

COLES COUNTY PLANNING & DEVELOPMENT COMMITTEE
HEARING ON COLES WIND, LLC'S, APPLICATION TO CONSTRUCT AND
OPERATE A COMMERCIAL WIND ENERGY FACILITY (WIND FARM) UPON
CERTAIN PROPERTIES IN COLES COUNTY

APRIL 15, 2025
6:30 P.M. - 9:08 P.M.

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I N D E X

KENNETH KALISKI	11
EXAMINATION BY MS. ANTONIOLLI.....	11
EXAMINATION BY MR. WATTS.....	51
EXAMINATION BY MR. DOUGHTY.....	52
EXAMINATION BY MR. JOHNSON.....	54
EXAMINATION BY MR. SHOOK.....	58
EXAMINATION BY MS. TAYLOR.....	65
JASON CONLEY	77
EXAMINATION BY MS. SHAPIRO.....	77
EXAMINATION BY MR. WATTS.....	103
EXAMINATION BY MR. DAVID JOHNSON.....	107
EXAMINATION BY MR. SHOOK.....	110
EXAMINATION BY MR. SMITH.....	111
EXAMINATION BY MS. MEG TAYLOR.....	114

1 6:30 P.M.

2 MR. WATTS: I am going to call this meeting of the
3 Coles County Planning & Development -- actually, not a
4 meeting -- reconvene the hearing for the Apex WECS license
5 application.

6 And if you will, all stand and join me in the
7 pledge of allegiance.

8 (PLEDGE OF ALLEGIANCE.)

9 MR. WATTS: Rollcall:

10 Darrell Cox?

11 MR. COX: Here.

12 MR. WATTS: Jeremy Doughty?

13 Tad Freezeland?

14 And I am Michael Watts, Chairman Presiding.

15 And I'll turn the meeting over to our hearing
16 facilitator Scott Kains.

17 MR. KAINS: Thank you, Mr. Chairman.

18 And, folks, if you note, there are two members of
19 the five-member committee here. The quorum requirements
20 are such that once the public hearing beginning -- and
21 that was the first night back on March 17 -- a quorum was
22 held at that time, and so it is not required for a
23 continuation of the public hearing.

24 I will note that, in the event a committee member

1 is not present for a session of the public hearing, they
2 will have the opportunity to read the transcript. We've
3 had two different court reporters. We've had Ms. Atkinson
4 and we have Ms. Matthews tonight, and we are having a
5 third one because they are trying to turn around
6 transcripts as quickly as possible.

7 So folks who are not present, among members of
8 the committee, will be able to have those transcripts and
9 have a chance to review them prior to a vote on this
10 issue.

11 When last we met I had given Mr. Hess some
12 homework, and you had a question last night about the sale
13 of some property in Vermilion County in 2014.

14 Have you been able to come up with anything?

15 MR. HESS: Yes, sir, Mr. Kains.

16 MR. KAINS: What do we have?

17 MS. ANTONIOLLI: Mr. Kains, I would proffer that was
18 related to the Hoopeston wind project, which was a
19 49-turbine project in Vermilion County. It became
20 operational in 2015.

21 Apex developed that project under our old
22 business model where we used to develop and then sell the
23 projects.

24 In fact, in 2014, we sold that project to Ikea,

1 the furniture store. So Ikea owns that project. I bring
2 that up because it's relevant for the rest of the proffer.

3 So the specific question was whether I had any
4 information about Apex purchasing real estate related to
5 that project, and I do.

6 So, in 2014, in negotiations with Ikea to sell
7 the project -- at that time, in a transaction that was
8 greater than \$150 million, Ikea required that 100 percent
9 of the neighbors signed Participating Neighbor Agreements.

10 We talked about the Participating Neighbor
11 Agreements in this hearing.

12 So the requirement that Apex had to meet was
13 100 percent Participating Neighbor Agreements. Apex was
14 close but didn't have all of them. There were several
15 landowners that held out.

16 And so, Apex, instead of doing Participating
17 Neighbor Agreements, offered to just buy those parcels.
18 So, Apex did, in fact, in the summer of 2014, buy at least
19 three parcels in Vermilion County prior to the transaction
20 where they sold that project to Ikea.

21 Apex purchased those parcels well above fair
22 market value. Those individuals did not want to sign
23 Participating Neighbor Agreements, understood the
24 situation Apex was in, and got a premium for those

1 properties. Apex then sold the project to Ikea, and the
2 project was built, and the project became operational.

3 Apex then had no reason to hold real estate in
4 Vermilion County, so they subsequently sold that real
5 estate after the projects were built, and everybody could
6 see the wind turbines. Those post-construction sales were
7 at a lower amount.

8 That would be my proffer.

9 MR. KAINS: Okay. Very good. Thank you. Thank you
10 for the explanation.

11 And then, let's see. I gave you some other
12 homework.

13 MR. HESS: Yes, sir.

14 MR. KAINS: Now I am trying to find --

15 MR. HESS: Ms. Taylor had asked about the Health
16 Canada Shadow Flicker Study. Your homework to me was to
17 get that study.

18 MR. KAINS: Yep. And did you find it?

19 MR. HESS: Yes, sir.

20 MR. KAINS: Okay. And what does it involve?

21 Is it a health survey?

22 Is it a shadow flicker survey?

23 What is it?

24 MR. HESS: It is a shadow flicker study, and thank you

1 for asking.

2 There are two Health Canada studies. There is a
3 noise study and a shadow flicker study. I believe,
4 because we were discussing shadow flicker yesterday, that
5 the question was asking about shadow flicker, so I have
6 that study.

7 But to be clear, so that the record is clear, it
8 is not a health study. I'll just read the very first
9 sentence from the discussion section.

10 And, Mr. Kains, may my colleagues hand you a copy
11 and then hand a copy --

12 MR. KAINS: Yes. Yes.

13 MR. HESS: And I provided a copy to Mr. Keyt.

14 So I will just read just, so that there is no
15 misunderstanding, the very first sentence under the
16 discussion section. This is from page 1488. It says:
17 The accumulated research on the potential health effects
18 associated with shadow flicker from wind turbines has
19 concluded that shadow flicker from wind turbines is
20 unlikely to present a risk to the occurrence of seizures,
21 even among individuals that have photosensitive epilepsy.

22 So, unlikely to present a risk to the occurrence
23 of seizures.

24 And then it has citations. I am on page 1488

1 under discussion, which is roman numeral 4.

2 MR. KAINS: Okay. Page 1488, contained in the lower
3 left-hand portion of this document?

4 MR. HESS: Yes, sir.

5 MR. KAINS: All right.

6 MR. HESS: I'll wait until everybody is there.

7 So I just read the first sentence, and then
8 you'll see there are three citations in blue. The three
9 studies, the first is from Harding, the second is from
10 Knopper, and the third is Smithly. The full citations are
11 in the back, in the references.

12 But those are studies that they are citing, for
13 the research on potential health effects, they have
14 concluded that shadow flicker -- that's abbreviated in the
15 study SF -- from wind turbines -- which is abbreviated WT
16 -- has concluded that shadow flicker from wind turbines is
17 unlikely to present a risk to the occurrence of seizures,
18 even among individuals that have photosensitive epilepsy.

19 The next sentence sort of explains the purpose of
20 this study: The knowledge gap that persists is to the
21 extent to which wind turbine shadow flicker causes
22 annoyance.

23 In other words, the entire Health Canada Study is
24 about whether individuals self-report that they are

1 annoyed at seeing wind turbines, and then it tries to
2 correlate why, and that's what the entire idea of this
3 study is.

4 It says there's no health effects. There is
5 annoyance. Let's try to get to the bottom of the
6 annoyance. That is the Health Canada Shadow Flicker
7 Study, Mr. Kains.

8 I was speaking to Mr. Keyt, and my suggestion --
9 I think you previously asked me to do exhibits at the end,
10 so why don't we hold this, and we can take that up at that
11 point.

12 MR. KAINS: Yeah.

13 MR. HESS: I also spoke with Mr. Lockhart. He's
14 willing to put this on the county website so it will be
15 available for everybody.

16 MR. KAINS: Ms. Taylor, I see you nodding your head
17 yes. Are you happy? Well, not happy, but have you
18 received a copy of this?

19 MS. TAYLOR: No.

20 MR. HESS: Would you like one?

21 MR. KAINS: Give that to Ms. Taylor. She was the one
22 that asked the question about it.

23 But, yeah, it can be on the website,
24 Mr. Lockhart?

1 MR. LOCKHART: Yes. Certainly.

2 MR. KAINS: Okay. Great. All right. Because I want
3 to make sure that when questions are asked you get
4 answers, okay? And I think that it's in the best interest
5 of the applicant to provide answers also.

6 All right. All right. Anything else further
7 preliminarily from you, Mr. Hess?

8 MS. ANTONIOLLI: Nothing from me.

9 MR. KAINS: Mr. Keyt, Ms. Rives, anything?

10 MR. KEYT: Nothing from us.

11 MS. RIVES: No.

12 MR. KAINS: All right. The applicant is still
13 presenting its case, calling its witnesses. And, again,
14 we will have witnesses testify, and then there will be the
15 opportunity for questions. Because this is the applicant,
16 questions will be received from folks who are opposed and
17 folks who are neutral on the issue. And, again, we will
18 go first with residents of Coles and Douglas County asking
19 questions, and then we'll go and spread it out to anybody
20 else from outside the county.

21 All right. Are you prepared to call your next
22 witness?

23 MS. ANTONIOLLI: I am.

24 MR. KAINS: All right. Ms. Antoniolli, call your next

1 one.

2 MS. ANTONIOLLI: I would like to call Mr. Ken Kaliski.

3 **KENNETH KALISKI,**

4 a witness herein, called by the Applicant, after having
5 been first duly sworn, was examined, and testified as
6 follows:

7 MR. KAINS: Go ahead. Your witness.

8 MS. ANTONIOLLI: Thank you.

9 **EXAMINATION**

10 BY MS. ANTONIOLLI:

11 Q. Mr. Kaliski, can you please state your name and
12 spell it for the record?

13 A. My name is Kenneth Kaliski, K-a-l-i-s-k-i.

14 Q. Thank you. And can you please give us a summary
15 of your educational background?

16 A. Yes. With regard to college, I have a Bachelor
17 of Arts in Biology and Environmental Studies. I also have
18 a Bachelor of Engineering from Thayer School of
19 Engineering at Dartmouth College.

20 My coursework at Dartmouth included
21 environmental, toxicology, epidemiology, coursework in
22 biology, and biostatistics, as well as, of course,
23 engineering and noise.

24 Q. Thanks. And can you please also tell us about

1 your work experience and background?

2 A. Yes. I am a principal at RSG. It's a consulting
3 firm headquartered in White River Junction in Vermont, but
4 it has offices throughout the country. As a principal, I
5 oversee the acoustics practice at RSG. I've been there
6 for 39 years, served on the board of directors, and my
7 work is primarily involved in noise control engineering.
8 That involves -- most of that work is in rural energy
9 noise, wind turbines, and solar.

10 Q. And do you have any specific certificates or
11 licenses related to your work in this field?

12 A. Yes. I am a Licensed Professional Engineer in
13 Illinois, Michigan, New Hampshire, Vermont, and
14 Massachusetts. I am also board certified through the
15 Institute of Noise Control Engineering.

16 MR. KAINS: So you mentioned you are board certified
17 with the National Institute of Noise Control Engineering.
18 Do you hold any leadership positions with that
19 origination?

20 A. So I am a former Vice President of Board
21 Certification. So I oversaw the administration of the
22 board certification program.

23 I was also formerly on the Board of Directors.

24 And currently I'm the Technical Chair of the Wind

1 Turbine Noise, Renewable Energy Noise, Technical Activity
2 Committee.

3 Q. And do you serve on any standards committees
4 related to sound?

5 A. Yes. Specifically related to wind turbine sound,
6 I serve on the ANSI, American National Standards
7 Institute, ANSI ACP 111-1. That is the standard for
8 modeling wind turbine sound.

9 And I also serve on the ISO 9613-2 committee.
10 ISO is the International Organization for Standardization.
11 And 9613-2 is the standard for upper-sound propagation
12 modeling, and specifically within the last year there was
13 a new annex to that standard specifically on the wind
14 turbine sound model.

15 Q. Okay. Thank you. And these two standards, the
16 ANSI standard, and the ISO standard, would you consider
17 them to be the gold standard for sound modeling for wind
18 projects?

19 A. Yes. Just about all of the sound propagation
20 modeling done in the ISO 9613-2 standard and the ANSI
21 standard sets the parameters that you use with the ISO
22 standard such that your results are conservative, if they
23 exceeded, if you go out there and monitor the sound levels
24 while monitoring conditions.

1 **Q.** Thank you. And how many times have you
2 participated in county zoning or similar hearings related
3 to sound?

4 **A.** In my 39 years at RSG, I've done a lot. I don't
5 have a count, but it's dozens and dozens.

6 **Q.** And how many times has RSG participated in
7 projects sited in Illinois?

8 **A.** We have been involved in at least 15 projects in
9 Illinois.

10 **Q.** Okay. So we are going to talk about some
11 peer-reviewed studies later tonight that either you've
12 reviewed or you've participated in preparing your
13 offering.

14 Can you please explain what peer-reviewed means?

15 **A.** So, if you are submitting a scientific paper, the
16 gold standard is submitting it to a peer-reviewed
17 publication.

18 And in a peer-reviewed process, you submit the
19 paper to the editors of the publication. They then can
20 reject the paper straight out or they could submit it to
21 their peer review. So they select peer reviewers with
22 expertise in the area of the paper's topic.

23 The peer reviewers then can reject the paper
24 outright, they can accept the paper, or they can accept

1 the paper with comments.

2 And so if they accept the paper with comments,
3 the comments go back to the authors. The authors have to
4 address every comment that the peer reviewer submits.
5 They don't have to agree with it. They can argue with the
6 peer reviewer. The peer reviewer then looks at their
7 response. They can say, okay, the response, the comments,
8 the changes look good, and accept the paper. They can say
9 we don't agree with you. They can reject the paper. Or
10 they can, again, go through another round of comments.

11 So back and forth between the peer review and the
12 authors, and what ends up is a process whereby you screen
13 out papers with serious flaws, and you publish papers that
14 are very high quality.

15 Q. Thanks. And you've been involved in conducting
16 peer-reviewed studies yourself -- correct? -- on various
17 topics related to sound, shadow flicker, and health
18 effects from sound and shadow flicker?

19 A. Yes.

20 Q. And in your work on these studies, do you
21 frequently review existing studies and reports on the
22 effects of wind projects on surrounding populations?

23 A. Yes.

24 Q. And on larger studies on potential effects of

1 wind projects, do they often have multiple authors that
2 collaborate together?

3 **A. Yes. In a complex topic, like with the sound,**
4 **you usually get a multidisciplinary team that has**
5 **expertise in areas of interest.**

6 **Q.** And do you have an estimate of how many studies
7 you've coauthored?

8 **A. I believe it's around 17 studies.**

9 **Q.** And as an example, did you collaborate with a
10 group of experts to conduct a study of potential effects
11 from wind projects through MIT?

12 **A. Yes.**

13 **Q.** Okay. And we are going to call that the MIT
14 Study and revisit that study later on after we discuss
15 your report.

16 But it looked at multiple topics, including, for
17 example, whether there are any health effects from wind
18 turbine noise; is that correct?

19 **A. That is correct. Yes.**

20 **MS. ANTONIOLLI:** Okay. So, at this point, we would
21 like to move to admit Mr. Kaliski as an expert on both
22 sound modeling and studying the health effects of wind
23 projects on surrounding populations.

24 **MR. KAINS:** You asked him if he had studied health

1 effects related to sound. What about health effects
2 related to shadow flicker?

3 MS. ANTONIOLLI: And shadow flicker as well. He has
4 also coauthored reports on shadow flicker.

5 MR. KAINS: Have you coauthored something on shadow
6 flicker and the health effects?

7 THE WITNESS: So we coauthored with Lawrence Berkeley
8 National Laboratory looking at the effects of wind
9 turbines. We looked at annoyance, and then the literature
10 review looked at health effects, like epilepsy, as part of
11 the study.

12 MR. KAINS: Mr. Keyt, do you have any questions?

13 MR. KEYT: I don't have any questions. Thank you.

14 MR. KAINS: Have you had occasion to testify in public
15 hearings such as this with respect to health effects from
16 wind turbines, whether it be shadow flicker, or sound, or
17 both?

18 THE WITNESS: I have not testified as to the effect of
19 shadow flicker. The study that we did is relatively
20 recent. But to the extent I testified on health effects,
21 I am not a doctor. I am an engineer, but I've testified
22 to the study that we've done in the multidisciplinary
23 teams where the health effects have been part of the
24 study.

1 MR. KAINS: I am going to allow Mr. Kaliski to testify
2 as an expert witness with respect to, and keeping in mind
3 he's an engineer, he is not a medical doctor, but with
4 respect to the issues of health effects, from noise, from
5 turbines.

6 And despite the fact that he has not testified
7 with respect to the health effects of shadow flicker, I am
8 going to allow him to testify as an expert on that in
9 light of the fact that the study that he conducted with
10 Berkeley Labs.

11 Is that correct? Berkeley Labs?

12 THE WITNESS: Yes.

13 MR. KAINS: Berkeley Labs was relatively recent. What
14 year was that?

15 THE WITNESS: It was 2022.

16 MR. KAINS: Okay. Because you have to start
17 somewhere. If we never allowed somebody to testify,
18 because they had never testified before, then they would
19 never get to testify.

20 So I am going to allow it, but we are going to
21 keep in mind when we have questions for him that he is not
22 a medical doctor. He has a bachelor's degree in
23 engineering and a bachelor's in biological sciences and
24 environmental studies. So, from his perspective, we are

1 going to -- I am going to allow him to delve into
2 discussion because I think everybody, after last night,
3 wants to know what are the health effects of these wind
4 turbines, and he has conducted studies, and I do find him
5 qualified as an expert in this field.

6 Go right ahead, Ms. Antonioli.

7 MR. KEYT: I don't mean to interrupt, but can we get a
8 copy of the CV?

9 MS. LODE: (Tendering document.)

10 MS. ANTONIOLLI: And do you also find him qualified to
11 testify on the topic of sound?

12 MR. KAINS: Yes. Sound and shadow flicker because he
13 has done studies, and I believe he has testified that he
14 has testified previously with respect to those issues.

15 So go right ahead.

16 MS. ANTONIOLLI: Okay. Thank you. What we plan to do
17 is go through some conclusions/methodologies that are
18 related to the sound report that is attached to the
19 application.

20 And then, after that, we will talk about some of
21 the bodies of studies that Mr. Kaliski has either
22 coauthored or reviewed on the topics of both sound and
23 shadow flicker.

24 MR. KAINS: Okay.

1 MS. ANTONIOLLI: So starting with the report that we
2 submitted as part of the Coles Wind Application, may I
3 approach the witness with that application?

4 MR. KAINS: Yes, you may.

5 BY MS. ANTONIOLLI:

6 Q. Okay. What we are starting with is Appendix D5
7 of the application. It's the sound modeling report
8 entitled *Coles Wind Sound Modeling*. Do you recognize this
9 report?

10 A. I do. Yes.

11 Q. Okay. And did you author, or did you oversee,
12 the drafting of this report?

13 A. As a principal, I oversee, in general, the
14 acoustics group, but also I did review the draft final
15 report for this report.

16 Q. Okay. And your colleague at RSG, Mr. Isaac Old,
17 who has attended previous days of hearings on this
18 application, he also participated in drafting the report,
19 correct?

20 A. Yes, he did.

21 Q. Okay. I am going to read to you and walk you
22 through the report starting with Appendix A. Okay. That
23 is attached to the report. It is titled *An Acoustic*
24 *Primer*, and it begins on page 11. Are you looking there?

1 A. Yes.

2 Q. Okay. So can you provide the county and public a
3 brief summary of this Appendix A to help us better
4 understand the issue of sound?

5 A. So the sound is a complicated topic, so we tried
6 to give a little bit of a primer to help you understand
7 the terminology used in the report.

8 So the first thing we look at is sort of a level
9 of sound and what that is measured in. So the sound
10 pressure level is measured in what you call decibels.
11 And, you know, roughly speaking, a 10-decibel increase is
12 a double in the perceived loudness.

13 To give you a sense of what decibel levels we see
14 in a common environment, we can see that on page 12 in a
15 little bit of a -- it's a temperature chart which goes
16 from 0 to 140. Now, on the top you see decibels, dBA. It
17 is call a-weighted decibels. It's a way of combining all
18 the frequencies of sound so that it mimics the response to
19 human hearing. So from that zero, which is the threshold
20 of human hearing to, you know, it goes up, but about 130,
21 140 decibels is the threshold of pain.

22 But on a day-to-day basis we live somewhere
23 between 30 decibels and, you know, 100 decibels. So a
24 library with the air-conditioning system going is about 38

1 or 40 decibels. TV in a quiet room might be about 60
2 decibels. My voice right now is probably about 55 to
3 60 decibels. And then you get up to, like, a riding lawn
4 mower that might be about 90 decibels.

5 Q. Moving on to Appendix B, which is entitled Wind
6 *Turbine Acoustic Primer* and begins on page 17, can you
7 briefly provide a summary of the types of sound produced
8 by a wind turbine and share with us a primary type of
9 sound produced?

10 A. Yes. So wind turbines generate electricity by
11 the wind moving through the blade, turning the blades, and
12 then there is essentially a gear box in the nacelle which
13 turns that rotational energy into electrical energy.

14 There is also mechanical equipment, a motor
15 turning the nacelle to face the rotor to the wind. So
16 there's, essentially, two main components there.

17 One is the aerodynamic noise from the wind
18 passing over the blades, and that's more of a whooshing
19 sound or a very broadband sound.

20 And the second component is the mechanical
21 equipment in the nacelle and the gearbox motors.

22 So, for the most part, with the ear, when you are
23 listening to the wind turbine sound that is aerodynamic
24 sound from air on the blades. When turbines start to get

1 going, that aerodynamic sound drowns out the mechanical
2 sounds in the gearbox.

3 Q. Okay. And can you provide for us an average
4 sound pressure and level range for a wind turbine where
5 it's traditionally measured by wind turbine manufacturers?

6 A. Yes. So wind turbine manufacturers use a
7 standard called IEC 61400-11. IEC stands for the
8 International Electrotechnical Commission. That's a way
9 of standardizing measurements of wind turbines so that,
10 when the data is given to consultants by us, it's
11 comparable to manufacturers. We can use it and be pretty
12 certain that the data is selective in a standardized way.

13 They measure sound at a distance of one tip
14 height from the turbine base. At one tip height away you
15 get a sound level somewhere between about 48 and
16 52 decibels, dBA. dBA is decibels.

17 Q. Okay. And with that background, let's go to the
18 report, the modeling, and its conclusions. So can you
19 please describe the methodology and assumptions used in
20 the modeling?

21 A. So, if you go to page 7, it describes the sound
22 monitoring procedure. So I mention ISO 9613-2 and ACP
23 111-1. Those are the foundations of the procedures that
24 we use.

1 And what it involves -- I'll take the ISO
2 standard first. The ISO standard is for sound propagation
3 modeling, and it takes into account the drain, the ground
4 porosity. The more porous ground doesn't let sound
5 propagate as well as hard ground or nonporous ground, for
6 example. It looks at weather conditions. It models under
7 what's called a moderate nighttime inversion, which is a
8 worst-case condition. It's where it usually occurs at
9 night. And it's where the temperature and wind is such
10 that it bends sound toward the ground as opposed to during
11 the day, when it's a sunny day, when it's warmer at the
12 ground and aloft, and the sound tends to bend up toward
13 the ground. So the wind turbines, for example, the sound
14 level tends to be higher at night. So the modeling that
15 we do uses those conditions.

16 We don't include walls and berms, per se. We
17 don't include the attenuation from buildings. We don't
18 include any attenuation from foliage, trees, forest. So
19 it tends to be a more conservative model.

20 It, of course, includes what we call geometric
21 inversions, which is, as you move the sound away from the
22 source, essentially, since it's -- thinking of it as a
23 sphere, that sphere is getting larger, so that energy in
24 the sphere is getting smaller. The sound level is

1 decreased as you move away from the source. They decrease
2 slower downwind and faster upwind. So we are seeing the
3 downwind condition.

4 When we do the model, we assume the downwind is
5 in every direction. So every receiver is downwind of
6 every wind turbine. So that is another way of trying to
7 be more conservative.

8 Then, what we do is we -- once we get all of the
9 results, we then add an additional 2 decibels as a factor
10 to account for uncertainty. So we made the conservative
11 assumptions, and then we add another 2 decibels to make
12 sure that we are not going to exceed the sound level that
13 we model.

14 In the model, we were modeling all of the wind
15 turbines, including the spares, so modeling 62 wind
16 turbines even though 51 will be built.

17 And I should mention that, once the final array
18 is done, that we'll also provide an updated sound model
19 with just the 51 turbines. So we expect the results will
20 be lower at least at some locations than where the
21 turbines would go.

22 Q. And the model also modeled both turbine models,
23 correct?

24 A. Right. So we are modeling both turbine models,

1 the GE and Vestas turbines. The GE turbines are a little
2 bit louder than the Vestas turbines, but we are showing
3 results for both.

4 Q. And where did your model derive the sound data
5 from?

6 A. We collect several sources of -- we collected
7 from several sources of data. The ground quality is
8 collected from the USDS digital elevation models. The
9 locations of the turbines are, of course, given to us by
10 Apex. The parameters of the wind turbines are provided
11 from the manufacturer, so that includes hub height and
12 sound powered by wind speed.

13 And then, finally, there is what is called the
14 receptors, or I think you've heard receivers yesterday,
15 but basically the locations of homes are given to us by
16 Apex.

17 And I should say that there are two types of
18 receivers, one is the homes that we model. The other is a
19 grid of receivers that we model throughout the project.
20 Every 20 meters in the project area we modeled the sound.
21 That allows us to essentially show you the sound contours
22 from the project, not just the sound at homes, but also
23 the sounds at property lines and anywhere else you like to
24 see. Those are in the annex.

1 Q. You talked about residential locations. How did
2 you determine which properties were residential?

3 A. So I guess there are three ways.

4 One is that, from what I understand, Apex did do
5 a field validation and went around and viewed the homes in
6 the area to verify that those are residential.

7 We also looked at aerial photography. And in
8 this area there is a pretty good distinction between
9 agricultural and residential land.

10 Certainly, on some residential plots there might
11 be, you know, a barn or something, for the most part
12 that's included in the residential portion of the land,
13 unless it was not attached to the residential portion.

14 But I went around and I field verified all of the
15 homes within 1 DB of the standard. So I went to each
16 location, looked at where the home was, made sure there
17 weren't any additional encroachments than what we
18 considered agricultural at the time, and so I did confirm
19 that those that were considered residential were
20 residential.

21 Q. Thank you. And let's talk a little bit more
22 about the Illinois Pollution Control Board limits. When
23 you are talking about distinguishing residential land from
24 agricultural land, why is that significant for modeling

1 compliance with the Pollution Control Board regulations?

2 A. If you look at Table 1 in the report, Table 1
3 shows the Illinois Pollution Control Board regulations as
4 we are applying it here.

5 For an energy project, including alternative
6 energy and turbine power projects, those are classified
7 under the regulations as Class C. Residential land uses
8 are classified as Class A. And there's specific standards
9 for sound coming from Class A land to -- sorry -- sound
10 coming from Class E land and being received on Class A
11 land.

12 Q. Correct. And can you also explain how the
13 Illinois Pollution Control Board sets limits for each
14 octave band at different decibels?

15 A. Yes. So I think I had to frequency the sound,
16 but frequency -- so the nominal frequencies that people
17 can hear are between 20 hertz and 20,000 hertz. So hertz
18 is a cycle per second. It's the rate at which sound
19 pressure fluctuates. An octave is a doubling of
20 frequency.

21 So just like we have on a piano going from the
22 low C and then you keep going to the next C up, and the
23 next C up, those are all octaves. And those are doubling
24 the frequency; it's the same as that concept.

1 And, essentially, what the Illinois Pollution
2 Control Board has done is that they have set a different
3 standard for every octave in the nominal hearing range,
4 except for 16,000 hertz, which most people can't hear.

5 What we see here is essentially 18 different
6 standards that need to be met by the project; 9 during the
7 day and 9 during the evening or nighttime. Nighttime is
8 defined as from 10:00 p.m. to 7:00 a.m.

9 Now, these octave band sound levels are
10 unweighted. So, whereas the sound levels that I showed
11 you in the appendix are a-weighted. These represent the
12 individual octaves on unweighted. So they are not
13 weighted to sensitivity of human hearing.

14 But you can see that, for example, during the
15 daytime, 75 decibels at 31 hertz is a lot higher than the
16 40 decibels at 8 kilohertz. That is because they allow
17 more sound at the lower frequencies because our hearing is
18 less sensitive to low-frequency sound.

19 You know, when you hear a bass, you see somebody
20 playing the bass, and it's not very loud. Even though the
21 actual sound that is generated from the bass is fairly
22 loud, it's just that our hearing doesn't allow us to.
23 It's just much less sensitive to that low-frequency sound
24 so you have to play that bass louder than you would, say,

1 a midrange guitar.

2 Q. And just to clarify, RSG modeled compliances with
3 the nighttime limits here all day and all night to show
4 compliance with the Coles Wind ordinance, correct?

5 A. Verifying the nighttime standard to both
6 nighttime and daytime, and so we are modeling it to meet
7 the nighttime standard at all residences.

8 Q. Okay. Let's go to Table 2. Can you just provide
9 us a summary of the results in Table 2?

10 A. So this table is configured very similarly to
11 Table 1. You see the octave bands on that second line
12 there, and then you see the Illinois Pollution Class C to
13 class nighttime in bold below that. So that is the same
14 information we gave you before.

15 And then below that are the results at the
16 worst-case residence for both the GE and the Vestas
17 turbines.

18 And so let's just start on the left side. We
19 have a 31.5 hertz. That's the very low frequency. The
20 standard is 69. The Vestas actually has the higher sound
21 level here at 63. So we are 6 decibels below the Illinois
22 Pollution Control Board limit at 31.5 hertz.

23 And you go completely to the other side, at 8
24 kilohertz. The standard is 32. And both the GE and

1 Vestas turbines don't really make any sound at 8,000
2 hertz. That is why the zeros. So you are essentially
3 32 decibels or more below the standard of 8 kilohertz.
4 But the critical frequency is at 1 kilohertz. 1 kilohertz
5 is 1,000 hertz. So, at 1,000 hertz, the standard is 41
6 unweighted decibels.

7 And with the GE turbine, the highest sound level
8 at any receiver, or at any residence, is at 41. And with
9 the Vestas turbine, the highest sound level is 39.

10 Q. Now, go ahead.

11 A. So I just want to mention that this assumes two
12 sets of mitigation. Both the Vestas and GE turbines are
13 equipped with what are called serrated trailing edges, or
14 low-noise trailing edges. And the best way to describe it
15 is to compare it to an owl. An owl's wings are much
16 quieter because essentially the trailing edges of the
17 wings have more fur so they are, essentially, serrations
18 that help to reduce the trailing edge turbulence and
19 noise. So the wind turbine manufacturers have tried to
20 mimic that with serrated trailing edges. So they reduced
21 the overall sound level.

22 In addition, the GE turbines meet -- some of the
23 GE turbines, 17 of them, need to be placed into
24 noise-reduced operations. So noise-reduced operations

1 slows the rotor speed and, in so doing, reduces the sound
2 levels that are coming off the rotor.

3 So the Vestas turbines don't need those on any of
4 their turbines, but the GE turbines would need those
5 noise-reduced operations on 17 and up.

6 Q. Okay. Thanks. And your Table 2 talks about
7 residence or uses the term "residence." Can you clarify,
8 does residence mean that the limits were modeled at the
9 home itself or at the edge of the residential use?

10 A. So where this indicates that there aren't any
11 residential land uses, not only the home, but the area
12 around the home used for residential purposes that are
13 above 41 decibels.

14 Q. And as you mentioned previously, you assumed that
15 even sheds, barns, and other locations on the property
16 would be considered residential use?

17 A. Yes.

18 Q. Okay. And then, in this Table 2, you mentioned
19 that this is the highest limit that you modeled at any of
20 the residences. So does that assume that all other
21 residences would be modeled at lower limits than these?

22 A. Yeah. I believe there are two residences -- one
23 participating, one not -- at 41 decibels, and then the
24 rest are below that.

1 Q. Okay. Thank you. So, in your opinion, has RSG
2 modeled compliance, the Coles Wind project compliant, with
3 the Illinois Pollution Control Board sound limits?

4 A. Yeah. We are modeling the sound levels they are
5 at or below the limits.

6 Q. Okay. Thank you. Okay. We are going to move on
7 to the studies, and we'll start with -- one second --
8 whether you were able to attend -- you were here attending
9 the hearing last night, correct?

10 A. Yes.

11 Q. And so, at the beginning of tonight's testimony,
12 we discussed your involvement in the MIT study, correct?

13 A. Yes.

14 Q. Can you please tell us a little bit more about
15 the MIT study and how it came about?

16 A. Yeah. So I was approached by several doctors at
17 MIT, specifically Bob Cunney, who is at MIT and also works
18 at the Massachusetts General Hospital in Boston -- he's an
19 epidemiologist -- to put together a study looking at wind
20 turbines and health as essentially a critical review. The
21 scientific literature, it would be peer reviewed and would
22 look at the effects, not only of noise, but, in general,
23 of wind turbines. But it did look -- you know -- wind
24 turbine, the noise is prominent, so essentially my role on

1 the team is to be the expert on the noise to inform their
2 analyses.

3 Q. Okay. And then, right here, we have pulled up
4 page 1 of the MIT study, and there are three questions set
5 forth in the study that the study was meant to address; is
6 that correct?

7 A. Yes.

8 Q. So we are going to walk through the questions.
9 And as we are walking through the questions and the
10 conclusions of the report related to each of these
11 questions, we'll refer periodically to other reports that
12 may corroborate, or even pose other findings, but always
13 related to this question.

14 So starting with the first one, and I am
15 paraphrasing here: Whether there is scientific evidence
16 that wind turbines adversely impact human health, what did
17 your report conclude?

