443:6</p> <p><b>ground (3)</b> 367:6;372:14;442:2</p> <p><b>group (2)</b> 343:24;366:23</p> <p><b>groups (2)</b> 460:23;461:11</p> <p><b>Grove (1)</b> 413:15</p> <p><b>grow (1)</b> 346:23</p> <p><b>GSA (1)</b> 348:2</p> <p><b>guess (17)</b> 340:18;343:21; 346:2;358:1;400:2; 401:2;411:8;412:2; 416:4;420:14;424:8; 428:5;430:21;434:6; 436:8;437:11;455:13</p> <p><b>guidance (2)</b> 371:6;448:23</p> <p><b>Guidelines (2)</b> 368:10;457:18</p> <p><b>guys (3)</b> 354:8;390:5;391:2</p>
<b>H</b>				
			<p><b>habitat (3)</b> 417:19;420:1;450:8</p> <p><b>habitats (2)</b> 426:4;436:6</p> <p><b>half (8)</b> 356:10,13;368:21; 384:5;389:2;416:21; 434:1;437:15</p> <p><b>halfway (4)</b> 435:23;459:8,9; 460:6</p> <p><b>hand (1)</b> 341:16</p> <p><b>handle (6)</b> 361:17;373:21; 392:18;397:1;414:16; 457:1</p> <p><b>happen (1)</b> 449:1</p> <p><b>happened (1)</b> 451:10</p> <p><b>happens (1)</b> 448:24</p> <p><b>hard (3)</b> 354:12,13;391:2</p> <p><b>harmful (1)</b> 460:15</p>	



<p><b>harrier (3)</b> 439:23;440:20; 442:1</p> <p><b>harriers (1)</b> 440:8</p> <p><b>head (15)</b> 345:2,8;371:12; 377:22;378:9;393:19; 394:17;395:5;398:3; 404:8,21;405:4; 406:14,19;410:3</p> <p><b>headed (1)</b> 382:24</p> <p><b>heading (2)</b> 440:2;442:14</p> <p><b>health (1)</b> 460:15</p> <p><b>hear (7)</b> 341:13;352:19; 359:18;391:5;392:1; 395:20,23</p> <p><b>heard (5)</b> 387:23;388:2; 395:19;434:8;442:22</p> <p><b>hearing (6)</b> 350:19,21;359:19; 368:10;391:3;457:17</p> <p><b>hearings (1)</b> 345:5</p> <p><b>heavy (1)</b> 373:3</p> <p><b>height (8)</b> 373:16,17,22,23; 408:22;441:8,15,17</p> <p><b>helped (1)</b> 363:9</p> <p><b>herds (1)</b> 462:7</p> <p><b>here's (3)</b> 348:20,21;390:11</p> <p><b>hibernate (1)</b> 418:15</p> <p><b>hibernating (1)</b> 438:21</p> <p><b>high (2)</b> 372:8;395:1</p> <p><b>higher (2)</b> 419:15;459:12</p> <p><b>highest (9)</b> 419:8;424:18,23; 425:1,4,10;438:23; 439:1;453:7</p> <p><b>Hill (7)</b> 358:11;359:1,23; 360:23;361:5;400:13; 410:22</p> <p><b>hired (3)</b> 421:10;455:24,24</p> <p><b>hit (1)</b> 390:19</p> <p><b>hitch (1)</b> 374:23</p> <p><b>hold (3)</b> 340:15;373:19; 429:19</p> <p><b>holding (1)</b> 377:8</p> <p><b>home (1)</b> 358:5</p> <p><b>homes (3)</b> 354:12;356:9,12</p> <p><b>honest (1)</b> 411:11</p> <p><b>hope (1)</b> 465:1</p> <p><b>hopefully (1)</b> 439:12</p> <p><b>hopes (1)</b> 343:15</p> <p><b>hormone (1)</b> 459:7</p> <p><b>hormones (2)</b> 459:13;460:15</p> <p><b>hour (3)</b> 384:5;434:2;446:24</p> <p><b>Howard (2)</b> 340:9;344:24</p> <p><b>hub (3)</b> 400:24;401:4; 408:22</p> <p><b>huh (1)</b> 418:16</p> <p><b>Huisman (18)</b> 340:11;345:9,9,14, 16,19,24;346:2;347:1, 7,11,15,17;349:17; 350:7,16,20;465:9</p> <p><b>human (1)</b> 359:4</p> <p><b>hundred (4)</b> 355:19;370:19,23; 441:24</p> <p><b>hurt (1)</b> 401:18</p> <p><b>hypothetical (2)</b> 405:18;442:1</p>	<p><b>I</b></p> <p><b>IAAA (4)</b> 406:2,6,13,16</p> <p><b>ICC (1)</b> 377:20</p> <p><b>idea (6)</b> 377:2;410:2;429:4; 430:2,22;444:10</p> <p><b>identified (1)</b> 345:13</p> <p><b>identify (1)</b> 453:1</p> <p><b>IDNR (15)</b> 445:21;449:4,11, 20;450:16,21;451:3,6, 16,19;452:6;455:21; 457:11,24;458:1</p> <p><b>Illinois (29)</b></p>	<p>340:21;348:3; 361:12;377:4;382:22; 383:21;388:22,23; 406:2;413:12,18; 414:17;415:2;419:12; 427:13,13,18;428:1; 429:15;430:20;431:3; 432:15;444:4,24; 451:15;456:10; 457:13;462:7;464:15</p> <p><b>immediate (2)</b> 458:15;461:24</p> <p><b>immune (1)</b> 460:16</p> <p><b>impact (8)</b> 344:6;345:20; 347:21;349:21;350:1; 426:3;461:24;464:16</p> <p><b>impacted (1)</b> 426:4</p> <p><b>implement (2)</b> 447:17,18</p> <p><b>implications (2)</b> 345:20;347:10</p> <p><b>implied (3)</b> 452:11,16,18</p> <p><b>imply (1)</b> 453:8</p> <p><b>importantly (1)</b> 450:12</p> <p><b>inches (1)</b> 380:6</p> <p><b>incidental (4)</b> 454:22,24;455:2,3</p> <p><b>include (1)</b> 399:12</p> <p><b>included (5)</b> 347:2;368:19; 400:23;440:22; 451:17</p> <p><b>includes (1)</b> 343:1</p> <p><b>including (3)</b> 351:4;400:7;460:9</p> <p><b>increased (2)</b> 460:14,16</p> <p><b>independent (2)</b> 455:22,23</p> <p><b>index (1)</b> 428:20</p> <p><b>Indiana (10)</b> 388:20;422:19; 431:6;442:14,15; 447:16;448:9,11; 450:13,14</p> <p><b>indicate (2)</b> 459:16;461:24</p> <p><b>indicates (2)</b> 462:13,14</p> <p><b>individual (4)</b> 383:9,12;426:3; 457:7</p> <p><b>individuals (5)</b></p>	<p>343:24;344:19,20; 351:15;363:10</p> <p><b>individual's (1)</b> 457:9</p> <p><b>infections (1)</b> 460:17</p> <p><b>inform (1)</b> 445:5</p> <p><b>information (22)</b> 353:23;355:4; 357:5;429:20;430:8, 15,17;433:4,5;435:8, 15,19;446:13,15,16, 19;450:24;451:2,5,11, 16;459:21</p> <p><b>infrasound (1)</b> 459:21</p> <p><b>infrastructure (1)</b> 425:24</p> <p><b>initiate (1)</b> 448:19</p> <p><b>inside (10)</b> 374:12,13;375:8,9; 378:11,14,20;379:22; 381:5;440:16</p> <p><b>installed (1)</b> 372:20</p> <p><b>instances (1)</b> 399:23</p> <p><b>instead (2)</b> 352:23;432:23</p> <p><b>instruct (1)</b> 355:3</p> <p><b>instructed (1)</b> 355:9</p> <p><b>Insulated (1)</b> 379:16</p> <p><b>intensive (1)</b> 447:20</p> <p><b>interested (3)</b> 351:9;464:5,12</p> <p><b>interrupt (2)</b> 375:7;446:22</p> <p><b>intersection (1)</b> 376:20</p> <p><b>intersections (1)</b> 369:5</p> <p><b>into (14)</b> 347:19;350:1; 351:12;374:5;379:21; 390:24;391:15;412:4; 414:4,7,15;417:9; 420:10,21</p> <p><b>introduced (1)</b> 464:17</p> <p><b>Invenergy (39)</b> 349:19;357:3,4; 358:4;360:21,22; 362:5,21;367:3,6; 382:7,13;389:10,13; 395:21,22;406:6; 421:2,5;429:11,14,21; 431:24;432:15,20,21;</p>	<p>435:14;445:8,19; 446:7,14,15;448:5,18; 449:14;453:12,14; 454:7;456:1</p> <p><b>Invenergy's (1)</b> 366:16</p> <p><b>involved (16)</b> 358:10,13;362:24; 381:23;382:17; 383:21;386:11; 388:14;393:14,17; 414:8,11;421:6,12; 422:15;450:2</p> <p><b>involvement (1)</b> 423:3</p> <p><b>Iowa (1)</b> 433:1</p> <p><b>ISBE (2)</b> 348:7,24</p> <p><b>isolated (1)</b> 379:20</p> <p><b>issue (5)</b> 399:4,7,11;433:19; 444:22</p> <p><b>issues (3)</b> 358:6;359:10;360:2</p> <p><b>item (1)</b> 340:23</p> <p><b>iv (1)</b> 424:6</p> <p><b>Iverson (2)</b> 340:7,8</p>
<b>J</b>				
<p><b>Jersey (2)</b> 361:9,15</p> <p><b>Joan (3)</b> 340:11;345:9;465:9</p> <p><b>job (1)</b> 358:2</p> <p><b>John (4)</b> 340:5;345:3,6; 465:8</p> <p><b>jot (1)</b> 354:7</p> <p><b>July (3)</b> 416:3;421:21; 422:21</p> <p><b>June (2)</b> 416:2;422:20</p>				
<b>K</b>				
<p><b>keep (4)</b> 379:2;439:12; 457:24;464:7</p> <p><b>kept (4)</b> 459:13,15;461:18, 19</p> <p><b>Kevin (5)</b> 395:10,11,12; 402:16;410:14</p>				

<p><b>Kevin's (1)</b> 403:11</p> <p><b>key (1)</b> 348:20</p> <p><b>Kiefer (1)</b> 340:7</p> <p><b>kill (2)</b> 357:21;403:4</p> <p><b>killed (1)</b> 435:24</p> <p><b>Kimberly (2)</b> 462:10,12</p> <p><b>kind (10)</b> 349:20;365:14; 410:17;426:15; 427:22,23;439:11,12; 447:1;464:17</p> <p><b>knowledge (20)</b> 362:6,19,23;364:4; 383:4,16,17;386:16; 389:11,12,13;393:18; 396:13,15;410:6,7; 421:4;429:12,13; 455:11</p> <p><b>knows (6)</b> 355:2;391:22; 392:4,22,22,23</p>	<p><b>late (1)</b> 366:11</p> <p><b>later (9)</b> 350:17,21;351:2; 354:7;355:11;385:2, 21;442:9;460:6</p> <p><b>latitude (1)</b> 360:1</p> <p><b>lattice (2)</b> 408:20;410:1</p> <p><b>lay (2)</b> 383:18;431:10</p> <p><b>laydown (1)</b> 396:3</p> <p><b>layer (1)</b> 384:23</p> <p><b>layout (2)</b> 357:7;371:5</p> <p><b>least (9)</b> 401:16;402:7; 404:11;405:18;427:1; 430:8;443:2;452:21; 463:3</p> <p><b>leave (1)</b> 372:24</p> <p><b>led (1)</b> 433:10</p> <p><b>left (3)</b> 364:19;385:1; 426:17</p> <p><b>legal (1)</b> 355:4</p> <p><b>legally (1)</b> 350:4</p> <p><b>legend (2)</b> 427:23;428:3</p> <p><b>length (1)</b> 447:21</p> <p><b>lengthy (1)</b> 412:23</p> <p><b>less (3)</b> 346:22;378:21; 447:19</p> <p><b>letter (16)</b> 417:6;433:10; 444:16;447:10;449:4, 11;451:19,24;452:1, 6;453:22,23;454:11; 462:13;463:12,13</p> <p><b>level (8)</b> 348:2,3,5,7,10,11; 