17-2295-EL-BEN

Huntley Reporting Service, Inc. 1919 Sandusky Mall Blvd. Sandusky, Ohio 44870

RE: THE APPLICATION OF REPUBLIC WIND, LLC, FOR A CERTIFICATE TO SITE WIND-POWERED ELECTRIC GENERALTION **FACILITIES IN** SENECA AND SANDUSKY COUNTY, OHIO

October 17, 2019

To Whom It May Concern,

This needs to be filed along with the attached Exhibits an Documents. It goes to the PYCO Docketing Division, 180 East Broad Street, 11th Floor, Columbus, Ohio.

If you have any questions please don't hesitate to contact Huntley Reporting Service, 419-626-4039 or huntleyreporting.com.

Thank you for your help.

Sincerely,

Lori Delhees

**Court Reporter** 

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## ORIGINAL

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3	IN THE MATTER OF:
4	THE APPLICATION OF REPUBLIC WIND, LLC
5	FOR A CERTIFICATE TO SITE WIND-POWERED
6	ELECTRIC GENERATION FACILITIES
7	IN SENECA AND SANDUSKY COUNTY, OHIO
8	
9	REPUBLIC WIND FARM
10	CASE NO. 17-2295-EL-BGN
11	
12	Thursday, September 12, 2019
13	~ ~
14	BOARD MEMBERS:
15	Sam Randazzo, Chairman Jay S. Agranoff, Administrative Law Judge
16	Anna Sanyal, Administrative Law Judge
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18	Tiffin University  Marion Center
19	235 Miami Street Tiffin, Ohio
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21	Tiffin, Ohio  CT 18 AN CO AN C
22	Marion Center 235 Miami Street Tiffin, Ohio  PUCO ANII: 30
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Board is scheduled for a Public Hearing at this time and place. Case No. 17-2295-EL-EGN, which is captioned, In The Matter of the Application of

MR. AGRANOFF: The Ohio Power Siting

Wind-Powered Electric Generation Facilities in

Republic Wind, LLC for a Certificate to Site

Seneca and Sandusky Counties.

My name is Jay Agranoff, and next to me is Anna Sanyal, and we are the Administrative Law Judges assigned to hear this particular case on behalf of the Board. Also with us is the Chairman of the Ohio Power Siting Board, Mr. Sam Randazzo. And Mr. Randazzo, would you like to make a statement at this time?

MR. RANDAZZO: Hello, everybody, and thanks for coming. I recognize some faces from some other hearings that we've been to. So this is an important meeting to all of you, but regardless of which side of the issue you're on, and as a result of that it's important to us. So thanks very much for taking part in this process. Thank you.

MR. AGRANOFF: Thank you.

I'd also like to point out that we also

have a number of the Board staff members that are in attendance today, and you may have seen them when you first came into the building. In particular, Mr. Matt Butler and Mr. Matt Schilling are here and they can assist you with any questions that you might have regarding the application or any other questions you might have regarding matters that are before Ohio Power Siting Board.

1.0

If you have any questions regarding the application in this case, as I pointed out before, we also have members of the applicant for Republic Wind that are available to answer any questions that you might have.

interviewers in this particular case, they include property owners, governmental entities, environmental groups, and the Ohio Farm Group.

The adjudicatory hearing portion of this proceeding was originally scheduled to commence on October 2, 2019. Pursuant to an entry that was issued earlier today, the October 2nd hearing will now be a call and continue with the hearing to reconvene on Monday, November 4th at the Board's offices in Columbus.

1 At the evidentiary hearing the parties 2 in this case will offer the testimony of their 3 witnesses, present evidence, and cross-examine witnesses of other parties. In this case, the 4 5 applicant for Republic Wind sees a Certificate of 6 Environmental compatibility and public needs to 7 construct and operate the Republic Wind Farm, which is a proposed wind powered elect generation 8 9 facility consisting of up to 47 wind-powered 10 turbines, for a total generation capacity of up 11 to 200 megawatts in Seneca and Sandusky Counties. 12 The project will be located in Adams, 13 Pleasant, Reed, Scipio, and Thompson Townships in 14 Seneca County, and York Township in Sandusky 1.5 County. The project will occupy up to 19,000 acres of leased private land, involving 16 1.7 approximately 440 properties. 18 The applicant anticipates that 19 construction would begin in the first or second quarter of 2020. The Board Staff Report, in 20 21 response to Republic's application, was filed on 22 July 25, 2019. 23 The purpose of today's hearing is limited to receiving comments from the public, 24 25 specific to the Republic Wind application to

construct its proposed wind farm project. We emphasize that this is your opportunity to let the board know how you would be affected if the proposed project is constructed and your opinion of how Republic's application. Any questions that you have about the project, the application, or the Board process should be addressed to the Board staff or Republic's representatives prior to offering the testimony.