18 A. Yes. So the report concluded that the -- this is
19 on -- I am not sure what page it is, but the
20 epidemiological and experimental literature provides no
21 convincing or consistent evidence that wind turbine noise
22 is associated with any well-defined disease outcome. It
23 talks about annoyance. But with respect to any disease
24 outcome, there is no convincing or consistent.

1 Q. And regarding adverse health impacts, are you
2 aware of any studies, since this was published in 2014,
3 that disagree with or corroborate this conclusion?

4 A. Most of the studies I've seen would corroborate
5 this conclusion.

6 Q. And what about the 2025 Netherlands study looking
7 at primary health care data?

8 A. Yes. So this is a study that just came out this
9 year. And in the Netherlands, they have access to, I
10 think, it's a socialized medical system. They have access
11 to health data, confidential health data, and they were
12 able to look at people who live near wind farms and see if
13 there's any health effects that those people are
14 presenting to their physicians.

15 And what they found, it said the present study
16 does not support an association between living in the
17 vicinity of wind turbines and prevalence of key symptoms
18 and chronic diseases at the population level, and they
19 found -- they say, you know, that there could be
20 annoyance, but they don't see any adverse health effects.

21 Q. Okay.

22 MR. KEYT: Can we pause for just a second?

23 I am not saying the technical rules of evidence
24 apply, but I don't have a copy of the studies that we are

1 reading from, etc.

2 MR. KAINS: Yes. Let's go off the record.

3 (DISCUSSION OFF THE RECORD.)

4 MR. KAINS: Back on the record.

5 MR. HESS: Mr. Kains, thank you for your patience.

6 Thank you everyone. We have handed out three studies --

7 MS. ANTONIOLLI: Four total.

8 MR. HESS: Four studies total, including providing
9 copies to Mr. Keyt, to you Mr. Kains, and members of the
10 committee and board. We will also provide electronic
11 copies of those to Mr. Lockhart, and he's gracious enough
12 to put those on the website, and they will be available
13 for everyone.

14 There are three additional studies that we didn't
15 have time to print this afternoon that we will provide
16 tomorrow, one of which is, I believe, the Netherlands
17 Study that we were just discussing. So I will commit to
18 get those into the record. We have limited printing
19 options.

20 MR. KAINS: All right.

21 MS. ANTONIOLLI: Yeah.

22 MR. KAINS: I am sure it's hard to practice law on the
23 road, and I bet -- I am not going to say I bet, but I
24 imagine there is probably not local counsel who's

1 experienced in this kind of area of the law.

2 MR. HESS: This is true, and I will say I just thank
3 you, Mr. Hoover, I don't know where he is at. He spent
4 the day printing for us. So he will print some stuff
5 tomorrow.

6 MR. KAINS: All right. Very good.

7 Go right ahead, Ms. Antoniolli, with your
8 questioning of Mr. Kaliski.

9 BY MS. ANTONIOLLI:

10 Q. Thank you for summarizing the 2025 Netherlands
11 study.

12 Now we are going to move on to the second
13 question. Going back to that MIT report, and just
14 paraphrasing this second question, where it talks about
15 whether stress, psychological stress, annoyance, and sleep
16 disturbance can occur from living near wind turbines, and
17 whether the stress leads to adverse health effects, and
18 what did your report conclude?

19 A. I was trying to find the sleep disturbance part,
20 but we did not find that there was an effect on sleep
21 disturbance. Sorry. I can't --

22 Q. Specifically related to reporting annoyance, was
23 it strongly related to attitudes towards wind turbines?

24 A. Yeah. So they reviewed literature on annoyance

1 and found that this is a complex topic, that annoyance
2 isn't necessarily related to the level of sound that
3 people are exposed to. In fact, that it's more related to
4 subjective factors from the person who is experiencing the
5 sound.

6 So this might relate to how they experience
7 process fairness, fairness of the process which led to the
8 permitting of the wind project. It might relate to their
9 attitudes toward the wind project, whether they like the
10 look of the project visually. So the relationship to
11 annoyance is very weak when it comes to the level of wind
12 turbine sound by itself.

13 Q. Okay. Thank you. Regarding psychological stress
14 annoyance, and sleep disturbance, are you aware of any
15 other studies, since this MIT study was published, that
16 either disagree with or corroborate with this conclusion?

17 A. Yes. So we actually did a study on annoyance
18 with the Lawrence Berkeley National Labs and published
19 that study in 2019.

20 Q. Yeah. This is a study that we have not provided
21 a hardcopy of, but we will do so tomorrow.

22 And can you give us the conclusions, the general
23 conclusions of that 2019 report, specifically with respect
24 to self-report annoyance levels?

1 A. Yes. So this is the only study that has looked
2 at audibility and annoyance of wind turbines in the United
3 States with a large-scale dataset, looking at the entire
4 United States.

5 So, we were involved in this study. It was
6 Lawrence Berkeley National Labs. It involved 1,043
7 surveyor respondents around several wind farms in the US,
8 and the respondents were asked about whether or not they
9 could hear wind turbines, whether or not they were annoyed
10 by wind turbines and, if they were annoyed by it, how
11 much.

12 They were also asked some personal questions
13 about their attitudes toward wind projects, and their
14 annoyance toward other things like lawn mowers, and road
15 traffic, and other environmental factors.

16 So this is, again, a peer-reviewed study. It was
17 published in the Journal of the Acoustical Society of
18 America.

19 So what we found was that, if you just look at
20 whether or not you could hear the turbines, for the most
21 part, that is entirely determined by the level of sound
22 that we modeled.

23 But if you then go to whether somebody is highly
24 annoyed by the wind turbine sound, that is much more

1 complicated. In fact, the level of sound has the lowest
2 contribution towards somebody's annoyance.

3 So if you look at, for example, page 1135, when
4 you include subjective factors, the most significant
5 factor that contributes to whether you're highly annoyed
6 by the wind turbine noise is whether you like the look of
7 the project. So somebody who doesn't like the look of the
8 project is 11 times more likely to be annoyed, highly
9 annoyed, by the wind turbine sound.

10 Next, if you are noise sensitive, compared to
11 people who aren't noise sensitive, you are 8 times more
12 likely to be annoyed, highly annoyed, by the project.

13 However, your prior attitude is also important.
14 So, if your prior attitude was positive towards the
15 project, you are about half as likely to be highly
16 annoyed. And if you moved in after the project was built,
17 you are about a quarter as likely to be highly annoyed by
18 the wind turbine sound.

19 There are some other factors looking at wind
20 turbine sound that was, again, significant but very
21 unimportant, the rotor diameter, significant but
22 relatively unimportant. And females were more likely to
23 be annoyed by the wind turbine sound than males.

24 Q. Okay. Thank you. And we did find our copies of

1 this report that we can pass out now. I apologize for the
2 inconvenience there.

3 Okay. In looking at the third question, going
4 back to the 2014 MIT study, the third question summarized,
5 is there evidence to conclude that specific aspects of the
6 wind turbine sound, such as infrasound and low-frequency
7 sound, have unique potential health effects, what did your
8 report conclude on this topic?

9 A. So I haven't explained yet what infrasound is.
10 So I mentioned that nominal range of human hearing is
11 between the frequency of 20 hertz and 20,000 hertz. So
12 below 20 percent is what you call infrasound, and it's for
13 everyday sounds, we wouldn't be able to hear the
14 infrasound from those sounds.

15 If you are in a rocket blasting off to, you know,
16 the moon, there would be a lot of infrasound. You might
17 be able to sense that.

18 But from wind turbines -- sounds from the beach,
19 you know, waves crashing into the shore, which creates
20 infrasound, and other sources, it's not audible.

21 On the other side of the spectrum, the sound
22 above 20,000 hertz, or ultrasound, I think most people
23 know what ultrasound is. You know, for example, it's
24 high-frequency sounds, it's medical imaging. Bats can geo

1 locate using ultrasound. But there has been a lot of talk
2 about infrasound creating health effects, and this report
3 found that there is no scientific evidence, however,
4 including results for field measurements of wind turbine
5 related noise and experimental studies, which people have
6 been purposely exposed to infrasound, to support this
7 hypothesis.

8 Q. Okay. Thank you. Regarding infrasound in
9 low-frequency impacts, are you aware of any studies since
10 that MIT study was published that disagree or more
11 corroborate this conclusion?

12 A. Yes. In fact, another study was published this
13 year, and it was published in Finland -- or it was
14 published in the Journal of Acoustical Society of America,
15 but it was a Finish study.

16 And what they did in this study was they had an
17 area where there was potentially high infrasound levels,
18 there was a house that was not occupied, and they measured
19 the complete spectrum of sound from infrasound on up, and
20 they recorded the sound. And then they brought those
21 sound recordings into a lab, and they had a setup where
22 they could essentially generate the same exact sound
23 levels, going down from the infrasonic frequencies up to
24 the audible frequencies.

1 And then they brought in two groups of people.
2 One group was self-reported to be highly sensitive to the
3 wind turbine sound, and another group that was found to be
4 not sensitive.

5 And so they sat -- they didn't tell people what
6 they were doing. They sat them down, and they played the
7 infrasound, and they played the sound not infrasound, and
8 there was no -- and they hooked the people up to various
9 monitors to see if there are any stress reactions and
10 heart increase and so forth.

11 And what they found was that, both the sensitive
12 population and the non-sensitive population had exactly
13 the same response to the infrasound. But then what they
14 did was they told the group that, what they had just
15 heard, there was infrasound in what they had just heard,
16 and the group that was noise sensitive then had a stress
17 response. So, knowing that, there was infrasound-created
18 stress.

19 Whereas just being exposed to the infrasound, and
20 not knowing it was there, they didn't have that stress.
21 So it was just an indication that, you know, for
22 infrasound these impacts can occur not necessarily as a
23 result of exposure but as a result of the fear of that
24 exposure.

1 Q. Okay. Thank you. Now, at different times during
2 the hearing so far, we have heard concerns about whether
3 taller turbines impact the perception of sound. And you,
4 in fact, coauthored a 2023 study entitled *Effects of*
5 *Land-based Wind Turbine Upsizing on Community Sound Levels*
6 *and Power and Energy Density*, correct?

7 A. Yes. So this was published in *Applied Energy*,
8 another peer-reviewed journal, and there was another study
9 we did with Lawrence Berkeley National Labs.

10 Q. Okay. This article looked at impacts from sound
11 -- of sounds from wind turbines, and it continues to
12 increase in height, correct?

13 A. That's right. Yeah. We saw that, the trends in
14 wind turbines, that they were getting bigger. And we
15 wanted to look at what the impacts would be on noise as
16 well as, you know, the output of the wind farms and the
17 potential for benefits to the community if the output
18 increased.

19 Q. And what was the conclusion of the report?

20 A. So, when you have larger wind turbines, the
21 setbacks increase. You can't build as many wind turbines
22 as you can with the shorter wind turbines. But the larger
23 wind turbines generate more electricity, and they generate
24 -- they tend to generate higher sound levels.

1 But the increase in sound levels is offset by the
2 fact that these future wind turbines almost all come
3 standard with these serrated trailing edges, so the
4 increase in sound is in-proportional.

5 So what we found is that, when you look at the
6 future sites, with the larger wind turbines, the overall
7 output from the wind turbine in terms of electricity
8 increases, and the sound level decreases in the community
9 by an average of 3 decibels, as well as the -- I think it
10 was about a 17 percent decrease in the loudness.

11 So the conclusion was that actually the community
12 benefits are twofold; one, with the larger turbines, that
13 overall community sound levels are lower; and the
14 potential payments to the community would be higher
15 because of the higher total output from the wind projects.

16 Q. Okay. In that report, it talked about future,
17 the heights of future wind turbines. This article was
18 published in 2023 and talked about turbines that would be
19 constructed in the next three to five years at a height
20 that was over 600 feet; is that correct?

21 So we are looking at figure 5 on page 5, and it
22 talks about the different -- it talks about some model
23 numbers and hub heights.

24 A. Yeah. So we looked at turbines up to a total

1 height of 202 meters, which I can calculate what that
2 height is in feet; that is 662 feet.

3 Q. Okay. Thank you. So, in your opinion, based on
4 the reports we just discussed related to sound, including
5 the 2014 MIT study, your 2023 upsizing study, and some of
6 the others, the sound generated from wind turbines does
7 not cause adverse impacts to health; is that correct?

8 A. Yeah. That would be my opinion. Yes.

9 Q. Okay. Let's move on to shadow flicker studies.

10 You also co-authored a study published in 2022
11 entitled *In the Shadow of Wind Energy Predicting Community*
12 *Exposure and Annoyance to Wind Turbine Shadow Flicker in*
13 *the United States*; would that be correct?

14 A. Yes. And that was another study with the
15 Lawrence Berkley National Labs, and this was published in
16 the peer-reviewed journal *Energy Research and Social*
17 *Science*.

18 Q. Okay. Thank you. And did this study include a
19 literature review?

20 A. Yes. So, in the beginning of the study, we tried
21 to find out what was written about shadow flicker with
22 respect to health. And we were trying to see, for
23 example, using the data that was collected with this, the
24 same dataset that was collected, the wind turbines -- with

1 the wind turbine study, those respondents were also asked
2 about whether they experienced shadow flicker outside the
3 home and inside the home and whether they were annoyed,
4 and if they were, how annoyed were they on a five-point
5 scale from zero, as not at all annoyed, to five, being
6 highly annoyed.

7 So it was a similar type of study, trying to find
8 out what the contributions to annoyance were. We started
9 out in our study looking at the previous research, and
10 that previous research found that there weren't any health
11 effects associated with wind turbine shadow flicker, other
12 than that it could cause high annoyance.

13 And they found that there is a threshold for
14 epileptic reactions at around a wind turbine rotational
15 speed of about 60 RPM. So that would be the rotor
16 spinning once per second. And with the rotor spinning
17 once per second, the three blades, in terms of shadow
18 flicker, it would be three flickers per second. So, if
19 the rotor was spinning faster than 60 RPM, you could
20 possibly get epileptic -- photosensitive epileptic
21 effects, and if it was slower you wouldn't see that.

22 So the wind turbines that are proposed for this
23 project have an RPM of between 10 and 12 RPM at their
24 maximum. So this is about six times lower than the

1 threshold to cause photosensitive epileptic effects.

2 Q. Okay. Thank you. In your shadow flicker study,
3 this '22 -- 2022 study we are talking about, did you also
4 refer to a 2016 Health Canada Study on shadow flicker?

5 A. Yes.

6 Q. And is this the study that we handed out and that
7 Mr. Hess proffered at the beginning of the hearing
8 tonight?

9 A. Yes.

10 Q. Okay. Again, last night we heard a couple
11 members of the audience raise questions regarding health
12 impacts related to shadow flicker. Do you remember those
13 questions?

14 A. Some of them. Yes.

15 Q. Okay. And, also, last night our shadow flicker
16 expert Jacob Runner testified that he's aware of the
17 Health Canada Study looking at annoyance levels related to
18 shadow flicker.

19 To your knowledge, is this study entitled
20 *Estimating Annoyance to Calculated Wind Turbine Shadow*
21 *Flicker is Improved when Variables Associated with Wind*
22 *Turbine Noise Exposure are Considered?*

23 A. That's right.

24 Q. That's the one, in fact, that we are showing up

1 on the screen?

2 A. Yes. I have that in front of me.

3 Q. Okay. So, based on your review of the
4 literature, does the 2016 Health Canada Shadow Flicker
5 Study reach any conclusions to impacts to human health,
6 including those with photosensitive epilepsy?

7 A. They did something similar to what we did, and
8 they did a background study on health effects.

9 And their conclusion, from their study, was that
10 the accumulated research on potential health effects
11 associated with shadow flicker from wind turbines has
12 concluded that shadow flicker from wind turbines is
13 unlikely to present a risk to the occurrence of seizures
14 even amongst individuals that have photosensitive
15 epilepsy. So their focus is on annoyance instead.

16 Q. Okay. And we heard Mr. Hess talk about the
17 conclusions in the discussion section of this report.

18 What does the Health Canada report say the
19 scientific literature says about shadow flicker and health
20 effects, including risks of seizures?

21 A. So that was the quote I just read. There is no
22 risk. They say unlikely, but it's, for this project,
23 which is, again, six times lower than the threshold for
24 photosensitive epilepsy. I would say there's very little

1 **likelihood of an occurrence of seizures.**

2 **Q.** Okay. Thank you. So then, based on the reports
3 that we've discussed today, on shadow flicker, including
4 your 2022 shadow flicker study, and the 2016 Health Canada
5 shadow flicker study, is it your opinion that shadow
6 flicker from wind turbine does not cause adverse health
7 impacts to humans?

8 **A.** That is right. There is annoyance, but no other
9 adverse impacts.

10 MR. KAINS: No what?

11 THE WITNESS: No other adverse impacts to health.

12 MR. KAINS: Thank you.

13 MS. ANTONIOLLI: Okay. Thank you. That's all I have
14 for now.

15 MR. KAINS: You asked him the question about shadow
16 flicker. What about noise?

17 MS. ANTONIOLLI: We covered that in that previous
18 section on the reports.

19 MR. KAINS: I am going to ask it again. Is there any
20 adverse effect on human health from noise from these
21 turbines?

22 THE WITNESS: The same answer would apply. There is
23 annoyance effects, but otherwise there's no other adverse
24 health effects.

1 MR. KAINS: All right. Very good. Thank you.

2 All right. Questions for this witness, first,
3 from members of the Coles County Planning & Development
4 Committee?

5 | Mr. Chairman?

6 EXAMINATION

7 BY MR. WATTS:

8 **Q.** I am going to hopefully not throw a monkey
9 wrench into all of this, but in the studies that you've
10 quoted --

11 MR. KAINS: Can you stand and hit the microphone?
12 Thanks.

13 | BY MR. WATTS:

14 Q. On the studies that you quoted and reviewed, are
15 there any references to the effects of wind turbines in
16 determining if people have a reaction and are subject to
17 migraine headaches?

18 | Has that come up?

19 A. Yes. So they have looked at headaches, nausea.
20 I can probably get a list for you, but they have looked at
21 many different types, including -- well, I am not sure
22 about migraines, but they do look at headaches. I can see
23 if Health Canada evaluated migraines specifically to make
24 sure.

1 **Q.** And then, also related to the actual licensing,
2 in terms of sound, what is being proposed by Apex meets
3 the requirement set by the Illinois Pollution Control
4 Board regarding sound?

5 **A.** **It does. Yes.**

6 MR. WATTS: Okay. Thank you.

7 MR. KAINS: Thank you, Mr. Chairman.

8 Any other questions from the committee?

9 Mr. Doughty?

10 EXAMINATION

11 BY MR. DOUGHTY:

12 **Q.** I just have one. So you talked about the
13 fairness process. Are you equating, like, annoyances to,
14 like, a psychosomatic, kind of, or are there other
15 annoyances?

16 Because in the summary of the MIT study,
17 number 4, and the summary is on page E127 -- and this is
18 just for clarification for me -- number 4, annoyance
19 associated with living near wind turbines is a complex
20 phenomenon related to personal factors. You had kind of
21 somewhat addressed that. Noise from turbines is annoying
22 in comparison to other factors believed to be a report of
23 annoyance in context of wind turbines.

24 So I just didn't know if the annoyance was the

1 perspective someone has, you know, one position or
2 another. So is an annoyance a psychosomatic effect?

3 You can use whatever word you want to use.

4 A. I am not a doctor. I don't want to use -- I
5 wouldn't use that word. But it's related to subjective
6 factors from individuals; so predisposition.

7 Q. That is what you are calling annoyances?

8 A. So people are annoyed.

9 Q. Right.

10 A. It's a real reaction.

11 Q. Right.

12 A. But there are certain factors that predispose
13 somebody to be annoyed to wind turbines. And, in part,
14 they are subjective, like, you know, whether you like the
15 look of the project, process fairness, whether you are
16 compensated for the project in some way, whether you see a
17 benefit to the community. So those aren't related to
18 sound, per se. Certainly, if you don't hear the sound,
19 you can't be annoyed by it, but it's not necessarily
20 related to the level of sound that you are being exposed
21 to.

22 Q. So that is what you would define the annoyance
23 as, as when it's termed annoyances?

24 A. There is a definition of annoyance in the *Wind*

1 *Turbines and Health Study.* I am not sure I am going to be
2 able to turn to it right away.

3 Q. That's all right. Thanks.

4 A. But it's in there.

5 Q. Thanks.

6 MR. KAINS: All right. Any other questions from the
7 committee?

8 All right. From the county board?

9 Sir, if you could, come forward and give the
10 court reporter your name.

11 MR. JOHNSON: I am David Johnson, District 9.

12 EXAMINATION

13 BY MR. JOHNSON:

14 Q. Sir, I've got two questions:

15 Number 1, as an old, damaged musician, going back
16 to your bass and guitar thing, I noticed that the 37 hertz
17 threshold there, I think, was something like 79 decibels,
18 and nobody is going to really hear that.

19 But I think you might be -- has there been any
20 studies, any models run, on duration of that kind of
21 pressure?

22 Because if you are in a room with, not a bass
23 guitar, or guitar, but the kick-drum, you are going to
24 feel that 37 hertz at 79 decibels.

1 A. Yes. Yeah. 31.5 hertz, that is 75 decibels;
2 that is the daytime standard. And then, the nighttime
3 standard, which this project would meet would be 69.

4 But, nevertheless, to answer your question, noise
5 can induce vibration, low-frequency noise specifically.
6 So you might feel it. You might feel the vibration that
7 is being caused by that low-frequency sound.

8 So there have been studies and standards related
9 to low-frequency sound. For the sound level inside the
10 room, not outside, the walls of the building attenuate the
11 low-frequency sound somewhat.

12 But once you get inside the room, sound levels
13 above 70 decibels, at 31.5 hertz, is likely to induce a
14 noise. It likely -- the noise is likely to induce a
15 vibration that you can perceive. So, that is about 70.

16 About 65 decibels at 31.5 hertz, you might have a
17 moderately perceptible vibration related to the sound.

18 In this project, we are modeling sound below
19 that. The highest sound levels for modeling are below
20 65 decibels at 31.5 hertz. We are modeling that at the
21 highest sound level for the Vestas turbine is 63 decibels,
22 and the highest sound level at that frequency for the GE
23 turbine is 62 decibels.

24 So, yeah, good question. There is the

1 **low-frequency-induced vibration that you can feel.**

2 **Q.** The other question I had: As far as shadow
3 flicker, I get all the studies are saying no physiological
4 issues. The word you used was it's "annoying."

5 In today's world where we have more people
6 working remotely, things of that nature.

7 Has there been any studies on shadow flicker
8 causing issues with mental health wellbeing because of
9 things like this?

10 I know, if you were sitting underneath that
11 florescent lamp right there, and the ballast was starting
12 to fail when you were trying to do your testimony, it
13 would, obviously, add a whole lot more stress to the
14 situation for you.

15 If somebody is living in that, and trying to
16 work, as my wife gets to now, I think it would be -- I
17 don't know. Is there anything that has been studied on
18 that to see if it has any ill effects on people?

19 **A.** So, a member of our LEL project team, Gundula
20 Hubner, who is a researcher in Europe, she took our
21 dataset and went one step further.

22 So we have annoyance, but does that annoyance
23 cause stress effects?

24 Does it go to the next level?

1 Does it cause headaches and things that you would
2 expect when you are overly stressed?

3 And so she looked at the wind turbine sound
4 levels, the wind turbine effects -- sorry -- the wind
5 turbine noise effects, she looked at shadow flicker.

6 On the wind turbine effects -- I'll look at the
7 conclusion -- she did find that there weren't any ill
8 effects, the secondary health effects from annoyance. She
9 wrote that turbine annoyance and stress effects are not
10 otherwise a problem. Average annoyance levels of
11 residents near wind farms in Europe and the US were less
12 than five percent highly annoyed. So she did look at the
13 secondary impacts.

14 For shadow flicker, however, there weren't enough
15 respondents that were annoyed by the shadow flicker that
16 she could, essentially, do that correlational study.

17 So annoyance to shadow flicker is lower than
18 annoyance to noise, and she didn't just have enough
19 respondents to answer that. So she tried to look at it,
20 but didn't.

21 So the point is you try to minimize the amount of
22 shadow flicker that occurs.

23 I know there was a question yesterday about
24 outside versus inside. And from our study, we found that,

1 of the population that was exposed to shadow flicker
2 outside, about seven percent were annoyed. But if they
3 were exposed to shadow flicker inside, about a third were
4 annoyed. So, if you are exposed inside, you know, you
5 tend to be annoyed by it. And that's why there is, you
6 know, a standard of 30 hours per year to try to minimize
7 that annoyance. It certainly can be annoying.

8 Q. Okay. Thank you.

9 MR. KAINS: Thank you, Mr. Johnson.

10 Any other questions from members of the county
11 board?

12 Mr. Shook?

13 MR. SHOOK: Thank you, sir.

14 My name is Rick Shook, District 8, Mattoon.

15 EXAMINATION

16 BY MR. SHOOK:

17 Q. So, in the long run, what we are saying is your
18 studies, and in all that, the wind turbines, and the
19 shadow flicker, no one has got sick or very ill or
20 anything like that, that you know of?

21 And I appreciate you not being a doctor, but --

22 A. Yeah. I don't want to talk about individuals. I
23 am just saying, if you look at the population, you know,
24 look at thousands of people, which is what we did here,

1 you know, the hours of shadow flicker study modeled shadow
2 flicker at like 35,000 residents in the US and surveyed
3 another 700. So, if you look at that population, there is
4 no significant correlation between the noise and the
5 shadow flicker exposure and the health impacts, again, on
6 them and annoyance.

7 But I can't say, you know, that person there
8 hasn't had an effect to it, or a person -- so I don't
9 know.

10 Q. So it could happen?

11 A. It could happen. The data has that there's no
12 correlation. Whether an individual as had an effect, I am
13 sure that -- I know that people have claimed that they
14 have had effects from the turbine sound. But if it does
15 occur, it's very rare and potentially not correlated to
16 the actual sound level that they are exposed to.

17 Q. But it's still going to happen?

18 A. It could happen. I would say nothing is off the
19 table, and I wouldn't want to evaluate an individual as an
20 engineer.

21 Q. Thank you, sir.

22 MR. KAINS: Thank you, Mr. Shook.

23 Any other questions from members of units of
24 local government?

1 County Board?

2 School districts?

3 All right. Very good. All right. We'll come
4 back after the break and have questions from people
5 opposed to the project and people who are neutral on the
6 project.

7 Again, Mr. Kaliski, you'll remain on the witness
8 stand after the break.

9 We'll take a break until about 7:48. That gives
10 us about 15 minutes, 7:48. The committee is in recess.

11 (COMMITTEE IN RECESS.)

12 MR. KAINS: All right. Folks, if you could please
13 find your seat or find a different one.

14 Ms. Antonioli, your witness, Mr. Kaliski, would
15 he be available to come back tomorrow evening?

16 MS. ANTONIOLLI: Yes. He can come back tomorrow
17 evening.

18 MR. KAINS: Folks, the reason I asked that is, if you
19 have questions for Mr. Kaliski, I can give you the option
20 of asking now or asking him tomorrow.

21 The reason I am going to do that -- and if you
22 want to ask him questions tomorrow, that would give you a
23 chance to read up on some of the things he's testified to.
24 It's hard to cross-examine somebody if you don't have

1 their reports in front of you.

2 Mr. Lockhart, when could these be up on the
3 website?

4 MR. LOCKHART: Well, I am not 100 percent sure, but
5 we'll get them as early in the morning as we can.

6 MR. KAINS: Okay.

7 Have you e-mailed them to Mr. Lockhart yet?

8 MS. ANTONIOLLI: In the process.

9 MR. KAINS: Thank you.

10 Ms. Taylor, you've got your hand up. Would you
11 just come up here so everybody could hear you?

12 MS. TAYLOR: Thank you.

13 MR. KAINS: Or shout from back there.

14 MS. TAYLOR: I was wondering: Are we allowed to begin
15 asking questions tonight? And then, after reading these,
16 are we allowed to continue it tomorrow? Or is it one or
17 the other?

18 MR. KAINS: I think we are just going to do just one
19 or the other. Would you prefer just to wait until
20 tomorrow?

21 MR. WATTS: I would.

22 MR. KAINS: Mr. Watts says he would.

23 What about you, Mr. Sherman?

24 MR. SHERMAN: I would prefer to wait.

1 MR. KAINS: Mr. Shaw, Mr. Borgman?

2 MR. BORGMAN: I have a question. So all of the
3 reports that have been given here tonight are from the
4 wind farm. I assume that part of that has to do with -- I
5 brought a university report with me last night. Is there
6 someplace -- I mean not everyone in the room can
7 necessarily -- maybe doesn't have access to all the
8 resources to get their own information.

9 Is there any way to share cited works on the
10 site?

11 If they are able to, are we able to as well for
12 people to study, or not?

13 MR. KAINS: Well, they would have to be introduced in
14 evidence in the hearing. So it would have to wait.

15 MR. BORGMAN: I don't know the process.

16 MR. KAINS: And that is fine, Mr. Borgman, because you
17 are blessed not to have gone to law school and practiced
18 for 34 years.

19 But yeah, you would.

20 And I say that in gest. It's been a great
21 career; but, you know, you get old, and you get tired.

22 I am looking at you, Mr. Keyt.

23 But yeah.

24 Mr. Shaw, you prefer to wait?

1 MR. SHAW: Yeah.

2 MR. KAINS: I am trying to think who else we have.

3 Ms. Clark and Ms. Pedigo have also, and

4 Ms. Winslow.

5 Would it be all right if we waited until tomorrow
6 night before you examined, meaning asked questions of this
7 witness?

8 MS. CLARK: I would rather wait.

9 MR. KAINS: Ms. Clark said she would rather wait.

10 I just want to do what is fair and what's right
11 for everybody.

12 And the Chairman, you think you would rather
13 wait?

14 MR. WATTS: I would.

15 MR. SHERMAN: I certainly appreciate that. I really
16 appreciate that because coming in here and thinking we are
17 getting one thing in the application, and then several
18 things are presented, my mind just went boom. So I
19 appreciate that. I very much appreciate that.

20 MR. KAINS: Certainly, Mr. Sherman, and we're -- I
21 want to see your mind go boom one of these days because I
22 bet there is quite a bit up there, a lot of knowledge, a
23 lot of knowledge.

24 Ms. Clark, you had your hand up?

1 MR. CLARK: If somebody wants to go ahead and go, can
2 they, even if we say wait until tomorrow?

3 MS. TAYLOR: I was just wondering if some of the
4 questions that I ask, then we could further -- I could
5 further research or look up. What if --

6 MR. KAINS: Well, no. How we are going to do it is
7 you are going to get one bite at the apple.

8 MS. TAYLOR: I think I am going to get it over with,
9 or do I have to wait since everybody is?

10 MR. KAINS: Well, I think, Ms. Taylor, if you want to
11 ask questions, but then you wouldn't be able to tomorrow
12 night.

13 MS. TAYLOR: Just of this witness?

14 MR. KAINS: Of this witness, yes. Just with respect
15 to this witness only because -- and here is the reason
16 why: Because they have come forth with a bunch of
17 academic studies that are way over most everybody's heads.

18 And I know that Mr. Kaliski authored, and he
19 actually was the lead writer on some of these, so he is
20 very knowledgeable in his field.

21 But I want to make sure that, you know, I don't
22 want to have seven people from the public asking him
23 questions now and then also seven people, the same seven
24 people, getting up tomorrow night and asking questions.

1 It will just take too long.

2 So if you would like to ask him your questions
3 with respect to sound, shadow flicker, and health
4 concerns, you can do that tonight; but then, with respect
5 to this witness, I would preclude you from asking
6 questions of him tomorrow night.

7 MS. ANTONIOLLI: If we proceed and have him present or
8 answer questions tomorrow night, we can proceed with
9 Mr. Jason Conley tonight on the issue of safety.

10 MR. KAINS: Okay. Ms. Taylor, if you want to ask
11 questions of this witness right now, I will allow that;
12 otherwise, we can wait until tomorrow night.

13 MS. TAYLOR: I guess don't put off until tomorrow what
14 I can do today. I'll just get it over with.

15 MR. KAINS: All right.

16 COURT REPORTER: Give me your first name.

17 MS. TAYLOR: Meg Taylor, M-e-g T-a-y-l-o-r.

18 EXAMINATION

19 BY MS. TAYLOR:

20 Q. Could you explain: Are children the same as
21 adults the way perceiving sound?

22 You were talking mainly about adults, but are
23 children in any of these studies?

24 A. I think that's one area where that would probably

1 need a doctor because I am sure there are oto --
2 otolaryngo -- laryn -- ear differences between children
3 and adults, but I don't think I feel qualified to answer
4 that.

5 MR. KAINS: Okay. I am just going to ask her the
6 question. Are there studies about children?

7 THE WITNESS: Yeah. I don't believe that these looked
8 at children. I can check to see whether children
9 responded or how they were treated in the study. I don't
10 remember.

11 MR. KAINS: Let's check that.

12 BY MS. TAYLOR: Because in these areas, you know, would be
13 -- there are a lot of families. It wouldn't just pertain
14 to adults, but children as well.

15 A. I understand.

16 Q. Correct?

17 A. I understand. Yes.

18 Q. I am just wondering, is there any study or
19 literature then that describes the effects on children,
20 and not just adults? Because since there are probably
21 differences between children and adults.

22 A. Right.

23 Q. Okay. Are there any studies that show the
24 effects on children?

1 A. I didn't know. I don't know that.

2 Q. Okay.

3 A. You know, certainly, there are studies that look
4 at the effect of noise on children, but I don't know if
5 there are any specific to wind turbine noise.

6 Q. Okay. You said that, in this study, I think the
7 MIT study, that it does not produce disease. Could you
8 define disease for us?

9 A. So, in the MIT study, I don't know if we defined
10 disease; but, generally, there is a reference to a
11 publication, a medical publication, which essentially
12 lists the recognized diseases. And I don't have the quote
13 offhand, but I can try to look for it.

14 Q. I am not sure if I am looking at the -- if I am
15 looking at the same one, but the World Health Organization
16 defines health as a state of complete physical, mental,
17 and social wellbeing, and not merely the absence of
18 disease. So I was just wondering if that correlated with
19 your study when you said they did not find disease.

20 A. So that's a point of contention. In the US, we
21 tend to think of disease as something that's defined.
22 And, again, this publication *Diseases*, whether or not
23 annoyance, annoyance in itself is not a disease that is
24 listed in that publication. So I think the WHO treats

1 annoyance more as a health effect in and of itself, and in
2 the US it tends to be a condition that can lead to health
3 effects.