372:14;395:2</p> <p><b>Liaison (3)</b> 359:10;363:22; 364:23</p> <p><b>light (2)</b> 377:13;451:14</p> <p><b>lighting (2)</b> 374:24;377:1</p> <p><b>lights (3)</b> 376:20,22;402:8</p> <p><b>likely (1)</b> 427:7</p>	<p><b>limited (1)</b> 426:2</p> <p><b>line (7)</b> 367:9,22;371:21; 407:19;423:8;424:12; 432:17</p> <p><b>lines (3)</b> 353:2,3,6</p> <p><b>list (3)</b> 351:14;412:19,23</p> <p><b>listed (6)</b> 426:19;427:12; 431:4;446:10;448:9; 451:6</p> <p><b>listen (2)</b> 456:15;457:5</p> <p><b>little (10)</b> 349:9,11;359:17, 24;360:1;363:7; 378:20;415:23; 421:19;445:5</p> <p><b>livestock (1)</b> 420:4</p> <p><b>Livingston (9)</b> 351:13;361:22; 389:6;395:14;433:3; 434:3,8;451:23; 457:14</p> <p><b>LLC (2)</b> 364:13;451:22</p> <p><b>LNTE (6)</b> 393:4,8;394:22; 395:4,7;411:8</p> <p><b>LNTEs (2)</b> 397:21,22</p> <p><b>local (3)</b> 351:3;392:9,10</p> <p><b>located (11)</b> 361:8,19;362:1; 393:23;394:16; 419:10,14;420:1; 425:24;438:21; 462:16</p> <p><b>location (6)</b> 342:22;389:5; 432:14;433:1;463:23, 24</p> <p><b>locations (2)</b> 394:21;410:4</p> <p><b>long (8)</b> 363:14,18;371:22; 372:14;397:14;416:1; 442:18,19</p> <p><b>long-eared (4)</b> 442:15;447:17; 448:10;450:13</p> <p><b>long-eareds (1)</b> 450:15</p> <p><b>look (11)</b> 347:5;348:1; 376:13;396:1;407:7; 416:20;425:13; 431:19;462:14;</p>	<p>464:24;465:5</p> <p><b>looked (1)</b> 357:6</p> <p><b>looking (11)</b> 357:8;364:13; 380:2;415:13,14; 425:17;432:23;440:1; 441:8;445:17;457:17</p> <p><b>looks (3)</b> 415:22,24;416:4</p> <p><b>Loomis (14)</b> 344:5;345:11,16, 22;346:1,5;347:4,9, 14,16,24;349:23; 350:14;464:15</p> <p><b>lost (1)</b> 407:24</p> <p><b>lot (5)</b> 347:18;376:14,22; 401:24;426:23</p> <p><b>Low (2)</b> 393:6;441:20</p> <p><b>lower (5)</b> 424:16,22;454:8; 459:14;461:19</p> <p><b>lowest (2)</b> 441:18,23</p> <p><b>LUETKEHANS (90)</b> 341:23;343:8,11; 350:9;351:10,15,16, 18,19,21;352:1,3,5, 10,13,22;353:1,24; 354:14,22;355:3,6,13; 359:16,19;368:12; 369:8,9,13,16,19; 382:23;383:3,11,14, 19;385:12,17,22; 390:7,14,23;391:6,7, 20,22;392:3,5,22; 411:20,22;412:2,8,10, 13,16;415:21;429:18, 23;431:8,13,23;432:4, 7,9,19;433:11,16; 434:5,14,18,21;437:3; 446:21;447:3,7,8; 456:12,22;457:8; 458:4,6,9,10;461:6, 14;463:1,5,14,16</p>	<p><b>management (2)</b> 443:18;448:7</p> <p><b>manager (2)</b> 382:14;423:18</p> <p><b>manufacturer (1)</b> 377:16</p> <p><b>manufacturer's (2)</b> 452:14;453:5</p> <p><b>many (28)</b> 341:6,7;353:2,6,19; 354:15;355:18; 362:16;365:16;366:3; 367:21;368:24;376:1; 393:10,20;400:10; 404:22,23;405:13; 408:7;409:2;410:8; 413:17;429:14,21; 436:6,9;438:12</p> <p><b>map (6)</b> 357:6,8,11;365:9; 394:4,5</p> <p><b>March (4)</b> 420:16,17;421:14; 424:2</p> <p><b>marked (3)</b> 409:16,18,18</p> <p><b>marking (1)</b> 406:7</p> <p><b>marks (2)</b> 407:23;408:2</p> <p><b>material (1)</b> 373:24</p> <p><b>materials (2)</b> 384:20,21</p> <p><b>math (1)</b> 415:23</p> <p><b>maturity (1)</b> 417:24</p> <p><b>may (31)</b> 350:6,7,8;352:15; 354:10;359:11;360:3; 365:18;368:8;377:9, 14;378:24;380:18; 381:11,19,20;414:18; 427:3,3,6,8;430:12; 443:15;446:2;457:15; 459:16,22;460:14; 465:2,3,5</p>
<b>L</b>				
<p><b>labeled (1)</b> 459:2</p> <p><b>lack (1)</b> 456:8</p> <p><b>ladder (4)</b> 375:6,7,12;378:15</p> <p><b>laid (1)</b> 434:1</p> <p><b>lakes (1)</b> 456:19</p> <p><b>land (10)</b> 341:8;342:10; 358:3;363:5;364:5, 15,24;365:4;368:19; 426:1</p> <p><b>landowners (4)</b> 358:4;359:10; 360:2;363:12</p> <p><b>language (1)</b> 449:11</p> <p><b>large (3)</b> 370:5;414:5;419:12</p> <p><b>larger (2)</b> 411:15;419:14</p> <p><b>last (22)</b> 340:24;365:16,24; 366:1;375:13;382:16, 19,20,22;383:20; 416:21;422:18; 424:12;425:23;428:3; 436:12;444:3;447:18; 457:23;460:21; 461:22;462:5</p>	<p><b>level (8)</b> 348:2,3,5,7,10,11; 372:14;395:2</p> <p><b>Liaison (3)</b> 359:10;363:22; 364:23</p> <p><b>light (2)</b> 377:13;451:14</p> <p><b>lighting (2)</b> 374:24;377:1</p> <p><b>lights (3)</b> 376:20,22;402:8</p> <p><b>likely (1)</b> 427:7</p>	<p><b>limited (1)</b> 426:2</p> <p><b>line (7)</b> 367:9,22;371:21; 407:19;423:8;424:12; 432:17</p> <p><b>lines (3)</b> 353:2,3,6</p> <p><b>list (3)</b> 351:14;412:19,23</p> <p><b>listed (6)</b> 426:19;427:12; 431:4;446:10;448:9; 451:6</p> <p><b>listen (2)</b> 456:15;457:5</p> <p><b>little (10)</b> 349:9,11;359:17, 24;360:1;363:7; 378:20;415:23; 421:19;445:5</p> <p><b>livestock (1)</b> 420:4</p> <p><b>Livingston (9)</b> 351:13;361:22; 389:6;395:14;433:3; 434:3,8;451:23; 457:14</p> <p><b>LLC (2)</b> 364:13;451:22</p> <p><b>LNTE (6)</b> 393:4,8;394:22; 395:4,7;411:8</p> <p><b>LNTEs (2)</b> 397:21,22</p> <p><b>local (3)</b> 351:3;392:9,10</p> <p><b>located (11)</b> 361:8,19;362:1; 393:23;394:16; 419:10,14;420:1; 425:24;438:21; 462:16</p> <p><b>location (6)</b> 342:22;389:5; 432:14;433:1;463:23, 24</p> <p><b>locations (2)</b> 394:21;410:4</p> <p><b>long (8)</b> 363:14,18;371:22; 372:14;397:14;416:1; 442:18,19</p> <p><b>long-eared (4)</b> 442:15;447:17; 448:10;450:13</p> <p><b>long-eareds (1)</b> 450:15</p> <p><b>look (11)</b> 347:5;348:1; 376:13;396:1;407:7; 416:20;425:13; 431:19;462:14;</p>	<p>464:24;465:5</p> <p><b>looked (1)</b> 357:6</p> <p><b>looking (11)</b> 357:8;364:13; 380:2;415:13,14; 425:17;432:23;440:1; 441:8;445:17;457:17</p> <p><b>looks (3)</b> 415:22,24;416:4</p> <p><b>Loomis (14)</b> 344:5;345:11,16, 22;346:1,5;347:4,9, 14,16,24;349:23; 350:14;464:15</p> <p><b>lost (1)</b> 407:24</p> <p><b>lot (5)</b> 347:18;376:14,22; 401:24;426:23</p> <p><b>Low (2)</b> 393:6;441:20</p> <p><b>lower (5)</b> 424:16,22;454:8; 459:14;461:19</p> <p><b>lowest (2)</b> 441:18,23</p> <p><b>LUETKEHANS (90)</b> 341:23;343:8,11; 350:9;351:10,15,16, 18,19,21;352:1,3,5, 10,13,22;353:1,24; 354:14,22;355:3,6,13; 359:16,19;368:12; 369:8,9,13,16,19; 382:23;383:3,11,14, 19;385:12,17,22; 390:7,14,23;391:6,7, 20,22;392:3,5,22; 411:20,22;412:2,8,10, 13,16;415:21;429:18, 23;431:8,13,23;432:4, 7,9,19;433:11,16; 434:5,14,18,21;437:3; 446:21;447:3,7,8; 456:12,22;457:8; 458:4,6,9,10;461:6, 14;463:1,5,14,16</p>	<p><b>management (2)</b> 443:18;448:7</p> <p><b>manager (2)</b> 382:14;423:18</p> <p><b>manufacturer (1)</b> 377:16</p> <p><b>manufacturer's (2)</b> 452:14;453:5</p> <p><b>many (28)</b> 341:6,7;353:2,6,19; 354:15;355:18; 362:16;365:16;366:3; 367:21;368:24;376:1; 393:10,20;400:10; 404:22,23;405:13; 408:7;409:2;410:8; 413:17;429:14,21; 436:6,9;438:12</p> <p><b>map (6)</b> 357:6,8,11;365:9; 394:4,5</p> <p><b>March (4)</b> 420:16,17;421:14; 424:2</p> <p><b>marked (3)</b> 409:16,18,18</p> <p><b>marking (1)</b> 406:7</p> <p><b>marks (2)</b> 407:23;408:2</p> <p><b>material (1)</b> 373:24</p> <p><b>materials (2)</b> 384:20,21</p> <p><b>math (1)</b> 415:23</p> <p><b>maturity (1)</b> 417:24</p> <p><b>may (31)</b> 350:6,7,8;352:15; 354:10;359:11;360:3; 365:18;368:8;377:9, 14;378:24;380:18; 381:11,19,20;414:18; 427:3,3,6,8;430:12; 443:15;446:2;457:15; 459:16,22;460:14; 465:2,3,5</p>
<b>M</b>				