1.5

I would like to point out that the hearing is being transcribed by a court reporter. Please make sure that when you testify that you verbalized all of your responses and speak clearly so that the court reporter can accurately reflect your testimony.

If you will or expect to be a witness on behalf of the intervening party, your testimony should be offered at the evidentiary and judicatory hearing and not at this public hearing. I would point out that the intervening parties are as follows: The Board of Seneca County Commissioners, Adams Township, Scipio Township, Reed Township, York Township, Seneca County Park District, the Ohio Environmental Council and the Environmental Defense Fund, the

Ohio Farm Bureau Federation, various local residences, and staff of the Ohio Power siting Board.

1.1

I would ask at this time that if there are counsel from any of the entities that I just identified, if you would please come and sit in the front row and that way if you have any questions to any of the witnesses that will be testifying, it will just make it easier and more conducive for your questions to be asked and so the court reporter can hear you. So if there is any counsel for the entities I just identified, please come forward and sit in the front rows.

If you have prepared a written statement, it would be helpful if you provide a copy to the court reporter for reference to ensure that the transcript is accurate. In addition, any attachments to your testimony will be marked as public hearing exhibits. If you have written comments from others who are not able to attend or do not wish to offer testimony, you may present their comments to myself,

Ms. Sanyal, or any member of the Board staff to be included in the comment section of the case docket.

Additionally, if you do not wish to testify or believe your testimony would be duplicative of the testimony of others, there are sheets at the desk when you first came in that you can sign and that way it will be reflected as to whether or not you are in support or in opposition to the proposed application without having to actually testify.

For those of you that did sign up to be witnesses in this particular proceeding, we will call you forward in order that you were listed on the sign-in sheet. We will also call the name of the person who is on deck, and basically so we'll have two witnesses coming forward at the same time.

And to start, the first name that we call will go to the microphone to my left, your right, and the second witness will go over to my right, your left, and we'll then just keep rotating so that we can hopefully do things in an expedient manner. If for some reason, when your name is called, you decide you do not want to testify, simply just indicate that you're passing and we'll move on to the next witness.

Before you present your testimony,

either myself or Ms. Sanyal will be basically asking you to take an oath, to swear you in, so that we can basically have you attest to the veracity of your testimony. And then you'll be asked to spell your name, provide your address, and to indicate which township you reside in and whether or not you reside within a project area.

1.7

1.8

Your testimony will be considered to be part of the record in this case and it will be available and reviewed by the Board in consideration of it's decision regarding Republic's application. Additionally, if there were counsel here from any of the parties, in the moment it doesn't appear that there are, they too may be able to ask any clarifying questions regarding your testimony. And Ms. Sanyal or myself or Chairman Randazzo may also have some questions to ask you regarding your testimony that you provide today.

Once you are finished testifying you certainly are free to leave at any time, we just ask that you leave quietly so that you do not disturb any witnesses that are testifying. And we ask that the audience please be considerate of those that are testifying and try to just make

sure that you allow the individuals to complete their testimony without interrupting them.

We ask that you try to keep your testimony to a reasonable amount of time, since I presume that we're going to have a large of people that do want to testify, just so that we can keep things moving efficiently in a expedient manner.

I would also ask that if there are any members of the media that in attendance, if you please make sure that you let either Matt Schilling or Matt Butler know as to who you are and please provide them with your business card, that way they'll be able to put you on our service list and provide you with any information that may be issued pertaining to this case.

And, lastly, I would ask that you please shut off your cell phones so that there is no noise that may interrupt this particular proceeding. And are there any questions from we begin?