4 So, yes, I agree that is what the WHO considers.

5 Q. Considers. So the annoyance -- are you saying
6 the annoyance could then lead to other health problems?

7 A. Yes.

8 Q. Yes?

9 A. Yeah.

10 Q. Okay.

11 A. High annoyance can lead to stress, and stress can
12 lead to other health effects.

13 Q. Okay. Could those health effects then lead to
14 disease?

15 A. Yes. Yes. Those health effects would be some
16 type of disease, like headaches, and migraines, and
17 cardiac issues, and so forth. So, yeah, people that are
18 under higher stress, that can lead to disease.

19 The Hubner study that I talked about looked at
20 the secondary effects and concluded that there wasn't that
21 next step of stress to disease.

22 But, certainly, people under high stress can have
23 secondary disease impacts. Yes.

24 Q. Okay. So I -- can you please help me understand

1 how there can be no disease but then the annoyance can
2 lead to the stress and can lead to the disease?

3 Can you help me to understand that?

4 A. Right. So you have to -- just being annoyed
5 about something doesn't necessarily mean that you have a
6 disease. I am annoyed about a lot of things.

7 Q. Right.

8 A. But that doesn't make me sick.

9 Q. But can stress make you sick?

10 A. Stress can make you sick. But stress over a
11 long-term, and high enough stress, that would have to
12 be -- again, I am a little bit outside my wheelhouse about
13 the factors that cause diseases, but that's something that
14 we looked at. And something that has been looked at in
15 the literature is whether there is that next step between,
16 yes, there is annoyance and people do get stressed about
17 wind turbine noise. Not the majority. Certainly, it's,
18 certainly, most people do not have high annoyance from
19 wind turbine sound.

20 But, nevertheless, there are people with that
21 high annoyance. And whether there is a significant --
22 that next step between that annoyance, the stress, and
23 disease, that hasn't been found.

24 Q. Okay. I had another question. You said that

1 there's not been studies differentiating between adults
2 and children.

3 In the studies, does it describe any people who
4 have hearing aid devices, or cochlear implants, or
5 anything like that?

6 A. One of the things we mentioned in our study is
7 that we did ask people whether they had normal hearing.

8 So it is possible that people in the study did
9 have it. We found an age response, and our theory was
10 that perhaps the older people didn't respond as much
11 because their hearing was not as good. So we tried to
12 incorporate that through looking at the age variable.

13 Q. Do you think, if people living within the area,
14 if they did have a hearing device, or cochlear implants,
15 or something like that, that it would be more detrimental
16 to their health than a regular hearing person?

17 Because you said that the studies just were
18 regular hearing people, or you didn't differentiate.

19 A. We didn't ask the question whether they had an
20 implant.

21 Q. Do you think, if they did have an impairment or
22 an implant, that it would have more of an adverse effect?

23 A. I don't know. I am not an audiologist. I don't
24 know what the implant would be in terms of perception.

1 **It's just not something I could talk confidently about.**

2 **Q.** Okay. And then I believe you said that wind
3 turbine noise is prominent. Can you explain to us what
4 you mean by prominent?

5 **A.** **Sorry. I don't remember saying that. What**
6 **context did you hear that?**

7 **Q.** I just wrote down and quoted you of saying that,
8 so I just wanted you to clarify on that.

9 **MR. KAINS:** If you can recall.

10 **THE WITNESS:** I can't recall. Unfortunately, I don't
11 remember the context in which that was said.

12 **BY MS. TAYLOR:**

13 **Q.** Okay. Are you aware of any studies that talk
14 about the interference of wind turbines and pacemakers?

15 **A.** **I am not. I am not aware of any.**

16 **Q.** Okay. Are you aware of any studies that talk
17 about the correlation between -- I know you mentioned
18 headaches. But what about dizziness, or vertigo,
19 tachycardia, problems with concentration, and memory? Are
20 you aware of any studies that talk about those?

21 **A.** **Yes. Certainly, sound affects all of those**
22 **things in general.**

23 **People who have experienced higher sound levels**
24 **in their home would have kind of higher levels of**

1 concentration.

2 Certainly, studies have looked at -- you know,
3 you mentioned children. You know, children that live near
4 the subway tracks do worse in school than people who live
5 away from subway tracks because of the impact of high
6 levels of noise.

7 And then, of course, there have been studies that
8 look at cardiac effects. Again, these are high levels of
9 noise. The levels of wind turbine sound that we are
10 talking about are fairly low.

11 You know, as an example, at 1,000 hertz, which is
12 -- 1,000 hertz, that is the middle frequency. That's the
13 worst case sound level, the worst case frequency for wind
14 turbine sound standard. The average sound level in rural
15 sites in the US is 39 decibels, which is 2 decibels below
16 the standard.

17 So, you know, you are talking about sound levels
18 from this project that are pretty close to background, but
19 they are not what you would experience in an urban area
20 that would affect necessarily -- that would have those
21 same effects.

22 Q. Okay. I just want to clarify. So you said there
23 are studies in rural areas with children around.

24 A. Studies of urban areas of children.

1 Q. Sorry. Sorry. The traffic noise, is that what
2 you said?

3 A. Yes. So I was talking about train noise.
4 Correct.

5 Q. Can you compare for us the difference between the
6 train noise versus the noise from the turbine?

7 A. The train noise would be louder. I don't know
8 how to quantify it, and I don't remember what the sound
9 levels were in the study.

10 But, like, a truck going by 50 feet, for example,
11 would be, you know, somewhere between 75 and 80 decibels,
12 compared to the wind turbine sound because of the
13 a-weighted decibels. The overall sound levels compared to
14 wind turbine sound, which is typically, you know, 45,
15 46 decibels and below.

16 So, again, the sound levels are much lower than
17 what you typically find in an urban area, in highway and
18 transit noise.

19 Q. Okay. I believe I am almost done.

20 You talked about the serrated and trailing edges.
21 Do both the GE and the Vestas model, do they both have
22 this serrated and trailing edges?

23 A. They call them two different things, but one is a
24 low-noise trailing edge, and one is a serrated-trailing

1 edge, but it's basically the same.

2 Q. But they both have them?

3 A. They both have them. Yeah. And all the turbines
4 in the project will have them.

5 Q. Okay. For the studies that you talked about,
6 were any of the participants the people in -- and I am not
7 sure if I am using the correct term -- the participants
8 that had signed the nondisclosure agreements?

9 Where -- maybe they -- I am not exactly sure what
10 is in the nondisclosure agreement, but where they are
11 unable to talk about their health effects, or things they
12 are experiencing?

13 If they signed that, are they unable then to talk
14 about the effects?

15 A. So our study included participants and
16 non-participants in the project. What agreements they
17 signed, I don't know.

18 But I am just speculating that some participants
19 may have signed some type of nondisclosure agreement.
20 Whether that precludes them from answering a survey which
21 is anonymous, I don't know.

22 But we did look at participants and
23 nonparticipants, and as you would expect, participants in
24 the project who get some form of financial compensation

1 are less likely to be annoyed by the project, project
2 noise, and they are less likely to notice the shadow
3 flicker.

4 So we did look at the difference between those
5 two types of people that would be affected by the noise of
6 the project.

7 Q. All right. Thank you, sir.

8 MR. KAINS: Thank you, Ms. Taylor, for your questions.

9 Was there anybody else from the public who wanted
10 to ask questions tonight rather than wait until tomorrow
11 night?

12 All right. Then the next questions would be from
13 Coles County staff and consultants.

14 Mr. Keyt, you've already indicated to me that you
15 would like to wait until tomorrow night.

16 MR. KEYT: Yeah, I can. There's probably two studies
17 I am not familiar with that they gave us, so I prefer to
18 wait to ask Mr. Kaliski.

19 MR. KAINS: Let's take that up tomorrow night as well.

20 So what I am going to do now: Mr. Kaliski, you
21 may step down from the witness stand. You are not excused
22 from this hearing, however; but we will need you back here
23 tomorrow evening at 6:00 to take questions from the
24 members of the public and from Coles County staff and

1 consultants.

2 Counsel, of course, you'll be afforded redirect
3 examination.

4 And then we'll have final questions from members
5 of the committee.

6 All right. So you may step down. Thank you,
7 Mr. Kaliski, and we will see you tomorrow night.

8 COURT REPORTER: I need to know who the lady is that
9 joined the board.

10 MR. KAINS: Ma'am, could you put your name -- give
11 your name to the court reporter?

12 All you have to do is holler at her.

13 MS. PURDY: Nancy Purdy, P-U-R-D-Y. Coles County
14 Board.

15 MR. KAINS: And what district?

16 MS. PURDY: 16th.

17 MR. KAINS: 16th.

18 MS. PURDY: District 7. I am sorry. I was at another
19 meeting, and we talked about precincts.

20 MR. KAINS: District 7, County Board, Precinct 16
21 somewhere else. Okay. Glad to have you here.

22 Holly, add her to the appearance.

23 Ms. Shapiro, call your next witness.

24 MS. SHAPIRO: Yes. We would like to call Jason

1 Conley.

2 **JASON CONLEY,**

3 a witness herein, called by the Applicant, after having
4 been first duly sworn, was examined, and testified as
5 follows:

6 **EXAMINATION**

7 **BY MS. SHAPIRO:**

8 **Q.** Can you state your name and spell it for the
9 record?

10 **A.** Jason -- J-a-s-o-n -- Conley -- C-o-n-l-e-y.

11 **Q.** What is your job title?

12 **A.** My job title is Director of Environmental Health
13 and Safety for Apex Clean Energy.

14 **Q.** And you have a slide to take us through your
15 educational background?

16 **A.** Yes. I would like to speak to this. So my
17 educational background, I hold a Bachelor of Science in
18 Occupational Safety and Health from Southeastern Oklahoma
19 State University.

20 I am currently in the process of obtaining a
21 Master's Degree in Occupational Safety and Health from the
22 same university.

23 And I hold a CSP certification from the Board of
24 Certified Safety Professionals, which is the highest

1 safety certification in the United States of America, and
2 I've held that since 2017.

3 Q. Thank you. And your safety background?

4 A. My background? Almost 18 years as a safety
5 professional. Majority of that, I guess, kind of split is
6 in the oil and gas industry, overseeing safety for
7 drilling operations, oil completions, offshore operations
8 all over the US. The last eight to nine years have been
9 in the renewable energy industry, wind and solar
10 construction and operations all over the US.

11 Q. What are your responsibilities at Apex?

12 A. My responsibilities as Director of Health and
13 Safety is to develop, implement, and monitor safety
14 procedures and protocols for Apex employees as well as
15 contractor safety for employees who work on our behalf.

16 Q. And what type of protocols, safety protocols, and
17 procedures?

18 A. So working with the facility managers at an
19 operating site, building safe work procedures for
20 switching in substation, reviewing job safety analyses, as
21 well as participating in any incident investigations or
22 trending safety observations from those projects.

23 Q. And for approximately how long have you held this
24 director role you are in?

1 A. As director, since January of this year. With
2 Apex, since 2022.

3 Q. And what did you do in connection with safety for
4 Coles Wind?

5 A. For Coles Wind, I help produce the overview of
6 the emergency action plan for the project. And as the
7 project progresses, I will help develop and implement the
8 emergency action plan as it pertains to Coles Wind. And
9 once operation commences, then fall into the
10 responsibilities of job safety procedures, safe work
11 procedures for operations.

12 Q. And, in general, what do you do in connection
13 with emergency management for Apex?

14 A. Yeah. So, for emergency management, as I
15 mentioned, we develop emergency action plans as they
16 pertain to the wind farms that we operate.

17 Q. And why is health in your job title?

18 A. That is a good question. So it's common practice
19 in the safety industry for environmental health or
20 occupational health to be in the title.

21 As it pertains to health, it focuses more on the
22 employees' work environment and the areas they are going
23 to be working in and the health of that environment,
24 whether it's a safe operating area for those employees to

1 **be in.**

2 **Q.** Okay. So that is an important distinction to
3 make, right?

4 Because we have gotten a lot of questions over
5 the last couple of hours.

6 **A.** **Sure.**

7 **Q.** That there is a distinction between public health
8 and occupational health?

9 **A.** **That's correct.**

10 **Q.** Okay. Are you a public health expert?

11 **A.** **I am not a public health expert.**

12 **Q.** Are you an occupational safety expert?

13 **A.** **I am.**

14 MS. SHAPIRO: Okay. Mr. Kains, I would like to move
15 Mr. Conley as an expert in occupational safety and
16 emergency management for Coles Wind.

17 MR. KAINS: Mr. Keyt, any additional voir dire of the
18 witness?

19 MR. KEYT: No, sir.

20 MR. KAINS: Very good. I find that Mr. Conley is an
21 expert in the field of occupational health, which is the
22 health and welfare and concerns of people on the site,
23 employees, and contractors.

24 I've also found him to be an expert witness in at

1 least one, probably two, prior public hearings in other
2 counties in Illinois, and he is an expert in the field of
3 occupational health and safety.

4 So you may go right ahead.

5 MS. SHAPIRO: Thank you.

6 BY MS. SHAPIRO:

7 Q. And you have a brief presentation?

8 A. That's correct.

9 Q. Great. Thank you.

10 A. As my colleagues have mentioned in their
11 sessions, Apex has five core values that guide our company
12 and how we operate, with one of those values being safety,
13 which is what I am going to talk about this evening.

14 Safety is not just a part of our business, but
15 it's how we do our business. The success we have with a
16 project, with regards to safety, is a team effort, from us
17 at the company, from our contractors that work onsite, and
18 from the communities that we operate in.

19 This collective approach to safety allows us to
20 ensure that it stays at the heart and the shared progress
21 of our projects.

22 Over these next few slides, I'll highlight some
23 of Ms. Anderson's safety points from her presentation,
24 speak to some of the safety aspects of this project as

1 well as mention Alan -- as well as Alan's mention of the
2 partnerships that we've created within this community.

3 Next slide, please.

4 The next -- this partnership and coordination
5 that Alan mentioned in his presentation is well underway.

6 I am sorry. Hang on a second. Sorry.

7 From a collaboration standpoint, we've met with,
8 or provided, copies of an overview of our emergency action
9 plan to the following fire protection districts that are
10 on screen and the emergency management personnel for this
11 county.

12 In November of 2024, we held a meeting at our
13 project office here in Charleston with the Coles County
14 Emergency Management and invited all of the fire
15 protection districts to the sessions as well, to which the
16 majority of them were able to make it.

17 We broke bread. We talked about the overall
18 project and discussed potential emergency scenarios, site
19 training, and what response would look like.

20 Great discussion with no questions or concerns
21 raised to date, with an understanding that we would keep
22 the team updated and informed throughout the duration of
23 this project.

24 For those that were not able to make/attend the

1 meeting in person, the following day I meet with the Coles
2 County Sheriff's Department and spoke with Sheriff Kent
3 Martin and Chief Deputy Tyler Heleine about this project.

4 After that, I went to two other districts and
5 provided them copies of the overview of the emergency
6 action plan and was able to sit and talk to Mr. Bill
7 Strode from the Seven Hickory Township on the first night
8 of this session, after the hearing, and discussed any
9 questions that he may have about the project.

10 This partnership, in coordination, as mentioned
11 in previous presentations and just now, is well underway
12 and will continue throughout the life of this project in
13 the development of the emergency action plan and will
14 include construction and operations for Coles Wind.

15 Q. So, Mr. Conley, before you move on, the
16 coordination you are doing with fire districts, is that
17 over?

18 A. It is not over. We just started. We had an
19 initial meeting in development of the emergency action
20 plan; and as the project progresses, we will have
21 continued meetings through the construction phase and well
22 into the operations phase throughout the life of the
23 project.

24 Q. Thank you.

1 A. You bet.

2 The next step of this partnership will include
3 site safety training and orientation.

4 During our discussions with emergency management
5 personnel, we discussed the training of our onsite
6 technicians, as well as bringing the fire protection
7 district personnel to the site to conduct site
8 walkthroughs of the equipment that we have.

9 To be clear, should there be an emergency at the
10 site, the county will respond as they would to any other
11 emergency in the community. They would not be expected to
12 access or climb any of the turbines for the emergency.

13 The site technicians for the project are trained
14 in electrical safety, will have the required OSHA
15 training, but are also trained in advanced tower rescue,
16 self-rescue, first aid, CPR, and ADD protocols, and are
17 able to assist as needed.

18 Early communication and development of these
19 emergency response plans, with the local responders,
20 demonstrating the transparency that my colleagues have
21 spoken to, helps us ensure that the wind project does not
22 create barriers to respond to any emergencies in the
23 community.

24 During this development, some of the safety

1 measures we've focused on are personnel orientations, site
2 walkthroughs, as I mentioned, the equipment locations, and
3 annually coordinated drills with the local responders.

4 Along with the safety, as it relates to people,
5 we also focus on the layout and the design of the
6 equipment for continued safe operations.

7 Next slide, please.

8 With some of the layout and design features
9 mentioned in previous presentations, a couple of other
10 safety measures that are associated with the project and
11 equipment include visible signage, posted emergency
12 contact information, along with the turbine access logs
13 for climb prevention and security purposes, which is an
14 ordinance requirement.

15 Some engineering safety features of the turbines
16 include redundancies in the mechanical and electrical
17 safety monitoring systems that are designed to shut down
18 the turbine if the preset parameters are exceeded.

19 Imagine the sensor in your vehicle that shows you
20 if something is wrong and the vehicle is not operating
21 properly. The sensor on the turbines do the exact same
22 thing, with the built-in feature of shutting the turbine
23 down so the equipment isn't damaged and can be serviced
24 properly.

1 An example of this would be with wind and ice
2 protection. There are two methods used to detect icy
3 conditions on the turbines.

4 One method involves meteorological monitoring for
5 winter weather and the likelihood of icing conditions,
6 which allows the project personnel to shut down the
7 turbine to prevent any potential damage to the turbine in
8 the event of icy conditions.

9 The second method is turbine sensor that monitors
10 for imbalance in the blades due to icing conditions. If
11 ice were to accumulate on the blades, it creates an
12 imbalance on those blades, and the turbine shuts down, and
13 it cannot be turned back on until a technician goes to the
14 turbine, verifies conditions are safe, and resets the
15 turbine manually.

16 **Q.** So, Mr. Conley, the two methods for ice
17 detection, this is just one example of built-in safety
18 mechanisms that are within each turbine?

19 **A.** That is correct.

20 **Q.** Okay. Thank you.

21 **A.** You bet.

22 Next slide, please.

23 Transitioning from the design into the
24 operational oversight of the project.

1 This project is expected to have ten full-time
2 staff that will be located at the operations and
3 maintenance building.

4 These technicians will be local people to the
5 community. Their duties include, but are not limited to,
6 daily visual inspections and routine maintenance with the
7 equipment throughout the project.

8 Safe operation of Coles means several things:
9 Training of the onsite personnel, which I've already
10 touched on; coordination with local emergency management,
11 which is well underway; and the monitoring of the
12 equipment and site conditions both by the onsite personnel
13 and with our load operations control center, which I will
14 now touch on.

15 Next slide, please.

16 The Apex remote operations control center, better
17 known as the ROCC, is a multimillion dollar facility that
18 is designed to monitor our entire fleet across the United
19 States. They can see every turbine, every substation,
20 every transformer, and every feeder breaker, and have
21 capabilities to isolate or remote shutdown a turbine in a
22 moment's notice.

23 The ROCC is staffed 24 hours a day, 7 days a
24 week, 364 days a year by highly-skilled operators, several

1 which are veterans. Meaning that someone or multiple
2 people are always monitoring the status of this equipment.

3 Along with the Apex ROCC, the turbine
4 manufacturer, which is GE or Vestas, also has the same
5 capabilities as it pertains to their equipment, which
6 means there are two layers of visual monitoring of this
7 equipment.

8 This functionality, oversight, and multilayer
9 redundancy provides full visibility of the equipment and
10 it's the best-in-class data management, reporting and
11 diagnostic system that enables us to operate efficiently
12 and, most of all, safely.

13 Q. Mr. Conley, I just want to emphasize this because
14 it's important: The ROCC that you are explaining, you are
15 telling us that the ROCC can see, manage, and shut down
16 each individual turbine at a moment's notice if there is
17 an issue?

18 A. That's correct.

19 Q. Okay. Thank you.

20 A. A couple of other topics I would like to address,
21 as it pertains to safety, that have been brought up in
22 other hearings are turbine fires and severe weather
23 conditions.

24 On the topic of turbine fires, I can

1 affirmatively say there have been no turbine fires on any
2 project at Apex Clean Energy owns. One of the primary
3 reasons for this is that the equipment and technology that
4 I just mentioned is built into each turbine that we
5 operate, and it is designed to prevent this occurrence
6 from happening.

7 What I cannot do is speak to the details of other
8 projects, other companies where these events have
9 occurred, the equipment that was being used, it's design
10 features, or the maintenance habits of those projects.
11 There are too many variables to accurately describe what
12 may have been the cause of those events.

13 As I mentioned, this project is designed to
14 prevent this type of event. In the extremely rare
15 instance, if this type of event were to occur, we are
16 already coordinated with emergency management, and
17 absolutely no personnel will access or climb those
18 turbines during those events.

19 We would isolate the equipment electrically,
20 establish a safe parameter and monitor conditions to
21 minimize the impact to the area around the turbine, as
22 this is the safest course of action for all parties
23 involved.

24 On the topic of severe weather and tornados,

1 we've developed and built wind farms all over the United
2 States with some of those sites being right in the middle
3 of Tornado Alley, located in parts of Texas, Oklahoma, and
4 Kansas.

5 Wind turbines are inherently designed to
6 withstand very high winds and severe weather conditions.

7 On this topic, the actions to be taken and the
8 protocols to keep people safe are built into our emergency
9 response plans and communicated with the local emergency
10 management personnel.

11 In the event that this type of emergency takes
12 place, utilizing the previously mentioned ROCC, we would
13 monitor weather conditions, monitor the equipment as
14 needed for the event, and coordinate any assistance or
15 response efforts with emergency management.

16 So, in summary, and as previously mentioned,
17 safety is a core value of Apex. I hope that, with the
18 provided information from my colleagues, the steps we've
19 taken and will continue to take along with the
20 collaboration, communication, and transparency with the
21 local community, you can see we hold safety in the highest
22 regard in all aspects of how we operate. It's not just a
23 part of our business; it's how we do our business.

24 Q. Thank you, Mr. Conley.

1 We want to address a few questions that have come
2 up over the course of all the nights of the hearing.

3 First, we want to start with the facility of
4 Prosperity. Are you familiar with that incident?

5 A. Yes, I am.

6 Q. What can you tell us?

7 A. The event I can speak to is a tragic motor
8 vehicle accident involving a young man. A loaded concrete
9 truck rolled over. The event occurred on a public roadway
10 with no one around and between the concrete batch plant
11 and the concrete pour for the turbine. All the evidence
12 from the investigation on the incident suggests that the
13 cause of the accident was due to distracted driving.

14 Since then, we have worked closely with the
15 companies involved, created lessons learned, and improved
16 the processes around these type of events.

17 Extra measures were put in place, not only for
18 the remainder of the project, but also for any future
19 projects that the company has across their fleet.

20 Those extra measures include no cellphone use
21 while driving, by having the drivers store their phones
22 away; external monitoring for speeds on concrete trucks;
23 video monitoring of the drivers; and a proposal to have
24 the trucks grouped together and escorted so that speed can

1 be maintained and no trucks drive alone.

2 There have been no other fatalities associated
3 with that project, and to date no injury related to -- no
4 injury-related incidents in the past two months.

5 Q. Thank you. And what kind of safety measures will
6 be implemented for Coles Wind?

7 A. For Coles Wind, with regards to transportation
8 and concrete trucks, everything I just mentioned from a
9 corrective action standpoint: No cellphone use while
10 driving, by having drivers store their phones away;
11 external monitoring of the speeds; video monitoring of the
12 drivers; and, once again, the proposal for having the
13 trucks grouped together and escorted so they can maintain
14 lower speeds.

15 Q. There is also a question on the electrocution at
16 Prosperity. Was there an electrocution?

17 A. There was not an electrocution at Prosperity.

18 Q. So, just to be clear, the two questions -- the
19 questions about two deaths at Prosperity, was that one was
20 a concrete death at Prosperity, and there was no other
21 electrocution death?

22 A. There were no other fatalities associated with
23 that project from a work-related standpoint. That is
24 correct.

1 **Q.** There is also a question regarding construction
2 traffic on public-use public roads. Can you speak to
3 that?

4 **A.** Sure. As it pertains to vehicles and the truck
5 drivers and safe driving practice for the project, there
6 is a transportation plan that is put in place. It takes
7 where heavy equipment travels, where they go. It's part
8 of the road-use agreement, the way I understand
9 construction.

10 The drivers are also expected to follow the local
11 regulations for speed limits, as they currently are, with
12 communications to the drivers on the emphasis of slowing
13 down in more densely populated areas of the project.

14 **Q.** That was a little quick, but I think I got it.

15 Mr. Conley, we've had several questions
16 throughout this hearing about how Coles Wind will address
17 complaints. Have you heard the questions come up in the
18 hearings?

19 **A.** Yes, I have.

20 **Q.** I want to give some context and perspective about
21 this. Apex Clean Energy is operating wind projects all
22 over the country; is that correct?

23 **A.** That is correct.

24 **Q.** Do you know approximately how many wind farms

1 Apex has operated?

2 A. We currently operate eight wind farms scattered
3 throughout the US.

4 Q. And approximately how many individuals turbines
5 is that?

6 A. I believe the latest count is 611.

7 Q. At these other projects, is it pretty typical for
8 the county, or whichever local authority, to require that
9 we have a complaint resolution process?

10 A. We do have a complaint resolution process. The
11 jurisdiction of the county where it is, it may or may not
12 be a requirement, but all of our operating sites have the
13 same resolution process. Yes.

14 Q. Should someone make a complaint about any of our
15 operating wind projects, in your job at Apex, would you
16 hear about the complaint and be involved in addressing it?

17 A. It depends on the scenario. So, if the complaint
18 or issue being raised was associated with employee safety,
19 or a safety violation, then I would be aware of it, and I
20 would be part of the resolve for that. That is correct.

21 Q. Are complaints common?

22 A. Complaints are not common.

23 Q. Okay. Well, let's focus on this. So last night
24 there was a question about wind turbines causing seizures.

1 Have you ever heard or received a complaint from any Apex
2 wind project in the United States causing seizures?

3 **A. No. I have not.**

4 **Q.** What about headaches? Has anyone ever made a
5 complaint to Apex, at any of our wind projects, that their
6 project is causing headaches?

7 **A. No. They have not.**

8 **Q.** What about a question that we heard about
9 tonight, interference with pacemakers?

10 **A. I've never had that brought up.**

11 **Q.** What about wind turbines causing memory loss; any
12 complaints with that?

13 **A. No, ma'am.**

14 **Q.** How about no sleep; has anyone ever made a
15 complaint that an Apex operating wind project was making
16 it impossible to sleep?

17 **A. No. Not to my knowledge. In eight or nine years**
18 **in operations, I have never encountered that complaint.**

19 **Q.** What about health issues in general, seizures,
20 headaches, pacemakers, memory loss, lack of sleep --

21 **MR. KAINS:** Ms. Shapiro, I think he can only address
22 health issues as it relates to people on the site, not
23 necessarily anyone who happens to be a member of the
24 public.

1 If he is aware of a complaint as part of the
2 complaint resolution process or if he's aware of a
3 complaint with respect to these issues, but I think he
4 testified that he's only aware -- he's only brought in
5 when it's an occupational health and safety type of issue.

6 So I'm concerned here that you are going down the
7 path of asking this gentleman, who is not a medical doctor
8 or a health professional, with respect to the general
9 public, asking him questions about whether he knows
10 anything about whether there have been these complaints.

11 I guess I have the question for Mr. Conley:
12 Would you be made aware of a public health or illness type
13 of complaint filed by a citizen?

14 THE WITNESS: It could happen.

15 MR. KAINS: Okay. Has it happened?

16 THE WITNESS: In my duration as a safety professional
17 supporting wind operations, it has not happened.

18 MR. KAINS: So you have not received a complaint --
19 you have not been called in to help resolve a complaint
20 about a medical condition?

21 THE WITNESS: That is correct.

22 MR. KAINS: Does that mean there have been no
23 complaints about medical conditions?

24 THE WITNESS: Not that I am aware of.

1 MR. KAINS: Okay. All right. Go ahead.

2 MS. SHAPIRO: I was just at the end of that section.

3 MR. KAINS: Okay.

4 BY MS. SHAPIRO:

5 Q. Just two more. What about sound or noise issues,
6 have you ever received any complaints about that?

7 A. Not -- so no complaints with regards to normally
8 operating turbines. However, if there was an issue where
9 the turbine wasn't making a normal sound, maybe a
10 landowner or a member of the community was in the area and
11 heard something that sounded out of the normal for the
12 turbine, we've used that process for -- they would notify
13 us. And we've used that process, once notification was
14 made, we would shut down the turbine, and the turbine
15 technicians would address, you know, by performing
16 inspection or maintenance, if it was required.

17 So we've used it not only as a complaint process
18 but also as an avenue for extra sets of eyes and ears,
19 which has been pretty successful.

20 Q. That is the only type of noise complaint that --

21 A. Yeah. Correct.

22 Q. What about oil leaks?

23 There is a photo going around all over social
24 media of a turbine gushing with oil. Have you seen those

1 social media posts?

2 A. I don't know which photo you are referring to,
3 but I can assure you it is not an Apex project or an Apex
4 turbine.

5 Q. Well, with complaints, have you ever received a
6 complaint that a turbine was leaking oil and polluting the
7 surrounding land?

8 A. No, I have not.

9 Q. What about that a turbine was leaking oil and
10 reducing property values?

11 A. No, I have not.

12 Q. What about a complaint that a turbine was leaking
13 oil and making people sick?

14 A. No, I have not.

15 Q. You just testified that Apex currently has over
16 600 wind turbines. To your knowledge, are any of those
17 currently leaking oil or other fluids?

18 A. No, not to my knowledge. And this is why we have
19 the ROCC monitoring our turbines and doing onsite
20 inspections. The turbines are machines, not unlike
21 tractors or combines out in the field, so sometimes a
22 gasket will wear thin, or a hose will fail, just like a
23 tractor or combines require maintenance. So we do daily
24 inspections and regular maintenance on that.

1 If there is a failure, we see it, and we replace
2 it as soon as we can.

3 It's in our interest to have these operating.
4 Right? So we take maintenance and repairs quite seriously
5 with the turbines. We don't make money if they are not
6 producing electricity and not working. So, in my
7 experience, we don't have any problems with leaking oil at
8 turbines.

9 Q. And these onsite staff that you just mentioned --

10 A. Sure.

11 Q. -- they are there for all of our projects?

12 A. That is correct.

13 Q. And for at least 40 hours a week?

14 A. That's correct.

15 Q. And have they ever reported any internal
16 complaints about headaches or seizures or memory loss?

17 A. Other than being tired at the end of the week,
18 no. No complaints with regards to health effects.

19 Q. Thank you. Several members of the public have
20 asked, in previous days of hearings, if any of our
21 witnesses that we brought up have ever lived around wind
22 turbines, slept around turbines, existed around turbines
23 over a long period of time. Do you want to respond to
24 that with your experiences?

1 **A. Absolutely.**

2 **Q. Before working for Apex, you worked for BP,**
3 **British Petroleum, and although you started on BP's**
4 **offshore oil rigs, as we heard in your introduction, did**
5 **BP eventually assign you to some of their very own wind**
6 **turbines?**

7 **A. That they did.**

8 **Q. Did BP eventually assign you to a large wind**
9 **project in Kansas?**

10 **A. Yes, they did.**

11 **Q. Can you tell us about your experience?**

12 **A. Sure. So, for four years, I directly supported**
13 **the single largest wind farm in Kansas. It's located**
14 **about 43 miles south of Wichita. The site has**
15 **approximately 294 turbines and produces 470 megawatts of**
16 **power and has two substations. The footprint of the**
17 **project is approximately 100 square miles. So it's**
18 **five miles north and south from each turbine and 20 miles**
19 **east and west of each turbine. The site operated with**
20 **anywhere between 30 and 50 site technicians.**

21 **For part of my time, my family, wife, kids, dogs**
22 **lived inside the footprint of the wind farm in a rent**
23 **house that was less than a mile from the nearest turbine,**
24 **as did many of the site technicians who lived relatively**

1 close.

2 We lived out in the country as most people here
3 do. Right? But never once in that four years was there a
4 complaint of anyone working or any landowners having any
5 health-related issues during my duration there.

6 Q. So 294 turbines?

7 A. That's correct.

8 Q. With you -- and did you say 30 other people?

9 A. Yeah, between 30 and 50, on a daily basis, on the
10 site.

11 Q. Within a mile of the turbine?

12 A. Well, I mean not everyone lived inside the
13 confines, but we were all there five to six days a week at
14 the wind farm, and I lived within a mile of the turbine
15 for part of my duration there. Yes.

16 Q. Did you have any issues with any health?

17 A. No.

18 Q. No seizures? No memory loss?

19 A. No.

20 Q. Sleep deprivation? Anybody in your family?

21 A. No.

22 Q. Have you heard of anybody else who lived in a
23 similar situation as you having an issue?

24 A. No, ma'am.

1 **Q.** I am almost done. If you found out that there
2 was a wind farm moving or being developed in your area or
3 neighborhood, would you be moving away for fear of a
4 health impact?

5 **A.** **No. I would not.**

6 **Q.** Okay. Last two questions: Specifically for
7 Apex -- this question has been asked -- why is there no
8 medical professional -- I know we had our previous witness
9 -- but a medical professional here to testify?

10 **A.** My time at Apex, there has never been a pattern
11 or correlation established between any wind farms and
12 negative health effects that would require you to need to
13 have a medical professional on staff to address those
14 issues that pertain to the wind farm personnel or the
15 community at large.

16 **Q.** Thank you. My last question: If people do have
17 complaints, any kind of complaints -- I know we've been
18 over this before, but could you please just walk us
19 through one more time how people can get their complaints
20 heard and resolved?

21 **A.** Yeah, for sure. So there is a complaint
22 resolution process that is part of the ordinance. But
23 essentially how the process works is a member of the
24 community or landowner could call the hotline and make

1 that complaint or issue known.