<p><b>main (3)</b> 380:23,23;381:2</p> <p><b>mainly (4)</b> 374:2,3,7,9</p> <p><b>majority (2)</b> 436:17,18</p> <p><b>makes (3)</b> 347:21;401:24; 465:9</p> <p><b>making (3)</b> 366:24;403:8; 410:11</p>	<p><b>level (8)</b> 348:2,3,5,7,10,11; 372:14;395:2</p> <p><b>Liaison (3)</b> 359:10;363:22; 364:23</p> <p><b>light (2)</b> 377:13;451:14</p> <p><b>lighting (2)</b> 374:24;377:1</p> <p><b>lights (3)</b> 376:20,22;402:8</p> <p><b>likely (1)</b> 427:7</p>	<p><b>limited (1)</b> 426:2</p> <p><b>line (7)</b> 367:9,22;371:21; 407:19;423:8;424:12; 432:17</p> <p><b>lines (3)</b> 353:2,3,6</p> <p><b>list (3)</b> 351:14;412:19,23</p> <p><b>listed (6)</b> 426:19;427:12; 431:4;446:10;448:9; 451:6</p> <p><b>listen (2)</b> 456:15;457:5</p> <p><b>little (10)</b> 349:9,11;359:17, 24;360:1;363:7; 378:20;415:23; 421:19;445:5</p> <p><b>livestock (1)</b> 420:4</p> <p><b>Livingston (9)</b> 351:13;361:22; 389:6;395:14;433:3; 434:3,8;451:23; 457:14</p> <p><b>LLC (2)</b> 364:13;451:22</p> <p><b>LNTE (6)</b> 393:4,8;394:22; 395:4,7;411:8</p> <p><b>LNTEs (2)</b> 397:21,22</p> <p><b>local (3)</b> 351:3;392:9,10</p> <p><b>located (11)</b> 361:8,19;362:1; 393:23;394:16; 419:10,14;420:1; 425:24;438:21; 462:16</p> <p><b>location (6)</b> 342:22;389:5; 432:14;433:1;463:23, 24</p> <p><b>locations (2)</b> 394:21;410:4</p> <p><b>long (8)</b> 363:14,18;371:22; 372:14;397:14;416:1; 442:18,19</p> <p><b>long-eared (4)</b> 442:15;447:17; 448:10;450:13</p> <p><b>long-eareds (1)</b> 450:15</p> <p><b>look (11)</b> 347:5;348:1; 376:13;396:1;407:7; 416:20;425:13; 431:19;462:14;</p>	<p>464:24;465:5</p> <p><b>looked (1)</b> 357:6</p> <p><b>looking (11)</b> 357:8;364:13; 380:2;415:13,14; 425:17;432:23;440:1; 441:8;445:17;457:17</p> <p><b>looks (3)</b> 415:22,24;416:4</p> <p><b>Loomis (14)</b> 344:5;345:11,16, 22;346:1,5;347:4,9, 14,16,24;349:23; 350:14;464:15</p> <p><b>lost (1)</b> 407:24</p> <p><b>lot (5)</b> 347:18;376:14,22; 401:24;426:23</p> <p><b>Low (2)</b> 393:6;441:20</p> <p><b>lower (5)</b> 424:16,22;454:8; 459:14;461:19</p> <p><b>lowest (2)</b> 441:18,23</p> <p><b>LUETKEHANS (90)</b> 341:23;343:8,11; 350:9;351:10,15,16, 18,19,21;352:1,3,5, 10,13,22;353:1,24; 354:14,22;355:3,6,13; 359:16,19;368:12; 369:8,9,13,16,19; 382:23;383:3,11,14, 19;385:12,17,22; 390:7,14,23;391:6,7, 20,22;392:3,5,22; 411:20,22;412:2,8,10, 13,16;415:21;429:18, 23;431:8,13,23;432:4, 7,9,19;433:11,16; 434:5,14,18,21;437:3; 446:21;447:3,7,8; 456:12,22;457:8; 458:4,6,9,10;461:6, 14;463:1,5,14,16</p>	<p><b>management (2)</b> 443:18;448:7</p> <p><b>manager (2)</b> 382:14;423:18</p> <p><b>manufacturer (1)</b> 377:16</p> <p><b>manufacturer's (2)</b> 452:14;453:5</p> <p><b>many (28)</b> 341:6,7;353:2,6,19; 354:15;355:18; 362:16;365:16;366:3; 367:21;368:24;376:1; 393:10,20;400:10; 404:22,23;405:13; 408:7;409:2;410:8; 413:17;429:14,21; 436:6,9;438:12</p> <p><b>map (6)</b> 357:6,8,11;365:9; 394:4,5</p> <p><b>March (4)</b> 420:16,17;421:14; 424:2</p> <p><b>marked (3)</b> 409:16,18,18</p> <p><b>marking (1)</b> 406:7</p> <p><b>marks (2)</b> 407:23;408:2</p> <p><b>material (1)</b> 373:24</p> <p><b>materials (2)</b> 384:20,21</p> <p><b>math (1)</b> 415:23</p> <p><b>maturity (1)</b> 417:24</p> <p><b>may (31)</b> 350:6,7,8;352:15; 354:10;359:11;360:3; 365:18;368:8;377:9, 14;378:24;380:18; 381:11,19,20;414:18; 427:3,3,6,8;430:12; 443:15;446:2;457:15; 459:16,22;460:14; 465:2,3,5</p>

<p>342:20;346:17; 365:7;369:23;401:13; 418:24;425:2 <b>meant (1)</b> 408:15 <b>measure (1)</b> 441:6 <b>measured (1)</b> 357:7 <b>measures (4)</b> 442:16;448:8,21; 459:11 <b>mechanical (1)</b> 399:11 <b>meeting (9)</b> 340:2;341:1; 395:13,18,20;455:4,8; 463:21;464:23 <b>meetings (3)</b> 340:16;464:9;465:1 <b>megawatt (3)</b> 428:5,19;438:10 <b>megawatts (2)</b> 428:10;438:12 <b>member (1)</b> 456:16 <b>members (2)</b> 341:5;465:11 <b>memory (2)</b> 413:3,5 <b>mentioned (6)</b> 349:23;405:15,16; 414:12;420:22; 459:17 <b>messed (1)</b> 442:8 <b>MET (10)</b> 406:7,9,20;407:1,3, 5,15;409:6,8,23 <b>meteorological (2)</b> 406:7;409:3 <b>meter (3)</b> 378:9;394:11,13 <b>meters (20)</b> 371:9,15;372:8,11; 373:20,23,23;408:22; 443:7;448:14;452:14; 453:10;454:3,8,14; 458:15,17;459:14,16; 461:20 <b>METs (1)</b> 410:8 <b>Michael (1)</b> 360:18 <b>microphone (3)</b> 352:2;359:17;374:6 <b>microphones (1)</b> 391:1 <b>middle (2)</b> 375:16;408:5 <b>midsection (1)</b> 375:19 <b>Midwest (6)</b></p>	<p>361:20;412:18,20; 413:18;433:14; 438:17 <b>Midwestern (2)</b> 425:5;438:7 <b>might (7)</b> 349:24;387:23; 425:14;427:11; 431:11;436:8;444:11 <b>migrate (4)</b> 419:11;444:4,18,19 <b>migrating (1)</b> 419:7 <b>migration (7)</b> 419:9;443:23; 444:2,6,7;445:13,24 <b>Mike (1)</b> 340:3 <b>mile (13)</b> 341:7;342:23; 352:7;353:3,7,9,14, 20;356:10,13;367:19; 371:10;462:22 <b>miles (5)</b> 367:16,21,24; 368:24;369:2 <b>million (1)</b> 347:22 <b>mind (2)</b> 414:24;453:20 <b>mine (1)</b> 363:4 <b>mines (1)</b> 418:9 <b>mine's (1)</b> 461:5 <b>minimum (1)</b> 371:6 <b>Minnesota (1)</b> 432:24 <b>minute (1)</b> 390:18 <b>minutes (5)</b> 390:19;419:22; 447:4,6;463:17 <b>miss (1)</b> 413:1 <b>missed (1)</b> 380:19 <b>missing (1)</b> 368:14 <b>Mississippi (2)</b> 419:12;425:6 <b>mist (3)</b> 415:6;416:8;422:24 <b>mobile (1)</b> 374:23 <b>mode (2)</b> 359:7;389:14 <b>model (2)</b> 376:11;377:18 <b>Molly (1)</b> 423:23</p>	<p><b>moment (1)</b> 411:6 <b>Monday (2)</b> 464:2,12 <b>money (2)</b> 346:18;348:9 <b>monitoring (11)</b> 443:17,21,23; 444:1,2;445:12; 447:19,20,24;452:23; 453:13 <b>month (4)</b> 402:7;416:21; 417:1;444:9 <b>months (4)</b> 363:11,21;365:2,16 <b>more (26)</b> 357:15;359:17,24; 360:1;362:8,9;382:4, 7;395:6;396:6,13; 407:22;408:4;411:3; 419:4;427:7;428:17; 433:19;444:23;445:1; 446:24;447:4;450:12; 464:1,6;465:6 <b>morning (1)</b> 396:19 <b>mortality (28)</b> 418:21;419:1,8,15, 17,23;426:22,24; 427:21,23;428:2,4,12; 429:1;430:22;431:24; 432:22;435:8,23; 436:17,19;438:8,18; 452:23,24;453:2,4,7 <b>Mortensen (2)</b> 361:3,24 <b>M-O-R-T-E-N-S-E-N (1)</b> 361:4 <b>most (2)</b> 428:16;462:20 <b>motion (2)</b> 465:8,9 <b>mouth (1)</b> 359:20 <b>move (7)</b> 351:2;371:14; 372:10;434:13,20; 458:4,9 <b>moved (2)</b> 372:24;374:20 <b>moving (5)</b> 354:10;360:2; 363:11;435:9;465:4 <b>much (7)</b> 358:17;372:14; 380:5;395:6;403:7; 410:2;435:7 <b>multiple (2)</b> 408:1;430:4 <b>multiplied (1)</b> 348:23 <b>multiply (2)</b></p>	<p>349:5;428:13 <b>mussel/aquatic/amphibian (1)</b> 457:3 <b>muster (1)</b> 396:19 <b>myself (5)</b> 340:18;366:18; 397:2;401:24;403:7  <b>N</b>  <b>name (8)</b> 341:24;342:6,7,19; 360:16,18;410:24; 413:24 <b>names (3)</b> 395:23;413:7,10 <b>Natural (2)</b> 414:2,8 <b>near (3)</b> 369:6;411:4;461:18 <b>nearest (1)</b> 404:19 <b>Nebraska (2)</b> 382:21;400:21 <b>necessarily (1)</b> 446:5 <b>necessary (5)</b> 352:16;392:18; 449:18;452:7;455:19 <b>need (22)</b> 340:16;344:18; 352:13;359:17;366:6; 373:17;383:8;398:24; 417:15,16;423:10,24; 431:10;433:24,24; 434:2,13;447:1,3; 448:18;450:7;458:9 <b>needed (2)</b> 450:4;454:23 <b>needs (1)</b> 387:10 <b>negative (2)</b> 458:14;461:24 <b>nest (4)</b> 414:14;421:16; 423:9;444:3 <b>net (2)</b> 416:4;422:24 <b>netted (1)</b> 416:2 <b>netting (2)</b> 415:6;416:8 <b>New (5)</b> 361:9,15,15; 451:13,15 <b>next (17)</b> 348:13;350:19; 371:3,20;375:18; 380:1;428:9;430:1; 435:22;438:23; 443:16;448:21;449:3; 460:1;461:17;463:21;</p>	<p>464:9 <b>Nice (1)</b> 340:15 <b>nick (1)</b> 401:5 <b>Nielsen (1)</b> 340:11 <b>night (3)</b> 409:19;416:3;419:7 <b>nights (2)</b> 416:4;422:22 <b>nine (5)</b> 371:17;414:18,20; 436:10;446:24 <b>Nods (1)</b> 371:12 <b>noise (3)</b> 393:6;456:18; 459:21 <b>nonagricultural (1)</b> 425:24 <b>None (3)</b> 400:2;427:18;431:5 <b>nonparticipating (2)</b> 342:17;365:10 <b>non-PTEL (1)</b> 346:9 <b>normal (2)</b> 452:24;453:4 <b>north (2)</b> 358:22;367:16 <b>northern (10)</b> 389:2;439:22; 440:8,20;442:14,15; 447:16;448:10; 450:13,15 <b>note (1)</b> 342:18 <b>notes (2)</b> 342:3;418:21 <b>November (3)</b> 416:20,23;437:24 <b>number (40)</b> 346:16;347:22; 349:3;353:14;354:12, 21;356:1,9,12,15,16; 357:10;365:18;377:3, 14,16,18;399:1; 401:24;405:3,23; 414:5;415:9,11,18; 428:4,9,24;429:2; 433:3,6;438:16,24; 441:22;449:6,18; 451:4;452:5;454:21; 455:17 <b>numbered (1)</b> 439:11 <b>numbering (1)</b> 401:22 <b>numbers (13)</b> 341:10;393:12,24; 394:2,6;399:19; 413:8;428:22;432:20,</p>
--	--	--	---	--