MR. RANDAZZO: Yes. I just, I would like to introduce Representative Stein, Dick Stein, who is with us this evening. I know we chatted earlier in the day and I know he has

1 obligations back in the district, but thanks for 2 being here. 3 MR. AGRANOFF: Thank you. At this 4 point in time we're going take the appearances of 5 the parties in this proceeding. And on behalf of 6 the Applicant. 7 MR. PARRAM: Yes. Thank you, Your 8 Honor, and good afternoon. 9 On behalf of the Applicant, Republic 1.0 Wind, Devin Parram and Dylan Borchers from the 11 Law Firm of Bricker & Eckler, 100 South Third 12 Street, Columbus, Ohio 43215. 13 MR. AGRANOFF: Thank you. And is there counsel from any of the 14 15 intervening parties in attendance today? I will 16 presume that silence indicates there are none. 17 And I also would like to mention that we probably, depending on how we're doing time-wise, 18 19 we'll take a break sometime, maybe in an hour or an hour and a half or, just so that, to extent 20 21 that there are people that may need to be leave 22 and, you know, just want to wait until we took 23 breaks. So that you know it will be sometime 24 probably in about an hour and a half or so. 25 Anything else? If not, then well call

1	the first witness.
2	MS. SANYAL: Kathy Yost. And then if
3	we could have Ms. Linda Coffman also come up and
4	if could just wait up here.
5	MR. AGRANOFF: Please raise your right
6	hand.
7	Do you solemnly swear the testimony
8	you're about to give in this proceedings is the
9	truth, the whole truth, and nothing but the
10	truth?
11	MS. YOST: Yes.
12	MR. AGRANOFF: Please state your full
13	name and address, please.
14	MS. YOST: Kathleen, K-A-T-H-L-E-E-N,
15	Yost, Y-O-S-T, 3206 South County Road 7, Tiffin,
16	that's Seneca Township. And I am not in the
17	footprint of the current wind project.
18	MR. AGRANOFF: Thank you. Please
19	proceed.
20	MS. YOST: I would like to address the
21	fact that there are more than 14,000 abandoned
22	wind turbines currently sited throughout the
23	United States. There are at least 3 abandoned
24	project sites in California and 5 in Hawaii, with
25	more scattered throughout many other states. The

winds companies promised at the beginning to have a bond to cover decommissioning and removing turbines that are not longer viable, but after many sales to different investment groups, that promise is not being kept and these eyesores are what the residents need to live with for years to come, possibly decades.

2.1

The bases of these turbines are 25 to 30 feet deep, maybe even more, I don't know.

They need to blast through bedrock to build the bases. What is that going to do to our aquifers and our wells? I have read testimony from people living in other areas with turbines and they have stated that it has affected their wells, sometimes the water is almost black. Living in the country, we will have our wells to bring clean, fresh water into our homes.

For the past 20 years or so, Seneca

County has been actively trying to reintroduce

the bald eagle into this area. And we have done

a terrific job! We now have dozens of nesting

pairs. Wind companies like to say that cats kill

more birds in the U.S. than turbines, and I'm

sure that's true. But cats kill robins,

sparrows, starlings, and other small birds that

are not endangered. Cats do not kill eagles, hawks, owls, and other larger birds. Turbines also kill bats, which are beneficial to our area farmers, and even family gardeners, so they can use less and spend less on pesticides. Seneca County has many nature preserves for the very purpose of providing habitat for a variety or native wildlife and plants, and at least two of these are in the footprint of the turbines. All those years of nurturing these would be for nothing.

Many rural areas of our county are zoned for agricultural, residential, and some commercial use. What is the purpose of local zoning laws if industrial use turbines are allowed on thousands of acres? I can assure you none of the people living in these areas ever thought they would be living in an industrial zone. Some people in the past have been to the Whirlpool facility in Findlay, Hancock County, Ohio, and the fact that they have a half a dozen or more turbines. Whirlpool is already zoned industrial and their turbines are half or less the size of the ones proposed for our mainly agricultural townships. And the people in that

township have since voted against more turbines being built. Thankfully, they had that choice.

And none of the above points even

addresses the fact that it costs more in ores and minerals and other production costs to produce each turbines than will ever be produced in electricity. None of the wind turbines would be economically viable without government subsidies. These turbines are not the green dream or savior that they are made out to be.

Please consider all of these points, along with others that will be made here today, and decline to approve these industrial wind turbines in Seneca County. Thank you.

MR. AGRANOFF: Thank you. If you could, please, and we'll see if counsel has any questions.