2 They can also, in person, go talk with the
3 facility manager at the O&M building or contact one of the
4 numbers, phone numbers, that are posted at the O&M
5 building as well as posted at the substation. They make
6 their comment or issue known, and then a resolve process
7 is put in place to make sure that there is a resolution
8 for that, which would, per the ordinance, that would be
9 provided to the county.

10 Q. So an e-mail, a phone number?

11 A. Absolutely.

12 Q. Okay. Thank you.

13 A. You bet.

14 MS. SHAPIRO: No further questions.

15 MR. KAINS: All right. Thank you. All right.

16 Questions for Mr. Conley, first, from members of
17 the Planning & Development Committee?

18 Mr. Chairman?

19 EXAMINATION

20 BY MR. WATTS:

21 Q. Thank you. In your experience, how frequently,
22 say within a year's time, do you get emergency calls for
23 wind turbines for whatever reasons?

24 A. Whew, there's a lot of variables in that. One to

1 two times a year for emergencies. It depends on the
2 nature of the incident, right?

3 So, if it's a minor first aid, where an
4 individual gets a cut or scratch, I get notified. But as
5 far as major emergencies, hardly ever, rarely ever.

6 Q. And how frequently do the major emergencies, as
7 infrequently as they happen, involve the actual
8 maintenance or operation of the turbine itself?

9 A. I don't have an exact number, but it would be
10 extremely rare. I mean we have a substation outage that
11 wouldn't be, you know, in a situation where emergency
12 management is coordinated or anything along those lines.

13 Q. And a lot of the emergency personnel that you
14 showed on your screen --

15 A. Sure.

16 Q. -- was it volunteer groups?

17 A. That is correct. That is my understanding, yes,
18 with the exception of, I think, the emergency management
19 coordinator for Coles County.

20 Q. So, in your experience, how often have, you know,
21 local fire district people had to be involved in your
22 emergency activities in the past? What is the frequency?

23 A. Yeah. So, as far as their involvement, we try to
24 keep them engaged on a routine basis. We've had facility

1 managers attend, you know, their weekly, biweekly, or
2 monthly meetings as a participant.

3 If they have any questions with regard to the
4 operations, we try to get them out -- during some of those
5 sessions, we would try to bring them out to the wind farm,
6 and, once again, do a walkthrough of the substation, the
7 O&M building, take them to a turbine.

8 Obviously, we can't take them up-tower, but we
9 can take them to the turbine and explain how the turbine
10 works, how the operations works. So we try to stay fairly
11 involved with the fire protection districts.

12 Q. Part of the reason I am asking is that, you know,
13 with volunteer fire departments around here --

14 A. Yeah.

15 Q. -- a lot of the people are aging out, having
16 trouble finding people to fill those slots. Is that
17 possibly going to have an impact on the ability for there
18 to be a proper response to an emergency at the site if
19 it's developed?

20 A. So, from an Apex perspective, all we can do is
21 coordinate inside, you know, our operations. I can't
22 speak to, you know, how many firefighters they have or
23 don't have, or what their response looks like.

24 If there was a change in that, that response, a

1 change in personnel, obviously, we would try to coordinate
2 as much as possible to, you know, minimize any impact to
3 their department as well as our operations.

4 Q. And the reason for not developing the emergency
5 plan until further on in the project, is that because you
6 don't know yet where the turbines are going to be sited,
7 or are there a lot of other variables that haven't been
8 defined?

9 A. Yeah. So, sure. We provide an overview of what
10 is contained inside the emergency action plan. Depending
11 on the jurisdiction and the county, they are anywhere
12 between probably 35 and 50 pages long. But part of that
13 is that, if we produced one now, it could potentially be
14 obsolete if we change turbine styles or we use different
15 locations for the turbines as far as the response goes.

16 So the draft plan, to my understanding, and the
17 way the ordinance is written, is required to be in place
18 before the building permits, and so that we would
19 coordinate with them and, once again, receive their
20 feedback from any of the overview we've already provided.
21 Once we put the draft in place, we would review that as
22 well to make sure that there's no issues.

23 Q. Has there ever been a scenario where you've gone
24 into a project and you don't feel that the local emergency

1 abilities are adequate to support the project?

2 A. No. I have not, and that is one reason I
3 mentioned that, you know, a response to our operations is
4 not -- is typically not any different than a house call
5 that they would make. And I can provide the scenario of
6 that, if an individual were to get hurt on a tower, once
7 again, our technicians are trained in first aid, CPR, ADD,
8 and entire rescue, so we would get said individual from
9 the top of the turbine. So it's just like emergency
10 management making a house call to said individual to a
11 medical facility.

12 Q. Okay. Thank you.

13 A. You bet.

14 MR. KAINS: Thank you, Mr. Chairman.

15 Any questions from other members of the
16 committee?

17 Questions from members of units of local
18 government?

19 County board members?

20 School districts?

21 Mr. Johnson?

22 EXAMINATION

23 BY MR. DAVID JOHNSON:

24 Q. I think it was your second slide that you were

1 listing people you had spoken to. Maybe one more. There
2 you go.

3 A. Sure.

4 Q. Seven Hickory Township, you said you have spoken
5 with them?

6 A. I spoke with Bill Strode here on the very first
7 Monday night. He was here, present, and I spoke with him
8 during and after the meeting.

9 Q. I saw you talked to him that night. Were you
10 supposed to get back with him or anything?

11 A. I think there has been some e-mails that have
12 been sent back and forth for some sort of coordination.

13 Q. The reason I ask is he has been in contact with
14 me a couple of times, as of the latest today --

15 A. Okay.

16 Q. -- saying that he still has not heard anything.
17 So I don't know if we have an e-mail issue.

18 A. Possibly. I don't know that -- I mean I did have
19 a conversation with him.

20 Q. I saw it. I saw you have a conversation.

21 A. And I did commit to staying in contact with him.
22 I don't know why there has been a miscommunication.

23 Q. Just as of today he was still saying that he was
24 waiting for the safety packet so he could -- you know,

1 these guys are volunteer firefighters.

2 A. Yep.

3 Q. Something new and this big, they are terrified,
4 and I don't blame them. I would be too. It's just you've
5 got a great record and never had anything happen that goes
6 astray. But anytime you have something new and you are
7 not used to it --

8 A. Sure.

9 Q. -- then they are going to be. So, if we can get
10 that to them, that would be great.

11 A. Yeah. Absolutely. Once we get the draft
12 emergency action plan in place, I can coordinate with him
13 and make sure all the volunteer fire departments and
14 responding personnel would have a copy of that.

15 Q. Thank you.

16 A. You bet.

17 MR. KAINS: Mr. Conley, do you have this gentleman's
18 number from Seven Hickory?

19 THE WITNESS: I would have to go back and look through
20 my e-mails to see if I do have it.

21 MR. KAINS: Mr. Johnson, do you have the number of the
22 gentleman from Seven Hickory Township?

23 MR. JOHNSON: If I have enough battery left.

24 MR. KAINS: Okay. That is all right. All I am saying

1 is you two gentlemen, Mr. Conley and Mr. Johnson, talk
2 after tonight and then call him.

3 THE WITNESS: Absolutely.

4 MR. KAINS: Because that is the way to do it.

5 Mr. Shook?

6 MR. SHOOK: Thank you, sir.

7 MR. KAINS: Yes, sir.

8 EXAMINATION

9 BY MR. SHOOK:

10 Q. You and your other 30 folks, you guys union?

11 Are you union?

12 A. No, sir.

13 Q. And the other 30 are not union?

14 A. Are you talking the other 30 that worked at the
15 wind farm?

16 Q. Yes.

17 A. In Kansas, they were not.

18 Q. How about around here?

19 A. I don't know the status requirement for union and
20 nonunion employees on the site. I don't know what that
21 is.

22 Q. All right.

23 MR. KAINS: All right. Any other questions from
24 members of units of local government?

1 School districts?

2 County Board?

3 All right. Very good. Questions from interested
4 parties?

5 Members of the public, folks either opposed to
6 the application or neutral on the application?

7 Yes, sir. In the back, Mr. Smith, right?

8 MR. SMITH: Yes.

9 MR. KAINS: Terry Smith:

10 EXAMINATION

11 BY MR. SMITH:

12 Q. I just had a couple of questions. Do you use
13 fire districts that are in different counties?

14 I am just trying to figure out, like, where I
15 live on 1900 North, you didn't have Arcola's fire
16 department up there. I am sure they would be a whole
17 faster than Hindsboro, or Ashmore, or Seven Hickory.

18 A. Yeah. So the meeting that was coordinated would
19 with be with our public engagement personnel that are on
20 the site, site development, and should be the fire
21 protection districts that are inside the footprint of the
22 local wind farm.

23 Q. But it wasn't up here listed?

24 A. I don't have coordination on who was there and

1 **who wasn't there.**

2 **Q.** I am up here saying you were telling us how fast
3 and responsive your safety is.

4 **A.** **Sure.**

5 **Q.** I am telling you that going from Arcola to my
6 house is probably going to be faster than getting the
7 volunteer guys.

8 **A.** Well, through the development of the emergency
9 action plan, we would flush that out, to make sure that we
10 did have the most accurate and fastest response to any
11 incident within the wind farm.

12 **Q.** Okay. The other question I had was: We all
13 drive new vehicles, and their sensors and everything fail.
14 You get tire warnings, you get engines. You can't get
15 them to go off.

16 What happens if the brakes fail during a high
17 wind on these wind turbines?

18 **A.** **What happens if the brakes fail?**

19 **Q.** Yeah. I mean we talked about, you know, seeing
20 posts go around. Well, I've seen pictures of them on
21 fire, burning. What causes them to burn?

22 **A.** I don't know. Like I said in my presentation, I
23 don't know the circumstances of those turbines that
24 encountered that, how they were maintained, what the

1 manufacturer is, whether it was or wasn't done.

2 What I can tell you is that, if the turbine is
3 not operating properly, it is designed to fault out and
4 shut off so it doesn't tear itself up.

5 Q. So the sensors don't fail; is that what you are
6 saying?

7 A. They are not supposed to. There is multiple
8 redundancies.

9 Q. I know they are not supposed to fail. You are
10 saying they don't fail?

11 A. I am saying there is multiple redundancies built
12 in to prevent that as much as possible.

13 Q. Kind of like cars; I mean they still fail, but we
14 all have to live with them, correct?

15 A. Sure.

16 Q. Okay. That's all I have.

17 MR. KAINS: Thank you, Mr. Smith.

18 Mr. Conley, would you commit to getting in touch
19 with the Arcola Fire Department?

20 THE WITNESS: Absolutely.

21 MR. KAINS: Okay. And we will just put that on the
22 list of things to do.

23 MR. HESS: Yes, sir.

24 MS. SHAPIRO: That's my homework assignment.

1 MR. KAINS: Okay. That's Ms. Shapiro's homework, to
2 make sure you all get in touch with the Arcola Fire
3 Department because that sounds like a good idea that Mr.
4 Smith has.

5 Ms. Taylor, I think you had a hand up.

6 EXAMINATION

7 BY MS. MEG TAYLOR:

8 Q. My first question: You said that it's the wind
9 farm personnel who respond to the emergencies?

10 A. Initially, that is correct.

11 Q. They respond initially?

12 A. Sure.

13 Q. So, when there is an emergency, people of the
14 public, they normally call 911, correct?

15 A. Okay.

16 Q. So does 911, do they contact the wind personnel
17 then? How does that work?

18 A. No. So, if there is an incident onsite, then the
19 site technicians would report through their supervisor or
20 line management, safety personnel, like myself included.

21 If the incident would require medical attention
22 beyond what these guys are trained for, then they are
23 instructed to call 911.

24 Q. Okay. Okay. Could you explain -- so you said

1 there is going to be one local staff always on call in a
2 location. What location is that?

3 A. So the local staff, the way that I understand the
4 project design, it is expected to have ten full-time
5 personnel, give or take. You know, the site technicians,
6 they work out of the operations and maintenance building
7 for the project.

8 Q. Can you tell me where that building is located
9 within this project?

10 A. I would have to look at the map to see exactly
11 where the O&M building is located. It should be marked on
12 the map, though.

13 Q. Could you explain -- which maybe you can't -- but
14 could you explain the response from that location to the
15 farthest turbine in the area?

16 A. Right now, I cannot until I know exactly which
17 turbines are being built and what the locations are going
18 to be. Through the development of the emergency action
19 plan, that is something we would explore. The response
20 time, (1) from the respective fire district that the
21 turbines are located in, as well as from the operations
22 and maintenance building to that turbine.

23 So until more details are brought about the
24 project, once again, what turbine we use, exactly where

1 they are located, that is built into the emergency action
2 plan. Turbine locations, GPS locations for the turbines,
3 all that information is provided to local emergency
4 management.

5 Q. If he knows the answer, are they allowed to say
6 the answer, or are only you?

7 MR. KAINS: Okay. Who do you want to answer the
8 question?

9 MS. TAYLOR: I am just wondering. He turned and said
10 he knows. Is there someone that could say where the
11 building -- emergency response building will be?

12 MR. KAINS: Let's have Mr. Moore address that.

13 And if you could, stand and project your voice,
14 please.

15 MR. MOORE: I was just saying, after the -- when we
16 are done, I can point it out to you on the map.

17 MS. TAYLOR: Are you able to tell me how far -- the
18 response time from that building to the farthest turbine
19 in the area?

20 MR. MOORE: No, for the same reasons that Mr. Conley
21 had.

22 BY MS. TAYLOR:

23 Q. I guess I am not understanding the reason. What
24 is the reason?

1 You can't locate the building?

2 A. No, no, no. So the building is not in place yet.
3 I mean, if we wanted to put a GPS marker on the expected
4 location from the building and then track that time to the
5 nearest emergency response, we could absolutely do that.
6 We typically don't do that until the emergency response
7 plan is being built out because we would include the
8 operations and maintenance building, the substation, and
9 all the turbines, and their GPS locations, and then we map
10 out what those response times look like and coordinate
11 that with the local responders.

12 Q. Right. I am asking because with a small town,
13 like Oakland, you have your localized -- because they are
14 much quicker to respond to you. I live in Oakland, and so
15 Charleston wouldn't be the first to respond to me.

16 A. Sure.

17 Q. That is why I am asking that. I am trying to get
18 the connection there.

19 A. Yeah. Right now I do not have that time, but it
20 will be marked in the emergency action plan with regard to
21 where the locations are, and then we would flush out what
22 those times look like with emergency responders
23 coordinating a drill or coordinating walkthroughs, as I
24 mentioned.

1 **Q.** Are there any specified response times that you
2 have to keep it within? You know, we can't exceed so
3 many minutes to get to someone. Are there any
4 specifications of response times?

5 **A.** There is no industry standards. We do it as fast
6 as we can and as safe as we can.

7 **Q.** That is relative, you know. If you are the one
8 having an emergency, your response time is relative.

9 **A.** Well, I mean it depends on the type of emergency
10 and where the response is coming from. So until we have
11 those details of, once again, where the locations are,
12 where the O&M building to the nearest facility is going to
13 be, I don't know what those times are going to look like.

14 What I can tell you is they are going to be as
15 fast as reasonably possible.

16 **Q.** Okay. My next question: You said that for part
17 of the time that you worked for BP, I believe it was, that
18 you lived within this wind turbine farm?

19 **A.** That's correct.

20 **Q.** You said part of the time. Can you expound on
21 how long?

22 **A.** We lived -- I lived in Kansas for one year.

23 **Q.** One year within the turbine?

24 **A.** No, no, no. Probably eight months of that

1 **timeframe inside the area of the wind farm.**

2 **Q. So for eight months, and you said you lived in a**
3 **rental house?**

4 **A. That's right.**

5 **Q. So did the company own that or did you?**

6 **A. I did.**

7 **Q. So you were responsible for selling the rental**
8 **house when you were done?**

9 **A. So I rented it out until we found a place to**
10 **live. And so, when I first moved to Kansas for BP, I had**
11 **a rent house. I lived in the rent house for eight months**
12 **approximately and then moved to a different area.**

13 **Q. Okay. So you were not responsible for finding**
14 **new tenants or selling the home?**

15 **A. No. I was not.**

16 **Q. You personally were not responsible?**

17 **A. I was not.**

18 **Q. Okay. I am asking because it was pointed out,**
19 **you know, that we have a difference in, I guess, opinion**
20 **if you are receiving money or -- obviously, you were**
21 **employed by the company. So your opinion of an**
22 **inconvenience would be different than someone who is not**
23 **employed by the company?**

24 **A. That's about perspective. I can't speak to how**

1 **other people feel about a wind farm.**

2 **Q.** One of your prior experts said that the people
3 receiving money had less of an adverse effect or less of
4 an annoyance than those that were not.

5 So, obviously, if you were employed, that would
6 create a difference than someone, average people like us,
7 who are just living within the area. You are employed
8 with the company.

9 **A.** **That is where I work.**

10 **Q.** Okay. Okay. You said that there was no injury
11 within the past two months. Could you tell us what about
12 the past six months? The past year? Can you go out to
13 the past five years?

14 **A.** **I am talking -- so that is in context with**
15 **regards to the Prosperity Wind being built in Piatt**
16 **County. For the last two months there have been no**
17 **injuries to personnel reported at that project.**

18 **Q.** Okay. Prosperity Wind, is that different than
19 Apex then?

20 **A.** **So, Prosperity Wind is the project that we are**
21 **constructing, developed and constructing, and plan to**
22 **operate in Piatt County.**

23 **Q.** Okay. Could you give us numbers farther out than
24 two months?

1 **A. That could be retrieved.**

2 **Q. But you can't state it now?**

3 **A. I don't have it off the top of my head. No.**

4 **Q. Not even a guess?**

5 **A. That is not a project -- so that project is**
6 **currently under construction. My purview for the company**
7 **is operations with regards to safety.**

8 **MR. KAINS:** So it would have to be operating for you
9 to be involved in it?

10 **THE WITNESS:** That's correct.

11 **MR. KAINS:** And it is just being built right now?

12 **THE WITNESS:** That is correct.

13 **BY MS. TAYLOR:**

14 **Q. So have you worked with any where they have been**
15 **operating?**

16 **A. Any wind farm that's currently operating? Yes.**
17 **I currently support eight wind projects across the United**
18 **States that are operating.**

19 **Q. Could you give us some numbers of injuries within**
20 **those?**

21 **A. Not off the top of my head, but I could pull that**
22 **data.**

23 **MR. KAINS:** Ms. Shapiro, you have homework.

24 **MS. SHAPIRO:** It's written down.

1 BY MS. TAYLOR:

2 Q. I am not sure if you -- it's kind of fuzzy who we
3 are supposed to ask the question, but the nondisclosure
4 agreement, you said within your complaint resolution
5 process that it was so minimal, almost nonexistent, people
6 filing complaints; but did those include people that have
7 signed these nondisclosure agreements?

8 A. That information, I do not know if they did or
9 did not sign nondisclosure agreements.

10 Q. Wouldn't that affect the outcome of the question
11 that I am asking?

12 If you signed a nondisclosure agreement, then you
13 are unable to pose a complaint?

14 A. So it is my understanding, and under previous
15 conversation testimony, that the nondisclosure is related
16 to the financial compensation of that person. As with
17 regards to incidents, injuries, and things of those
18 nature, I don't know what is included in the agreements.

19 Q. So are the people that sign those agreements
20 allowed to voice complaints or health complaints, like she
21 brought up? Are those people who have signed those
22 documents, are they presenting these complaints or health
23 issues?

24 A. It would be my presumption, if there is

1 health-related issues that they could voice that. Yes.

2 Q. Even if they have signed a nondisclosure
3 agreement?

4 A. Once again, I do not know the nature of the
5 nondisclosure agreement. But what I can tell you is that,
6 if somebody had an issue, they should report it.

7 Q. Will the public be made aware of what is within
8 these nondisclosure agreements?

9 MR. HESS: I would respectfully object, Mr. Kains. I
10 mean this entire line of questioning is beyond the scope
11 of safety, and we've already covered the Participating
12 Neighbor Agreements are in the binder. We've gone over
13 this.

14 MR. KAINS: I am going to sustain the objection, but I
15 am going to ask you this question, Mr. Hess:

16 Does the nondisclosure agreement relate to the
17 amount of lease payments that are being paid to a
18 participant?

19 MR. HESS: The limits on what you can disclose are
20 only the financial terms; that's it.

21 MR. KAINS: So then, if somebody has a complaint,
22 somebody has an injury, somebody has an illness, that's
23 not subject to the nondisclosure?

24 MR. HESS: Correct.

1 MR. KAINS: So people can talk about everything except
2 the amount of money they are getting?

3 MR. HESS: Absolutely. Yes, sir.

4 MR. KAINS: Then that makes sense.

5 Does that help, Ms. Taylor?

6 MS. TAYLOR: Will they lose the money they are
7 receiving if they voice those complaints?

8 MR. KAINS: I don't know the answer to that.

9 But as an attorney, I know that there's -- that
10 is not going to happen. You know, if there is a
11 nondisclosure agreement, the agreement would be specific
12 to -- and I haven't seen their agreement, but it would be
13 the terms, the financial terms, and they would not be
14 prohibited from saying anything, and it wouldn't terminate
15 that agreement.

16 MS. SHAPIRO: That's correct. The short answer is no.
17 Okay. They can voice their complaints, and they will not
18 lose the agreement that they have with Apex.

19 MR. KAINS: Thank you, Ms. Shapiro.

20 Ms. Taylor, do you have something else?

21 Oh, do you have something else?

22 MR. HESS: Well, I was just going to state for the
23 record -- since it has been a while since we covered this
24 the first night -- those agreements are in Appendix B,

1 specifically Appendix B4 and B5 of the binder of the
2 application. So they have been submitted. They are
3 publicly available. Everyone can see them.

4 MR. KAINS: Is it on the website, Mr. Lockhart?

5 MR. LOCKHART: It is.

6 MR. KAINS: B4 and B5?

7 MR. HESS: Yes, sir.

8 MR. KAINS: All right. Go ahead, Ms. Taylor.

9 BY MS. TAYLOR:

10 Q. Pertaining to the complaints about sound, can you
11 tell us the frequency of complaints, you know, how many
12 you receive in a year? One complaint? Two? Three?
13 Three times a month?

14 A. During my career or during my time with Apex?
15 Because it's none. I don't know of any complaints. I am
16 under -- it's no complaints under normal operating
17 conditions with regards to the turbines.

18 Now, once again, if the turbine is making a sound
19 or doesn't sound right, like it's got a thumping sound
20 that sounds weird, as an example, then we have had, not a
21 complaint, but we've had people from the community notify
22 us that something didn't sound right. The turbine was
23 shut off. The technicians went to the turbine to perform
24 inspections and did maintenance on that piece of equipment

1 to get it operating properly.

2 Q. So that is a matter of semantics. I mean they
3 are letting you know that would be a complaint that it's
4 not sounding correct. Okay.

5 But could you give us a number, within a year,
6 how many complaints about the nonnormal sounds that you
7 receive?

8 A. I don't have a number off the top of my head.
9 It's just an instance that it has happened, so at least
10 once. But an exact number, I don't have.

11 Q. So once a year, most likely?

12 A. I don't have an exact number.

13 Q. Okay. I believe I am almost there.

14 You said that -- could you just tell us the five
15 core values?

16 I know that you outlined one. Could you tell us
17 what the five are again?

18 A. Oh, you are putting me on the spot.

19 MR. KAINS: There goes your Christmas bonus,
20 Mr. Conley. Mr. Apex is going to want you to know this
21 stuff.

22 THE WITNESS: I know. I am going to get in trouble
23 here.

24 So safety, entrepreneurship, professionalism,

1 integrity, sustainability. These are Apex's five core
2 values.

3 MS. TAYLOR: Thank you, sir.

4 THE WITNESS: You bet.

5 MR. KAINS: Thank you for your questions, Ms. Taylor.

6 I just need a show of hands to see who still has
7 questions for this witness.

8 Okay. One, two, three, four, five, six, seven.

9 Mr. Conley, are you able to come back tomorrow
10 evening?

11 THE WITNESS: Yes, sir, I am.

12 MR. KAINS: I am sure your family in Oklahoma misses
13 you, but you've got to be in Charleston, Illinois,
14 tomorrow night.

15 THE WITNESS: No problem.

16 MR. KAINS: All right.

17 Okay. Tomorrow evening we will first take up
18 questions from the public for Mr. Kaliski. And then,
19 after that, then counsel for the county will have
20 questions for Mr. Kaliski, and we'll finish his questions.

21 And then we'll have -- finish questions for
22 Mr. Conley.

23 And then you have two more subject matter
24 witnesses?

1 MR. HESS: Yes, sir. So we have our decommissioning
2 expert, which will be relatively brief, and then Adam
3 Carlson, our construction manager, who will talk about
4 construction, have a presentation a little bit briefer
5 than Mr. Conley's.

6 MR. KAINS: I don't know if we are going to get
7 through everybody tomorrow night, but we get to be here
8 Thursday as well.

9 So, with that, we have kind of a roadmap for what
10 tomorrow is going to look like: Questions for
11 Mr. Kaliski, questions for Mr. Conley, and then additional
12 witnesses on decommissioning and construction.

13 And whoever doesn't get to go tomorrow night will
14 be held over for Thursday night.

15 And then Thursday night we will hopefully start
16 with questions -- or with testimony and evidence from
17 members of the public.

18 All right. With that said, Mr. Keyt, do you have
19 anything else?

20 MR. KEYT: Not at this time.

21 MR. KAINS: Not at this time. All right.

22 Counsel?

23 MR. HESS: No, sir. Thank you.

24 MR. KAINS: All right. Ladies and gentlemen, thank

1 you.

2 The Planning & Development Committee of the Coles
3 County Board is in recess until tomorrow night at six
4 o'clock p.m., in this very room in the courthouse on
5 Jackson.

6 (HEARING IN RECESS UNTIL 4/16/2025 AT 6:00 P.M.)
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I, MARY DIANE HOLLY MATTHEWS, an Official Court Reporter for the Sixth Judicial Circuit of Illinois, do hereby certify that the foregoing Report of Proceedings, consisting of Pages 1 to 129, inclusive, was reported in machine shorthand by me and is a true, correct, and complete transcript of my machine shorthand notes so taken at the time and place hereinabove set forth to the best of my ability.

Dated: 5/9/2025

\$	20,000 [3] - 28:17, 41:11, 41:22	5	A	addition [1] - 31:22
\$150 [1] - 5:8	2014 [7] - 4:13, 4:24, 5:6, 5:18, 35:2, 41:4, 46:5	5 [2] - 45:21	a-weighted [3] - 21:17, 29:11, 73:13	additional [5] - 25:9, 27:17, 36:14, 80:17, 128:11
'		5/9/2025 [1] - 130:24	a.m [1] - 29:8	address [9] - 15:4, 34:5, 88:20, 91:1, 93:16, 95:21, 97:15, 102:13, 116:12
'22 [1] - 48:3	2015 [1] - 4:20	50 [4] - 73:10, 100:20, 101:9, 106:12	abbreviated [2] - 8:14, 8:15	addressed [1] - 52:21
0	2016 [3] - 48:4, 49:4, 50:4	51 [3] - 2:3, 25:16, 25:19	abilities [1] - 107:1	addressing [1] - 94:16
0 [1] - 21:16	2017 [1] - 78:2	52 [2] - 2:3, 23:16	ability [2] - 105:17, 130:10	adequate [1] - 107:1
084-003888 [2] - 1:23, 130:21	2019 [2] - 38:19, 38:23	54 [1] - 2:4	able [16] - 4:8, 4:14, 33:8, 35:12, 41:13, 41:17, 54:2, 62:11, 64:11, 82:16, 82:24, 83:6, 84:17, 116:17, 127:9	administration [1] - 12:21
1	202 [1] - 46:1	55 [1] - 22:2	absence [1] - 67:17	admit [1] - 16:21
1 [10] - 27:15, 28:2, 30:11, 31:4, 34:4, 54:15, 115:20, 130:6	2022 [5] - 18:15, 46:10, 48:3, 50:4, 79:2	58 [1] - 2:4	absolutely [8] - 89:17, 100:1, 103:11, 109:11, 110:3, 113:20, 117:5, 124:3	adults [7] - 65:21, 65:22, 66:3, 66:14, 66:20, 66:21, 70:1
1,000 [4] - 31:5, 72:11, 72:12	2023 [3] - 44:4, 45:18, 46:5	6	academic [1] - 64:17	advanced [1] - 84:15
1,043 [1] - 39:6	2024 [1] - 82:12	6 [1] - 30:21	accept [4] - 14:24, 15:2, 15:8	adverse [11] - 35:1, 35:20, 37:17, 46:7, 50:6, 50:9, 50:11, 50:20, 50:23, 70:22, 120:3
10 [1] - 47:23	2025 [3] - 1:4, 35:6, 37:10	60 [4] - 22:1, 22:3, 47:15, 47:19	access [6] - 35:9, 35:10, 62:7, 84:12, 85:12, 89:17	adversely [1] - 34:16
10-decibel [1] - 21:11	24 [1] - 87:23	600 [2] - 45:20, 98:16	accident [2] - 91:8, 91:13	aerial [1] - 27:7
100 [5] - 5:8, 5:13, 21:23, 61:4, 100:17	294 [2] - 100:15, 101:6	611 [1] - 94:6	account [2] - 24:3, 25:10	aerodynamic [3] - 22:17, 22:23, 23:1
103 [1] - 2:6	3	61400-11 [1] - 23:7	accumulate [1] - 86:11	affect [2] - 72:20, 122:10
107 [1] - 2:7	3 [1] - 45:9	62 [2] - 25:15, 55:23	accumulated [2] - 7:17, 49:10	affected [1] - 75:5
10:00 [1] - 29:8	30 [8] - 21:23, 58:6, 100:20, 101:8, 101:9, 110:10, 110:13, 110:14	63 [2] - 30:21, 55:21	accurate [1] - 112:10	affects [1] - 71:21
11 [4] - 2:2, 2:2, 20:24, 40:8	31 [1] - 29:15	65 [3] - 2:5, 55:16, 55:20	accurately [1] - 89:11	affirmatively [1] - 89:1
110 [1] - 2:7	31.5 [6] - 30:19, 30:22, 55:1, 55:13, 55:16, 55:20	662 [1] - 46:2	Acoustic [2] - 20:23, 22:6	afforded [1] - 76:2
111 [1] - 2:8	32 [2] - 30:24, 31:3	69 [2] - 30:20, 55:3	Acoustical [2] - 39:17, 42:14	afternoon [1] - 36:15
111-1 [2] - 13:7, 23:23	34 [1] - 62:18	6:00 [2] - 75:23, 129:6	acoustics [2] - 12:5, 20:14	age [2] - 70:9, 70:12
1135 [1] - 40:3	35 [1] - 106:12	6:30 [2] - 1:5, 3:1	ACP [2] - 13:7, 23:22	aging [1] - 105:15
114 [1] - 2:8	35,000 [1] - 59:2	7	action [15] - 79:6, 79:8, 79:15, 82:8, 83:6, 83:13, 83:19, 89:22, 92:9, 106:10, 109:12, 112:9, 115:18, 116:1, 117:20	agree [3] - 15:5, 15:9, 68:4
12 [2] - 21:14, 47:23	364 [1] - 87:24	7 [4] - 23:21, 76:18, 76:20, 87:23	actions [1] - 90:7	agreement [13] - 74:10, 74:19, 93:8, 122:4, 122:12, 123:3, 123:5, 123:16, 124:11, 124:12, 124:15, 124:18
129 [1] - 130:6	37 [2] - 54:16, 54:24	70 [2] - 55:13, 55:15	activities [1] - 104:22	Agreements [6] - 5:9, 5:11, 5:13, 5:17, 5:23, 123:12
130 [1] - 21:20	38 [1] - 21:24	700 [1] - 59:3	Activity [1] - 13:1	agreements [8] - 74:8, 74:16, 122:7, 122:9, 122:18, 122:19, 123:8, 124:24
140 [2] - 21:16, 21:21	39 [4] - 12:6, 14:4, 31:9, 72:15	75 [3] - 29:15, 55:1, 73:11	actual [4] - 29:21, 52:1, 59:16, 104:7	agricultural [3] - 27:9, 27:18, 27:24
1488 [3] - 7:16, 7:24, 8:2	4	77 [2] - 2:5, 2:6	Adam [1] - 128:2	ahead [9] - 11:7, 19:6, 19:15, 31:10, 37:7, 64:1, 81:4, 97:1, 125:8
15 [3] - 1:4, 14:8, 60:10	4 [3] - 8:1, 52:17, 52:18	79 [2] - 54:17, 54:24	add [4] - 25:9, 25:11, 56:13, 76:22	aid [4] - 70:4, 84:16, 104:3, 107:7
16 [1] - 76:20	4/16/2025 [1] - 129:6	7:00 [1] - 29:8	ADD [2] - 84:16, 107:7	
16,000 [1] - 29:4	40 [3] - 22:1, 29:16, 99:13	7:48 [2] - 60:9, 60:10		
16th [2] - 76:16, 76:17	41 [4] - 31:5, 31:8, 32:13, 32:23	8		
17 [6] - 3:21, 16:8, 22:6, 31:23, 32:5, 45:10	43 [1] - 100:14	8 [5] - 29:16, 30:23, 31:3, 40:11, 58:14		
18 [2] - 29:5, 78:4	45 [1] - 73:14	8,000 [1] - 31:1		
1900 [1] - 111:15	46 [1] - 73:15	80 [1] - 73:11		
2	470 [1] - 100:15	9		
2 [7] - 25:9, 25:11, 30:8, 30:9, 32:6, 32:18, 72:15	48 [1] - 23:15	9 [3] - 29:6, 29:7, 54:11		
20 [5] - 26:20, 28:17, 41:11, 41:12, 100:18	49-turbine [1] - 4:19	90 [1] - 22:4		
		911 [3] - 114:14, 114:16, 114:23		
		9613-2 [4] - 13:9, 13:11, 13:20, 23:22		
		9:08 [1] - 1:5		

air [2] - 21:24, 22:24
air-conditioning [1] - 21:24
Alan [2] - 82:1, 82:5
Alan's [1] - 82:1
Alex [1] - 1:10
allegiance [1] - 3:7
ALLEGIANCE [1] - 3:8
Alley [1] - 90:3
allow [7] - 18:1, 18:8, 18:20, 19:1, 29:16, 29:22, 65:11
allowed [5] - 18:17, 61:14, 61:16, 116:5, 122:20
allows [3] - 26:21, 81:19, 86:6
almost [6] - 45:2, 73:19, 78:4, 102:1, 122:5, 126:13
aloft [1] - 24:12
alone [1] - 92:1
alternative [1] - 28:5
America [3] - 39:18, 42:14, 78:1
American [1] - 13:6
amount [4] - 6:7, 57:21, 123:17, 124:2
Amy [1] - 1:13
analyses [2] - 34:2, 78:20
AND [1] - 1:1
Anderson's [1] - 81:23
Andrew [1] - 1:9
annex [2] - 13:13, 26:24
annoyable [1] - 52:21
Annoyance [2] - 46:12, 48:20
annoyance [50] - 8:22, 9:5, 9:6, 17:9, 34:23, 35:20, 37:15, 37:22, 37:24, 38:1, 38:11, 38:14, 38:17, 38:24, 39:2, 39:14, 40:2, 47:8, 47:12, 48:17, 49:15, 50:8, 50:23, 52:18, 52:23, 52:24, 53:2, 53:22, 53:24, 56:22, 57:8, 57:9, 57:10, 57:17, 57:18, 58:7, 59:6, 67:23, 68:1, 68:5, 68:6, 68:11, 69:1, 69:16, 69:18, 69:21, 69:22, 120:4
annoyances [4] - 52:13, 52:15, 53:7, 53:23
annoyed [27] - 9:1,