21,24;450:10,11 <b>number's (1)</b> 416:6	432:24 <b>old (1)</b> 418:10 <b>once (3)</b> 402:7;446:13; 447:23 <b>one (85)</b> 341:5,7;345:14; 349:18;352:7;353:2, 6,13,20;357:15;362:5, 7,8,9;365:24;366:1; 367:19;371:3,19,19; 375:1,16,16,17;377:3; 382:22;383:20;384:2; 386:2;390:16;391:15; 393:2;396:6,9,13; 398:1,20;400:5; 402:5;403:13;407:20, 21;408:3,4;409:5,6,8, 8,10,11;411:6,15; 413:1,9;416:10; 417:13;420:6,6,7,9, 13,19;421:18;422:18, 21;423:18,20;426:16; 427:12,13;429:24; 430:1;432:12;433:3; 434:23;439:20; 440:21;447:14;449:6, 18;451:4;452:21; 456:14;458:7;461:15	<b>order (3)</b> 340:2;343:17;424:1 <b>orders (1)</b> 340:16 <b>ordinance (1)</b> 433:4 <b>origin (1)</b> 460:18 <b>original (6)</b> 392:21;393:7,9; 444:20;450:17; 451:10 <b>others (2)</b> 419:4;427:5 <b>Otherwise (2)</b> 357:18,20 <b>out (26)</b> 360:20;371:18; 377:11;381:3;382:20; 383:5,17;385:19; 387:17;388:20; 391:20;399:21;400:3, 21;404:12;405:20; 406:6,15;423:19; 425:5;430:1;434:9; 438:22;441:10; 449:11;464:5 <b>outline (2)</b> 408:9;411:10 <b>out-of-state (1)</b> 362:2 <b>outside (5)</b> 342:23;375:8; 376:9;410:13;415:2 <b>over (12)</b> 341:13;364:3; 376:23;378:9;399:24; 400:10,12;403:5; 404:3;416:1;446:17; 463:17 <b>overall (1)</b> 438:8 <b>overseeing (1)</b> 359:14 <b>overview (1)</b> 464:17 <b>own (5)</b> 353:18;354:23; 364:11;379:1;442:10 <b>owner (1)</b> 429:7 <b>owners (3)</b> 363:15;365:10,17 <b>owners/developers (1)</b> 435:11 <b>owns (1)</b> 429:22	363:1 <b>pad (7)</b> 370:4;381:11; 384:7,21;385:3; 386:8,11 <b>pads (7)</b> 370:1,3;381:10; 384:7,11,12,24 <b>page (48)</b> 348:1;349:7; 398:16;401:11,21; 405:24;407:6;410:17; 411:7;415:22;424:5, 6;425:18,20;426:11; 427:22,23;428:3; 435:3,4;436:7,22; 437:8;438:2;439:15, 17;440:5;442:6,7,9, 11;443:16,16;447:9, 11,13,18;449:5,7; 454:20;459:1,10,20; 460:1,21;461:23; 462:5,5 <b>pages (6)</b> 347:6,15,16; 427:17;439:11;442:9 <b>paid (2)</b> 456:1,4 <b>pain (1)</b> 347:17 <b>paint (1)</b> 376:8 <b>paragraph (16)</b> 368:9,13;424:9; 425:19,19;435:22; 436:8,9,12;437:20; 438:6;460:2,7,10,11; 461:22 <b>paragraphs (1)</b> 460:6 <b>parallel (1)</b> 443:13 <b>parameters (1)</b> 458:16 <b>parcel (6)</b> 365:10;366:4,5,6; 368:1,2 <b>parcels (3)</b> 342:16,18,20 <b>parents (3)</b> 418:3,4,16 <b>part (18)</b> 363:12,15;377:13, 14,16,19;404:13,16; 405:9,11;410:11; 444:15;451:9;453:19, 23;455:4;459:9;461:2 <b>participate (1)</b> 365:11 <b>participating (3)</b> 342:16,19;365:17 <b>particular (8)</b> 366:5;383:9;	405:11;414:15;419:4, 18;445:11;458:7 <b>particularly (1)</b> 412:21 <b>parties (1)</b> 351:9 <b>Parzyck (13)</b> 350:18;370:13; 388:3;391:16,21; 392:2;395:11,12; 398:5,10,11;410:15; 464:16 <b>Parzyck's (1)</b> 388:11 <b>passerines (1)</b> 419:7 <b>past (1)</b> 409:18 <b>path (4)</b> 371:21;372:19; 380:1,4 <b>paths (1)</b> 379:10 <b>pattern (1)</b> 365:8 <b>pay (1)</b> 363:3 <b>people (4)</b> 364:15;365:23; 456:16;457:21 <b>per (16)</b> 371:6;409:8;428:5, 5,19;436:1,1;438:10, 10;443:7;448:14; 452:14;453:10;454:3, 8,14 <b>percent (2)</b> 346:21;461:18 <b>performed (3)</b> 420:23;421:1; 422:12 <b>performing (1)</b> 359:12 <b>period (5)</b> 364:16;399:24; 416:1;419:9;442:20 <b>permanent (9)</b> 372:19;381:11; 406:9;407:1,3;409:2, 23,24;410:1 <b>permanents (1)</b> 408:16 <b>permit (6)</b> 402:12;403:9; 453:19;454:23,24; 455:1 <b>permits (1)</b> 455:2 <b>person (1)</b> 404:9 <b>personal (1)</b> 349:1 <b>perspective (1)</b>
<b>O</b>		<b>P</b>		
<b>Oak (6)</b> 358:12,22;359:22, 24;360:23;361:2 <b>object (3)</b> 353:21;354:23; 431:15 <b>Objection (8)</b> 388:4;391:19; 392:20;431:7;432:16; 434:10;435:16;458:9 <b>objectionable (1)</b> 431:16 <b>obligability (1)</b> 431:15 <b>observed (3)</b> 439:23;460:3;462:9 <b>obtain (2)</b> 365:13;435:12 <b>obtained (1)</b> 368:1 <b>obviously (5)</b> 351:1;362:8; 371:23;431:24; 432:23 <b>occupied (1)</b> 426:4 <b>occur (3)</b> 400:20;446:3; 448:12 <b>occurred (3)</b> 399:15;400:19; 401:4 <b>o'clock (3)</b> 441:19,21;446:24 <b>October (13)</b> 363:24;364:4,16; 393:21;395:14;405:9; 416:19;421:22;426:8; 452:22;453:18;454:4, 7 <b>off (23)</b> 359:3;373:20; 377:22;378:8;390:6; 393:19;394:17;395:5; 398:3;401:6;404:8, 21;405:3;406:14,19; 410:3;460:2;461:1,4, 5,11,12;464:10 <b>offhand (1)</b> 369:4 <b>office (3)</b> 358:5;388:21,23 <b>offices (1)</b> 396:20 <b>often (2)</b> 399:17;435:11 <b>Ohio (1)</b>	<b>operate (1)</b> 453:5 <b>operation (3)</b> 429:16;452:12; 454:2 <b>operations (9)</b> 382:1,3,4,17;383:1; 388:15;452:9;453:1,4 <b>operator (1)</b> 411:3 <b>opinion (3)</b> 415:4;454:6,13 <b>opportunity (3)</b> 347:3;351:1;390:18 <b>Orange (2)</b> 407:9,10	<b>package (2)</b> 377:19,23 <b>packages (1)</b>		

<p>382:1  <b>pertinent (1)</b>  368:8  <b>phase (4)</b>  358:11;360:5;  397:18;400:16  <b>phases (4)</b>  358:10,20;359:1;  360:12  <b>phones (1)</b>  390:5  <b>physical (1)</b>  362:21  <b>picture (1)</b>  407:23  <b>piece (1)</b>  368:20  <b>Pines (1)</b>  413:15  <b>pink (1)</b>  411:9  <b>Pioneer (1)</b>  413:14  <b>pit (1)</b>  397:8  <b>pitch (1)</b>  399:3  <b>place (4)</b>  340:15;397:15;  402:1;461:5  <b>plan (8)</b>  344:3;349:20;  396:4;404:23;405:1;  443:18;464:19,21  <b>plane (1)</b>  423:19  <b>planning (1)</b>  400:17  <b>plans (1)</b>  387:16  <b>plant (5)</b>  391:18;392:7,10,  13,17  <b>platform (5)</b>  374:17;375:2,12,  20,21  <b>platforms (2)</b>  375:15,22  <b>Pleasant (26)</b>  340:20;391:11;  398:12;400:13;406:1;  411:7;413:12;415:17;  420:15;421:20;422:4,  19;423:6;424:15,16;  426:6;430:22;432:11;  434:22;436:20;  437:22;439:7;450:1,  13;451:21;454:2  <b>please (13)</b>  340:2;341:15,18;  342:5;359:5;379:6;  385:17;390:6;394:9;  415:12;420:17;</p>	<p>456:15;464:8  <b>plover (3)</b>  443:21;444:21;  445:17  <b>plovers (2)</b>  444:3,10  <b>plus (3)</b>  367:1;400:7,9  <b>pm (3)</b>  390:22,22;465:12  <b>point (40)</b>  343:14,14,16;  344:23;345:7;352:24;  366:11;371:17,17;  385:6,15;390:3,9,10,  11,13;398:13;401:22;  403:17;405:24;  410:16;411:7;413:13;  417:14;418:19;420:5;  424:9;432:18,19;  439:3,22;440:7;  447:14,18;448:12;  454:1,21;456:23;  462:6;463:17  <b>pointed (1)</b>  391:20  <b>points (2)</b>  398:17;449:13  <b>Pontiac (1)</b>  367:20  <b>portion (1)</b>  401:16  <b>possible (2)</b>  358:6;387:17  <b>possibly (3)</b>  368:17;425:13;  439:7  <b>post-construction (2)</b>  445:12;452:22  <b>potential (7)</b>  350:15;419:15;  425:23;426:2;444:11;  445:5,7  <b>power (23)</b>  367:1,3;380:12,23;  381:2;390:3,9,10,11,  13;398:13;401:21;  403:17;405:24;  410:16;411:6;417:14;  418:18;420:5;439:3,  22;443:5;462:6  <b>Prairie (3)</b>  382:20;400:15;  424:13  <b>Prairie[sic] (1)</b>  389:21  <b>precise (2)</b>  354:21;356:1  <b>Precisely (2)</b>  361:20;369:7  <b>Preconstruction (2)</b>  439:16;440:3  <b>preference (1)</b></p>	<p>456:14  <b>preparation (1)</b>  423:4  <b>prepared (4)</b>  341:9;423:15,20,21  <b>presence (1)</b>  450:14  <b>present (2)</b>  340:18;357:7  <b>presentation (3)</b>  345:24;410:16;  439:4  <b>presented (1)</b>  429:21  <b>president (1)</b>  395:15  <b>pretty (4)</b>  372:13;373:11;  419:22;436:3  <b>prevent (1)</b>  379:21  <b>previous (1)</b>  345:5  <b>previously (1)</b>  351:7  <b>primarily (1)</b>  438:20  <b>principally (1)</b>  444:5  <b>probably (15)</b>  363:17,21;366:1;  375:4;377:3;395:10;  398:5;416:3;418:5;  421:14;425:5;428:16;  447:3,13;465:5  <b>problem (5)</b>  385:2;410:10;  414:22;430:21;440:2  <b>problems (1)</b>  415:3  <b>proceed (2)</b>  369:13;432:8  <b>proceedings (2)</b>  345:4;368:9  <b>process (7)</b>  360:3;363:1,18;  381:24;393:15,17;  406:22  <b>program (1)</b>  451:9  <b>project (59)</b>  341:6,7,21;342:10,  14,17,24;344:2,15;  358:2,13;363:5,8,9,  10,13;365:5,12;  366:12;368:17,18,19,  21;369:21;382:14;  383:22;384:8;386:22;  387:17;389:9;392:15,  19;393:11;394:5;  396:12,14;397:12,16;  400:17;406:9,23;  409:9,15;421:11,13;</p>	<p>423:17;432:14;433:8,  12,14;436:20;438:13;  443:8;445:4;447:21;  451:8;454:10;464:17,  18  <b>projects (9)</b>  362:5;363:2;  399:14,22;400:11,12;  432:11;433:8;438:7  <b>project's (1)</b>  360:18  <b>promises (1)</b>  392:3  <b>properties (4)</b>  429:15,21;432:10,  13  <b>property (7)</b>  349:1;353:2,3,6;  356:13;365:17;  372:24  <b>proposal (1)</b>  454:9  <b>proposed (3)</b>  436:19;443:8;  456:19  <b>proposing (1)</b>  445:8  <b>prorate (1)</b>  348:8  <b>prorated (1)</b>  348:12  <b>protecting (1)</b>  457:13  <b>protection (1)</b>  404:24  <b>provide (14)</b>  353:23;365:5,6;  