MR. PARRAM: Your Honor, I'm just going to make a standing objection. I believe Ms. Yost may have read some statement or made indications about other things that she read in other proceedings. I just want to make a standing hearsay objection with respect to the witnesses that testify or brought other statements. A standing hearsay objection throughout the

1	proceeding, that we are not waiving any objection
2	with respect to hearsay for the purposes of the
3	hearing or for purposes of briefing.
4	MR. AGRANOFF: So noted.
5	MS. YOST: I'm sorry, what did you say
6	to do with this?
7	MR. AGRANOFF: If you can just please
8	give it to me.
9	MS. YOST: I'm sorry.
10	MR. AGRANOFF: Thank you. I appreciate
11	it.
12	MS. SANYAL: Cathy Limbird, if you
13	could please come up. And if you could just wait
14	over there.
15	MS. COFFMAN: I don't know where I'm
16	supposed to go.
17	MS. SANYAL: I'm going to swear you in
18	right now.
19	MS. COFFMAN: Okay.
20	MS. SANYAL: Okay. If you'll please
21	stand up.
22	MS. COFFMAN: Sorry.
23	MS. SANYAL: Do you solemnly swear or
24	affirm that the testimony you're about to provide
25	is the whole truth?

1	MS. COFFMAN: I do.
2	MS. SANYAL: Okay. And then if you
3	will state your address and the township from
4	where you are from, and whether or not you're in
5	the project area.
6	MS. COFFMAN: Do you want me to stand
7	over there?
8	MS. SANYAL: No. You can stand here.
9	There. Thank you, Mr. Parram.
10	MS. COFFMAN: I'm sort of all
11	right. Thank you.
12	MR. PARRAM: You're welcome.
13	MS. COFFMAN: All right. My name is
14	Linda Coffman, L-I-N-D-A C-O-F-F-M-A-N. I live
15	at 6851 South State Route 231 in Tiffin, Ohio,
16	which is in Eden Township.
17	I am opposed to the industrial wind
18	turbine project proposed by APEX. I am
19	essentially concerned with the people who live in
20	the project footprint, some barely a quarter mile
21	from 600 turbines. These families would be the
22	ones to bear the heaviest burden and pay the
23	highest price. If a project like this were to be
24	allowed, that project would transform their rural
25	farmland community into an industrialized area.

I am also very concerned about the environmental impact from these turbines, especially on large birds species and on bats. This is a problem that effects everyone.

About a year ago I received an email invitation to attend an open house at the APEX office in Bellevue. I went to learn, to hear what they had to say. APEX Clean Energy had produced various handouts and I was encouraged to take one of each of them. Today I would like to comment on a few of the topics APEX covered in these handouts, and you might want to look to see if there is a pattern of their coverage.

values and quotes of study which says "the core results of our analysis consistently show no sizeable, statistically, significant impact of wind turbines on nearby property values." The size of the study they quoted was 51 thousand homes and all of the homes were within 10 miles of wind facilities. Study details show that less than 3 percent of these homes were within one mile of the turbines. The vast majority of the homes were from nearby towns up to 10 miles away. This study is meaningless for the people actually

1 living nearby or inside the project's footprint. 2 In a Forbes article dated September 23, 3 2015, it states, "Why should somebody choose to buy a 4 5 home with an industrial wind farm nearby." 6 In contrast to the APEX handout, the 7 conclusion in this article was that nearby 8 residents would take about 25 to 40 percent loss. 9 On the subject of wildlife APEX states 10 that they conduct environmental impact studies 11 and they coordinate with federal and state 12 wildlife agencies to make sure their projects are 13 sited in areas where impact to birds and bats are 14 minimized and appropriately mitigated, if 15 necessary. 16 In November of 2018 I wrote a letter to 17 the Ohio Power Siting Board concerning a 18 statement an APEX project manager made to a group 19 of people in the open house. He was answering a 20 question about wind quality and he told the group 21 the wind across Seneca County is very high 22 quality. He said because of Lake Erie there is a 23 steady river of wind. I then asked him if 24 migrating birds wouldn't follow a route like 25 that? He acknowledged that Seneca County is in a

migratory route for birds and APEX will be 1 required to curtail their turbines during the 2 3 migration period. My letter to the Ohio Power Siting Board was to ask how long their turbines 4 would be curtailed and who would enforce it? 5 Putting industrial wind turbines in a 6 7 known migratory fly away doesn't sound like APEX was making sure their projects are sited in areas 8 9 where impacts to birds and bats are minimized. 10 This is just one of the reasons why Seneca County 11 would not be an appropriate location to host 12 these turbines. 13 A third topic in an APEX handout addresses health, and specifically infrasound. 14 The handout states, and I quote, 15 16 "Low level frequently noise or Infrasound modifies wind turbines as 17 18 minimal and at no consequence. Further, numerous reports have concluded that there 19 is no evidence of health effects arising 20 21 from infrasound or low frequency noise 22 generated by turbines." End quote. 23 APEX goes on to say that health 24 symptoms associated with turbines are likely due 25 to a nocebo response, which is a recognized