39:9, 39:10, 39:24, 40:5, 40:8, 40:9, 40:12, 40:16, 40:17, 40:23, 47:3, 47:4, 47:5, 47:6, 53:8, 53:13, 53:19, 57:12, 57:15, 58:2, 58:4, 58:5, 69:4, 69:6, 75:1
annoying [2] - 56:4, 58:7
annually [1] - 85:3
anonymous [1] - 74:21
ANSI [4] - 13:6, 13:7, 13:16, 13:20
answer [10] - 50:22, 55:4, 57:19, 65:8, 66:3, 116:5, 116:6, 116:7, 124:8, 124:16
answering [1] - 74:20
answers [2] - 10:4, 10:5
ANTONIOLLI [20] - 4:17, 10:8, 10:23, 11:2, 11:8, 11:10, 16:20, 17:3, 19:10, 19:16, 20:1, 20:5, 36:7, 36:21, 37:9, 50:13, 50:17, 60:16, 61:8, 65:7
Antoniolli [5] - 1:13, 10:24, 19:6, 37:7, 60:14
ANTONIOLLI..... [1] - 2:2
anytime [1] - 109:6
Apex [42] - 3:4, 4:21, 5:4, 5:12, 5:13, 5:16, 5:18, 5:21, 5:24, 6:1, 6:3, 26:10, 26:16, 27:4, 52:2, 77:13, 78:11, 78:14, 79:2, 79:13, 81:11, 87:16, 88:3, 89:2, 90:17, 93:21, 94:1, 94:15, 95:1, 95:5, 95:15, 98:3, 98:15, 100:2, 102:7, 102:10, 105:20, 120:19, 124:18, 125:14, 126:20
Apex's [1] - 127:1
apologize [1] - 41:1
appearance [1] - 76:22
appendix [1] - 29:11
Appendix [6] - 20:6, 20:22, 21:3, 22:5, 124:24, 125:1

apple [1] - 64:7
applicant [3] - 10:5, 10:12, 10:15
Applicant [3] - 1:12, 11:4, 77:3
Application [1] - 20:2
APPLICATION [1] - 1:1
application [9] - 3:5, 19:19, 20:3, 20:7, 20:18, 63:17, 111:6, 125:2
Applied [1] - 44:7
apply [2] - 35:24, 50:22
applying [1] - 28:4
appreciate [5] - 58:21, 63:15, 63:16, 63:19
approach [2] - 20:3, 81:19
approached [1] - 33:16
APRIL [1] - 1:4
Arcola [3] - 112:5, 113:19, 114:2
Arcola's [1] - 111:15
area [20] - 14:22, 26:20, 27:6, 27:8, 32:11, 37:1, 42:17, 65:24, 70:13, 72:19, 73:17, 79:24, 89:21, 97:10, 102:2, 115:15, 116:19, 119:1, 119:12, 120:7
areas [6] - 16:5, 66:12, 72:23, 72:24, 79:22, 93:13
argue [1] - 15:5
array [1] - 25:17
article [2] - 44:10, 45:17
Arts [1] - 11:17
Ashmore [1] - 111:17
aspects [3] - 41:5, 81:24, 90:22
assign [2] - 100:5, 100:8
assignment [1] - 113:24
assist [1] - 84:17
assistance [1] - 90:14
Associated [1] - 48:21
associated [9] - 7:18, 34:22, 47:11, 49:11, 52:19, 85:10, 92:2, 92:22, 94:18
association [1] - 35:16
assume [3] - 25:4, 32:20, 62:4

assumed [1] - 32:14
assumes [1] - 31:11
assumptions [2] - 23:19, 25:11
assure [1] - 98:3
astray [1] - 109:6
AT [1] - 129:6
Athena [1] - 1:14
Atkinson [1] - 4:3
attached [3] - 19:18, 20:23, 27:13
attend [2] - 33:8, 105:1
attended [1] - 20:17
attending [1] - 33:8
attention [1] - 114:21
attenuate [1] - 55:10
attenuation [2] - 24:17, 24:18
attitude [2] - 40:13, 40:14
attitudes [3] - 37:23, 38:9, 39:13
attorney [1] - 124:9
Attorney [1] - 1:12
Attorneys [1] - 1:9
audibility [1] - 39:2
audible [2] - 41:20, 42:24
audience [1] - 48:11
audiologist [1] - 70:23
author [1] - 20:11
authored [2] - 46:10, 64:18
authority [1] - 94:8
authors [4] - 15:3, 15:12, 16:1
available [4] - 9:15, 36:12, 60:15, 125:3
avenue [1] - 97:18
average [5] - 23:3, 45:9, 57:10, 72:14, 120:6
aversions [1] - 24:21
aware [15] - 35:2, 38:14, 42:9, 48:16, 71:13, 71:15, 71:16, 71:20, 94:19, 96:1, 96:2, 96:4, 96:12, 96:24, 123:7

B

B4 [2] - 125:1, 125:6
B5 [2] - 125:1, 125:6
Bachelor [3] - 11:16, 11:18, 77:17
bachelor's [2] - 18:22, 18:23
background [9] -

11:15, 12:1, 23:17, 49:8, 72:18, 77:15, 77:17, 78:3, 78:4
ballast [1] - 56:11
band [2] - 28:14, 29:9
bands [1] - 30:11
barn [1] - 27:11
barns [1] - 32:15
barriers [1] - 84:22
base [1] - 23:14
based [4] - 44:5, 46:3, 49:3, 50:2
basis [3] - 21:22, 101:9, 104:24
bass [6] - 29:19, 29:20, 29:21, 29:24, 54:16, 54:22
batch [1] - 91:10
bats [1] - 41:24
battery [1] - 109:23
beach [1] - 41:18
became [2] - 4:19, 6:2
begin [1] - 61:14
beginning [4] - 3:20, 33:11, 46:20, 48:7
begins [2] - 20:24, 22:6
behalf [1] - 78:15
below [11] - 30:13, 30:15, 30:21, 31:3, 32:24, 33:5, 41:12, 55:18, 55:19, 72:15, 73:15
bend [1] - 24:12
bends [1] - 24:10
benefit [1] - 53:17
benefits [2] - 44:17, 45:12
Berkeley [7] - 17:7, 18:10, 18:11, 18:13, 38:18, 39:6, 44:9
Berkley [1] - 46:15
berms [1] - 24:16
best [4] - 10:4, 31:14, 88:10, 130:9
best-in-class [1] - 88:10
bet [9] - 36:23, 63:22, 84:1, 86:21, 103:13, 107:13, 109:16, 127:4
better [2] - 21:3, 87:16
between [24] - 15:11, 21:23, 23:15, 27:8, 28:17, 35:16, 41:11, 47:23, 59:4, 66:2, 66:21, 69:15, 69:22, 70:1, 71:17, 73:5, 73:11, 75:4, 80:7, 91:10, 100:20,

101:9, 102:11, 106:12 beyond [2] - 114:22, 123:10 big [1] - 109:3 bigger [1] - 44:14 Bill [2] - 83:6, 108:6 binder [2] - 123:12, 125:1 biological [1] - 18:23 Biology [1] - 11:17 biology [1] - 11:22 biostatistics [1] - 11:22 bit [8] - 21:6, 21:15, 26:2, 27:21, 33:14, 63:22, 69:12, 128:4 bite [1] - 64:7 biweekly [1] - 105:1 blade [1] - 22:11 blades [7] - 22:11, 22:18, 22:24, 47:17, 86:10, 86:11, 86:12 blame [1] - 109:4 blasting [1] - 41:15 blessed [1] - 62:17 blue [1] - 8:8 board [9] - 12:6, 12:14, 12:16, 12:22, 36:10, 54:8, 58:11, 76:9, 107:19 Board [17] - 1:15, 12:20, 12:23, 27:22, 28:1, 28:3, 28:13, 29:2, 30:22, 33:3, 52:4, 60:1, 76:14, 76:20, 77:23, 111:2, 129:3 Bob [1] - 33:17 bodies [1] - 19:21 bold [1] - 30:13 bonus [1] - 126:19 boom [2] - 63:18, 63:21 Borgman [2] - 62:1, 62:16 BORGMAN [2] - 62:2, 62:15 Boston [1] - 33:18 bottom [1] - 9:5 box [1] - 22:12 BP [5] - 100:2, 100:5, 100:8, 118:17, 119:10 BP's [1] - 100:3 brakes [2] - 112:16, 112:18 bread [1] - 82:17 break [3] - 60:4, 60:8, 60:9	breaker [1] - 87:20 Brian [1] - 1:11 brief [3] - 21:3, 81:7, 128:2 briefe [1] - 128:4 briefly [1] - 22:7 bring [2] - 5:1, 105:5 bringing [1] - 84:6 British [1] - 100:3 broadband [1] - 22:19 broke [1] - 82:17 brought [9] - 42:20, 43:1, 62:5, 88:21, 95:10, 96:4, 99:21, 115:23, 122:21 build [1] - 44:21 building [19] - 55:10, 78:19, 87:3, 103:3, 103:5, 105:7, 106:18, 115:6, 115:8, 115:11, 115:22, 116:11, 116:18, 117:1, 117:2, 117:4, 117:8, 118:12 buildings [1] - 24:17 built [15] - 6:2, 6:5, 25:16, 40:16, 85:22, 86:17, 89:4, 90:1, 90:8, 113:11, 115:17, 116:1, 117:7, 120:15, 121:11 built-in [2] - 85:22, 86:17 bunch [1] - 64:16 burn [1] - 112:21 burning [1] - 112:21 business [5] - 4:22, 81:14, 81:15, 90:23 buy [2] - 5:17, 5:18 BY [35] - 2:2, 2:3, 2:3, 2:4, 2:4, 2:5, 2:6, 2:6, 2:7, 2:7, 2:8, 2:8, 11:10, 20:5, 37:9, 51:7, 51:13, 52:11, 54:13, 58:16, 65:19, 66:12, 71:12, 77:7, 81:6, 97:4, 103:20, 107:23, 110:9, 111:11, 114:7, 116:22, 121:13, 122:1, 125:9	7:2, 8:23, 9:6, 48:4, 48:17, 49:4, 49:18, 50:4, 51:23 cannot [3] - 86:13, 89:7, 115:16 capabilities [2] - 87:21, 88:5 cardiac [2] - 68:17, 72:8 care [1] - 35:7 career [2] - 62:21, 125:14 Carlson [1] - 128:3 cars [1] - 113:13 case [5] - 10:13, 24:8, 30:16, 72:13 caused [1] - 55:7 causes [2] - 8:21, 112:21 causing [5] - 56:8, 94:24, 95:2, 95:6, 95:11 cellphone [2] - 91:20, 92:9 center [2] - 87:13, 87:16 CERTAIN [1] - 1:2 certain [2] - 23:12, 53:12 certainly [12] - 10:1, 27:10, 53:18, 58:7, 63:15, 63:20, 67:3, 68:22, 69:17, 69:18, 71:21, 72:2 certificates [1] - 12:10 Certification [1] - 12:21 certification [3] - 12:22, 77:23, 78:1 Certified [1] - 77:24 certified [2] - 12:14, 12:16 certify [1] - 130:5 Chair [1] - 12:24 Chairman [3] - 3:14, 51:5, 63:12 chairman [4] - 3:17, 52:7, 103:18, 107:14 CHAMPAIGN [1] - 130:1 chance [2] - 4:9, 60:23 change [3] - 105:24, 106:1, 106:14 changes [1] - 15:8 Charleston [3] - 82:13, 117:15, 127:13 chart [1] - 21:15 check [2] - 66:8, 66:11 Chief [1] - 83:3	children [16] - 65:20, 65:23, 66:2, 66:6, 66:8, 66:14, 66:19, 66:21, 66:24, 67:4, 70:2, 72:3, 72:23, 72:24 Christmas [1] - 126:19 chronic [1] - 35:18 Circuit [1] - 130:4 CIRCUIT [2] - 130:1 circumstances [1] - 112:23 citations [3] - 7:24, 8:8, 8:10 cited [1] - 62:9 citing [1] - 8:12 citizen [1] - 96:13 claimed [1] - 59:13 clarification [1] - 52:18 clarify [4] - 30:2, 32:7, 71:8, 72:22 Clark [3] - 63:3, 63:9, 63:24 CLARK [2] - 63:8, 64:1 Class [6] - 28:7, 28:8, 28:9, 28:10, 30:12 class [2] - 30:13, 88:10 classified [2] - 28:6, 28:8 Clean [3] - 77:13, 89:2, 93:21 clear [4] - 7:7, 84:9, 92:18 climb [3] - 84:12, 85:13, 89:17 close [3] - 5:14, 72:18, 101:1 closely [1] - 91:14 co [1] - 46:10 co-authored [1] - 46:10 coauthored [6] - 16:7, 17:4, 17:5, 17:7, 19:22, 44:4 cochlear [2] - 70:4, 70:14 COLES [3] - 1:1, 1:1, 1:2 Coles [24] - 1:9, 3:3, 10:18, 20:2, 20:8, 30:4, 33:2, 51:3, 75:13, 75:24, 76:13, 79:4, 79:5, 79:8, 80:16, 82:13, 83:1, 83:14, 87:8, 92:6, 92:7, 93:16, 104:19, 129:2 collaborate [2] - 16:2,	16:9 collaboration [2] - 82:7, 90:20 colleague [1] - 20:16 colleagues [4] - 7:10, 81:10, 84:20, 90:18 collect [1] - 26:6 collected [4] - 26:6, 26:8, 46:23, 46:24 collective [1] - 81:19 college [1] - 11:16 College [1] - 11:19 combines [2] - 98:21, 98:23 combining [1] - 21:17 coming [5] - 28:9, 28:10, 32:2, 63:16, 118:10 commences [1] - 79:9 comment [2] - 15:4, 103:6 comments [5] - 15:1, 15:2, 15:3, 15:7, 15:10 COMMERCIAL [1] - 1:2 Commission [1] - 23:8 commit [3] - 36:17, 108:21, 113:18 committee [10] - 3:19, 3:24, 4:8, 13:9, 36:10, 52:8, 54:7, 60:10, 76:5, 107:16 COMMITTEE [2] - 1:1, 60:11 Committee [4] - 13:2, 51:4, 103:17, 129:2 committees [1] - 13:3 common [4] - 21:14, 79:18, 94:21, 94:22 communicated [1] - 90:9 communication [2] - 84:18, 90:20 communications [1] - 93:12 communities [1] - 81:18 Community [2] - 44:5, 46:11 community [15] - 44:17, 45:8, 45:11, 45:13, 45:14, 53:17, 82:2, 84:11, 84:23, 87:5, 90:21, 97:10, 102:15, 102:24, 125:21 companies [2] - 89:8, 91:15
C				
C-o-n-l-e-y [1] - 77:10 calculate [1] - 46:1 Calculated [1] - 48:20 Canada [10] - 6:16,				

company [8] - 81:11, 81:17, 91:19, 119:5, 119:21, 119:23, 120:8, 121:6 comparable [1] - 23:11 compare [2] - 31:15, 73:5 compared [3] - 40:10, 73:12, 73:13 comparison [1] - 52:22 compensated [1] - 53:16 compensation [2] - 74:24, 122:16 complaint [28] - 94:9, 94:10, 94:14, 94:16, 94:17, 95:1, 95:5, 95:15, 95:18, 96:1, 96:2, 96:3, 96:13, 96:18, 96:19, 97:17, 97:20, 98:6, 98:12, 101:4, 102:21, 103:1, 122:4, 122:13, 123:21, 125:12, 125:21, 126:3 complaints [25] - 93:17, 94:21, 94:22, 95:12, 96:10, 96:23, 97:6, 97:7, 98:5, 99:16, 99:18, 102:17, 102:19, 122:6, 122:20, 122:22, 124:7, 124:17, 125:10, 125:11, 125:15, 125:16, 126:6 complete [3] - 42:19, 67:16, 130:8 completely [1] - 30:23 completions [1] - 78:7 complex [3] - 16:3, 38:1, 52:19 compliance [3] - 28:1, 30:4, 33:2 compliances [1] - 30:2 compliant [1] - 33:2 complicated [2] - 21:5, 40:1 component [1] - 22:20 components [1] - 22:16 concentration [2] - 71:19, 72:1 concept [1] - 28:24 concerned [1] - 96:6 concerns [4] - 44:2,	65:4, 80:22, 82:20 conclude [4] - 34:17, 37:18, 41:5, 41:8 concluded [6] - 7:19, 8:14, 8:16, 34:18, 49:12, 68:20 conclusion [8] - 35:3, 35:5, 38:16, 42:11, 44:19, 45:11, 49:9, 57:7 conclusions [6] - 23:18, 34:10, 38:22, 38:23, 49:5, 49:17 conclusions/ methodologies [1] - 19:17 concrete [6] - 91:8, 91:10, 91:11, 91:22, 92:8, 92:20 condition [4] - 24:8, 25:3, 68:2, 96:20 conditioning [1] - 21:24 conditions [15] - 13:24, 24:6, 24:15, 86:3, 86:5, 86:8, 86:10, 86:14, 87:12, 88:23, 89:20, 90:6, 90:13, 96:23, 125:17 conduct [2] - 16:10, 84:7 conducted [2] - 18:9, 19:4 conducting [1] - 15:15 confidential [1] - 35:11 confidently [1] - 71:1 configured [1] - 30:10 confines [1] - 101:13 confirm [1] - 27:18 CONLEY [1] - 77:2 Conley [20] - 65:9, 77:1, 77:10, 80:15, 80:20, 83:15, 86:16, 88:13, 90:24, 93:15, 96:11, 103:16, 109:17, 110:1, 113:18, 116:20, 126:20, 127:9, 127:22, 128:11 Conley's [1] - 128:5 CONLEY..... [1] - 2:5 connection [3] - 79:3, 79:12, 117:18 conservative [4] - 13:22, 24:19, 25:7, 25:10 consider [1] - 13:16 considered [3] -	27:18, 27:19, 32:16 Considered [1] - 48:22 considers [2] - 68:4, 68:5 consistent [2] - 34:21, 34:24 consisting [1] - 130:6 CONSTRUCT [1] - 1:1 constructed [1] - 45:19 constructing [2] - 120:21 construction [10] - 6:6, 78:10, 83:14, 83:21, 93:1, 93:9, 121:6, 128:3, 128:4, 128:12 consultants [3] - 23:10, 75:13, 76:1 consulting [1] - 12:2 contact [5] - 85:12, 103:3, 108:13, 108:21, 114:16 contained [2] - 8:2, 106:10 contention [1] - 67:20 context [5] - 52:23, 71:6, 71:11, 93:20, 120:14 continuation [1] - 3:23 continue [3] - 61:16, 83:12, 90:19 continued [2] - 83:21, 85:6 continues [1] - 44:11 contours [1] - 26:21 contractor [1] - 78:15 contractors [2] - 80:23, 81:17 contributes [1] - 40:5 contribution [1] - 40:2 contributions [1] - 47:8 control [3] - 12:7, 87:13, 87:16 Control [10] - 12:15, 12:17, 27:22, 28:1, 28:3, 28:13, 29:2, 30:22, 33:3, 52:3 conversation [3] - 108:19, 108:20, 122:15 convincing [2] - 34:21, 34:24 coordinate [6] - 90:14, 105:21, 106:1, 106:19, 109:12, 117:10	coordinated [4] - 85:3, 89:16, 104:12, 111:18 coordinating [2] - 117:23 coordination [6] - 82:4, 83:10, 83:16, 87:10, 108:12, 111:24 coordinator [1] - 104:19 copies [5] - 36:9, 36:11, 40:24, 82:8, 83:5 copy [7] - 7:10, 7:11, 7:13, 9:18, 19:8, 35:24, 109:14 core [4] - 81:11, 90:17, 126:15, 127:1 correct [43] - 15:16, 16:18, 16:19, 18:11, 20:19, 25:23, 28:12, 30:4, 33:9, 33:12, 34:6, 44:6, 44:12, 45:20, 46:7, 46:13, 66:16, 73:4, 74:7, 80:9, 81:8, 86:19, 88:18, 92:24, 93:22, 93:23, 94:20, 96:21, 97:21, 99:12, 99:14, 101:7, 104:17, 113:14, 114:10, 114:14, 118:19, 121:10, 121:12, 123:24, 124:16, 126:4, 130:7 corrective [1] - 92:9 correlate [1] - 9:2 correlated [2] - 59:15, 67:18 correlation [4] - 59:4, 59:12, 71:17, 102:11 correlational [1] - 57:16 corroborate [5] - 34:12, 35:3, 35:4, 38:16, 42:11 counsel [4] - 36:24, 76:2, 127:19, 128:22 count [2] - 14:5, 94:6 counties [2] - 81:2, 111:13 country [3] - 12:4, 93:22, 101:2 COUNTY [2] - 1:1, 1:2 county [16] - 9:14, 10:20, 14:2, 21:2, 54:8, 58:10, 60:1, 82:11, 84:10, 94:8, 94:11, 103:9,	106:11, 107:19, 111:2, 127:19 County [19] - 1:9, 1:15, 3:3, 4:13, 4:19, 5:19, 6:4, 10:18, 51:3, 75:13, 75:24, 76:13, 76:20, 82:13, 83:2, 104:19, 120:16, 120:22, 129:3 couple [6] - 48:10, 80:5, 85:9, 88:20, 108:14, 111:12 course [7] - 11:22, 24:20, 26:9, 72:7, 76:2, 89:22, 91:2 coursework [2] - 11:20, 11:21 COURT [3] - 65:16, 76:8, 130:1 court [3] - 4:3, 54:10, 76:11 Court [3] - 1:22, 130:3, 130:20 courthouse [1] - 129:4 covered [3] - 50:17, 123:11, 124:23 Cox [2] - 1:17, 3:10 COX [1] - 3:11 CPR [2] - 84:16, 107:7 crashing [1] - 41:19 create [2] - 84:22, 120:6 created [3] - 43:17, 82:2, 91:15 creates [2] - 41:19, 86:11 creating [1] - 42:2 critical [2] - 31:4, 33:20 cross [1] - 60:24 cross-examine [1] - 60:24 CRR [1] - 1:22 CSP [1] - 77:23 CSR [1] - 1:22 Cunney [1] - 33:17 cut [1] - 104:4 CV [1] - 19:8 cycle [1] - 28:18
D				
D5 [1] - 20:6 daily [3] - 87:6, 98:23, 101:9 damage [1] - 86:7 damaged [2] - 54:15, 85:23				

Darrell [2] - 1:17, 3:10 Dartmouth [2] - 11:19, 11:20 data [11] - 23:10, 23:12, 26:4, 26:7, 35:7, 35:11, 46:23, 59:11, 88:10, 121:22 dataset [3] - 39:3, 46:24, 56:21 date [2] - 82:21, 92:3 Dated [1] - 130:24 David [2] - 1:18, 54:11 DAVID [2] - 2:7, 107:23 day-to-day [1] - 21:22 days [6] - 20:17, 63:21, 87:23, 87:24, 99:20, 101:13 daytime [3] - 29:15, 30:6, 55:2 DB [1] - 27:15 dBA [3] - 21:16, 23:16 death [2] - 92:20, 92:21 deaths [1] - 92:19 decibel [1] - 21:13 decibels [36] - 21:10, 21:16, 21:17, 21:21, 21:23, 22:1, 22:2, 22:3, 22:4, 23:16, 25:9, 25:11, 28:14, 29:15, 29:16, 30:21, 31:3, 31:6, 32:13, 32:23, 45:9, 54:17, 54:24, 55:1, 55:13, 55:16, 55:20, 55:21, 55:23, 72:15, 73:11, 73:13, 73:15 decommissioning [2] - 128:1, 128:12 decrease [2] - 25:1, 45:10 decreased [1] - 25:1 decreases [1] - 45:8 define [2] - 53:22, 67:8 defined [5] - 29:8, 34:22, 67:9, 67:21, 106:8 defines [1] - 67:16 definition [1] - 53:24 degree [1] - 18:22 Degree [1] - 77:21 delve [1] - 19:1 demonstrating [1] - 84:20 densely [1] - 93:13 Density [1] - 44:6 department [2] - 106:3, 111:16	Department [3] - 83:2, 113:19, 114:3 departments [2] - 105:13, 109:13 deprivation [1] - 101:20 Deputy [1] - 83:3 derive [1] - 26:4 describe [4] - 23:19, 31:14, 70:3, 89:11 describes [2] - 23:21, 66:19 design [5] - 85:5, 85:8, 86:23, 89:9, 115:4 designed [6] - 85:17, 87:18, 89:5, 89:13, 90:5, 113:3 despite [1] - 18:6 details [3] - 89:7, 115:23, 118:11 detect [1] - 86:2 detection [1] - 86:17 determine [1] - 27:2 determined [1] - 39:21 determining [1] - 51:16 detrimental [1] - 70:15 develop [4] - 4:22, 78:13, 79:7, 79:15 developed [5] - 4:21, 90:1, 102:2, 105:19, 120:21 developing [1] - 106:4 DEVELOPMENT [1] - 1:1 Development [4] - 3:3, 51:3, 103:17, 129:2 development [7] - 83:13, 83:19, 84:18, 84:24, 111:20, 112:8, 115:18 device [1] - 70:14 devices [1] - 70:4 diagnostic [1] - 88:11 diameter [1] - 40:21 DIANE [1] - 130:3 Diane [3] - 1:22, 130:19, 130:20 difference [4] - 73:5, 75:4, 119:19, 120:6 differences [2] - 66:2, 66:21 different [15] - 4:3, 28:14, 29:2, 29:5, 44:1, 45:22, 51:21, 60:13, 73:23, 106:14, 107:4, 111:13, 119:12, 119:22, 120:18 differentiate [1] - 70:18 differentiating [1] - 70:1 digital [1] - 26:8 dire [1] - 80:17 direction [1] - 25:5 directly [1] - 100:12 Director [3] - 1:19, 77:12, 78:12 director [2] - 78:24, 79:1 directors [1] - 12:6 Directors [1] - 12:23 disagree [3] - 35:3, 38:16, 42:10 disclose [1] - 123:19 discuss [1] - 16:14 discussed [6] - 33:12, 46:4, 50:3, 82:18, 83:8, 84:5 discussing [2] - 7:4, 36:17 DISCUSSION [1] - 36:3 discussion [6] - 7:9, 7:16, 8:1, 19:2, 49:17, 82:20 discussions [1] - 84:4 disease [18] - 34:22, 34:23, 67:7, 67:8, 67:10, 67:18, 67:19, 67:21, 67:23, 68:14, 68:16, 68:18, 68:21, 68:23, 69:1, 69:2, 69:6, 69:23 diseases [3] - 35:18, 67:12, 69:13 Diseases [1] - 67:22 distance [1] - 23:13 distinction [3] - 27:8, 80:2, 80:7 distinguishing [1] - 27:23 distracted [1] - 91:13 District [4] - 54:11, 58:14, 76:18, 76:20 district [4] - 76:15, 84:7, 104:21, 115:20 districts [10] - 60:2, 82:9, 82:15, 83:4, 83:16, 105:11, 107:20, 111:1, 111:13, 111:21 disturbance [4] - 37:16, 37:19, 37:21, 38:14 dizziness [1] - 71:18 doctor [7] - 17:21, 18:3, 18:22, 53:4, 58:21, 66:1, 96:7 doctors [1] - 33:16 document [2] - 8:3, 19:9 documents [1] - 122:22 dogs [1] - 100:21 dollar [1] - 87:17 done [11] - 13:20, 14:4, 17:22, 19:13, 25:18, 29:2, 73:19, 102:1, 113:1, 116:16, 119:8 double [1] - 21:12 doubling [2] - 28:19, 28:23 DOUGHTY [1] - 52:11 Doughty [2] - 3:12, 52:9 DOUGHTY..... [1] - 2:3 Douglas [1] - 10:18 down [14] - 42:23, 43:6, 71:7, 75:21, 76:6, 85:17, 85:23, 86:6, 86:12, 88:15, 93:13, 96:6, 97:14, 121:24 downwind [4] - 25:2, 25:3, 25:4, 25:5 dozens [2] - 14:5 draft [4] - 20:14, 106:16, 106:21, 109:11 drafting [2] - 20:12, 20:18 drain [1] - 24:3 drill [1] - 117:23 drilling [1] - 78:7 drills [1] - 85:3 drive [2] - 92:1, 112:13 drivers [7] - 91:21, 91:23, 92:10, 92:12, 93:5, 93:10, 93:12 driving [4] - 91:13, 91:21, 92:10, 93:5 drowns [1] - 23:1 drum [1] - 54:23 due [2] - 86:10, 91:13 duly [2] - 11:5, 77:4 duration [5] - 54:20, 82:22, 96:16, 101:5, 101:15 during [14] - 24:10, 29:6, 29:7, 29:14, 44:1, 84:4, 84:24, 89:18, 101:5, 105:4, 108:8, 112:16, 125:14	duties [1] - 87:5
E		
e-mail [2] - 103:10, 108:17 e-mailed [1] - 61:7 e-mails [2] - 108:11, 109:20 E127 [1] - 52:17 ear [2] - 22:22, 66:2 early [2] - 61:5, 84:18 ears [1] - 97:18 east [1] - 100:19 edge [4] - 31:18, 32:9, 73:24, 74:1 edges [7] - 31:13, 31:14, 31:16, 31:20, 45:3, 73:20, 73:22 editors [1] - 14:19 educational [3] - 11:15, 77:15, 77:17 effect [10] - 17:18, 37:20, 50:20, 53:2, 59:8, 59:12, 67:4, 68:1, 70:22, 120:3 effects [57] - 7:17, 8:13, 9:4, 15:18, 15:22, 15:24, 16:10, 16:17, 16:22, 17:1, 17:6, 17:8, 17:10, 17:15, 17:20, 17:23, 18:4, 18:7, 19:3, 33:22, 35:13, 35:20, 37:17, 41:7, 42:2, 47:11, 47:21, 48:1, 49:8, 49:10, 49:20, 50:23, 50:24, 51:15, 56:18, 56:23, 57:4, 57:5, 57:6, 57:8, 57:9, 59:14, 66:19, 66:24, 68:3, 68:12, 68:13, 68:15, 68:20, 72:8, 72:21, 74:11, 74:14, 99:18, 102:12 Effects [1] - 44:4 efficiently [1] - 88:11 effort [1] - 81:16 efforts [1] - 90:15 eight [7] - 78:8, 94:2, 95:17, 118:24, 119:2, 119:11, 121:17 either [4] - 14:11, 19:21, 38:16, 111:5 electrical [3] - 22:13, 84:14, 85:16 electrically [1] - 89:19 electricity [4] - 22:10, 44:23, 45:7, 99:6		