411:16;430:7,19,20,  24;431:2;432:20;  439:6;444:12,23;  461:14  <b>provided (16)</b>  356:16,17;377:2,9;  411:17,18;412:3,5;  427:6;430:15;433:6;  435:15,18;444:14;  451:2,6  <b>provider (1)</b>  377:3  <b>providing (1)</b>  406:8  <b>PRWF (1)</b>  424:13  <b>PTEL (1)</b>  346:9  <b>public (4)</b>  345:10;350:4;  368:10;457:17  <b>publicly (2)</b>  427:1,9  <b>published (2)</b>  427:4;428:13  <b>pulled (2)</b></p>	<p>363:11,21  <b>purchase (1)</b>  377:20  <b>purple (3)</b>  411:9,10,10  <b>purpose (8)</b>  366:22;392:12;  408:23;430:18;444:1,  5;451:22;457:13  <b>pursuant (1)</b>  368:9  <b>purview (2)</b>  403:9;410:12  <b>put (20)</b>  366:9;370:5;  378:15;381:8,9;  386:8;387:4,8;  391:15;406:23;407:2;  410:11;411:22;412:4;  414:4,7;417:9;420:5,  10;430:9  <b>puts (1)</b>  456:9  <b>putting (2)</b>  366:9;392:12</p> <hr/> <p style="text-align: center;"><b>Q</b></p> <hr/> <p><b>quantity (1)</b>  349:4  <b>quarry (1)</b>  436:14  <b>questioner (1)</b>  457:20  <b>quick (1)</b>  383:17  <b>quicker (2)</b>  342:2;421:19  <b>quickly (1)</b>  343:21  <b>quite (1)</b>  446:23  <b>Quorum (1)</b>  340:12  <b>quote (1)</b>  418:19</p> <hr/> <p style="text-align: center;"><b>R</b></p> <hr/> <p><b>raise (1)</b>  341:16  <b>raised (2)</b>  348:7;458:17  <b>ramping (2)</b>  382:2,2  <b>range (5)</b>  436:3,5,6;438:17,  20  <b>ranged (1)</b>  438:8  <b>ranges (1)</b>  435:24  <b>raptor (6)</b></p>
--	--	--	---	--

<p>414:14;421:16; 423:9;424:13,17; 425:4 <b>rate (4)</b> 348:23,24;419:17; 431:24 <b>rated (2)</b> 452:14;453:6 <b>rates (4)</b> 419:23;424:18; 425:4;438:18 <b>rather (2)</b> 398:2;412:23 <b>Rautmann (2)</b> 385:10;464:18 <b>reached (1)</b> 406:6 <b>reaching (1)</b> 406:15 <b>read (8)</b> 379:1;418:20; 427:17;442:10;453:9, 11;463:11,15 <b>reading (2)</b> 457:4;463:6 <b>reads (2)</b> 451:19;452:20 <b>ready (1)</b> 383:3 <b>real (2)</b> 383:17;418:11 <b>really (16)</b> 344:19;347:5; 348:15,19;349:15; 352:16;355:6;365:13; 421:7;426:14;428:19; 438:20;444:22; 448:23;450:7;455:9 <b>reason (4)</b> 392:16;402:10; 431:15;457:12 <b>rebar (1)</b> 387:2 <b>rebuild (1)</b> 385:8 <b>recall (9)</b> 362:3;367:24; 369:4,5;405:10,11; 416:23;451:24; 458:17 <b>received (6)</b> 405:13,17,22; 406:12;451:20;455:6 <b>recess (3)</b> 390:18,22;465:8 <b>recommendation (19)</b> 449:6,9,10,17,18, 21;451:3;452:5,8,11, 17,19,19;454:20; 455:17,18;456:17,23, 24 <b>recommendations (2)</b> 451:18;457:11</p>	<p><b>reconsider (1)</b> 365:11 <b>record (4)</b> 365:22;368:7; 457:22;464:10 <b>records (4)</b> 451:7,13,15,17 <b>red (4)</b> 407:6,10;409:19; 436:15 <b>reduced (1)</b> 348:12 <b>reduction (7)</b> 346:3,15,17,21; 347:20,23;348:16 <b>reductions (1)</b> 379:11 <b>reference (1)</b> 394:4 <b>referenced (2)</b> 345:10,11 <b>references (1)</b> 347:7 <b>referring (2)</b> 350:8;425:4 <b>reflect (1)</b> 457:22 <b>regard (2)</b> 341:19;343:18 <b>regarding (4)</b> 350:15;435:8; 448:20;450:8 <b>regards (2)</b> 376:17;377:21 <b>region (1)</b> 399:22 <b>regular (1)</b> 380:11 <b>related (1)</b> 420:4 <b>relates (5)</b> 358:2;433:7;456:9, 22;457:10 <b>relation (2)</b> 419:11;420:1 <b>relay (1)</b> 360:4 <b>released (1)</b> 427:9 <b>relevance (6)</b> 431:7;432:16; 433:18;434:10; 435:16;456:20 <b>relevant (8)</b> 431:21,23;432:1,8; 433:13,16;434:3; 458:5 <b>remember (7)</b> 363:15;393:19; 403:16,18;429:19,19; 438:16 <b>remind (5)</b> 397:3;403:7;431:9,</p>	<p>17;456:13 <b>reminder (1)</b> 390:4 <b>remove (7)</b> 385:3,5,6,8,24; 386:2,6 <b>removed (1)</b> 384:24 <b>repair (1)</b> 398:20 <b>repaired (1)</b> 398:24 <b>repeat (3)</b> 353:12;437:18; 450:7 <b>repeated (2)</b> 450:5;457:19 <b>repeatedly (1)</b> 457:19 <b>repeating (1)</b> 457:21 <b>petition (1)</b> 457:18 <b>repetitive (1)</b> 458:3 <b>replacement (1)</b> 349:1 <b>report (20)</b> 345:23;346:11; 347:10;388:6;389:20; 390:2;416:6,9; 418:18;420:14; 422:20;423:7,15,20, 22;424:1;425:3,14, 17;430:9 <b>reported (1)</b> 462:8 <b>reporter (1)</b> 356:21 <b>reports (3)</b> 418:19;432:1; 435:10 <b>representation (1)</b> 352:14 <b>represented (1)</b> 351:9 <b>representing (1)</b> 351:16 <b>represents (1)</b> 351:5 <b>request (5)</b> 340:17;451:1,7,10, 16 <b>requested (1)</b> 445:12 <b>require (1)</b> 446:5 <b>required (2)</b> 350:4;446:3 <b>requirement (1)</b> 452:20 <b>requirements (2)</b> 431:20;445:10</p>	<p><b>requires (2)</b> 446:7;448:4 <b>reserve (1)</b> 344:23 <b>residence (1)</b> 342:20 <b>residences (13)</b> 341:6,20;342:14, 15;343:1;352:6; 353:4,5,9,13,19; 354:15;355:19 <b>resource (1)</b> 427:7 <b>Resources (2)</b> 414:2,8 <b>responded (1)</b> 451:16 <b>responding (2)</b> 450:21,21 <b>response (6)</b> 404:23;405:1; 406:12;417:4;449:16; 451:6 <b>responses (1)</b> 433:2 <b>responsibilities (2)</b> 359:8;365:3 <b>responsibility (4)</b> 403:24;404:4,6,7 <b>responsible (2)</b> 406:15;414:13 <b>restate (1)</b> 454:5 <b>resulting (1)</b> 460:16 <b>results (3)</b> 448:1;458:14; 461:24 <b>Revenue (5)</b> 340:22;347:10; 349:8,9;350:3 <b>reverb (1)</b> 359:20 <b>review (2)</b> 402:6;434:16 <b>reviewed (3)</b> 420:3,6;433:9 <b>reviewing (1)</b> 421:15 <b>Rich (1)</b> 340:7 <b>Ridge (56)</b> 340:20;358:11,13, 20;359:6,9;360:8,18; 362:8;363:22;364:22, 23;383:22;388:15,18; 389:21;391:11; 398:12;400:12,13,13; 406:1;411:7;413:13, 13,14;415:17;420:15; 421:20;422:4,19; 423:6;424:13,15,16; 426:6;427:13,14,24;</p>	<p>428:10,11,12;429:1,8; 430:22;432:11,12,13; 434:22;436:20; 437:22;439:7;450:1, 14;451:21;454:2 <b>right (48)</b> 340:13,23;341:16; 343:7,13;344:8,23,24; 345:15,18;347:24; 348:4;351:8;358:19; 368:15;373:15; 376:20;377:1;380:1; 381:20;385:8,11; 391:5;400:5;412:6; 415:7;417:23;423:12; 426:13,18,21;427:20; 428:4;431:15;434:11; 436:21;438:5;439:8; 440:5,5;441:11; 447:11;452:18; 459:10;463:19,23; 464:2,9 <b>risk (7)</b> 422:5;434:24; 437:13;444:11;445:6, 7;453:7 <b>River (2)</b> 419:12;425:7 <b>rivers (2)</b> 419:12,14 <b>road (3)</b> 372:20,22;376:14 <b>roads (4)</b> 360:2;372:16,22; 373:2 <b>role (3)</b> 363:7;364:3;388:11 <b>roll (1)</b> 340:2 <b>rolled (1)</b> 374:10 <b>Romanette (1)</b> 424:6 <b>room (1)</b> 375:4 <b>rotor (15)</b> 371:7;373:13; 379:7;394:11,13; 439:23,24;440:8,12, 13,17,23;441:7,14; 442:3 <b>rude (2)</b> 357:16,20 <b>rules (2)</b> 368:10;431:9 <b>runs (1)</b> 374:19 <b>Ryan (4)</b> 382:11;387:22,24; 388:1</p>
				<b>S</b>

<p><b>safe (1)</b> 459:17</p> <p><b>safer (1)</b> 459:16</p> <p><b>same (24)</b> 342:19;357:8,11, 19;359:4,22;362:9; 371:20;373:9;392:1; 396:8;401:11;402:1; 408:17;415:14;424:1; 449:6;450:9,10; 457:20,20,21;459:20; 461:5</p> <p><b>satisfaction (1)</b> 465:3</p> <p><b>save (1)</b> 383:9</p> <p><b>savings (1)</b> 379:11</p> <p><b>saw (5)</b> 384:12,15,23; 396:4;420:3</p> <p><b>saying (4)</b> 399:9;408:13; 418:13;441:24</p> <p><b>scale (2)</b> 363:3;452:24</p> <p><b>scheduled (1)</b> 393:11</p> <p><b>scheduling (1)</b> 463:20</p> <p><b>school (11)</b> 345:21;346:8,9,13; 347:10;348:6,19; 349:3;350:3,3;351:4</p> <p><b>SCHOPP (8)</b> 340:3,5,7,9,11; 390:11;411:22,24</p> <p><b>Schultz (4)</b> 382:11;383:6; 387:22;388:6</p> <p><b>scope (4)</b> 351:6;353:22; 362:15;392:20</p> <p><b>search (2)</b> 414:14;421:16</p> <p><b>searches (2)</b> 445:14,16</p> <p><b>season (1)</b> 452:22</p> <p><b>Second (30)</b> 340:23;357:24; 380:4;390:14;398:16, 17;402:2,20,21; 416:10;424:8;425:19; 436:7;437:10;438:6; 443:7;447:11,13; 448:14;452:1,14; 453:10;454:3,8,14,21; 459:9;460:1,11,20</p> <p><b>seconds (1)</b> 465:9</p> <p><b>secretion (2)</b></p>	<p>460:8,14</p> <p><b>section (7)</b> 347:8;375:13,16, 18;435:3;455:1; 457:17</p> <p><b>sections (2)</b> 375:15;376:2</p> <p><b>seeing (1)</b> 407:16</p> <p><b>select (1)</b> 343:23</p> <p><b>self-supporting (2)</b> 408:19,20</p> <p><b>send (1)</b> 443:6</p> <p><b>sent (2)</b> 405:2,20</p> <p><b>sentence (13)</b> 425:23;436:12; 437:10,16;438:6; 460:11,12,13,21; 461:1,3,17,23</p> <p><b>sentient (1)</b> 439:23</p> <p><b>separate (1)</b> 380:1</p> <p><b>September (1)</b> 363:24</p> <p><b>serious (1)</b> 459:22</p> <p><b>Service (18)</b> 417:17,20;427:8; 433:9;444:15,24; 446:7;448:2,3,15,16, 20,22;449:2;450:3,6; 454:19;455:5</p> <p><b>set (1)</b> 348:3</p> <p><b>Settlers (1)</b> 413:14</p> <p><b>seven (5)</b> 400:10;405:5,19, 20;454:21</p> <p><b>several (3)</b> 364:5;421:12; 462:15</p> <p><b>shadow (2)</b> 344:2;464:20</p> <p><b>Shakes (2)</b> 345:2,8</p> <p><b>sheep (1)</b> 460:9</p> <p><b>show (2)</b> 375:14;391:17</p> <p><b>showed (1)</b> 459:12</p> <p><b>shown (4)</b> 392:7;407:5;411:8; 419:6</p> <p><b>side (5)</b> 382:5,8;388:15; 459:10;460:21</p> <p><b>sign (1)</b></p>	<p>363:9</p> <p><b>signed (3)</b> 342:21;365:24; 366:1</p> <p><b>significant (5)</b> 414:23;415:3; 438:17;442:20; 460:24</p> <p><b>signified (1)</b> 410:17</p> <p><b>signing (4)</b> 363:12,12,14; 365:22</p> <p><b>silver-haired (1)</b> 436:14</p> <p><b>similar (4)</b> 372:12;378:19; 380:12;408:19</p> <p><b>simply (3)</b> 355:10;359:15; 385:20</p> <p><b>single (2)</b> 386:6;389:14</p> <p><b>sit (1)</b> 429:4</p> <p><b>site (11)</b> 374:14,16;385:13; 394:24;402:7;419:24; 429:11;430:20; 435:11;438:23;439:2</p> <p><b>sites (14)</b> 412:17,19;413:7, 10;428:21,22;430:12, 13;432:15;434:7; 436:6;438:20,22; 445:1</p> <p><b>sitting (1)</b> 442:2</p> <p><b>six (6)</b> 363:11;365:2,16; 441:19,20;451:12</p> <p><b>size (4)</b> 384:19;411:13,15, 19</p> <p><b>sizes (1)</b> 384:7</p> <p><b>skin (1)</b> 456:8</p> <p><b>Sky (1)</b> 413:13</p> <p><b>slightly (1)</b> 346:20</p> <p><b>slower (1)</b> 443:3</p> <p><b>slowly (1)</b> 443:15</p> <p><b>smaller (3)</b> 378:12,12;380:5</p> <p><b>sniping (3)</b> 352:16;355:3,7</p> <p><b>soil (6)</b> 381:17,18,19; 386:23;387:9,13</p>	<p><b>sole (1)</b> 362:10</p> <p><b>solid (2)</b> 354:2;379:14</p> <p><b>somebody (2)</b> 404:1,5</p> <p><b>somehow (1)</b> 383:7</p> <p><b>someone (5)</b> 350:16;364:3; 377:9;423:16;439:6</p> <p><b>sometime (3)</b> 363:23;416:21; 417:1</p> <p><b>somewhere (3)</b> 390:21;418:1,14</p> <p><b>songbirds (1)</b> 419:7</p> <p><b>soon (1)</b> 357:23</p> <p><b>sorry (20)</b> 347:12;364:9; 380:10;397:10,18; 400:6;403:5;408:16; 409:24;415:23; 434:24;435:4;437:18, 19;439:5,14;440:1; 445:23;454:5;461:4</p> <p><b>Sort (1)</b> 379:19</p> <p><b>sound (3)</b> 394:23;395:1;465:2</p> <p><b>sounds (2)</b> 408:15;413:5</p> <p><b>source (2)</b> 459:22;460:7</p> <p><b>south (7)</b> 367:19;368:21,22, 24;369:2,3;418:3</p> <p><b>space (2)</b> 378:14,18</p> <p><b>spaces (1)</b> 418:12</p> <p><b>spacing (1)</b> 371:6</p> <p><b>speak (11)</b> 344:5;359:17; 372:2;373:4,4;374:5; 384:18;386:22; 389:17;390:24; 409:17</p> <p><b>speaker (1)</b> 410:18</p> <p><b>spec (3)</b> 376:13;377:20; 380:12</p> <p><b>special (3)</b> 402:11;410:12; 431:20</p> <p><b>specialized (1)</b> 362:17</p> <p><b>species (12)</b> 419:1;426:3;</p>	<p>436:10,14,18;439:23; 448:9;450:10;451:8; 453:1;455:1;460:9</p> <p><b>specific (1)</b> 354:11</p> <p><b>specifically (3)</b> 346:2;433:7;452:10</p> <p><b>specification (3)</b> 376:15,17;377:6</p> <p><b>specifics (1)</b> 423:10</p> <p><b>speculate (2)</b> 354:19,20</p> <p><b>speculation (1)</b> 388:4</p> <p><b>speed (14)</b> 409:1;442:20,23; 443:4,5,11,14;448:15; 452:13,15;453:6,17; 454:3,8</p> <p><b>spell (2)</b> 356:21;360:13</p> <p><b>Spelled (1)</b> 360:14</p> <p><b>spending (2)</b> 433:19,22</p> <p><b>split (1)</b> 362:12</p> <p><b>spoke (2)</b> 390:23;464:18</p> <p><b>spoken (1)</b> 463:10</p> <p><b>spring (2)</b> 444:5,10</p> <p><b>stable (1)</b> 370:6</p> <p><b>staff (4)</b> 423:16,18,20,21</p> <p><b>stage (1)</b> 400:17</p> <p><b>staging (6)</b> 396:1,5,17;397:5, 11,14</p> <p><b>stand (6)</b> 351:22,23;352:1; 369:17;412:14; 434:19</p> <p><b>stands (1)</b> 393:5</p> <p><b>Stantec (18)</b> 412:18,22;413:20, 22,23;414:10,12; 420:23;421:1,4,10,12; 422:1,15;423:3,7; 450:1;451:20</p> <p><b>start (10)</b> 376:23;398:16; 399:19;404:3;413:10, 11,20;420:12;424:1; 449:5</p> <p><b>started (5)</b> 363:15,16;413:22; 421:15,15</p>
--	---	---	---	---

<p><b>starting (1)</b> 449:5</p> <p><b>starts (3)</b> 424:9;436:9;460:2</p> <p><b>state (27)</b> 341:24;342:5; 346:3,5,15,18,22,23; 347:20;348:3,17; 349:6,16;362:3; 389:2;413:8;427:7; 429:22;445:2,3; 446:10;456:6,10; 457:13;458:1,1; 464:16</p> <p><b>stated (3)</b> 444:2;452:11; 456:17</p> <p><b>state-listed (1)</b> 426:3</p> <p><b>statement (5)</b> 435:7;442:19; 450:16;454:4;459:11</p> <p><b>States (2)</b> 438:8;449:22</p> <p><b>statistically (1)</b> 460:24</p> <p><b>stator (1)</b> 379:7</p> <p><b>Stay (7)</b> 373:15;397:15; 413:18;418:5,6; 421:17;464:6</p> <p><b>staying (1)</b> 343:8</p> <p><b>steel (15)</b> 374:2,3,7,9,10,10; 375:23,24,24;376:1,6, 8;387:2;410:1,2</p> <p><b>step (1)</b> 426:16</p> <p><b>steps (1)</b> 449:3</p> <p><b>steroid (1)</b> 460:15</p> <p><b>Stevens (1)</b> 462:10</p> <p><b>Stevens's (1)</b> 462:12</p> <p><b>still (5)</b> 365:22;391:2,9; 443:15;459:17</p> <p><b>stop (4)</b> 355:3;413:16; 414:23;415:4</p> <p><b>stopped (1)</b> 400:3</p> <p><b>Straight (1)</b> 423:8</p> <p><b>Strategy (6)</b> 415:16;416:14; 437:23;442:12;448:8; 454:11</p> <p><b>stream (1)</b></p>	<p>426:1</p> <p><b>stress (5)</b> 458:16;459:7,13, 22;460:7</p> <p><b>studied (2)</b> 412:18,21</p> <p><b>studies (20)</b> 414:4,8,13,15,17; 415:2;420:3,15,21; 421:16;422:20;425:3, 5;429:20;430:18; 435:24;439:16;440:3; 445:13;450:7</p> <p><b>study (31)</b> 344:10;394:23; 420:6,7,9,20;421:7, 21;422:2,16;424:2,3; 426:7;430:10;432:22, 22;433:7,17,19; 434:4;444:6,7,13; 445:20,24;453:10; 458:12,21;460:22; 461:9;464:15</p> <p><b>stupid (1)</b> 370:21</p> <p><b>subconsultant (1)</b> 421:4</p> <p><b>subcontractors (1)</b> 362:16</p> <p><b>submission (1)</b> 451:21</p> <p><b>submit (1)</b> 432:1</p> <p><b>submitted (6)</b> 416:15,18;433:17; 448:1;455:12,15</p> <p><b>submitting (1)</b> 433:18</p> <p><b>subscript (1)</b> 349:11</p> <p><b>substation (6)</b> 367:4,6,12,13,15,18</p> <p><b>subtract (1)</b> 373:22</p> <p><b>suburbs (1)</b> 389:3</p> <p><b>successive (1)</b> 459:11</p> <p><b>suggest (1)</b> 458:14</p> <p><b>suggested (1)</b> 398:1</p> <p><b>suggests (1)</b> 459:21</p> <p><b>summary (3)</b> 425:11;439:19; 440:4</p> <p><b>summer (3)</b> 417:19;418:1; 422:19</p> <p><b>supplement (1)</b> 391:14</p> <p><b>support (1)</b></p>	<p>408:2</p> <p><b>suppress (1)</b> 460:16</p> <p><b>Sure (26)</b> 347:24;349:17; 350:22;355:14;357:2; 370:12;374:15; 401:10;403:23; 411:12,24;412:7,23; 413:4,8;415:15; 420:19;422:5;425:14, 15;431:19;438:14; 439:1;455:7,9;464:2</p> <p><b>Survey (4)</b> 423:9;440:7; 444:21;446:12</p> <p><b>surveyor (1)</b> 441:13</p> <p><b>Surveys (3)</b> 439:20;440:4;450:4</p> <p><b>susceptibility (1)</b> 460:17</p> <p><b>sustaining (1)</b> 453:2</p> <p><b>swear (1)</b> 341:12</p> <p><b>swept (10)</b> 439:24,24;440:9, 12,13,17,23;441:7,14; 442:3</p> <p><b>sworn (5)</b> 341:9,17,24;342:4; 350:11</p> <p><b>synched (1)</b> 402:8</p> <p><b>system (5)</b> 366:15,16;399:3; 460:16;465:2</p> <p><b>systems (3)</b> 366:12;377:1;399:2</p>	<p>440:18;445:22</p> <p><b>talks (3)</b> 340:19;398:20; 440:7</p> <p><b>tall (4)</b> 371:23;372:1,7; 408:21</p> <p><b>taller (1)</b> 372:3</p> <p><b>tax (2)</b> 345:20;349:2</p> <p><b>taxing (1)</b> 348:19</p> <p><b>team (1)</b> 364:6</p> <p><b>technical (9)</b> 344:14;417:5; 433:10;435:10; 444:16;447:9;453:21, 23;454:11</p> <p><b>telling (1)</b> 421:7</p> <p><b>temporary (13)</b> 391:17;392:6,13; 396:20,21;406:7,20, 21;407:5,15,15; 409:23;410:8</p> <p><b>ten (5)</b> 363:21;371:18; 390:18,19;414:18</p> <p><b>term (1)</b> 397:16</p> <p><b>terminology (4)</b> 366:17;379:4,4; 396:7</p> <p><b>test (3)</b> 402:19;413:3,5</p> <p><b>testified (6)</b> 349:18,19;403:1; 416:10;463:10,12</p> <p><b>testify (5)</b> 341:2;350:10,13; 352:10;354:13</p> <p><b>testifying (1)</b> 403:18</p> <p><b>testimony (3)</b> 392:21;402:18; 414:12</p> <p><b>thick (1)</b> 378:2</p> <p><b>thickness (1)</b> 441:2</p> <p><b>thinking (1)</b> 409:10</p> <p><b>third (7)</b> 436:8,9;438:23; 439:1,22;440:6; 460:11</p> <p><b>though (6)</b> 359:13;361:12; 372:3;387:13;428:16; 448:18</p> <p><b>thought (3)</b></p>	<p>379:17;403:17; 432:1</p> <p><b>thousand (3)</b> 417:15,16,18</p> <p><b>threatened (2)</b> 446:10;451:7</p> <p><b>three (24)</b> 346:6;358:18,19; 371:7;372:9;375:13, 15,15;379:8,9; 398:17;402:19,22; 403:1;405:15;408:4; 414:6;436:13,18; 442:9;447:19,20; 453:13;459:11</p> <p><b>three-section (1)</b> 376:3</p> <p><b>throw (1)</b> 385:19</p> <p><b>tie (2)</b> 429:23,24</p> <p><b>times (7)</b> 371:18;402:19,22; 403:1;428:14;444:8; 465:6</p> <p><b>timing (4)</b> 443:24;444:6,22; 445:13</p> <p><b>tip (2)</b> 409:20;441:18</p> <p><b>title (4)</b> 342:8;382:12; 423:8;442:11</p> <p><b>titled (1)</b> 443:17</p> <p><b>today (3)</b> 356:18;365:23; 429:5</p> <p><b>together (8)</b> 357:13,14;366:24; 374:18;402:8;404:12; 439:13;450:2</p> <p><b>told (1)</b> 363:6</p> <p><b>tonight (2)</b> 340:14;404:10</p> <p><b>took (2)</b> 401:8;438:22</p> <p><b>top (36)</b> 350:1;375:16,16, 18;377:1,22;378:8,9, 9;379:16;380:22; 381:20;384:23; 393:19;394:17;395:5; 398:3;399:4,5,8; 404:8,21;405:3; 406:14,19;407:18,20, 23;408:2,4,10; 409:21;410:3;432:24; 439:19;449:10</p> <p><b>total (16)</b> 341:22;342:13,24; 356:9,12;377:23;</p>
<b>T</b>				
		<p><b>Table (7)</b> 345:20,22,23; 394:18;426:12;429:3; 431:5</p> <p><b>tables (1)</b> 426:19</p> <p><b>talk (10)</b> 344:10,14;402:14; 406:1;419:21;441:6; 443:20;463:20;464:1, 7</p> <p><b>talked (8)</b> 346:12,13;385:12; 403:13;404:10; 421:20;442:18; 458:11</p> <p><b>talking (9)</b> 366:9;373:14; 374:7;375:2;403:5; 422:22;437:20;</p>		



<p>405:23;414:20,22; 415:9,11,24;428:10, 24;430:3;450:11 <b>towards (3)</b> 378:8;382:20;408:3 <b>tower (44)</b> 370:6;371:20; 373:6,8,15,15,16,17, 22;374:1,9,12,13,19; 375:5,6,11,11;376:2, 5,11,13,15;377:8,13, 17,21;378:3,6,12,14; 379:10;380:2,13; 399:6;406:9;407:2; 408:2,5,6,19,19,20; 409:8 <b>towers (12)</b> 369:23;376:4; 386:15;406:7,8,20; 407:3,5;408:21; 409:3,22,23 <b>track (1)</b> 372:13 <b>Trail (2)</b> 413:14,14 <b>trailers (1)</b> 396:22 <b>trailing (1)</b> 393:6 <b>transcript (1)</b> 434:17 <b>Transect (1)</b> 423:9 <b>transmission (3)</b> 367:9,22,23 <b>trees (2)</b> 417:21;418:1 <b>trench (1)</b> 367:3 <b>tricks (1)</b> 355:5 <b>true (3)</b> 364:21;365:15; 455:13 <b>trust (1)</b> 405:18 <b>try (13)</b> 359:5;361:16; 385:20;390:20;391:4; 412:24;413:16; 418:12,14;421:18; 447:1,6;461:7 <b>trying (27)</b> 355:4;357:16,19, 20;360:20;361:17; 364:12;365:13; 373:20;377:11;379:1; 383:5,15;391:1; 397:3;400:2;401:10; 403:7;406:21;413:2, 3;414:5,16;430:1; 431:22;456:24; 462:14</p>	<p><b>Tuesday (3)</b> 463:24;464:3,12 <b>turbine (34)</b> 353:20;354:16,17; 355:20;356:4,7,10; 366:9,13;370:17; 371:3;381:8;382:18; 385:6,24;386:3,6; 399:2;404:20;414:23; 415:4;435:9;436:1; 440:14;443:5;456:20; 458:16,17;459:14; 461:18,20;462:18,21, 24 <b>turbines (26)</b> 355:18;366:24; 369:21;370:21,23; 371:14;372:3,6; 373:5;395:3;397:19; 409:7;411:4,8; 418:22;419:2,23; 420:4;428:9,22; 440:22;441:10; 452:13;462:1,12,19 <b>turn (4)</b> 390:5;391:1; 443:15;446:17 <b>turned (1)</b> 443:12 <b>two (22)</b> 348:14;366:1; 368:1;373:23;400:6, 7,9,19;404:2;407:13, 14;409:5,7,8,11; 427:17;433:2,6; 438:20,22;452:5; 460:5 <b>type (3)</b> 372:13;381:17; 386:23 <b>types (4)</b> 398:23;401:4; 419:4;426:1 <b>Typical (1)</b> 409:5 <b>typically (2)</b> 409:6;419:8</p>	<p>377:8;387:4; 441:17,18;442:14 <b>understood (1)</b> 366:17 <b>undisturbed (1)</b> 387:11 <b>undue (1)</b> 457:18 <b>United (2)</b> 351:12;438:7 <b>units (1)</b> 351:3 <b>unless (3)</b> 425:6;446:6;448:3 <b>unpublished (1)</b> 435:11 <b>up (42)</b> 342:21;346:19; 348:17,19;352:1; 355:11;356:15;357:5; 362:12;363:10,14; 374:19;376:13,18; 377:9;379:2,18; 381:8,9;382:2,2,17; 386:8;389:1,3;391:1; 404:1;406:23;407:2, 4,18,20;408:10,16; 429:24,24;442:8; 447:6;451:3;457:16; 464:7;465:3 <b>update (1)</b> 451:15 <b>updated (1)</b> 461:15 <b>upper (1)</b> 438:20 <b>use (21)</b> 372:1;373:2; 376:12,16;385:8; 386:5;389:14;394:15, 18;402:12;410:12; 424:10,13;426:7; 427:24;428:21; 431:20;432:21; 439:20;440:7;443:24 <b>used (6)</b> 346:7,14;348:24; 370:3;392:15;394:22 <b>useful (1)</b> 430:18 <b>using (3)</b> 350:2;373:9;442:1 <b>usually (17)</b> 371:20;372:18,19; 377:2;396:10,18,20; 397:7,7,9,15,16; 405:19;406:24;407:2; 408:18,22 <b>utilities (1)</b> 389:15 <b>utility (2)</b> 362:14,14</p>	<p style="text-align: center;"><b>V</b></p> <p><b>valley (1)</b> 353:10 <b>valuation (1)</b> 340:20 <b>value (6)</b> 348:15,18;349:12, 14,22;350:5 <b>VanDeWalle (4)</b> 344:9;412:14,17; 464:14 <b>variation (1)</b> 419:22 <b>various (2)</b> 374:24;396:18 <b>vehicle (1)</b> 372:13 <b>venue (1)</b> 340:15 <b>Vermilion (2)</b> 383:23,24 <b>versus (5)</b> 349:13;373:9; 395:7;397:23;400:4 <b>Veterinarians (2)</b> 462:6;463:11 <b>vicinity (3)</b> 458:15;462:1,7 <b>video (1)</b> 410:21 <b>view (1)</b> 402:6 <b>village (4)</b> 343:1;353:11,15; 354:12 <b>visit (1)</b> 345:20 <b>visually (1)</b> 402:6 <b>Vitzthum (4)</b> 340:5,6;345:8; 465:9 <b>VOICE (2)</b> 341:13;352:19 <b>volume (3)</b> 391:2;392:14,18 <b>Vulcan (1)</b> 377:14</p>	<p>372:16,17,18 <b>wall (1)</b> 380:2 <b>walls (2)</b> 374:9;378:2 <b>Walnut (1)</b> 413:13 <b>wants (5)</b> 342:1;354:23; 433:11,13;457:23 <b>warm (1)</b> 418:14 <b>way (6)</b> 419:19;426:16,19; 428:15;431:14;453:3 <b>week (2)</b> 444:3;457:23 <b>weeks (4)</b> 366:1;368:2;444:9, 9 <b>weight (2)</b> 461:19;462:2 <b>weights (2)</b> 460:23;461:10 <b>welcome (3)</b> 340:14;351:6;464:6 <b>weren't (6)</b> 345:4;359:12; 417:21;420:22;421:6; 422:17 <b>West (8)</b> 421:22;422:2; 423:1;424:2;425:5; 430:8,8;434:9 <b>what's (29)</b> 349:10;350:4; 358:1;366:5,5;371:2; 373:14,16,24;374:11; 375:2;378:17,17; 379:9;380:19;381:2; 382:12;391:5;400:22; 421:8;432:17,18; 439:24;443:8,11; 444:1;452:11;456:20; 459:6 <b>wheel (3)</b> 440:15,16;441:1 <b>When's (4)</b> 365:24;382:16,22; 383:20 <b>Where's (2)</b> 404:19;447:24 <b>wherever (1)</b> 368:18 <b>Whispering (1)</b> 413:15 <b>White (8)</b> 358:12,22;359:22, 24;360:23;361:1; 388:19;409:18 <b>whole (2)</b> 349:4;413:17 <b>whooping (2)</b></p>
	<b>U</b>		<b>W</b>	
	<p><b>UCLC (1)</b> 458:20 <b>unanswered (1)</b> 340:24 <b>uncurtailed (2)</b> 452:9;453:5 <b>under (6)</b> 342:19;350:4; 368:10;402:20; 417:24;440:7 <b>underground (3)</b> 366:19,21;367:7 <b>Underneath (5)</b></p>	<p><b>used (6)</b> 346:7,14;348:24; 370:3;392:15;394:22 <b>useful (1)</b> 430:18 <b>using (3)</b> 350:2;373:9;442:1 <b>usually (17)</b> 371:20;372:18,19; 377:2;396:10,18,20; 397:7,7,9,15,16; 405:19;406:24;407:2; 408:18,22 <b>utilities (1)</b> 389:15 <b>utility (2)</b> 362:14,14</p>	<p><b>wait (1)</b> 357:16 <b>walk (5)</b> 347:18;371:18; 372:13,15;375:21 <b>walked (1)</b> 372:22 <b>walking (1)</b> 371:19 <b>walks (3)</b></p>	