1 psychosomatic condition. 2 On pages 23 to 35 of the Ohio Power 3 Siting Board Post of the public hearing held July 23 this year, Captain Michael Curran 5 delivered a comprehensive report on studies which 6 show infrasound does adversely affect the heart 7 and other organs in laboratory animals, and human Я tissue samples were also studied. 9 Robert Berg, on pages 134 through 144 10 also spoke on infrasound and reported there is 11 proven reduction in the strength of the tissue of 12 the human heart when they're exposed to 13 infrasound signals. That scientist's conclusion 14 was that wind installations should be kept far 15 enough away from where people live and gather to 16 ensure human health is not endangered. 17 The two totally different and 18 independent studies cited by Curran and Berg reached similar conclusions and refute what APEX 19 20 wrote. 21 A fourth, and my final example, 22 concerns safety. APEX wrote, quote, 23 "Fact: Ohio has some of the most 24 restrictive setbacks in the country," end 25 quote.

APEX also wrote a paragraph attempting to make sure the safe viewing setback mentioned in the 2007 turbine manual written by turbine manufacturer, Vestas, was not confused with actual setback distances. In the last sentence of that paragraph APEX said, quote,

"The implication that a safe viewing distance from a catastrophic failing turbine should be applied as a standard setback is as unreasonable as the suggestion that standard setback if building to building in downtown Bellevue should be based on a safe viewing distance in the case of a gas explosion or fire in the neighborhood," end quote.

In June of this year, the Ohio Power
Siting Board asked for public comments on whether
to require turbine operators to report turbine
incidents. Apparently reporting has not been
required, which makes me wonder how APEX, without
having data to support it, can know for sure that
these incidents are really quite rare and highly
unlikely.

What we do know is that APEX would like our present setback distances to be reduced, even

1 though our current setbacks are insufficient to protect people and property if an incident were 3 to occur. Evidence from the blade throw workshop, 4 which is on file at the Ohio Power Siting Board, 5 6 clearly states that 1 in 20 turbines will have a 7 blade throw event in its lifetime, and blade fragments weighing several pounds have been 8 thrown hundreds of feet farther than current 9 setbacks. 10 If public safety truly is a 11 12 consideration, the industrial wind turbines 1.3 should not be sited close enough to where people live to make them unsafe in their own homes. 14 15 The pattern I see leads me to conclude 16 the APEX application to install their industrial wind turbines in Seneca County should be denied. 17 18 Thank you. MR. AGRANOFF: Thank you. 19 20 If I could just ask one question. 21 you currently residing within the propose 22 project? 23 MS. COFFMAN: Yes, I am currently --24 MR. AGRANOFF: Are you currently 25 residing within the proposed project?

1	MS. COFFMAN: Am I currently
2	MR. AGRANOFF: Living in the proposed
3	project area.
4	MS. COFFMAN: No. I live south of
5	town, in adjacent to the S Power Project, if
6	they should decide to refile. And I think I read
7	that if I had a concern, because my biggest
8	concern is the birds and the bats. I mean, I'm
9	concerned about people, but the birds and the
10	bats will be affected and affect all of us. Some
11	people living in town think they won't be
12	effected. They will be. So that's why I'm here
13	today.
14	MR. AGRANOFF: Any questions from
15	counsel?
16	MR. PARRAM: No questions, Your Honor.
17	MR. AGRANOFF: Thank you.
18	MS. SANYAL: And Lori Riedy, if you
19	would, please come up and hang out here. Thank
20	you.
21	Do you solemnly swear or affirm that
22	the testimony you're about to provide is the
23	whole truth?
24	MS. LIMBIRD: Yes.
25	MS. SANYAL: Okay. And then if you'll

if you're a part of the project area. Thank you.

MS. LIMBIRD: My name is Cathy Limbird.

C-A-T-H-Y L-I-M-B-I-R-D. I have lot at 16418

Reed Street, Township Road 9. I live in Reed

Township in Seneca County. I do not live in the footprint of Republic Wind.

MS. SANYAL: Thank you.

MS. LIMBIRD: I am talking to today because I oppose the wind turbine project. There are multitude of reasons why I oppose them, but I am focusing on what I think is the most important reason to me. I have growing concerns of the health effects that the industrial wind turbines can cause. I have worked in healthcare as a registered nurse for over 30 years. Because of my background as a nurse, my focus has always been trying to better the quality of my patients' lives. I feel that the effects of the turbines will decrease the quality of life in those living by them.