electrocution [4] - 92:15, 92:16, 92:17, 92:21 electronic [1] - 36:10 Electrotechnical [1] - 23:8 elevation [1] - 26:8 emergencies [5] - 84:22, 104:1, 104:5, 104:6, 114:9 emergency [47] - 79:6, 79:8, 79:13, 79:14, 79:15, 80:16, 82:8, 82:10, 82:18, 83:5, 83:13, 83:19, 84:4, 84:9, 84:11, 84:12, 84:19, 85:11, 87:10, 89:16, 90:8, 90:9, 90:11, 90:15, 103:22, 104:11, 104:13, 104:18, 104:22, 105:18, 106:4, 106:10, 106:24, 107:9, 109:12, 112:8, 114:13, 115:18, 116:1, 116:3, 116:11, 117:5, 117:6, 117:20, 117:22, 118:8, 118:9 Emergency [1] - 82:14 emphasis [1] - 93:12 emphasize [1] - 88:13 employed [4] - 119:21, 119:23, 120:5, 120:7 employee [1] - 94:18 employees [5] - 78:14, 78:15, 79:24, 80:23, 110:20 employees' [1] - 79:22 enables [1] - 88:11 encountered [2] - 95:18, 112:24 encroachments [1] - 27:17 end [3] - 9:9, 97:2, 99:17 ends [1] - 15:12 ENERGY [1] - 1:2 energy [7] - 12:8, 22:13, 24:23, 28:5, 28:6, 78:9 Energy [8] - 13:1, 44:6, 44:7, 46:11, 46:16, 77:13, 89:2, 93:21 engaged [1] - 104:24 engagement [1] - 111:19	engineer [3] - 17:21, 18:3, 59:20 Engineer [1] - 12:12 Engineering [4] - 11:18, 11:19, 12:15, 12:17 engineering [4] - 11:23, 12:7, 18:23, 85:15 engines [1] - 112:14 ensure [2] - 81:20, 84:21 entire [6] - 8:23, 9:2, 39:3, 87:18, 107:8, 123:10 entirely [1] - 39:21 entitled [5] - 20:8, 22:5, 44:4, 46:11, 48:19 entrepreneurism [1] - 126:24 environment [3] - 21:14, 79:22, 79:23 Environmental [2] - 11:17, 77:12 environmental [4] - 11:21, 18:24, 39:15, 79:19 epidemiological [1] - 34:20 epidemiologist [1] - 33:19 epidemiology [1] - 11:21 epilepsy [6] - 7:21, 8:18, 17:10, 49:6, 49:15, 49:24 epileptic [4] - 47:14, 47:20, 48:1 equating [1] - 52:13 equipment [19] - 22:14, 22:21, 84:8, 85:2, 85:6, 85:11, 85:23, 87:7, 87:12, 88:2, 88:5, 88:7, 88:9, 89:3, 89:9, 89:19, 90:13, 93:7, 125:24 equipped [1] - 31:13 escorted [2] - 91:24, 92:13 Esq [7] - 1:9, 1:10, 1:10, 1:13, 1:13, 1:14, 1:14 essentially [15] - 22:12, 22:16, 24:22, 26:21, 29:1, 29:5, 31:2, 31:16, 31:17, 33:20, 33:24, 42:22, 57:16, 67:11, 102:23	establish [1] - 89:20 established [1] - 102:11 estate [3] - 5:4, 6:3, 6:5 estimate [1] - 16:6 Estimating [1] - 48:20 etc [1] - 36:1 Europe [2] - 56:20, 57:11 evaluate [1] - 59:19 evaluated [1] - 51:23 evening [7] - 29:7, 60:15, 60:17, 75:23, 81:13, 127:10, 127:17 event [8] - 3:24, 86:8, 89:14, 89:15, 90:11, 90:14, 91:7, 91:9 events [4] - 89:8, 89:12, 89:18, 91:16 eventually [2] - 100:5, 100:8 eversion [1] - 24:7 everyday [1] - 41:13 evidence [8] - 34:15, 34:21, 35:23, 41:5, 42:3, 62:14, 91:11, 128:16 exact [5] - 42:22, 85:21, 104:9, 126:10, 126:12 exactly [5] - 43:12, 74:9, 115:10, 115:16, 115:24 EXAMINATION [24] - 2:2, 2:3, 2:3, 2:4, 2:4, 2:5, 2:6, 2:6, 2:7, 2:7, 2:8, 2:8, 11:9, 51:6, 52:10, 54:12, 58:15, 65:18, 77:6, 103:19, 107:22, 110:8, 111:10, 114:6 examination [1] - 76:3 examine [1] - 60:24 examined [3] - 11:5, 63:6, 77:4 example [13] - 16:9, 16:17, 24:6, 24:13, 29:14, 40:3, 41:23, 46:23, 72:11, 73:10, 86:1, 86:17, 125:20 exceed [2] - 25:12, 118:2 exceeded [2] - 13:23, 85:18 except [2] - 29:4, 124:1 exception [1] - 104:18	excused [1] - 75:21 exhibits [1] - 9:9 existed [1] - 99:22 existing [1] - 15:21 expect [3] - 25:19, 57:2, 74:23 expected [5] - 84:11, 87:1, 93:10, 115:4, 117:3 experience [7] - 12:1, 38:6, 72:19, 99:7, 100:11, 103:21, 104:20 experienced [3] - 37:1, 47:2, 71:23 experiences [1] - 99:24 experiencing [2] - 38:4, 74:12 experimental [2] - 34:20, 42:5 expert [14] - 16:21, 18:2, 18:8, 19:5, 34:1, 48:16, 80:10, 80:11, 80:12, 80:15, 80:21, 80:24, 81:2, 128:2 expertise [2] - 14:22, 16:5 experts [2] - 16:10, 120:2 explain [8] - 14:14, 28:12, 65:20, 71:3, 105:9, 114:24, 115:13, 115:14 explained [1] - 41:9 explaining [1] - 88:14 explains [1] - 8:19 explanation [1] - 6:10 explore [1] - 115:19 exposed [8] - 38:3, 42:6, 43:19, 53:20, 58:1, 58:3, 58:4, 59:16 exposure [3] - 43:23, 43:24, 59:5 Exposure [2] - 46:12, 48:22 expound [1] - 118:20 extent [2] - 8:21, 17:20 external [2] - 91:22, 92:11 extra [3] - 91:17, 91:20, 97:18 extremely [2] - 89:14, 104:10 eyes [1] - 97:18	F face [1] - 22:15 facilitator [1] - 3:16 FACILITY [1] - 1:2 facility [7] - 78:18, 87:17, 91:3, 103:3, 104:24, 107:11, 118:12 fact [10] - 4:24, 5:18, 18:6, 18:9, 38:3, 40:1, 42:12, 44:4, 45:2, 48:24 factor [2] - 25:9, 40:5 factors [9] - 38:4, 39:15, 40:4, 40:19, 52:20, 52:22, 53:6, 53:12, 69:13 fail [9] - 56:12, 98:22, 112:13, 112:16, 112:18, 113:5, 113:9, 113:10, 113:13 failure [1] - 99:1 fair [2] - 5:21, 63:10 fairly [3] - 29:21, 72:10, 105:10 fairness [4] - 38:7, 52:13, 53:15 fall [1] - 79:9 familiar [2] - 75:17, 91:4 families [1] - 66:13 family [3] - 100:21, 101:20, 127:12 far [6] - 44:2, 56:2, 104:5, 104:23, 106:15, 116:17 farm [15] - 62:4, 100:13, 100:22, 101:14, 102:2, 102:14, 105:5, 110:15, 111:22, 112:11, 114:9, 118:18, 119:1, 120:1, 121:16 FARM [1] - 1:2 farms [9] - 35:12, 39:7, 44:16, 57:11, 79:16, 90:1, 93:24, 94:2, 102:11 farthest [2] - 115:15, 116:18 fast [3] - 112:2, 118:5, 118:15 faster [4] - 25:2, 47:19, 111:17, 112:6 fastest [1] - 112:10 fatalities [2] - 92:2, 92:22
---	---	--	---	--

fault [1] - 113:3
fear [2] - 43:23, 102:3
feature [1] - 85:22
features [3] - 85:8, 85:15, 89:10
feedback [1] - 106:20
feeder [1] - 87:20
feet [4] - 45:20, 46:2, 73:10
females [1] - 40:22
few [2] - 81:22, 91:1
field [9] - 12:11, 19:5, 27:5, 27:14, 42:4, 64:20, 80:21, 81:2, 98:21
figure [2] - 45:21, 111:14
filed [1] - 96:13
filing [1] - 122:6
fill [1] - 105:16
final [3] - 20:14, 25:17, 76:4
finally [1] - 26:13
financial [4] - 74:24, 122:16, 123:20, 124:13
findings [1] - 34:12
fine [1] - 62:16
Finish [1] - 42:15
finish [2] - 127:20, 127:21
Finland [1] - 42:13
Fire [2] - 113:19, 114:2
fire [13] - 82:9, 82:14, 83:16, 84:6, 104:21, 105:11, 105:13, 109:13, 111:13, 111:15, 111:20, 112:21, 115:20
firefighters [2] - 105:22, 109:1
fires [3] - 88:22, 88:24, 89:1
firm [1] - 12:3
first [25] - 3:21, 7:8, 7:15, 8:7, 8:9, 10:18, 11:5, 21:8, 24:2, 34:14, 51:2, 65:16, 77:4, 83:7, 84:16, 91:3, 103:16, 104:3, 107:7, 108:6, 114:8, 117:15, 119:10, 124:24, 127:17
five [13] - 3:19, 45:19, 47:4, 47:5, 57:12, 81:11, 100:18, 101:13, 120:13, 126:14, 126:17, 127:1, 127:8

five-member [1] - 3:19
five-point [1] - 47:4
flaws [1] - 15:13
fleet [2] - 87:18, 91:19
Flicker [5] - 6:16, 9:6, 46:12, 48:21, 49:4
flicker [54] - 6:22, 6:24, 7:3, 7:4, 7:5, 7:18, 7:19, 8:14, 8:16, 8:21, 15:17, 15:18, 17:2, 17:3, 17:4, 17:6, 17:16, 17:19, 18:7, 19:12, 19:23, 46:9, 46:21, 47:2, 47:11, 47:18, 48:2, 48:4, 48:12, 48:15, 48:18, 49:11, 49:12, 49:19, 50:3, 50:4, 50:5, 50:6, 50:16, 56:3, 56:7, 57:5, 57:14, 57:15, 57:17, 57:22, 58:1, 58:3, 58:19, 59:1, 59:2, 59:5, 65:3, 75:3
flickers [1] - 47:18
fluorescent [1] - 56:11
fluctuates [1] - 28:19
fluids [1] - 98:17
flush [2] - 112:9, 117:21
focus [3] - 49:15, 85:5, 94:23
focused [1] - 85:1
focuses [1] - 79:21
foliage [1] - 24:18
Folks [1] - 60:18
folks [7] - 3:18, 4:7, 10:16, 10:17, 60:12, 110:10, 111:5
follow [1] - 93:10
following [2] - 82:9, 83:1
follows [2] - 11:6, 77:5
footprint [3] - 100:16, 100:22, 111:21
foregoing [1] - 130:5
forest [1] - 24:18
form [1] - 74:24
former [1] - 12:20
formerly [1] - 12:23
forth [7] - 15:11, 34:5, 43:10, 64:16, 68:17, 108:12, 130:9
forward [1] - 54:9
foundations [1] - 23:23
four [5] - 36:7, 36:8, 100:12, 101:3, 127:8
Frank [1] - 1:10

Freezeland [1] - 3:13
frequencies [5] - 21:18, 28:16, 29:17, 42:23, 42:24
frequency [22] - 28:15, 28:16, 28:20, 28:24, 29:18, 29:23, 30:19, 31:4, 41:6, 41:11, 41:24, 42:9, 55:5, 55:7, 55:9, 55:11, 55:22, 56:1, 72:12, 72:13, 104:22, 125:11
frequently [3] - 15:21, 103:21, 104:6
front [2] - 49:2, 61:1
full [4] - 8:10, 87:1, 88:9, 115:4
full-time [2] - 87:1, 115:4
functionality [1] - 88:8
fur [1] - 31:17
furniture [1] - 5:1
future [5] - 45:2, 45:6, 45:16, 45:17, 91:18
fuzzy [1] - 122:2

G

gap [1] - 8:20
gas [1] - 78:6
gasket [1] - 98:22
GE [12] - 26:1, 30:16, 30:24, 31:7, 31:12, 31:22, 31:23, 32:4, 55:22, 73:21, 88:4
gear [1] - 22:12
gearbox [2] - 22:21, 23:2
general [7] - 20:13, 33:22, 38:22, 71:22, 79:12, 95:19, 96:8
General [1] - 33:18
generally [1] - 67:10
generate [5] - 22:10, 42:22, 44:23, 44:24
generated [2] - 29:21, 46:6
gentleman [2] - 96:7, 109:22
gentleman's [1] - 109:17
gentlemen [2] - 110:1, 128:24
geo [1] - 41:24
geometric [1] - 24:20
gest [1] - 62:20
given [5] - 4:11, 23:10, 26:9, 26:15, 62:3
glad [1] - 76:21

gold [2] - 13:17, 14:16
government [3] - 59:24, 107:18, 110:24
GPS [3] - 116:2, 117:3, 117:9
gracious [1] - 36:11
great [6] - 10:2, 62:20, 81:9, 82:20, 109:5, 109:10
greater [1] - 5:8
grid [1] - 26:19
ground [8] - 24:3, 24:4, 24:5, 24:10, 24:12, 24:13, 26:7
group [6] - 16:10, 20:14, 43:2, 43:3, 43:14, 43:16
grouped [2] - 91:24, 92:13
groups [2] - 43:1, 104:16
guess [7] - 27:3, 65:13, 78:5, 96:11, 116:23, 119:19, 121:4
guide [1] - 81:11
guitar [4] - 30:1, 54:16, 54:23
Gundula [1] - 56:19
gushing [1] - 97:24
guys [4] - 109:1, 110:10, 112:7, 114:22

H

habits [1] - 89:10
half [1] - 40:15
Hampshire [1] - 12:13
hand [6] - 7:10, 7:11, 8:3, 61:10, 63:24, 114:5
handed [2] - 36:6, 48:6
hands [1] - 127:6
hang [1] - 82:6
happy [2] - 9:17
hard [3] - 24:5, 36:22, 60:24
hardcopy [1] - 38:21
Harding [1] - 8:9
hardly [1] - 104:5
head [4] - 9:16, 121:3, 121:21, 126:8
headaches [10] - 51:17, 51:19, 51:22, 57:1, 68:16, 71:18, 95:4, 95:6, 95:20, 99:16

headquartered [1] - 12:3
heads [1] - 64:17
Health [16] - 6:15, 7:2, 8:23, 9:6, 48:4, 48:17, 49:4, 49:18, 50:4, 51:23, 54:1, 67:15, 77:12, 77:18, 77:21, 78:12
health [79] - 6:21, 7:8, 7:17, 8:13, 9:4, 15:17, 16:17, 16:22, 16:24, 17:1, 17:6, 17:10, 17:15, 17:20, 17:23, 18:4, 18:7, 19:3, 33:20, 34:16, 35:1, 35:7, 35:11, 35:13, 35:20, 37:17, 41:7, 42:2, 46:7, 46:22, 47:10, 48:11, 49:5, 49:8, 49:10, 49:19, 50:6, 50:11, 50:20, 50:24, 56:8, 57:8, 59:5, 65:3, 67:16, 68:1, 68:2, 68:6, 68:12, 68:13, 68:15, 70:16, 74:11, 79:17, 79:19, 79:20, 79:21, 79:23, 80:7, 80:8, 80:10, 80:11, 80:21, 80:22, 81:3, 95:19, 95:22, 96:5, 96:8, 96:12, 99:18, 101:5, 101:16, 102:4, 102:12, 122:20, 122:22, 123:1
health-related [2] - 101:5, 123:1
hear [11] - 28:17, 29:4, 29:19, 39:9, 39:20, 41:13, 53:18, 54:18, 61:11, 71:6, 94:16
heard [14] - 26:14, 43:15, 44:2, 48:10, 49:16, 93:17, 95:1, 95:8, 97:11, 100:4, 101:22, 102:20, 108:16
HEARING [2] - 1:1, 129:6
hearing [27] - 3:4, 3:15, 3:20, 3:23, 4:1, 5:11, 21:19, 21:20, 29:3, 29:13, 29:17, 29:22, 33:9, 41:10, 44:2, 48:7, 62:14, 70:4, 70:7, 70:11, 70:14, 70:16, 70:18, 75:22, 83:8, 91:2,

93:16 Hearing [1] - 1:7 hearings [7] - 14:2, 17:15, 20:17, 81:1, 88:22, 93:18, 99:20 heart [2] - 43:10, 81:20 heavy [1] - 93:7 height [7] - 23:14, 26:11, 44:12, 45:19, 46:1, 46:2 heights [2] - 45:17, 45:23 held [6] - 3:22, 5:15, 78:2, 78:23, 82:12, 128:14 Heleine [1] - 83:3 help [9] - 21:3, 21:6, 31:18, 68:24, 69:3, 79:5, 79:7, 96:19, 124:5 helps [1] - 84:21 hereby [1] - 130:5 herein [2] - 11:4, 77:3 hereinabove [1] - 130:9 hertz [21] - 28:17, 29:4, 29:15, 30:19, 30:22, 31:2, 31:5, 41:11, 41:22, 54:16, 54:24, 55:1, 55:13, 55:16, 55:20, 72:11, 72:12 HESS [22] - 4:15, 6:13, 6:15, 6:19, 6:24, 7:13, 8:4, 8:6, 9:13, 9:20, 36:5, 36:8, 37:2, 113:23, 123:9, 123:19, 123:24, 124:3, 124:22, 125:7, 128:1, 128:23 Hess [6] - 1:13, 4:11, 10:7, 48:7, 49:16, 123:15 Hickory [5] - 83:7, 108:4, 109:18, 109:22, 111:17 high [13] - 15:14, 41:24, 42:17, 47:12, 68:11, 68:22, 69:11, 69:18, 69:21, 72:5, 72:8, 90:6, 112:16 high-frequency [1] - 41:24 higher [9] - 24:14, 29:15, 30:20, 44:24, 45:14, 45:15, 68:18, 71:23, 71:24 highest [8] - 31:7, 31:9, 32:19, 55:19,	55:21, 55:22, 77:24, 90:21 highlight [1] - 81:22 highly [10] - 39:23, 40:5, 40:8, 40:12, 40:15, 40:17, 43:2, 47:6, 57:12, 87:24 highly-skilled [1] - 87:24 highway [1] - 73:17 Hindsboro [1] - 111:17 hit [1] - 51:11 hold [6] - 6:3, 9:10, 12:18, 77:17, 77:23, 90:21 holler [1] - 76:12 Holly [4] - 1:22, 76:22, 130:19, 130:20 HOLLY [1] - 130:3 home [8] - 27:16, 32:9, 32:11, 32:12, 47:3, 71:24, 119:14 homes [5] - 26:15, 26:18, 26:22, 27:5, 27:15 homework [6] - 4:12, 6:12, 6:16, 113:24, 114:1, 121:23 hooked [1] - 43:8 Hoopeston [1] - 4:18 Hoover [1] - 37:3 hope [1] - 90:17 hopefully [2] - 51:8, 128:15 hose [1] - 98:22 Hospital [1] - 33:18 hotline [1] - 102:24 hours [5] - 58:6, 59:1, 80:5, 87:23, 99:13 house [9] - 42:18, 100:23, 107:4, 107:10, 112:6, 119:3, 119:8, 119:11 hub [2] - 26:11, 45:23 Hubner [2] - 56:20, 68:19 human [7] - 21:19, 21:20, 29:13, 34:16, 41:10, 49:5, 50:20 humans [1] - 50:7 hurt [1] - 107:6 hypothesis [1] - 42:7	idea [2] - 9:2, 114:3 IEC [2] - 23:7 Ierulli [1] - 1:10 Ikea [6] - 4:24, 5:1, 5:6, 5:8, 5:20, 6:1 IL [2] - 1:23, 130:21 ill [3] - 56:18, 57:7, 58:19 Illinois [14] - 12:13, 14:7, 14:9, 27:22, 28:3, 28:13, 29:1, 30:12, 30:21, 33:3, 52:3, 81:2, 127:13, 130:4 ILLINOIS [1] - 130:1 illness [2] - 96:12, 123:22 imagine [2] - 36:24, 85:19 imaging [1] - 41:24 imbalance [2] - 86:10, 86:12 impact [7] - 34:16, 44:3, 72:5, 89:21, 102:4, 105:17, 106:2 impacts [14] - 35:1, 42:9, 43:22, 44:10, 44:15, 46:7, 48:12, 49:5, 50:7, 50:9, 50:11, 57:13, 59:5, 68:23 impairment [1] - 70:21 implant [3] - 70:20, 70:22, 70:24 implants [2] - 70:4, 70:14 implement [2] - 78:13, 79:7 implemented [1] - 92:6 important [3] - 40:13, 80:2, 88:14 impossible [1] - 95:16 Improved [1] - 48:21 improved [1] - 91:15 IN [4] - 1:2, 60:11, 129:6, 130:1 in-proportional [1] - 45:4 incident [7] - 78:21, 91:4, 91:12, 104:2, 112:11, 114:18, 114:21 incidents [2] - 92:4, 122:17 include [13] - 24:16, 24:17, 24:18, 40:4, 46:18, 83:14, 84:2, 85:11, 85:16, 87:5, 91:20, 117:7, 122:6	included [5] - 11:20, 27:12, 74:15, 114:20, 122:18 includes [2] - 24:20, 26:11 including [10] - 16:16, 25:15, 28:5, 36:8, 42:4, 46:4, 49:6, 49:20, 50:3, 51:21 inclusive [1] - 130:6 inconvenience [2] - 41:2, 119:22 incorporate [1] - 70:12 increase [6] - 21:11, 43:10, 44:12, 44:21, 45:1, 45:4 increased [1] - 44:18 increases [1] - 45:8 indicated [1] - 75:14 indicates [1] - 32:10 indication [1] - 43:21 individual [8] - 29:12, 59:12, 59:19, 88:16, 104:4, 107:6, 107:8, 107:10 individuals [8] - 5:22, 7:21, 8:18, 8:24, 49:14, 53:6, 58:22, 94:4 induce [3] - 55:5, 55:13, 55:14 induced [1] - 56:1 industry [4] - 78:6, 78:9, 79:19, 118:5 inform [1] - 34:1 information [7] - 5:4, 30:14, 62:8, 85:12, 90:18, 116:3, 122:8 informed [1] - 82:22 infrasonic [1] - 42:23 infrasound [18] - 41:6, 41:9, 41:12, 41:14, 41:16, 41:20, 42:2, 42:6, 42:8, 42:17, 42:19, 43:7, 43:13, 43:15, 43:17, 43:19, 43:22 infrasound-created [1] - 43:17 infrequently [1] - 104:7 inherently [1] - 90:5 initial [1] - 83:19 injuries [3] - 120:17, 121:19, 122:17 injury [4] - 92:3, 92:4, 120:10, 123:22 injury-related [1] - 92:4	inside [12] - 47:3, 55:9, 55:12, 57:24, 58:3, 58:4, 100:22, 101:12, 105:21, 106:10, 111:21, 119:1 inspection [1] - 97:16 inspections [4] - 87:6, 98:20, 98:24, 125:24 instance [2] - 89:15, 126:9 instead [2] - 5:16, 49:15 Institute [3] - 12:15, 12:17, 13:7 instructed [1] - 114:23 integrity [1] - 127:1 interest [3] - 10:4, 16:5, 99:3 interested [1] - 111:3 interference [2] - 71:14, 95:9 internal [1] - 99:15 International [2] - 13:10, 23:8 interrupt [1] - 19:7 introduced [1] - 62:13 introduction [1] - 100:4 investigation [1] - 91:12 investigations [1] - 78:21 invited [1] - 82:14 involve [2] - 6:20, 104:7 involved [11] - 12:7, 14:8, 15:15, 39:5, 39:6, 89:23, 91:15, 94:16, 104:21, 105:11, 121:9 involvement [2] - 33:12, 104:23 involves [3] - 12:8, 24:1, 86:4 involving [1] - 91:8 Isaac [1] - 20:16 ISO [8] - 13:9, 13:10, 13:16, 13:20, 13:21, 23:22, 24:1, 24:2 isolate [2] - 87:21, 89:19 issue [13] - 4:10, 10:17, 21:4, 65:9, 88:17, 94:18, 96:5, 97:8, 101:23, 103:1, 103:6, 108:17, 123:6 issues [15] - 18:4, 19:14, 56:4, 56:8, 68:17, 95:19, 95:22,
---	---	---	--	--

96:3, 97:5, 101:5,
101:16, 102:14,
106:22, 122:23,
123:1
itself [6] - 32:9, 38:12,
67:23, 68:1, 104:8,
113:4

J

Jackson [1] - 129:5
Jacob [1] - 48:16
January [1] - 79:1
JASON [3] - 2:5, 77:2,
77:10
Jason [3] - 65:9,
76:24, 77:10
Jerald [1] - 1:13
Jeremy [1] - 3:12
job [6] - 77:11, 77:12,
78:20, 79:10, 79:17,
94:15
Johnson [6] - 1:18,
54:11, 58:9, 107:21,
109:21, 110:1
JOHNSON [4] - 54:11,
54:13, 107:23,
109:23
JOHNSON..... [1] -
2:7
JOHNSON.....
[1] - 2:4
join [1] - 3:6
joined [1] - 76:9
Journal [2] - 39:17,
42:14
journal [2] - 44:8,
46:16
JUDICIAL [1] - 130:1
Judicial [1] - 130:4
Junction [1] - 12:3
jurisdiction [2] -
94:11, 106:11

K

K-a-l-i-s-k-i [1] - 11:13
Kains [10] - 1:8, 3:16,
4:15, 4:17, 7:10, 9:7,
36:5, 36:9, 80:14,
123:9
KAINS [111] - 3:17,
4:16, 6:9, 6:14, 6:18,
6:20, 7:12, 8:2, 8:5,
9:12, 9:16, 9:21,
10:2, 10:9, 10:12,
10:24, 11:7, 12:16,
16:24, 17:5, 17:12,
17:14, 18:1, 18:13,
18:16, 19:12, 19:24,

20:4, 36:2, 36:4,
36:20, 36:22, 37:6,
50:10, 50:12, 50:15,
50:19, 51:1, 51:11,
52:7, 54:6, 58:9,
59:22, 60:12, 60:18,
61:6, 61:9, 61:13,
61:18, 61:22, 62:1,
62:13, 62:16, 63:2,
63:9, 63:20, 64:6,
64:10, 64:14, 65:10,
65:15, 66:5, 66:11,
71:9, 75:8, 75:19,
76:10, 76:15, 76:17,
76:20, 80:17, 80:20,
95:21, 96:15, 96:18,
96:22, 97:1, 97:3,
103:15, 107:14,
109:17, 109:21,
109:24, 110:4,
110:7, 110:23,
111:9, 113:17,
113:21, 114:1,
116:7, 116:12,
121:8, 121:11,
121:23, 123:14,
123:21, 124:1,
124:4, 124:8,
124:19, 125:4,
125:6, 125:8,
126:19, 127:5,
127:12, 127:16,
128:6, 128:21,
128:24

Kaliski [17] - 11:2,
11:11, 11:13, 16:21,
18:1, 19:21, 37:8,
60:7, 60:14, 60:19,
64:18, 75:18, 75:20,
76:7, 127:18,
127:20, 128:11
KALISKI [1] - 11:3
KALISKI.....
..... [1] - 2:2

Kansas [6] - 90:4,
100:9, 100:13,
110:17, 118:22,
119:10
keep [6] - 18:21,
28:22, 82:21, 90:8,
104:24, 118:2
keeping [1] - 18:2
Kelly [1] - 1:20
Ken [1] - 11:2
KENNETH [2] - 2:2,
11:3
Kenneth [1] - 11:13
Kent [1] - 83:2
key [1] - 35:17
KEYT [7] - 10:10,

17:13, 19:7, 35:22,
75:16, 80:19, 128:20
Keyt [10] - 1:9, 7:13,
9:8, 10:9, 17:12,
36:9, 62:22, 75:14,
80:17, 128:18
kick [1] - 54:23
kick-drum [1] - 54:23
kids [1] - 100:21
kilohertz [5] - 29:16,
30:24, 31:3, 31:4
kind [11] - 37:1, 52:14,
52:20, 54:20, 71:24,
78:5, 92:5, 102:17,
113:13, 122:2, 128:9
Knopper [1] - 8:10
knowing [2] - 43:17,
43:20
knowledge [7] - 8:20,
48:19, 63:22, 63:23,
95:17, 98:16, 98:18
knowledgeable [1] -
64:20
known [3] - 87:17,
103:1, 103:6
knows [3] - 96:9,
116:5, 116:10

L

lab [1] - 42:21
Laboratory [1] - 17:8
Labs [7] - 18:10,
18:11, 18:13, 38:18,
39:6, 44:9, 46:15
lack [1] - 95:20
ladies [1] - 128:24
lady [1] - 76:8
lamp [1] - 56:11
land [10] - 27:9, 27:12,
27:23, 27:24, 28:7,
28:9, 28:10, 28:11,
32:11, 98:7
Land [1] - 44:5
Land-based [1] - 44:5
landowner [2] - 97:10,
102:24
landowners [2] - 5:15,
101:4
large [3] - 39:3, 100:8,
102:15
large-scale [1] - 39:3
larger [6] - 15:24,
24:23, 44:20, 44:22,
45:6, 45:12
largest [1] - 100:13
larynx [1] - 66:2
last [14] - 4:11, 4:12,
13:12, 19:2, 33:9,
48:10, 48:15, 62:5,

78:8, 80:5, 94:23,
102:6, 102:16,
120:16
latest [2] - 94:6,
108:14
law [3] - 36:22, 37:1,
62:17
lawn [2] - 22:3, 39:14
Lawrence [5] - 17:7,
38:18, 39:6, 44:9,
46:15
layers [1] - 88:6
layout [2] - 85:5, 85:8
lead [9] - 64:19, 68:2,
68:6, 68:11, 68:12,
68:13, 68:18, 69:2
leadership [1] - 12:18
leads [1] - 37:17
leaking [5] - 98:6,
98:9, 98:12, 98:17,
99:7
leaks [1] - 97:22
learned [1] - 91:15
lease [1] - 123:17
least [6] - 5:18, 14:8,
25:20, 81:1, 99:13,
126:9
led [1] - 38:7
left [3] - 8:3, 30:18,
109:23
left-hand [1] - 8:3
LEL [1] - 56:19
less [8] - 29:18, 29:23,
57:11, 75:1, 75:2,
100:23, 120:3
lessons [1] - 91:15
letting [1] - 126:3
level [25] - 21:8, 21:10,
23:4, 23:15, 24:14,
24:24, 25:12, 30:21,
31:7, 31:9, 31:21,
35:18, 38:2, 38:11,
39:21, 40:1, 45:8,
53:20, 55:9, 55:21,
55:22, 56:24, 59:16,
72:13, 72:14
Levels [1] - 44:5
levels [26] - 13:23,
21:13, 29:9, 29:10,
32:2, 33:4, 38:24,
42:17, 42:23, 44:24,
45:1, 45:13, 48:17,
55:12, 55:19, 57:4,
57:10, 71:23, 71:24,
72:6, 72:8, 72:9,
72:17, 73:9, 73:13,
73:16
library [1] - 21:24
license [1] - 3:4
License [2] - 1:23,

130:21
Licensed [1] - 12:12
licenses [1] - 12:11
licensing [1] - 52:1
life [2] - 83:12, 83:22
light [1] - 18:9
likelihood [2] - 50:1,
86:5
likely [11] - 40:8,
40:12, 40:15, 40:17,
40:22, 55:13, 55:14,
75:1, 75:2, 126:11
limit [2] - 30:22, 32:19
limited [2] - 36:18,
87:5
limits [9] - 27:22,
28:13, 30:3, 32:8,
32:21, 33:3, 33:5,
93:11, 123:19
line [3] - 30:11,
114:20, 123:10
lines [2] - 26:23,
104:12
list [2] - 51:20, 113:22
listed [2] - 67:24,
111:23
listening [1] - 22:23
listing [1] - 108:1
lists [1] - 67:12
literature [9] - 17:9,
33:21, 34:20, 37:24,
46:19, 49:4, 49:19,
66:19, 69:15
live [8] - 21:22, 35:12,
72:3, 72:4, 111:15,
113:14, 117:14,
119:10
lived [12] - 99:21,
100:22, 100:24,
101:2, 101:12,
101:14, 101:22,
118:18, 118:22,
119:2, 119:11
living [6] - 35:16,
37:16, 52:19, 56:15,
70:13, 120:7
LLC'S [1] - 1:1
load [1] - 87:13
loaded [1] - 91:8
local [19] - 36:24,
59:24, 84:19, 85:3,
87:4, 87:10, 90:9,
90:21, 93:10, 94:8,
104:21, 106:24,
107:17, 110:24,
111:22, 115:1,
115:3, 116:3, 117:11
localized [1] - 117:13
locate [2] - 42:1, 117:1
located [7] - 87:2,