<p>418:19,20  <b>who's (3)</b>                  341:9;388:5;464:8  <b>whose (2)</b>                  404:7;411:12  <b>wide (2)</b>                  419:22;441:3  <b>width (4)</b>                  381:14;384:14;                  386:18,20  <b>widths (1)</b>                  382:15  <b>Wildlife (25)</b>                  416:16;417:7,17,                  19;420:15;421:13;                  424:3;427:8;433:9;                  444:15,24;445:23;                  446:6,18;448:2,3,15,                  16,20,22;449:2;450:3,                  6;454:18;455:4  <b>willing (1)</b>                  349:19  <b>wind (53)</b>                  340:19;346:12,20;                  347:9;348:17;349:12,                  14,15;350:5;355:20;                  362:10;381:24;                  382:17;406:8;408:24;                  409:1,1;414:23;                  415:4;418:21;419:2,                  10,13,18,23;420:4,16;                  424:14,17;426:18,21,                  23;431:2,4,5;433:3;                  435:10;438:7;443:4,                  13;451:21;452:12,24;                  453:4;454:2;458:16;                  461:18;462:1,7,16,18,                  18,21  <b>winding (1)</b>                  446:22  <b>Wing (1)</b>                  423:8  <b>winter (3)</b>                  417:22;418:2;                  438:21  <b>wire (8)</b>                  366:17,19,21;                  379:13,14;380:17;                  407:21,23  <b>wires (4)</b>                  407:20,22;408:1,12  <b>Wisconsin (1)</b>                  432:24  <b>wish (2)</b>                  355:16;369:14  <b>within (33)</b>                  341:6,7,21;342:14,                  15,23;344:6,14;                  352:6;353:2,6,9,13,                  15,15,20;354:12,15;                  355:19;356:10,13;                  362:15;368:19;                  399:22;425:24;</p>	<p>441:11,13;450:8;                  451:8;456:19,19;                  462:16,21  <b>without (3)</b>                  352:2;425:17;457:4  <b>witness (9)</b>                  341:1;350:12;                  352:23;353:22;                  354:23;385:10,15;                  391:20;457:24  <b>witnesses (1)</b>                  412:12  <b>witness's (1)</b>                  392:21  <b>wonder (1)</b>                  442:8  <b>wondering (1)</b>                  345:19  <b>woodlands (1)</b>                  417:18  <b>words (1)</b>                  456:8  <b>work (10)</b>                  358:4;360:1,7;                  362:17,22;364:7,20;                  391:1,3;421:14  <b>worked (4)</b>                  358:19;399:14;                  413:21;414:1  <b>working (2)</b>                  462:6;465:3  <b>works (2)</b>                  347:21;462:15  <b>worse (1)</b>                  408:15  <b>wrap (1)</b>                  447:6  <b>write (1)</b>                  358:17  <b>writing (4)</b>                  379:1;442:10;                  455:6,7  <b>written (2)</b>                  406:12;414:18  <b>wrong (4)</b>                  344:1;352:11;                  387:24;388:2</p>	<p><b>York (1)</b>                  361:15</p> <p style="text-align: center;"><b>Z</b></p> <p><b>ZBA (3)</b>                  341:5;402:11;                  440:11  <b>ZBA's (1)</b>                  368:10  <b>zero (1)</b>                  393:8  <b>Zimmerman (3)</b>                  340:9,10;345:2  <b>zone (9)</b>                  439:24,24;440:9,                  12,13,23;441:7,14;                  442:4  <b>zones (1)</b>                  440:17  <b>zoning (4)</b>                  343:15;350:24;                  431:18;456:16</p> <p style="text-align: center;"><b>1</b></p> <p><b>1 (7)</b>                  349:13;358:11,12,                  20;359:1,9;435:24  <b>1.88 (1)</b>                  438:9  <b>10 (6)</b>                  394:10;435:3,4;                  455:1;458:21;461:18  <b>100 (4)</b>                  373:9;394:11;                  398:7;440:21  <b>100s (2)</b>                  376:15;397:22  <b>103 (5)</b>                  394:13;398:7;                  420:12,14;421:20  <b>103s (3)</b>                  373:10;376:15;                  397:23  <b>104 (2)</b>                  421:21;426:7  <b>105 (2)</b>                  422:4;434:22  <b>106 (1)</b>                  422:19  <b>107 (1)</b>                  423:7  <b>108 (2)</b>                  415:20;437:22  <b>109 (2)</b>                  394:10;417:12  <b>11 (1)</b>                  447:9  <b>113 (1)</b>                  439:7  <b>115 (3)</b>                  347:4,5,11</p>	<p><b>12 (8)</b>                  366:24;401:21;                  436:7;449:5;455:18;                  456:17,23;457:5  <b>121 (2)</b>                  347:13,14  <b>122 (2)</b>                  340:21;345:12  <b>126 (2)</b>                  394:10,13  <b>129 (2)</b>                  394:10,14  <b>13 (6)</b>                  414:20,22;456:24,                  24;457:2,5  <b>136 (8)</b>                  369:20,23;370:1;                  373:5,6;394:11;                  397:19;440:17  <b>14 (2)</b>                  456:24;457:4  <b>15 (16)</b>                  351:13;378:7,19;                  393:13,15,23;394:7;                  397:21,21;405:24;                  407:6;422:22;447:3,                  5;456:24;463:17  <b>1500 (2)</b>                  354:16,17  <b>15th (5)</b>                  393:21;405:9;                  421:22;464:24;465:4  <b>16 (9)</b>                  347:6,15,16;348:2;                  349:8;354:16;410:17;                  436:22;437:8  <b>160 (2)</b>                  366:4;368:2  <b>1600 (2)</b>                  354:17;355:19  <b>17 (3)</b>                  347:6,15,16  <b>1700 (2)</b>                  355:19,22  <b>17th (2)</b>                  464:24;465:5  <b>18 (2)</b>                  366:24;454:20  <b>1800 (2)</b>                  355:22;356:2  <b>1st (4)</b>                  395:14;453:18;                  454:4,7</p> <p style="text-align: center;"><b>2</b></p> <p><b>2 (6)</b>                  349:11;358:12;                  359:2;360:12;400:16;                  438:9  <b>20 (2)</b>                  411:18;422:23  <b>200 (1)</b></p>	<p>438:15  <b>2000 (2)</b>                  356:2,4  <b>2006 (2)</b>                  413:23;414:1  <b>2008 (7)</b>                  363:10,16,17,24;                  364:16;400:1;451:11  <b>2009 (13)</b>                  363:24;364:4,16;                  414:5,7;420:16;                  421:22;422:10;426:9;                  430:10,12,14;451:11  <b>2010 (4)</b>                  413:23;414:1;                  420:17;424:2  <b>2010-2011 (1)</b>                  348:6  <b>2011 (2)</b>                  422:20,21  <b>2013 (3)</b>                  400:1,4;458:11  <b>2014 (8)</b>                  393:21;395:14;                  400:2,6,19;414:14;                  421:15;437:24  <b>20th (2)</b>                  416:3;422:21  <b>21 (1)</b>                  435:24  <b>21st (2)</b>                  421:22;426:9  <b>22 (1)</b>                  394:10  <b>224 (2)</b>                  342:16,18  <b>23 (1)</b>                  426:11  <b>25 (3)</b>                  427:22,23;428:3  <b>2500 (2)</b>                  356:4,6  <b>26 (4)</b>                  398:12;406:1;                  411:7;416:4  <b>265 (1)</b>                  372:9  <b>27.23 (1)</b>                  438:9  <b>298 (1)</b>                  342:13  <b>2nd (2)</b>                  420:17;424:2</p> <p style="text-align: center;"><b>3</b></p> <p><b>3 (1)</b>                  452:14  <b>3.0 (1)</b>                  452:14  <b>3.1 (1)</b>                  435:3  <b>3.27 (2)</b></p>
---	--	---	--	---

428:2,13 <b>300 (3)</b> 371:9,14;372:10 <b>3000 (1)</b> 356:6 <b>30th (2)</b> 416:2;422:20 <b>31 (1)</b> 425:18 <b>3-2 (1)</b> 391:13 <b>32,000 (1)</b> 409:11 <b>33 (1)</b> 428:10 <b>34 (1)</b> 415:22	24;453:10,13,15,17; 454:3,8 <b>6:30 (6)</b> 463:22,24;464:3,4, 21;465:5 <b>60 (1)</b> 386:24 <b>653 (1)</b> 352:6 <b>657 (5)</b> 342:24;352:9,12; 353:13;356:15 <b>68 (2)</b> 394:10,13 <b>684 (1)</b> 459:2 <b>69.6 (1)</b> 435:24			
<b>4</b>	<b>7</b>			
<b>4 (10)</b> 346:21;358:11,20; 359:9;360:12;391:11; 394:10;398:16;424:6, 6 <b>4.5 (1)</b> 454:14 <b>40 (2)</b> 438:2,3 <b>4-0 (1)</b> 438:4 <b>49 (1)</b> 394:10 <b>49.5 (2)</b> 428:10,14	<b>7:35 (2)</b> 390:20,22 <b>7:45 (1)</b> 390:20 <b>7:48 (2)</b> 390:21,22 <b>73 (2)</b> 394:10,13 <b>74 (1)</b> 342:15 <b>76 (1)</b> 394:10 <b>77 (2)</b> 404:14,16 <b>78 (1)</b> 373:23 <b>7th (3)</b> 453:18;454:4,7			
<b>5</b>	<b>8</b>			
<b>5 (7)</b> 345:20,22,23; 420:16;426:12;431:5; 442:9 <b>50 (2)</b> 458:15;459:13 <b>500 (4)</b> 440:21;458:17; 459:15;461:20 <b>54 (2)</b> 386:23,24 <b>55 (1)</b> 376:24 <b>56 (1)</b> 415:24 <b>56,000 (1)</b> 409:14	<b>8 (2)</b> 442:6,7 <b>8.2 (1)</b> 367:24 <b>80 (3)</b> 372:8;408:22;442:2 <b>8th (5)</b> 463:21;464:3,12, 21,23			
<b>6</b>	<b>9</b>			
<b>6 (6)</b> 368:9,13;389:21; 411:7;439:15;457:17 <b>6.9 (10)</b> 443:7;448:14,22,	<b>9 (1)</b> 443:16 <b>9:20 (1)</b> 465:12 <b>9th (5)</b> 463:23;464:3,13, 21,23			