To term "Wind Turbine Syndrome" is a clinical name that has been given to the multiple symptoms that are experienced by many people who live near the wind turbines. These symptoms

include sleep disturbances, headache, tinnitus, ear pressure, dizziness, vertigo, nausea, visual blurring, rapid heart rate, irritability, problems with concentration and memory, panic episodes and anxiety that are associated from the internal pulsation of quivering which arise from even when they're awake or asleep.

Wind turbine syndrome seems to be triggered but the organs of motion, position, and balance, which is located in your ear. The low frequency noise and the infrasound that the wind turbine produces send scrambled signals to the brain centers that control these symptoms. There are many accounts of people who live by the turbines that have developed such intense symptoms that they literally had to move from their homes and property.

Infrasound is the noise produced by the turbines that a human ear cannot hear. It occurs when large masses are in motion, for example, the rotation of the wind turbine blades. Infrasound, especially the larger the wind turbines is, can be measured miles away from that turbine. Wind developers deny any health effects from the infrasound and the low frequency noise of the

turbines. Unfortunately, some people think that if you can't hear the noise, it can't hurt you. There has been much research done on this subject in the medical field and saying that what you can't hear will not hurt you is absolutely false.

As troubling as the Wind Turbine

Syndrome is, my concern grew even more when I

found research done by a cardiovascular physician
in Germany. The wind turbines have been around
there for over 20 years. He has been focusing on
the acute human health effects of infrasound.

It was found that infrasound does have a distinct effect on heart muscle tissue. They found a clear reduction of the heart muscle strength when exposed to infrasound. When your heart muscle decreases in its strength your heart will not pump as effectively as it should, thus decreasing the heart's function and causing a multitude of cardiac problems.

This study is alarming to me. Wind turbines do not belong around here in areas where people live. No one should endure health effects from wind turbines. There is nothing, absolutely nothing that says wind turbines must sited next door to peoples' homes. Siting of these turbines

that over 600 feet high is a crucial problem. Please keep them out of our counties where our population is too large. They do not belong here.

I am also very concerned about Life Flight being able to reach emergencies in our area if the wind turbines were to be built here. As a registered nurse, who has worked for over 30 years in a rural hospital emergency department, I am very aware of the importance of the golden hour a trauma victim has immediately after being involved in an injury accident. We live in an area that's at least 60 miles away from a Level 1 trauma center. Without Life Flight, we here in our rural area will take huge steps backward when it comes to treating trauma victims in a timely manner to save their lives. Not only are we in the middle of farm country where accidents can and do happen, but we have a great deal of tourist traffic, especially in the summer and fall months.

At the end of the day, you guys will all go home. I do not know if there are wind turbines lurking in your future or not, but I want you to remember that the decision that this

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1	board makes is going to impact thousands of
2	people. Our quality of life is resting in your
3	hands. Please do not subject us to all of the
4	negative impact that the wind turbines have. Let
5	us please continue to live our lives in our
6	beautiful and peaceful rural areas, unchanged
7	from the way it is now. Thank you.
8	MR. AGRANOFF: Thank you.
9	Any questions from counsel?
10	MR. PARRAM: No, questions. Your
11	Honor.
12	MR. AGRANOFF: Thank you very much.
13	MS. SANYAL: Casey Didion, if you'll
14	come here.
15	And, Ms. Riedy, if you'll please raise
16	your right hand.
17	Do you solemnly swear or affirm that
18	the testimony you're about to provide is the
19	whole truth?
20	MS. RIEDY: I do. And thank you for
21	saying "Riedy." Nobody gets my name right.
22	MS. SANYAL: I'm trying to be
23	phonetically correct.
24	MS. RIEDY: Okay. My name is Lori
25	Riedy, L-O-R-I R-I-E-D-Y. And I am in Groton

1 Township in Erie County. I am not in the footprint of this project. There is another 2 3 project going on next that I will be involved in. MS. SANYAL: Ms. Riedy, your address. 4 5 MS. RIEDY: 9910 State Route 269, and 6 that is in Bellevue. 7 MS. SANYAL: And you may proceed. 8 MS. RIEDY: All right. I own Russell's 9 Flower Garden Center & Gifts. And I am here to 10 voice my absolute opposition to the wind turbines 11 that are slated for Sandusky, Seneca, Erie, and 12 Huron Counties. All four counties that are 13 surrounded in the city of Bellevue. 14 There are many reasons why I am against 1.5 The bats, the eagles, the bird migration, 16 the infrasound, the shadow flicker, the fact that 17 only landowners that have them on their actual 18 property are the only ones that will really 19 benefit from them. But my biggest concern is the 20 effect that it will have on the very sensitive 21 region that we live in known as the Karst Region. 22 Bellevue has the largest sinkholes in 23 the State of Ohio by perimeter, area, and volume. 24 We have the most extensive karst region and this 25 has been documented.