90:3, 100:13, 115:8, 115:11, 115:21, 116:1 location [5] - 27:16, 115:2, 115:14, 117:4 locations [13] - 25:20, 26:9, 26:15, 27:1, 32:15, 85:2, 106:15, 115:17, 116:2, 117:9, 117:21, 118:11 Lockhart [7] - 1:20, 9:13, 9:24, 36:11, 61:2, 61:7, 125:4 LOCKHART [3] - 10:1, 61:4, 125:5 LODE [1] - 19:9 Lode [1] - 1:14 logs [1] - 85:12 long-term [1] - 69:11 look [34] - 15:8, 21:8, 28:2, 33:22, 33:23, 35:12, 38:10, 39:19, 40:3, 40:6, 40:7, 44:15, 45:5, 51:22, 53:15, 57:6, 57:12, 57:19, 58:23, 58:24, 59:3, 64:5, 67:3, 67:13, 72:8, 74:22, 75:4, 82:19, 109:19, 115:10, 117:10, 117:22, 118:13, 128:10 looked [17] - 16:16, 17:9, 17:10, 27:7, 27:16, 39:1, 44:10, 45:24, 51:19, 51:20, 57:3, 57:5, 66:7, 68:19, 69:14, 72:2 looking [14] - 17:8, 20:24, 33:19, 35:6, 39:3, 40:19, 41:3, 45:21, 47:9, 48:17, 62:22, 67:14, 67:15, 70:12 looks [3] - 15:6, 24:6, 105:23 lose [2] - 124:6, 124:18 loss [4] - 95:11, 95:20, 99:16, 101:18 loud [2] - 29:20, 29:22 louder [3] - 26:2, 29:24, 73:7 loudness [2] - 21:12, 45:10 low [14] - 28:22, 29:18, 29:23, 30:19, 31:14, 41:6, 42:9, 55:5, 55:7, 55:9,	55:11, 56:1, 72:10, 73:24 low-frequency [8] - 29:18, 29:23, 41:6, 42:9, 55:5, 55:7, 55:9, 55:11 low-frequency-induced [1] - 56:1 low-noise [2] - 31:14, 73:24 lower [11] - 6:7, 8:2, 25:20, 29:17, 32:21, 45:13, 47:24, 49:23, 57:17, 73:16, 92:14 lowest [1] - 40:1	manually [1] - 86:15 manufacturer [3] - 26:11, 88:4, 113:1 manufacturers [4] - 23:5, 23:6, 23:11, 31:19 map [4] - 115:10, 115:12, 116:16, 117:9 March [1] - 3:21 marked [2] - 115:11, 117:20 marker [1] - 117:3 market [1] - 5:22 Martin [1] - 83:3 MARY [1] - 130:3 Mary [3] - 1:22, 130:19, 130:20 Massachusetts [2] - 12:14, 33:18 Master's [1] - 77:21 matter [2] - 126:2, 127:23 MATTHEWS [1] - 130:3 Matthews [4] - 1:22, 4:4, 130:19, 130:20 Mattoon [1] - 58:14 maximum [1] - 47:24 mean [15] - 19:7, 32:8, 62:6, 69:5, 71:4, 96:22, 101:12, 104:10, 108:18, 112:19, 113:13, 117:3, 118:9, 123:10, 126:2 meaning [2] - 63:6, 88:1 means [3] - 14:14, 87:8, 88:6 meant [1] - 34:5 measure [1] - 23:13 measured [4] - 21:9, 21:10, 23:5, 42:18 measurements [2] - 23:9, 42:4 measures [5] - 85:1, 85:10, 91:17, 91:20, 92:5 mechanical [4] - 22:14, 22:20, 23:1, 85:16 mechanisms [1] - 86:18 media [2] - 97:24, 98:1 medical [13] - 18:3, 18:22, 35:10, 41:24, 67:11, 96:7, 96:20, 96:23, 102:8, 102:9, 102:13, 107:11,	114:21 meet [5] - 5:12, 30:6, 31:22, 55:3, 83:1 meeting [9] - 3:2, 3:4, 3:15, 76:19, 82:12, 83:1, 83:19, 108:8, 111:18 meetings [2] - 83:21, 105:2 meets [1] - 52:2 meg [1] - 65:17 MEG [3] - 2:8, 65:17, 114:7 megawatts [1] - 100:15 member [6] - 3:19, 3:24, 56:19, 95:23, 97:10, 102:23 Members [1] - 1:15 members [17] - 3:18, 4:7, 36:9, 48:11, 51:3, 58:10, 59:23, 75:24, 76:4, 99:19, 103:16, 107:15, 107:17, 107:19, 110:24, 111:5, 128:17 memory [5] - 71:19, 95:11, 95:20, 99:16, 101:18 mental [2] - 56:8, 67:16 mention [5] - 23:22, 25:17, 31:11, 82:1 mentioned [21] - 12:16, 32:14, 32:18, 41:10, 70:6, 71:17, 72:3, 79:15, 81:10, 82:5, 83:10, 85:2, 85:9, 89:4, 89:13, 90:12, 90:16, 92:8, 99:9, 107:3, 117:24 merely [1] - 67:17 met [3] - 4:11, 29:6, 82:7 meteorological [1] - 86:4 meters [2] - 26:20, 46:1 method [2] - 86:4, 86:9 methodology [1] - 23:19 methods [2] - 86:2, 86:16 Michael [2] - 1:16, 3:14 Michigan [1] - 12:13 microphone [1] - 51:11	middle [2] - 72:12, 90:2 midrange [1] - 30:1 might [10] - 22:1, 22:4, 27:10, 38:6, 38:8, 41:16, 54:19, 55:6, 55:16 migraine [1] - 51:17 migraines [3] - 51:22, 51:23, 68:16 mile [3] - 100:23, 101:11, 101:14 miles [4] - 100:14, 100:17, 100:18 million [1] - 5:8 mimic [1] - 31:20 mimics [1] - 21:18 mind [4] - 18:2, 18:21, 63:18, 63:21 minimal [1] - 122:5 minimize [4] - 57:21, 58:6, 89:21, 106:2 minor [1] - 104:3 minutes [2] - 60:10, 118:3 miscommunication [1] - 108:22 misses [1] - 127:12 misunderstanding [1] - 7:15 MIT [15] - 16:11, 16:13, 33:12, 33:15, 33:17, 34:4, 37:13, 38:15, 41:4, 42:10, 46:5, 52:16, 67:7, 67:9 mitigation [1] - 31:12 model [13] - 4:22, 13:14, 24:19, 25:4, 25:13, 25:14, 25:18, 25:22, 26:4, 26:18, 26:19, 45:22, 73:21 modeled [9] - 25:22, 26:20, 30:2, 32:8, 32:19, 32:21, 33:2, 39:22, 59:1 modeling [19] - 13:8, 13:12, 13:17, 13:20, 16:22, 20:7, 23:18, 23:20, 24:3, 24:14, 25:14, 25:15, 25:24, 27:24, 30:6, 33:4, 55:18, 55:19, 55:20 Modeling [1] - 20:8 models [5] - 24:6, 25:22, 25:24, 26:8, 54:20 moderate [1] - 24:7 moderately [1] - 55:17 moment's [2] - 87:22,
M				
ma'am [3] - 76:10, 95:13, 101:24 machine [2] - 130:7, 130:8 machines [1] - 98:20 mail [2] - 103:10, 108:17 mailed [1] - 61:7 mails [2] - 108:11, 109:20 main [1] - 22:16 maintain [1] - 92:13 maintained [2] - 92:1, 112:24 maintenance [12] - 87:3, 87:6, 89:10, 97:16, 98:23, 98:24, 99:4, 104:8, 115:6, 115:22, 117:8, 125:24 major [2] - 104:5, 104:6 majority [3] - 69:17, 78:5, 82:16 make/attend [1] - 82:24 males [1] - 40:23 man [1] - 91:8 manage [1] - 88:15 management [15] - 79:13, 79:14, 80:16, 82:10, 84:4, 87:10, 88:10, 89:16, 90:10, 90:15, 104:12, 104:18, 107:10, 114:20, 116:4 Management [1] - 82:14 manager [2] - 103:3, 128:3 managers [2] - 78:18, 105:1				

o'clock [1] - 129:4
Oakland [2] - 117:13, 117:14
object [1] - 123:9
objection [1] - 123:14
observations [1] - 78:22
obsolete [1] - 106:14
obtaining [1] - 77:20
obviously [5] - 56:13, 105:8, 106:1, 119:20, 120:5
occasion [1] - 17:14
occupational [7] - 79:20, 80:8, 80:12, 80:15, 80:21, 81:3, 96:5
Occupational [2] - 77:18, 77:21
occupied [1] - 42:18
occur [4] - 37:16, 43:22, 59:15, 89:15
occurred [2] - 89:9, 91:9
occurrence [6] - 7:20, 7:22, 8:17, 49:13, 50:1, 89:5
occurs [2] - 24:8, 57:22
octave [5] - 28:14, 28:19, 29:3, 29:9, 30:11
octaves [2] - 28:23, 29:12
OF [2] - 3:8, 130:1
OFF [1] - 36:3
offered [1] - 5:17
offering [1] - 14:13
offhand [1] - 67:13
office [1] - 82:13
Officer [1] - 1:7
offices [1] - 12:4
Official [3] - 1:22, 130:3, 130:20
offset [1] - 45:1
offshore [2] - 78:7, 100:4
often [2] - 16:1, 104:20
oil [10] - 78:6, 78:7, 97:22, 97:24, 98:6, 98:9, 98:13, 98:17, 99:7, 100:4
Oklahoma [3] - 77:18, 90:3, 127:12
Old [1] - 20:16
old [3] - 4:21, 54:15, 62:21
older [1] - 70:10
ON [1] - 1:1

once [21] - 3:20, 25:8, 25:17, 47:16, 47:17, 55:12, 79:9, 92:12, 97:13, 101:3, 105:6, 106:19, 106:21, 107:6, 109:11, 115:24, 118:11, 123:4, 125:18, 126:10, 126:11
one [53] - 4:5, 9:20, 9:21, 11:1, 22:17, 23:13, 23:14, 26:18, 27:4, 32:22, 32:23, 33:7, 34:14, 36:16, 43:2, 45:12, 48:24, 52:12, 53:1, 56:21, 58:19, 60:13, 61:16, 61:18, 63:17, 63:21, 64:7, 65:24, 67:15, 70:6, 73:23, 73:24, 81:1, 81:12, 86:4, 86:17, 89:2, 91:10, 92:19, 102:19, 103:3, 103:24, 106:13, 107:2, 108:1, 115:1, 118:7, 118:22, 118:23, 120:2, 125:12, 126:16, 127:8
onsite [7] - 81:17, 84:5, 87:9, 87:12, 98:19, 99:9, 114:18
OPERATE [1] - 1:2
operate [8] - 79:16, 81:12, 81:18, 88:11, 89:5, 90:22, 94:2, 120:22
operated [2] - 94:1, 100:19
operating [16] - 78:19, 79:24, 85:20, 93:21, 94:12, 94:15, 95:15, 97:8, 99:3, 113:3, 121:8, 121:15, 121:16, 121:18, 125:16, 126:1
operation [3] - 79:9, 87:8, 104:8
operational [3] - 4:20, 6:2, 86:24
operations [24] - 31:24, 32:5, 78:7, 78:10, 79:11, 83:14, 83:22, 85:6, 87:2, 87:13, 87:16, 95:18, 96:17, 105:4, 105:10, 105:21, 106:3, 107:3, 115:6, 115:21, 117:8, 121:7
operators [1] - 87:24

opinion [6] - 33:1, 46:3, 46:8, 50:5, 119:19, 119:21
opportunity [2] - 4:2, 10:15
opposed [4] - 10:16, 24:10, 60:5, 111:5
option [1] - 60:19
options [1] - 36:19
ordinance [5] - 30:4, 85:14, 102:22, 103:8, 106:17
Organization [2] - 13:10, 67:15
orientation [1] - 84:3
orientations [1] - 85:1
origination [1] - 12:19
OSHA [1] - 84:14
otherwise [3] - 50:23, 57:10, 65:12
oto [1] - 66:1
otolaryngo [1] - 66:2
outage [1] - 104:10
outcome [3] - 34:22, 34:24, 122:10
outlined [1] - 126:16
output [4] - 44:16, 44:17, 45:7, 45:15
outright [1] - 14:24
outside [6] - 10:20, 47:2, 55:10, 57:24, 58:2, 69:12
overall [5] - 31:21, 45:6, 45:13, 73:13, 82:17
overly [1] - 57:2
oversaw [1] - 12:21
oversee [3] - 12:5, 20:11, 20:13
overseeing [1] - 78:6
oversight [2] - 86:24, 88:8
overview [5] - 79:5, 82:8, 83:5, 106:9, 106:20
owl [1] - 31:15
owl's [1] - 31:15
own [3] - 62:8, 100:5, 119:5
owns [2] - 5:1, 89:2

P

P-U-R-D-Y [1] - 76:13
P.M [4] - 1:5, 3:1, 129:6
p.m [2] - 29:8, 129:4
pacemakers [3] - 71:14, 95:9, 95:20
packet [1] - 108:24

page [12] - 7:16, 7:24, 8:2, 20:24, 21:14, 22:6, 23:21, 34:4, 34:19, 40:3, 45:21, 52:17
pages [1] - 106:12
Pages [1] - 130:6
paid [1] - 123:17
pain [1] - 21:21
paper [9] - 14:15, 14:19, 14:20, 14:23, 14:24, 15:1, 15:2, 15:8, 15:9
paper's [1] - 14:22
papers [2] - 15:13
Paralegal [1] - 1:11
parameter [1] - 89:20
parameters [3] - 13:21, 26:10, 85:18
paraphrasing [2] - 34:15, 37:14
parcels [3] - 5:17, 5:19, 5:21
part [21] - 17:10, 17:23, 20:2, 22:22, 27:11, 37:19, 39:21, 53:13, 62:4, 81:14, 90:23, 93:7, 94:20, 96:1, 100:21, 101:15, 102:22, 105:12, 106:12, 118:16, 118:20
participant [2] - 105:2, 123:18
participants [7] - 74:6, 74:7, 74:15, 74:16, 74:18, 74:22, 74:23
participated [4] - 14:2, 14:6, 14:12, 20:18
Participating [6] - 5:9, 5:10, 5:13, 5:16, 5:23, 123:11
participating [2] - 32:23, 78:21
parties [2] - 89:22, 111:4
partnership [3] - 82:4, 83:10, 84:2
partnerships [1] - 82:2
parts [1] - 90:3
pass [1] - 41:1
passing [1] - 22:18
past [6] - 92:4, 104:22, 120:11, 120:12, 120:13
path [1] - 96:7
patience [1] - 36:5
pattern [1] - 102:10
pause [1] - 35:22

payments [2] - 45:14, 123:17
Pedigo [1] - 63:3
peer [16] - 14:11, 14:14, 14:16, 14:18, 14:21, 14:23, 15:4, 15:6, 15:11, 15:16, 33:21, 39:16, 44:8, 46:16
peer-reviewed [8] - 14:11, 14:14, 14:16, 14:18, 15:16, 39:16, 44:8, 46:16
people [63] - 28:16, 29:4, 35:12, 35:13, 38:3, 40:11, 41:22, 42:5, 43:1, 43:5, 43:8, 51:16, 53:8, 56:5, 56:18, 58:24, 59:13, 60:4, 60:5, 62:12, 64:22, 64:23, 64:24, 68:17, 68:22, 69:16, 69:18, 69:20, 70:3, 70:7, 70:8, 70:10, 70:13, 70:18, 71:23, 72:4, 74:6, 75:5, 80:22, 85:4, 87:4, 88:2, 90:8, 95:22, 98:13, 101:2, 101:8, 102:16, 102:19, 104:21, 105:15, 105:16, 108:1, 114:13, 120:1, 120:2, 120:6, 122:5, 122:6, 122:19, 122:21, 124:1, 125:21
per [8] - 24:16, 28:18, 47:16, 47:17, 47:18, 53:18, 58:6, 103:8
perceive [1] - 55:15
perceived [1] - 21:12
perceiving [1] - 65:21
percent [7] - 5:8, 5:13, 41:12, 45:10, 57:12, 58:2, 61:4
perceptible [1] - 55:17
perception [2] - 44:3, 70:24
perform [1] - 125:23
performing [1] - 97:15
perhaps [1] - 70:10
period [1] - 99:23
periodically [1] - 34:11
permits [1] - 106:18
permitting [1] - 38:8
persists [1] - 8:20
person [7] - 38:4, 59:7, 59:8, 70:16,

83:1, 103:2, 122:16 personal [2] - 39:12, 52:20 personally [1] - 119:16 personnel [19] - 82:10, 84:5, 84:7, 85:1, 86:6, 87:9, 87:12, 89:17, 90:10, 102:14, 104:13, 106:1, 109:14, 111:19, 114:9, 114:16, 114:20, 115:5, 120:17 perspective [5] - 18:24, 53:1, 93:20, 105:20, 119:24 pertain [3] - 66:13, 79:16, 102:14 pertaining [1] - 125:10 pertains [5] - 79:8, 79:21, 88:5, 88:21, 93:4 Petroleum [1] - 100:3 phase [2] - 83:21, 83:22 phenomenon [1] - 52:20 phone [2] - 103:4, 103:10 phones [2] - 91:21, 92:10 photo [2] - 97:23, 98:2 photography [1] - 27:7 photosensitive [7] - 7:21, 8:18, 47:20, 48:1, 49:6, 49:14, 49:24 physical [1] - 67:16 physicians [1] - 35:14 physiological [1] - 56:3 piano [1] - 28:21 Piatt [2] - 120:15, 120:22 pictures [1] - 112:20 piece [1] - 125:24 place [10] - 90:12, 91:17, 93:6, 103:7, 106:17, 106:21, 109:12, 117:2, 119:9, 130:9 placed [1] - 31:23 plan [18] - 19:16, 79:6, 79:8, 82:9, 83:6, 83:13, 83:20, 93:6, 106:5, 106:10, 106:16, 109:12, 112:9, 115:19,	116:2, 117:7, 117:20, 120:21 Planning [4] - 3:3, 51:3, 103:17, 129:2 PLANNING [1] - 1:1 plans [3] - 79:15, 84:19, 90:9 plant [1] - 91:10 play [1] - 29:24 played [2] - 43:6, 43:7 playing [1] - 29:20 pledge [1] - 3:7 PLEDGE [1] - 3:8 plots [1] - 27:10 point [6] - 9:11, 16:20, 47:4, 57:21, 67:20, 116:16 pointed [1] - 119:18 points [1] - 81:23 polluting [1] - 98:6 Pollution [9] - 27:22, 28:1, 28:3, 28:13, 29:1, 30:12, 30:22, 33:3, 52:3 populated [1] - 93:13 population [6] - 35:18, 43:12, 58:1, 58:23, 59:3 populations [2] - 15:22, 16:23 porosity [1] - 24:4 porous [1] - 24:4 portion [3] - 8:3, 27:12, 27:13 pose [2] - 34:12, 122:13 position [1] - 53:1 positions [1] - 12:18 positive [1] - 40:14 possible [5] - 4:6, 70:8, 106:2, 113:12, 118:15 possibly [3] - 47:20, 105:17, 108:18 post [1] - 6:6 post-construction [1] - 6:6 posted [3] - 85:11, 103:4, 103:5 posts [2] - 98:1, 112:20 potential [10] - 7:17, 8:13, 15:24, 16:10, 41:7, 44:17, 45:14, 49:10, 82:18, 86:7 potentially [3] - 42:17, 59:15, 106:13 pour [1] - 91:11 power [2] - 28:6, 100:16	Power [1] - 44:6 powered [1] - 26:12 practice [4] - 12:5, 36:22, 79:18, 93:5 practiced [1] - 62:17 Precinct [1] - 76:20 precincts [1] - 76:19 preclude [1] - 65:5 precludes [1] - 74:20 Predicting [1] - 46:11 predispose [1] - 53:12 predisposition [1] - 53:6 prefer [4] - 61:19, 61:24, 62:24, 75:17 preliminarily [1] - 10:7 premium [1] - 5:24 prepared [1] - 10:21 preparing [1] - 14:12 present [9] - 4:1, 4:7, 7:20, 7:22, 8:17, 35:15, 49:13, 65:7, 108:7 presentation [5] - 81:7, 81:23, 82:5, 112:22, 128:4 presentations [2] - 83:11, 85:9 presented [1] - 63:18 presenting [3] - 10:13, 35:14, 122:22 preset [1] - 85:18 President [1] - 12:20 Presiding [1] - 3:14 pressure [4] - 21:10, 23:4, 28:19, 54:21 presumption [1] - 122:24 pretty [5] - 23:11, 27:8, 72:18, 94:7, 97:19 prevalence [1] - 35:17 prevent [4] - 86:7, 89:5, 89:14, 113:12 prevention [1] - 85:13 previous [9] - 20:17, 47:9, 47:10, 50:17, 83:11, 85:9, 99:20, 102:8, 122:14 previously [5] - 9:9, 19:14, 32:14, 90:12, 90:16 primarily [1] - 12:7 primary [3] - 22:8, 35:7, 89:2 Primer [2] - 20:24, 22:6 primer [1] - 21:6 principal [3] - 12:2, 12:4, 20:13	print [2] - 36:15, 37:4 printing [2] - 36:18, 37:4 problem [2] - 57:10, 127:15 problems [3] - 68:6, 71:19, 99:7 procedure [1] - 23:22 procedures [6] - 23:23, 78:14, 78:17, 78:19, 79:10, 79:11 proceed [2] - 65:7, 65:8 Proceedings [1] - 130:5 process [20] - 14:18, 15:12, 38:7, 52:13, 53:15, 61:8, 62:15, 77:20, 94:9, 94:10, 94:13, 96:2, 97:12, 97:13, 97:17, 102:22, 102:23, 103:6, 122:5 processes [1] - 91:16 produce [2] - 67:7, 79:5 produced [3] - 22:7, 22:9, 106:13 produces [1] - 100:15 producing [1] - 99:6 professional [6] - 78:5, 96:8, 96:16, 102:8, 102:9, 102:13 Professional [1] - 12:12 professionalism [1] - 126:24 Professionals [1] - 77:24 proffer [3] - 4:17, 5:2, 6:8 proffered [1] - 48:7 program [1] - 12:22 progress [1] - 81:20 progresses [2] - 79:7, 83:20 prohibited [1] - 124:14 project [85] - 4:18, 4:19, 4:21, 4:24, 5:1, 5:5, 5:7, 5:20, 6:1, 6:2, 26:19, 26:20, 26:22, 28:5, 29:6, 33:2, 38:8, 38:9, 38:10, 40:7, 40:8, 40:12, 40:15, 40:16, 47:23, 49:22, 53:15, 53:16, 55:3, 55:18, 56:19, 60:5, 60:6, 72:18, 74:4, 74:16,	74:24, 75:1, 75:6, 79:6, 79:7, 81:16, 81:24, 82:13, 82:18, 82:23, 83:3, 83:9, 83:12, 83:20, 83:23, 84:13, 84:21, 85:10, 86:6, 86:24, 87:1, 87:7, 89:2, 89:13, 91:18, 92:3, 92:23, 93:5, 93:13, 95:2, 95:6, 95:15, 98:3, 100:9, 100:17, 106:5, 106:24, 107:1, 115:4, 115:7, 115:9, 115:24, 116:13, 120:17, 120:20, 121:5 projects [23] - 4:23, 6:5, 13:18, 14:7, 14:8, 15:22, 16:1, 16:11, 16:23, 28:6, 39:13, 45:15, 78:22, 81:21, 89:8, 89:10, 91:19, 93:21, 94:7, 94:15, 95:5, 99:11, 121:17 prominent [3] - 33:24, 71:3, 71:4 propagate [1] - 24:5 propagation [3] - 13:11, 13:19, 24:2 proper [1] - 105:18 properly [4] - 85:21, 85:24, 113:3, 126:1 properties [2] - 6:1, 27:2 PROPERTIES [1] - 1:2 property [4] - 4:13, 26:23, 32:15, 98:10 proportional [1] - 45:4 proposal [2] - 91:23, 92:12 proposed [2] - 47:22, 52:2 Prosperity [8] - 91:4, 92:16, 92:17, 92:19, 92:20, 120:15, 120:18, 120:20 protection [6] - 82:9, 82:15, 84:6, 86:2, 105:11, 111:21 protocols [5] - 78:14, 78:16, 84:16, 90:8 provide [10] - 10:5, 21:2, 22:7, 23:3, 25:18, 30:8, 36:10, 36:15, 106:9, 107:5 provided [9] - 7:13, 26:10, 38:20, 82:8, 83:5, 90:18, 103:9,
--	---	---	---	--

106:20, 116:3 provides [2] - 34:20, 88:9 providing [1] - 36:8 PRP [1] - 1:22 psychological [2] - 37:15, 38:13 psychosomatic [2] - 52:14, 53:2 public [25] - 3:20, 3:23, 4:1, 17:14, 21:2, 64:22, 75:9, 75:24, 80:7, 80:10, 80:11, 81:1, 91:9, 93:2, 95:24, 96:9, 96:12, 99:19, 111:5, 111:19, 114:14, 123:7, 127:18, 128:17 public-use [1] - 93:2 publication [6] - 14:17, 14:19, 67:11, 67:22, 67:24 publicly [1] - 125:3 publish [1] - 15:13 published [12] - 35:2, 38:15, 38:18, 39:17, 42:10, 42:12, 42:13, 42:14, 44:7, 45:18, 46:10, 46:15 pull [1] - 121:21 pulled [1] - 34:3 purchased [1] - 5:21 purchasing [1] - 5:4 PURDY [3] - 76:13, 76:16, 76:18 Purdy [2] - 1:18, 76:13 purpose [1] - 8:19 purposely [1] - 42:6 purposes [2] - 32:12, 85:13 purview [1] - 121:6 put [11] - 9:14, 33:19, 36:12, 65:13, 76:10, 91:17, 93:6, 103:7, 106:21, 113:21, 117:3 putting [1] - 126:18	10:15, 10:16, 10:19, 17:12, 17:13, 18:21, 34:4, 34:8, 34:9, 34:11, 39:12, 48:11, 48:13, 51:2, 52:8, 54:6, 54:14, 58:10, 59:23, 60:4, 60:19, 60:22, 61:15, 63:6, 64:4, 64:11, 64:23, 64:24, 65:2, 65:6, 65:8, 65:11, 75:8, 75:10, 75:12, 75:23, 76:4, 80:4, 82:20, 83:9, 91:1, 92:18, 92:19, 93:15, 93:17, 96:9, 102:6, 103:14, 103:16, 105:3, 107:15, 107:17, 110:23, 111:3, 111:12, 127:5, 127:7, 127:18, 127:20, 127:21, 128:10, 128:11, 128:16 quick [1] - 93:14 quicker [1] - 117:14 quickly [1] - 4:6 quiet [1] - 22:1 quieter [1] - 31:16 quite [2] - 63:22, 99:4 quorum [2] - 3:19, 3:21 quote [2] - 49:21, 67:12 quoted [3] - 51:10, 51:14, 71:7	real [4] - 5:4, 6:3, 6:4, 53:10 really [3] - 31:1, 54:18, 63:15 reason [10] - 6:3, 60:18, 60:21, 64:15, 105:12, 106:4, 107:2, 108:13, 116:23, 116:24 reasonably [1] - 118:15 reasons [3] - 89:3, 103:23, 116:20 receive [3] - 106:19, 125:12, 126:7 received [7] - 9:18, 10:16, 28:10, 95:1, 96:18, 97:6, 98:5 receiver [2] - 25:5, 31:8 receivers [3] - 26:14, 26:18, 26:19 receiving [3] - 119:20, 120:3, 124:7 recent [2] - 17:20, 18:13 receptors [1] - 26:14 recess [2] - 60:10, 129:3 RECESS [2] - 60:11, 129:6 recognize [1] - 20:8 recognized [1] - 67:12 reconvene [1] - 3:4 RECORD [1] - 36:3 record [8] - 7:7, 11:12, 36:2, 36:4, 36:18, 77:9, 109:5, 124:23 recorded [1] - 42:20 recordings [1] - 42:21 redirect [1] - 76:2 reduce [1] - 31:18 reduced [4] - 31:20, 31:24, 32:5 reduces [1] - 32:1 reducing [1] - 98:10 redundancies [3] - 85:16, 113:8, 113:11 redundancy [1] - 88:9 refer [2] - 34:11, 48:4 reference [1] - 67:10 references [2] - 8:11, 51:15 referring [1] - 98:2 regard [4] - 11:16, 90:22, 105:3, 117:20 regarding [6] - 35:1, 38:13, 42:8, 48:11, 52:4, 93:1 regards [8] - 81:16,	92:7, 97:7, 99:18, 120:15, 121:7, 122:17, 125:17 Regional [1] - 1:19 regular [3] - 70:16, 70:18, 98:24 regulations [4] - 28:1, 28:3, 28:7, 93:11 reject [3] - 14:20, 14:23, 15:9 relate [3] - 38:6, 38:8, 123:16 related [33] - 4:18, 5:4, 12:11, 13:4, 13:5, 14:2, 15:17, 17:1, 17:2, 19:18, 34:10, 34:13, 37:22, 37:23, 38:2, 38:3, 42:5, 46:4, 48:12, 48:17, 52:1, 52:20, 53:5, 53:17, 53:20, 55:8, 55:17, 92:3, 92:4, 92:23, 101:5, 122:15, 123:1 relates [2] - 85:4, 95:22 relationship [1] - 38:10 relative [2] - 118:7, 118:8 relatively [5] - 17:19, 18:13, 40:22, 100:24, 128:2 relevant [1] - 5:2 remain [1] - 60:7 remainder [1] - 91:18 remember [5] - 48:12, 66:10, 71:5, 71:11, 73:8 remote [2] - 87:16, 87:21 remotely [1] - 56:6 Renewable [1] - 13:1 renewable [1] - 78:9 rent [3] - 100:22, 119:11 rental [2] - 119:3, 119:7 rented [1] - 119:9 repairs [1] - 99:4 replace [1] - 99:1 report [33] - 8:24, 16:15, 19:18, 20:1, 20:7, 20:9, 20:12, 20:15, 20:18, 20:22, 20:23, 21:7, 23:18, 28:2, 34:10, 34:17, 34:18, 37:13, 37:18, 38:23, 38:24, 41:1, 41:8, 42:2, 44:19,	45:16, 49:17, 49:18, 52:22, 62:5, 114:19, 123:6 Report [1] - 130:5 reported [4] - 43:2, 99:15, 120:17, 130:6 Reporter [3] - 1:22, 130:4, 130:20 reporter [2] - 54:10, 76:11 REPORTER [2] - 65:16, 76:8 reporters [1] - 4:3 reporting [2] - 37:22, 88:10 reports [8] - 15:21, 17:4, 34:11, 46:4, 50:2, 50:18, 61:1, 62:3 represent [1] - 29:11 require [4] - 94:8, 98:23, 102:12, 114:21 required [5] - 3:22, 5:8, 84:14, 97:16, 106:17 requirement [5] - 5:12, 52:3, 85:14, 94:12, 110:19 requirements [1] - 3:19 rescue [3] - 84:15, 84:16, 107:8 Research [1] - 46:16 research [6] - 7:17, 8:13, 47:9, 47:10, 49:10, 64:5 researcher [1] - 56:20 resets [1] - 86:14 residence [5] - 30:16, 31:8, 32:7, 32:8 residences [4] - 30:7, 32:20, 32:21, 32:22 residential [15] - 27:1, 27:2, 27:6, 27:9, 27:10, 27:12, 27:13, 27:19, 27:20, 27:23, 28:7, 32:9, 32:11, 32:12, 32:16 residents [3] - 10:18, 57:11, 59:2 resolution [7] - 94:9, 94:10, 94:13, 96:2, 102:22, 103:7, 122:4 resolve [3] - 94:20, 96:19, 103:6 resolved [1] - 102:20 resources [1] - 62:8 respect [13] - 17:15, 18:2, 18:4, 18:7,
R				
raise [1] - 48:11 raised [2] - 82:21, 94:18 range [3] - 23:4, 29:3, 41:10 rare [3] - 59:15, 89:14, 104:10 rarely [1] - 104:5 rate [1] - 28:18 rather [4] - 63:8, 63:9, 63:12, 75:10 reach [1] - 49:5 reaction [2] - 51:16, 53:10 reactions [2] - 43:9, 47:14 read [7] - 4:2, 7:8, 7:14, 8:7, 20:21, 49:21, 60:23 reading [2] - 36:1, 61:15				
Q				
qualified [3] - 19:5, 19:10, 66:3 quality [2] - 15:14, 26:7 quantify [1] - 73:8 quarter [1] - 40:17 questioning [2] - 37:8, 123:10 questions [65] - 10:3,				

19:14, 34:23, 38:23,
46:22, 64:14, 65:3,
65:4, 96:3, 96:8
respectfully [1] -
123:9
respective [1] -
115:20
respond [8] - 70:10,
84:10, 84:22, 99:23,
114:9, 114:11,
117:14, 117:15
responded [1] - 66:9
respondents [5] -
39:7, 39:8, 47:1,
57:15, 57:19
responders [4] -
84:19, 85:3, 117:11,
117:22
responding [1] -
109:14
response [27] - 15:7,
21:18, 43:13, 43:17,
70:9, 82:19, 84:19,
90:9, 90:15, 105:18,
105:23, 105:24,
106:15, 107:3,
112:10, 115:14,
115:19, 116:11,
116:18, 117:5,
117:6, 117:10,
118:1, 118:4, 118:8,
118:10
responsibilities [3] -
78:11, 78:12, 79:10
responsible [3] -
119:7, 119:13,
119:16
responsive [1] - 112:3
rest [2] - 5:2, 32:24
result [2] - 43:23
results [7] - 13:22,
25:9, 25:19, 26:3,
30:9, 30:15, 42:4
retrieved [1] - 121:1
review [10] - 4:9,
14:21, 15:11, 15:21,
17:10, 20:14, 33:20,
46:19, 49:3, 106:21
reviewed [13] - 14:11,
14:12, 14:14, 14:16,
14:18, 15:16, 19:22,
33:21, 37:24, 39:16,
44:8, 46:16, 51:14
reviewer [3] - 15:4,
15:6
reviewers [2] - 14:21,
14:23
reviewing [1] - 78:20
revisit [1] - 16:14
Rick [2] - 1:17, 58:14

riding [1] - 22:3
rigs [1] - 100:4
risk [5] - 7:20, 7:22,
8:17, 49:13, 49:22
risks [1] - 49:20
River [1] - 12:3
Rives [2] - 1:10, 10:9
RIVES [1] - 10:11
road [3] - 36:23,
39:14, 93:8
road-use [1] - 93:8
roadmap [1] - 128:9
roads [1] - 93:2
roadway [1] - 91:9
ROCC [7] - 87:17,
87:23, 88:3, 88:14,
88:15, 90:12, 98:19
rocket [1] - 41:15
role [2] - 33:24, 78:24
rollcall [1] - 3:9
rolled [1] - 91:9
roman [1] - 8:1
room [6] - 22:1, 54:22,
55:10, 55:12, 62:6,
129:4
rotational [2] - 22:13,
47:14
rotor [7] - 22:15, 32:1,
32:2, 40:21, 47:15,
47:16, 47:19
roughly [1] - 21:11
round [1] - 15:10
routine [2] - 87:6,
104:24
Royal [1] - 1:16
RPM [4] - 47:15,
47:19, 47:23
RSG [7] - 12:2, 12:5,
14:4, 14:6, 20:16,
30:2, 33:1
rules [1] - 35:23
run [2] - 54:20, 58:17
Runner [1] - 48:16
rural [3] - 12:8, 72:14,
72:23

S

safe [10] - 78:19,
79:10, 79:24, 85:6,
86:14, 87:8, 89:20,
90:8, 93:5, 118:6
safely [1] - 88:12
safest [1] - 89:22
safety [44] - 65:9,
78:1, 78:3, 78:4,
78:6, 78:13, 78:15,
78:16, 78:20, 78:22,
79:3, 79:10, 79:19,
80:12, 80:15, 81:3,

81:12, 81:14, 81:16,
81:19, 81:23, 81:24,
84:3, 84:14, 84:24,
85:4, 85:10, 85:15,
85:17, 86:17, 88:21,
90:17, 90:21, 92:5,
94:18, 94:19, 96:5,
96:16, 108:24,
112:3, 114:20,
121:7, 123:11,
126:24
Safety [5] - 77:13,
77:18, 77:21, 77:24,
78:13
sale [1] - 4:12
sales [1] - 6:6
Sarah [1] - 1:14
sat [2] - 43:5, 43:6
saw [4] - 44:13, 108:9,
108:20
scale [2] - 39:3, 47:5
scattered [1] - 94:2
scenario [3] - 94:17,
106:23, 107:5
scenarios [1] - 82:18
school [5] - 60:2,
62:17, 72:4, 107:20,
111:1
School [1] - 11:18
Science [2] - 46:17,
77:17
sciences [1] - 18:23
scientific [5] - 14:15,
33:21, 34:15, 42:3,
49:19
scope [1] - 123:10
Scott [2] - 1:8, 3:16
scratch [1] - 104:4
screen [4] - 15:12,
49:1, 82:10, 104:14
se [2] - 24:16, 53:18
seat [1] - 60:13
second [14] - 8:9,
22:20, 28:18, 30:11,
33:7, 35:22, 37:12,
37:14, 47:16, 47:17,
47:18, 82:6, 86:9,
107:24
secondary [4] - 57:8,
57:13, 68:20, 68:23
section [5] - 7:9, 7:16,
49:17, 50:18, 97:2
security [1] - 85:13
see [32] - 6:6, 6:11,
8:8, 9:16, 21:13,
21:14, 21:16, 26:24,
29:5, 29:14, 29:19,
30:11, 30:12, 35:12,
35:20, 43:9, 46:22,
47:21, 51:22, 53:16,

56:18, 63:21, 66:8,
76:7, 87:19, 88:15,
90:21, 99:1, 109:20,
115:10, 125:3, 127:6
seeing [3] - 9:1, 25:2,
112:19
seizures [11] - 7:20,
7:23, 8:17, 49:13,
49:20, 50:1, 94:24,
95:2, 95:19, 99:16,
101:18
select [1] - 14:21
selective [1] - 23:12
self [4] - 8:24, 38:24,
43:2, 84:16
self-report [2] - 8:24,
38:24
self-reported [1] -
43:2
self-rescue [1] - 84:16
sell [2] - 4:22, 5:6
selling [2] - 119:7,
119:14
semantics [1] - 126:2
sense [3] - 21:13,
41:17, 124:4
sensitive [9] - 29:18,
29:23, 40:10, 40:11,
43:2, 43:4, 43:11,
43:12, 43:16
sensitivity [1] - 29:13
sensor [3] - 85:19,
85:21, 86:9
sensors [2] - 112:13,
113:5
sent [1] - 108:12
sentence [4] - 7:9,
7:15, 8:7, 8:19
serious [1] - 15:13
seriously [1] - 99:4
serrated [6] - 31:13,
31:20, 45:3, 73:20,
73:22, 73:24
serrated-trailing [1] -
73:24
serrations [1] - 31:17
serve [3] - 13:3, 13:6,
13:9
served [1] - 12:6
serviced [1] - 85:23
session [2] - 4:1, 83:8
sessions [3] - 81:11,
82:15, 105:5
set [4] - 29:2, 34:4,
52:3, 130:9
setbacks [1] - 44:21
sets [4] - 13:21, 28:13,
31:12, 97:18
setup [1] - 42:21
seven [5] - 58:2,

64:22, 64:23, 127:8
Seven [5] - 83:7,
108:4, 109:18,
109:22, 111:17
several [10] - 5:14,
26:6, 26:7, 33:16,
39:7, 63:17, 87:8,
87:24, 93:15, 99:19
severe [3] - 88:22,
89:24, 90:6
SF [1] - 8:15
Shadow [6] - 6:16,
9:6, 46:11, 46:12,
48:20, 49:4
shadow [54] - 6:22,
6:24, 7:3, 7:4, 7:5,
7:18, 7:19, 8:14,
8:16, 8:21, 15:17,
15:18, 17:2, 17:3,
17:4, 17:5, 17:16,
17:19, 18:7, 19:12,
19:23, 46:9, 46:21,
47:2, 47:11, 47:17,
48:2, 48:4, 48:12,
48:15, 48:18, 49:11,
49:12, 49:19, 50:3,
50:4, 50:5, 50:15,
56:2, 56:7, 57:5,
57:14, 57:15, 57:17,
57:22, 58:1, 58:3,
58:19, 59:1, 59:5,
65:3, 75:2
SHAPIRO [11] - 76:24,
77:7, 80:14, 81:5,
81:6, 97:2, 97:4,
103:14, 113:24,
121:24, 124:16
Shapiro [5] - 1:14,
76:23, 95:21,
121:23, 124:19
Shapiro's [1] - 114:1
SHAPIRO.....
[1] - 2:6
share [2] - 22:8, 62:9
shared [1] - 81:20
Shaw [2] - 62:1, 62:24
SHAW [1] - 63:1
sheds [1] - 32:15
Sheriff [1] - 83:2
Sheriff's [1] - 83:2
Sherman [2] - 61:23,
63:20
SHERMAN [2] - 61:24,
63:15
Shook [2] - 1:17,
58:14
shook [3] - 58:12,
59:22, 110:5
SHOOK [4] - 58:13,
58:16, 110:6, 110:9

SHOOK [2] - 2:4, 2:7 shore [1] - 41:19 short [1] - 124:16 shorter [1] - 44:22 shorthand [2] - 130:7, 130:8 shout [1] - 61:13 show [4] - 26:21, 30:3, 66:23, 127:6 showed [2] - 29:10, 104:14 showing [2] - 26:2, 48:24 shows [2] - 28:3, 85:19 shut [6] - 85:17, 86:6, 88:15, 97:14, 113:4, 125:23 shutdown [1] - 87:21 shuts [1] - 86:12 shutting [1] - 85:22 sick [5] - 58:19, 69:8, 69:9, 69:10, 98:13 side [3] - 30:18, 30:23, 41:21 sign [3] - 5:22, 122:9, 122:19 signage [1] - 85:11 signed [9] - 5:9, 74:8, 74:13, 74:17, 74:19, 122:7, 122:12, 122:21, 123:2 significant [6] - 27:24, 40:4, 40:20, 40:21, 59:4, 69:21 similar [4] - 14:2, 47:7, 49:7, 101:23 similarly [1] - 30:10 single [1] - 100:13 sit [1] - 83:6 site [23] - 62:10, 78:19, 80:22, 82:18, 84:3, 84:7, 84:10, 84:13, 85:1, 87:12, 95:22, 100:14, 100:19, 100:20, 100:24, 101:10, 105:18, 110:20, 111:20, 114:19, 115:5 sited [2] - 14:7, 106:6 sites [4] - 45:6, 72:15, 90:2, 94:12 sitting [1] - 56:10 situation [4] - 5:24, 56:14, 101:23, 104:11 six [6] - 47:24, 49:23, 101:13, 120:12,	127:8, 129:3 SIXTH [1] - 130:1 Sixth [1] - 130:4 skilled [1] - 87:24 sleep [8] - 37:15, 37:19, 37:20, 38:14, 95:14, 95:16, 95:20, 101:20 slept [1] - 99:22 slide [6] - 77:14, 82:3, 85:7, 86:22, 87:15, 107:24 slides [1] - 81:22 slots [1] - 105:16 slower [2] - 25:2, 47:21 slowing [1] - 93:12 slows [1] - 32:1 small [1] - 117:12 smaller [1] - 24:24 Smith [4] - 111:7, 111:9, 113:17, 114:4 SMITH [2] - 111:8, 111:11 SMITH [1] - 2:8 Smithly [1] - 8:10 Social [1] - 46:16 social [3] - 67:17, 97:23, 98:1 socialized [1] - 35:10 Society [2] - 39:17, 42:14 solar [2] - 12:9, 78:9 sold [4] - 4:24, 5:20, 6:1, 6:4 someone [7] - 53:1, 88:1, 94:14, 116:10, 118:3, 119:22, 120:6 someplace [1] - 62:6 sometimes [1] - 98:21 somewhat [2] - 52:21, 55:11 somewhere [5] - 18:17, 21:22, 23:15, 73:11, 76:21 soon [1] - 99:2 Sophia [1] - 1:14 sorry [9] - 28:9, 37:21, 57:4, 71:5, 73:1, 76:18, 82:6 sort [3] - 8:19, 21:8, 108:12 sound [136] - 13:4, 13:5, 13:8, 13:11, 13:14, 13:17, 13:19, 13:23, 14:3, 15:17, 15:18, 16:3, 16:22, 17:1, 17:16, 19:11, 19:12, 19:18, 19:22,	20:7, 21:4, 21:5, 21:9, 21:18, 22:7, 22:9, 22:19, 22:23, 22:24, 23:1, 23:4, 23:13, 23:15, 23:21, 24:2, 24:4, 24:10, 24:12, 24:13, 24:21, 24:24, 25:12, 25:18, 26:4, 26:12, 26:20, 26:21, 26:22, 28:9, 28:15, 28:18, 29:9, 29:10, 29:17, 29:18, 29:21, 29:23, 30:20, 31:1, 31:7, 31:9, 31:21, 32:1, 33:3, 33:4, 38:2, 38:5, 38:12, 39:21, 39:24, 40:1, 40:9, 40:18, 40:20, 40:23, 41:6, 41:7, 41:21, 42:19, 42:20, 42:21, 42:22, 43:3, 43:7, 44:3, 44:10, 44:24, 45:1, 45:4, 45:8, 45:13, 46:4, 46:6, 52:2, 52:4, 53:18, 53:20, 55:7, 55:9, 55:11, 55:12, 55:17, 55:18, 55:19, 55:21, 55:22, 57:3, 59:14, 59:16, 65:3, 65:21, 69:19, 71:21, 71:23, 72:9, 72:13, 72:14, 72:17, 73:8, 73:12, 73:13, 73:14, 73:16, 97:5, 97:9, 125:10, 125:18, 125:19, 125:22 Sound [2] - 20:8, 44:5 sounded [1] - 97:11 sounding [1] - 126:4 sounds [10] - 23:2, 26:23, 41:13, 41:14, 41:18, 41:24, 44:11, 114:3, 125:20, 126:6 source [2] - 24:22, 25:1 sources [3] - 26:6, 26:7, 41:20 south [2] - 100:14, 100:18 Southeastern [1] - 77:18 spares [1] - 25:15 speaking [2] - 9:8, 21:11 specific [6] - 5:3, 12:10, 28:8, 41:5, 67:5, 124:11 specifically [10] -	13:5, 13:12, 13:13, 33:17, 37:22, 38:23, 51:23, 55:5, 102:6, 125:1 specifications [1] - 118:4 specified [1] - 118:1 spectrum [2] - 41:21, 42:19 speculating [1] - 74:18 speed [5] - 26:12, 32:1, 47:15, 91:24, 93:11 speeds [3] - 91:22, 92:11, 92:14 spell [2] - 11:12, 77:8 spent [1] - 37:3 sphere [3] - 24:23, 24:24 spinning [3] - 47:16, 47:19 split [1] - 78:5 spoken [3] - 84:21, 108:1, 108:4 spot [1] - 126:18 spread [1] - 10:19 square [1] - 100:17 staff [7] - 75:13, 75:24, 87:2, 99:9, 102:13, 115:1, 115:3 staffed [1] - 87:23 stand [5] - 3:6, 51:11, 60:8, 75:21, 116:13 standard [27] - 13:7, 13:11, 13:13, 13:16, 13:17, 13:20, 13:21, 13:22, 14:16, 23:7, 24:2, 27:15, 29:3, 30:5, 30:7, 30:20, 30:24, 31:3, 31:5, 45:3, 55:2, 55:3, 58:6, 72:14, 72:16 Standardization [1] - 13:10 standardized [1] - 23:12 standardizing [1] - 23:9 standards [6] - 13:3, 13:15, 28:8, 29:6, 55:8, 118:5 Standards [1] - 13:6 standpoint [3] - 82:7, 92:9, 92:23 stands [1] - 23:7 start [6] - 18:16, 22:24, 30:18, 33:7, 91:3, 128:15 started [3] - 47:8,	83:18, 100:3 starting [5] - 20:1, 20:6, 20:22, 34:14, 56:11 State [1] - 77:19 state [5] - 11:11, 67:16, 77:8, 121:2, 124:22 States [8] - 39:3, 39:4, 46:13, 78:1, 87:19, 90:2, 95:2, 121:18 status [2] - 88:2, 110:19 stay [1] - 105:10 staying [1] - 108:21 stays [1] - 81:20 step [7] - 56:21, 68:21, 69:15, 69:22, 75:21, 76:6, 84:2 steps [1] - 90:18 still [6] - 10:12, 59:17, 108:16, 108:23, 113:13, 127:6 store [3] - 5:1, 91:21, 92:10 straight [1] - 14:20 stress [22] - 37:15, 37:17, 38:13, 43:9, 43:16, 43:18, 43:20, 56:13, 56:23, 57:9, 68:11, 68:18, 68:21, 68:22, 69:2, 69:9, 69:10, 69:11, 69:22 stressed [2] - 57:2, 69:16 Strode [2] - 83:7, 108:6 strongly [1] - 37:23 studied [2] - 16:24, 56:17 studies [49] - 7:2, 8:9, 8:12, 14:11, 15:16, 15:20, 15:21, 15:24, 16:6, 16:8, 18:24, 19:4, 19:13, 19:21, 33:7, 35:2, 35:4, 35:24, 36:6, 36:8, 36:14, 38:15, 42:5, 42:9, 46:9, 51:9, 51:14, 54:20, 55:8, 56:3, 56:7, 58:18, 64:17, 65:23, 66:6, 66:23, 67:3, 70:1, 70:3, 70:17, 71:13, 71:16, 71:20, 72:2, 72:7, 72:23, 72:24, 74:5, 75:16 Studies [1] - 11:17 Study [9] - 6:16, 8:23, 9:7, 16:14, 36:17,
--	---	---	--	---

48:4, 48:17, 49:5, 54:1
study [73] - 6:17, 6:24, 7:3, 7:6, 7:8, 8:15, 8:20, 9:3, 16:10, 16:14, 17:11, 17:19, 17:22, 17:24, 18:9, 33:12, 33:15, 33:19, 34:4, 34:5, 35:6, 35:8, 35:15, 37:11, 38:15, 38:17, 38:19, 38:20, 39:1, 39:5, 39:16, 41:4, 42:10, 42:12, 42:15, 42:16, 44:4, 44:8, 46:5, 46:10, 46:14, 46:18, 46:20, 47:1, 47:7, 47:9, 48:2, 48:3, 48:6, 48:19, 49:8, 49:9, 50:4, 50:5, 52:16, 57:16, 57:24, 59:1, 62:12, 66:9, 66:18, 67:6, 67:7, 67:9, 67:19, 68:19, 70:6, 70:8, 73:9, 74:15
studying [1] - 16:22
stuff [2] - 37:4, 126:21
styles [1] - 106:14
subject [3] - 51:16, 123:23, 127:23
subjective [4] - 38:4, 40:4, 53:5, 53:14
submit [2] - 14:18, 14:20
submits [1] - 15:4
submitted [2] - 20:2, 125:2
submitting [2] - 14:15, 14:16
subsequently [1] - 6:4
substation [6] - 78:20, 87:19, 103:5, 104:10, 105:6, 117:8
substations [1] - 100:16
subway [2] - 72:4, 72:5
success [1] - 81:15
successful [1] - 97:19
suggestion [1] - 9:8
suggests [1] - 91:12
summarized [1] - 41:4
summarizing [1] - 37:10
summary [7] - 11:14, 21:3, 22:7, 30:9, 52:16, 52:17, 90:16
summer [1] - 5:18
sunny [1] - 24:11

supervisor [1] - 114:19
support [4] - 35:16, 42:6, 107:1, 121:17
supported [1] - 100:12
supporting [1] - 96:17
supposed [4] - 108:10, 113:7, 113:9, 122:3
surrounding [3] - 15:22, 16:23, 98:7
survey [3] - 6:21, 6:22, 74:20
surveyed [1] - 59:2
surveyor [1] - 39:7
sustain [1] - 123:14
sustainability [1] - 127:1
switching [1] - 78:20
sworn [2] - 11:5, 77:4
symptoms [1] - 35:17
system [3] - 21:24, 35:10, 88:11
systems [1] - 85:17

T

T-a-y-l-o-r [1] - 65:17
table [2] - 30:10, 59:19
Table [7] - 28:2, 30:8, 30:9, 30:11, 32:6, 32:18
tachycardia [1] - 71:19
tad [1] - 3:13
talks [5] - 32:6, 34:23, 37:14, 45:22
taller [1] - 44:3
Taylor [13] - 6:15, 9:16, 9:21, 61:10, 64:10, 65:10, 65:17, 75:8, 114:5, 124:5, 124:20, 125:8, 127:5
TAYLOR [20] - 9:19, 61:12, 61:14, 64:3, 64:8, 64:13, 65:13, 65:17, 65:19, 66:12, 71:12, 114:7, 116:9, 116:17, 116:22, 121:13, 122:1, 124:6, 125:9, 127:3
TAYLOR..... [1] - 2:8
TAYLOR..... [1] - 2:5
team [5] - 16:4, 34:1, 56:19, 81:16, 82:22
teams [1] - 17:23
tear [1] - 113:4

technical [1] - 35:23
Technical [2] - 12:24, 13:1
technician [1] - 86:13
technicians [10] - 84:6, 84:13, 87:4, 97:15, 100:20, 100:24, 107:7, 114:19, 115:5, 125:23
technology [1] - 89:3
temperature [2] - 21:15, 24:9
ten [2] - 87:1, 115:4
tenants [1] - 119:14
tend [3] - 44:24, 58:5, 67:21
tendering [1] - 19:9
tends [4] - 24:12, 24:14, 24:19, 68:2
term [3] - 32:7, 69:11, 74:7
termed [1] - 53:23
terminate [1] - 124:14
terminology [1] - 21:7
terms [7] - 45:7, 47:17, 52:2, 70:24, 123:20, 124:13
terrified [1] - 109:3
Terry [1] - 111:9
testified [13] - 11:5, 17:18, 17:20, 17:21, 18:6, 18:18, 19:13, 19:14, 48:16, 60:23, 77:4, 96:4, 98:15
testify [8] - 10:14, 17:14, 18:1, 18:8, 18:17, 18:19, 19:11, 102:9
testimony [4] - 33:11, 56:12, 122:15, 128:16
Texas [1] - 90:3
Thayer [1] - 11:18
THE [24] - 17:7, 17:18, 18:12, 18:15, 36:3, 50:11, 50:22, 66:7, 71:10, 96:14, 96:16, 96:21, 96:24, 109:19, 110:3, 113:20, 121:10, 121:12, 126:22, 127:4, 127:11, 127:15, 130:1
theory [1] - 70:9
thin [1] - 98:22
thinking [2] - 24:22, 63:16
third [5] - 4:5, 8:10, 41:3, 41:4, 58:3

thousands [1] - 58:24
three [13] - 5:19, 8:8, 27:3, 34:4, 36:6, 36:14, 45:19, 47:17, 47:18, 125:12, 125:13, 127:8
threshold [6] - 21:19, 21:21, 47:13, 48:1, 49:23, 54:17
throughout [8] - 12:4, 26:19, 82:22, 83:12, 83:22, 87:7, 93:16, 94:3
throw [1] - 51:8
thumping [1] - 125:19
Thursday [3] - 128:8, 128:14, 128:15
timeframe [1] - 119:1
tip [2] - 23:13, 23:14
tire [1] - 112:14
tired [2] - 62:21, 99:17
title [4] - 77:11, 77:12, 79:17, 79:20
titled [1] - 20:23
TO [1] - 1:1
today [4] - 50:3, 65:14, 108:14, 108:23
today's [1] - 56:5
together [4] - 16:2, 33:19, 91:24, 92:13
Tom [1] - 1:16
tomorrow [29] - 36:16, 37:5, 38:21, 60:15, 60:16, 60:20, 60:22, 61:16, 61:20, 63:5, 64:2, 64:11, 64:24, 65:6, 65:8, 65:12, 65:13, 75:10, 75:15, 75:19, 75:23, 76:7, 127:9, 127:14, 127:17, 128:7, 128:10, 128:13, 129:3
tonight [10] - 4:4, 14:11, 48:8, 61:15, 62:3, 65:4, 65:9, 75:10, 95:9, 110:2
tonight's [1] - 33:11
took [1] - 56:20
top [5] - 21:16, 107:9, 121:3, 121:21, 126:8
topic [9] - 14:22, 16:3, 19:11, 21:5, 38:1, 41:8, 88:24, 89:24, 90:7
topics [4] - 15:17, 16:16, 19:22, 88:20
Tornado [1] - 90:3
tornados [1] - 89:24
total [4] - 36:7, 36:8,

45:15, 45:24
touch [3] - 87:14, 113:18, 114:2
touched [1] - 87:10
toward [5] - 24:10, 24:12, 38:9, 39:13, 39:14
towards [3] - 37:23, 40:2, 40:14
tower [3] - 84:15, 105:8, 107:6
town [1] - 117:12
Township [3] - 83:7, 108:4, 109:22
toxicology [1] - 11:21
track [1] - 117:4
tracks [2] - 72:4, 72:5
tractor [1] - 98:23
tractors [1] - 98:21
traditionally [1] - 23:5
traffic [3] - 39:15, 73:1, 93:2
tragic [1] - 91:7
trailing [10] - 31:13, 31:14, 31:16, 31:18, 31:20, 45:3, 73:20, 73:22, 73:24
train [3] - 73:3, 73:6, 73:7
trained [4] - 84:13, 84:15, 107:7, 114:22
training [5] - 82:19, 84:3, 84:5, 84:15, 87:9
transaction [2] - 5:7, 5:19
transcript [2] - 4:2, 130:8
transcripts [2] - 4:6, 4:8
transformer [1] - 87:20
transit [1] - 73:18
transitioning [1] - 86:23
transparency [2] - 84:20, 90:20
transportation [2] - 92:7, 93:6
travels [1] - 93:7
treated [1] - 66:9
treats [1] - 67:24
trees [1] - 24:18
rending [1] - 78:22
trends [1] - 44:13
tried [5] - 21:5, 31:19, 46:20, 57:19, 70:11
tries [1] - 9:1
trouble [2] - 105:16, 126:22

truck [3] - 73:10, 91:9, 93:4 trucks [5] - 91:22, 91:24, 92:1, 92:8, 92:13 true [2] - 37:2, 130:7 try [9] - 9:5, 57:21, 58:6, 67:13, 104:23, 105:4, 105:5, 105:10, 106:1 trying [11] - 4:5, 6:14, 25:6, 37:19, 46:22, 47:7, 56:12, 56:15, 63:2, 111:14, 117:17 Tuck [1] - 1:11 Turbine [6] - 13:1, 22:6, 44:5, 46:12, 48:20, 48:22 turbine [103] - 8:21, 13:5, 13:8, 13:14, 16:18, 22:8, 22:23, 23:4, 23:5, 23:6, 23:14, 25:6, 25:22, 25:24, 28:6, 31:7, 31:9, 31:19, 33:24, 34:21, 38:12, 39:24, 40:6, 40:9, 40:18, 40:20, 40:23, 41:6, 42:4, 43:3, 45:7, 47:1, 47:11, 47:14, 50:6, 55:21, 55:23, 57:3, 57:4, 57:5, 57:6, 57:9, 59:14, 67:5, 69:17, 69:19, 71:3, 72:9, 72:14, 73:6, 73:12, 73:14, 85:12, 85:18, 85:22, 86:7, 86:9, 86:12, 86:14, 86:15, 86:18, 87:19, 87:21, 88:3, 88:16, 88:22, 88:24, 89:1, 89:4, 89:21, 91:11, 97:9, 97:12, 97:14, 97:24, 98:4, 98:6, 98:9, 98:12, 100:18, 100:19, 100:23, 101:11, 101:14, 104:8, 105:7, 105:9, 106:14, 107:9, 113:2, 115:15, 115:22, 115:24, 116:2, 116:18, 118:18, 118:23, 125:18, 125:22, 125:23 Turbines [1] - 54:1 turbines [101] - 6:6, 7:18, 7:19, 8:15, 8:16, 9:1, 12:9, 17:9,	17:16, 18:5, 19:4, 22:10, 22:24, 23:9, 24:13, 25:15, 25:16, 25:19, 25:21, 26:1, 26:2, 26:9, 26:10, 30:17, 31:1, 31:12, 31:22, 31:23, 32:3, 32:4, 33:20, 33:23, 34:16, 35:17, 37:16, 37:23, 39:2, 39:9, 39:10, 39:20, 41:18, 44:3, 44:11, 44:14, 44:20, 44:21, 44:22, 44:23, 45:2, 45:6, 45:12, 45:17, 45:18, 45:24, 46:6, 46:24, 47:22, 49:11, 49:12, 50:21, 51:15, 52:19, 52:21, 52:23, 53:13, 58:18, 71:14, 74:3, 84:12, 85:15, 85:21, 86:3, 89:18, 90:5, 94:4, 94:24, 95:11, 97:8, 98:16, 98:19, 98:20, 99:5, 99:8, 99:22, 100:6, 100:15, 101:6, 103:23, 106:6, 106:15, 112:17, 112:23, 115:17, 115:21, 116:2, 117:9, 125:17 turbulence [1] - 31:18 turn [3] - 3:15, 4:5, 54:2 turned [2] - 86:13, 116:9 turning [2] - 22:11, 22:15 turns [1] - 22:13 TV [1] - 22:1 two [32] - 3:18, 4:3, 7:2, 13:15, 22:16, 26:17, 31:11, 32:22, 43:1, 54:14, 73:23, 75:5, 75:16, 81:1, 83:4, 86:2, 86:16, 88:6, 92:4, 92:18, 92:19, 97:5, 100:16, 102:6, 104:1, 110:1, 120:11, 120:16, 120:24, 125:12, 127:8, 127:23 twofold [1] - 45:12 Tyler [1] - 83:3 type [13] - 22:8, 47:7, 68:16, 74:19, 78:16, 89:14, 89:15, 90:11, 91:16, 96:5, 96:12, 97:20, 118:9	types [4] - 22:7, 26:17, 51:21, 75:5 typical [1] - 94:7 typically [4] - 73:14, 73:17, 107:4, 117:6 U ultrasound [3] - 41:22, 41:23, 42:1 unable [3] - 74:11, 74:13, 122:13 uncertainty [1] - 25:10 under [11] - 4:21, 7:15, 8:1, 24:6, 28:7, 68:18, 68:22, 121:6, 122:14, 125:16 underneath [1] - 56:10 understood [1] - 5:23 underway [3] - 82:5, 83:11, 87:11 unfortunately [1] - 71:10 unimportant [2] - 40:21, 40:22 union [4] - 110:10, 110:11, 110:13, 110:19 unique [1] - 41:7 United [8] - 39:2, 39:4, 46:13, 78:1, 87:18, 90:1, 95:2, 121:17 units [3] - 59:23, 107:17, 110:24 University [1] - 77:19 university [2] - 62:5, 77:22 unless [1] - 27:13 unlike [1] - 98:20 unlikely [5] - 7:20, 7:22, 8:17, 49:13, 49:22 UNTIL [1] - 129:6 unweighted [3] - 29:10, 29:12, 31:6 up [39] - 4:14, 5:2, 9:10, 15:12, 21:20, 22:3, 24:12, 28:22, 28:23, 32:5, 34:3, 42:19, 42:23, 43:8, 45:24, 48:24, 51:18, 60:23, 61:2, 61:10, 61:11, 63:22, 63:24, 64:5, 64:24, 75:19, 88:21, 91:2, 93:17, 95:10, 99:21, 105:8, 111:16, 111:23, 112:2, 113:4, 114:5, 122:21, 127:17	up-tower [1] - 105:8 updated [2] - 25:18, 82:22 UPON [1] - 1:2 upper [1] - 13:11 upper-sound [1] - 13:11 upsizing [1] - 46:5 Upsizing [1] - 44:5 upwind [1] - 25:2 urban [3] - 72:19, 72:24, 73:17 US [9] - 39:7, 57:11, 59:2, 67:20, 68:2, 72:15, 78:8, 78:10, 94:3 USDS [1] - 26:8 uses [4] - 24:15, 28:7, 32:7, 32:11 utilizing [1] - 90:12 V validation [1] - 27:5 value [2] - 5:22, 90:17 values [5] - 81:11, 81:12, 98:10, 126:15, 127:2 variable [1] - 70:12 Variables [1] - 48:21 variables [3] - 89:11, 103:24, 106:7 various [2] - 15:16, 43:8 vehicle [3] - 85:19, 85:20, 91:8 vehicles [2] - 93:4, 112:13 verified [1] - 27:14 verifies [1] - 86:14 verify [1] - 27:6 verifying [1] - 30:5 Vermilion [4] - 4:13, 4:19, 5:19, 6:4 Vermont [2] - 12:3, 12:13 versus [2] - 57:24, 73:6 vertigo [1] - 71:18 Vestas [11] - 26:1, 26:2, 30:16, 30:20, 31:1, 31:9, 31:12, 32:3, 55:21, 73:21, 88:4 veterans [1] - 88:1 vibration [5] - 55:5, 55:6, 55:15, 55:17, 56:1 Vice [1] - 12:20 vicinity [1] - 35:17	Victoria [1] - 1:14 video [2] - 91:23, 92:11 viewed [1] - 27:5 violation [1] - 94:19 visibility [1] - 88:9 visible [1] - 85:11 visual [2] - 87:6, 88:6 visually [1] - 38:10 voice [6] - 22:2, 116:13, 122:20, 123:1, 124:7, 124:17 voir [1] - 80:17 volunteer [5] - 104:16, 105:13, 109:1, 109:13, 112:7 vote [1] - 4:9 W wait [14] - 8:6, 61:19, 61:24, 62:14, 62:24, 63:8, 63:9, 63:13, 64:2, 64:9, 65:12, 75:10, 75:15, 75:18 waited [1] - 63:5 waiting [1] - 108:24 walk [3] - 20:21, 34:8, 102:18 walking [1] - 34:9 walkthrough [1] - 105:6 walkthroughs [3] - 84:8, 85:2, 117:23 walls [2] - 24:16, 55:10 wants [2] - 19:3, 64:1 warmer [1] - 24:11 warnings [1] - 112:14 Watts [3] - 1:16, 3:14, 61:22 WATTS [9] - 3:2, 3:9, 3:12, 51:7, 51:13, 52:6, 61:21, 63:14, 103:20 WATTS..... [2] - 2:3, 2:6 waves [1] - 41:19 ways [1] - 27:3 weak [1] - 38:11 wear [1] - 98:22 weather [6] - 24:6, 86:5, 88:22, 89:24, 90:6, 90:13 website [5] - 9:14, 9:23, 36:12, 61:3, 125:4 WECS [1] - 3:4 week [4] - 87:24, 99:13, 99:17, 101:13
---	---	---	---	--

weekly ^[1] - 105:1
weighted ^[4] - 21:17, 29:11, 29:13, 73:13
weird ^[1] - 125:20
welfare ^[1] - 80:22
well-defined ^[1] - 34:22
wellbeing ^[2] - 56:8, 67:17
west ^[1] - 100:19
wheelhouse ^[1] - 69:12
whereas ^[2] - 29:10, 43:19
whereby ^[1] - 15:12
whew ^[1] - 103:24
whichever ^[1] - 94:8
White ^[1] - 12:3
WHO ^[2] - 67:24, 68:4
whole ^[2] - 56:13, 111:16
whooshing ^[1] - 22:18
Wichita ^[1] - 100:14
wife ^[2] - 56:16, 100:21
willing ^[1] - 9:14
Wind ^[23] - 12:24, 20:2, 20:8, 22:5, 30:4, 33:2, 44:5, 46:11, 46:12, 48:20, 48:21, 53:24, 79:4, 79:5, 79:8, 80:16, 83:14, 92:6, 92:7, 93:16, 120:15, 120:18, 120:20
wind ^[147] - 4:18, 6:6, 7:18, 7:19, 8:15, 8:16, 8:21, 9:1, 12:9, 13:5, 13:8, 13:13, 13:17, 15:22, 16:1, 16:11, 16:17, 16:22, 17:8, 17:16, 19:3, 22:8, 22:10, 22:11, 22:15, 22:17, 22:23, 23:4, 23:5, 23:6, 23:9, 24:9, 24:13, 25:6, 25:14, 25:15, 26:10, 26:12, 31:19, 33:19, 33:23, 34:16, 34:21, 35:12, 35:17, 37:16, 37:23, 38:8, 38:9, 38:11, 39:2, 39:7, 39:9, 39:10, 39:13, 39:24, 40:6, 40:9, 40:18, 40:19, 40:23, 41:6, 41:18, 42:4, 43:3, 44:11, 44:14, 44:16, 44:20, 44:21, 44:22, 44:23, 45:2, 45:6, 45:7,

45:15, 45:17, 46:6, 46:24, 47:1, 47:11, 47:14, 47:22, 49:11, 49:12, 50:6, 51:15, 52:19, 52:23, 53:13, 57:3, 57:4, 57:6, 57:11, 58:18, 62:4, 67:5, 69:17, 69:19, 71:2, 71:14, 72:9, 72:13, 73:12, 73:14, 78:9, 79:16, 84:21, 86:1, 90:1, 90:5, 93:21, 93:24, 94:2, 94:15, 94:24, 95:2, 95:5, 95:11, 95:15, 96:17, 98:16, 99:21, 100:5, 100:8, 100:13, 100:22, 101:14, 102:2, 102:11, 102:14, 103:23, 105:5, 110:15, 111:22, 112:11, 112:17, 114:8, 114:16, 118:18, 119:1, 120:1, 121:16, 121:17
WIND ^[3] - 1:1, 1:2
winds ^[1] - 90:6
wings ^[2] - 31:15, 31:17
Winslow ^[1] - 63:4
winter ^[1] - 86:5
withstand ^[1] - 90:6
WITNESS ^[21] - 17:7, 17:18, 18:12, 18:15, 50:11, 50:22, 66:7, 71:10, 96:14, 96:16, 96:21, 96:24, 109:19, 110:3, 113:20, 121:10, 121:12, 126:22, 127:4, 127:11, 127:15
witness ^[21] - 10:22, 11:4, 11:7, 18:2, 20:3, 51:2, 60:7, 60:14, 63:7, 64:13, 64:14, 64:15, 65:5, 65:11, 75:21, 76:23, 77:3, 80:18, 80:24, 102:8, 127:7
witnesses ^[5] - 10:13, 10:14, 99:21, 127:24, 128:12
wondering ^[5] - 61:14, 64:3, 66:18, 67:18, 116:9
word ^[3] - 53:3, 53:5, 56:4

words ^[1] - 8:23
work-related ^[1] - 92:23
works ^[5] - 33:17, 62:9, 102:23, 105:10
world ^[1] - 56:5
World ^[1] - 67:15
worse ^[1] - 72:4
worst ^[4] - 24:8, 30:16, 72:13
worst-case ^[2] - 24:8, 30:16
wrench ^[1] - 51:9
writer ^[1] - 64:19
written ^[3] - 46:21, 106:17, 121:24
wrote ^[2] - 57:9, 71:7
WT ^[1] - 8:15

Y

year ^[14] - 13:12, 18:14, 35:9, 42:13, 58:6, 79:1, 87:24, 104:1, 118:22, 118:23, 120:12, 125:12, 126:5, 126:11
year's ^[1] - 103:22
years ^[10] - 12:6, 14:4, 45:19, 62:18, 78:4, 78:8, 95:17, 100:12, 101:3, 120:13
yesterday ^[3] - 7:4, 26:14, 57:23
young ^[1] - 91:8
yourself ^[1] - 15:16

Z

zero ^[2] - 21:19, 47:5
zeros ^[1] - 31:2
zoning ^[1] - 14:2