My business involves using tens of thousands of gallons of water being pumped from our well to water eight greenhouses full of plants, mum pots, et cetera. Without our well we will be out of business. Not only are they trying to put wind turbines here, but they want to erect the largest ever built, 655 feet, two of which are to be located directly behind my property within less than a quarter of a mile.

The amount of excavation that will have to be done to later pour hundreds of tons of concrete into the bases to hold these turbines is just unbelievable. There is absolutely a very high probability that greater sinkholes and solution cavities will be disrupted or filled in. Underground streams and drainage that have formed through our limestone layers will be irreparably damaged. Our wells may be contaminated, if not destroyed all together.

There was a report done after the 2008 flood in Bellevue, which closed down our State Route 269, where my business is located, for more than three months. I cannot imagine what would happen if these turbines are allowed to be built. This was designated as an EPA protected area

1 because of the sensitive region that we are 2 located in. Why would we allow anyone to come in 3 and disturb our area for something that has 4 already proven to have negative effects and no 5 quantitative benefits? They have no idea of what 6 type of area they are dealing with, and then add 7 to that they want to put the largest turbines 8 ever constructed on top of it in an area with 9 high population. They have slated a very high 10 concentration of turbines in a very populated 11 area, which makes no sense. 12 This whole process will have a negative 13 effect on many of the people who live in this 14 area and I would plead that they not be allowed 15 to located here in Bellevue. Thank you. 16 MS. SANYAL: Any questions? 17 MR. PARRAM: No questions. 18 MR. AGRANOFF: I just have one 19 clarifying question. You had indicated that 20 there was going to be a turbine a quarter mile 21 from your property. 22 MS. RIEDY: Yes. 23 MR. AGRANOFF: Which project was that? 24 MS. RIEDY: That would Emerson Creek. 25 MR. AGRANOFF: Okay. Thank you.

1	MS. SANYAL: Dustin Austin, if you'll
2	please come up.
3	And then, Mr. Didion, your right hand.
4	Do you solemnly swear or affirm that
5	the testimony you're about to provide is the
6	whole truth?
7	MR. DIDION: I do.
8	MS. SANYAL: And if you'll state your
9	name, address, township, and whether or not
10	you're in the project area.
11	MR. DIDION: My name is Casey Didion,
12	C-A-S-E-Y D-I-D-I-O-N. I'm in York Township,
13	Bellevue, Ohio. 6040 County Road 113.
14	MR. AGRANOFF: Are you in the project
15	area?
16	MR. DIDION: I am in the project area.
17	I have a windmill actually three windmills
18	scheduled to be within about 1,250 feet of my
19	residence.
20	MR. AGRANOFF: Please proceed.
21	MR. DIDION: Thank you.
22	Any sound decision is made by
23	conducting an impartial cost-benefit-analysis.
24	The factors to be analyzed in considering these
25	local wind farms fall into two categories:

Environmental Considerations and Economic Impact.

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The Environmental analysis centers on the undisputed amount and location of karst in our region. In the simplest terms, karst's unstable terrain allows for high connectivity between land surfaces and the water tables. What does this mean? It means pollution. Pollution of our wells. Pollutions of our drinking water. And pollutions of Lake Erie. This is because they promote major nutrient loading from farm runoff chemicals and fertilizers creating a direct route to Lake Erie and that's causing the notorious harmful algae blooms of Lake Erie.

Our own Ohio Department of National Resources independently documented and discussed these at length in a publication of 2013, which concluded that Bellevue's karst sites are the largest in the state. This report was conducted years before the influence or pressure of wind farm craze and cautioned the high susceptibility of pollution and instability of erecting structures in karst regions. Yet, interesting, windmill proponents now offer their own self-funded report to assure us that there is no risk to our local water supply.

But with windmills exerting more than

1,000 pounds of pressure per square foot, what if
they are wrong? What is the Ohio Department of
Natural Resources was right? How will a polluted
water table serving entire communities be
remediated? Who will the residents call when it
happens? Who will shoulder the cost? There is
no easy or cheap fix to these fragile
subterranean features that are damaged.

The environmental risks may pass muster in our cost-benefit-analysis if they were all paid by the economic benefit. But to be blunt, it isn't even close.

To summarize: These wind farms do not result in more energy choices to consumers.

These wind farms do not result in lower energy costs to consumers. Only a handful of local property owners stand to benefit from the land leases. By their own admission in their application, these windmills are expected to generate only 41 permanent jobs. And what's most telling, the economic projections themselves were filed under seal. Why? Because they'd rather line the pocket of developers and the lease holders.

1 Finally, we must consider safety in 2 completing our analysis. In 2014, legislators 3 took a note to the noise and dangers of blade throw from much shorter wind towers. At that 4 5 time they approved House Bill 483, which set the 6 distances of blade tips 1,125 feet from a 7 property line. Now, in a frenzy to promote and 8 approve much taller windmills, proponents seek 9 closer distances and want to measure from a 10 structure as opposed to the properly line. 11 They're looking out for our safety, aren't they? 12 Step back and run the analysis: 13 Irreparable harm to local residents, including 14 flood and the contamination of our drinking 15 water; further pollution to our Great Lake Erie; 16 Safety concerns of reduced setbacks weighed 17 against a non-profitable business adventure, 18 which generates few permanent jobs and results in no direct benefits to most local residents. 19 20 I encourage you to deny this 21 application for our sake. Thank you for 22 listening. 23 MR. AGRANOFF: No questions from 24 counsel? 25 No questions, Your Honor. MR. PARRAM:

1	MR. AGRANOFF: Mr. Chairman.
2	MR. RANDAZZO: Mr. Didion, you
3	mentioned a Department of Natural Resources study
4	from 2013 that examined the karst.
5	MR. DIDION: Yes, sir, I did.
6	MR. RANDAZZO: Do you have a copy of
7	that study or
8	MRS. DIDION: I do.
9	MR. RANDAZZO: Okay.
10	MR. DIDION: Yes. My wife is with me
11	and she's also going to speak on karst issues.
12	MR. RANDAZZO: Okay. Well, we can wait
13	until you speak.
14	MRS. DIDION: Okay.
15	MR. DIDION: This was also given to the
16	Siting Board at the same time actually I sent
17	this into the Siting Board beforehand. Actually,
18	it was given to them for the Seneca East project.
19	The Ohio Department of Natural Resources has done
20	one heck of a good job on this. And it's just
21	been upgraded in 2018, by the way. I just go
22	back to 2013, because 27 of these windmills, and
23	this Republic set up, are sitting right on top of
24	a karst by their own acknowledgement. They make
25	reference they've got some mountain in Oklahoma

1 or Texas that they're working on karst related 2 right now. Working on. Not settled. 3 figured out how to do it. They were told -- on 4 the Siting Board they were told that the 5 foundations are only 10 foot deep so they shouldn't effect our well water. 7 These karsts in the soil behind my 8 house two and a half feet under the soil level, 9 is limestone gold in my areas that can get 10 dissolved through that water running into there. 11 Two and a half feet of soil. That's what we got 12 to filter our farm chemicals and our sprays that 13 go on our fields and so forth. And that will go 14 along with our septic systems and so forth. 15 those layers are removed, that enters right into 16 the limestone cast formation. We have the 17 largest karst formation in Ohio. I wouldn't be 18 afraid to say probably the United States. That's 19 my testimony. 20 MR. RANDAZZO: Thank you. 21 MR. AGRANOFF: Any additional questions 22 from counsel? 23 MR. PARRAM: No, Your Honor. 24 MS. SANYAL: And then Diane Hudok, if 25 you'll come up here and wait. Thank you.

then Mr. Austin, your right hand. 1 2 Do you solemnly swear or affirm that 3 the testimony you're about to provide is the whole truth? MR. AUSTIN: I do. 5 MS. SANYAL: And I feel like you know 6 7 the drill by now. 8 MR. AUSTIN: My name is Dustin, 9 D-U-S-T-I-N A-U-S-T-I-N. I live at 14281 East 10 County Road 46, Bellevue. I live in Thompson 11 Township and I am within the Republic Wind 12 Footprint. As a matter of fact, I have five 13 turbines approximately 2,000 feet from my 14 residence. 15 I come to you today as a long time 16 Seneca County resident. A Thompson Township 17 resident whose family has resided in this county 18 for over 170 years. My home that I've own is 19 located on the family farm, which has been in our 20 family for 131 years. Over the years I've heard 21 generations of family members tell stories about 22 the land, and give insights to the farming 23 operations and the geology of the farm. This is 24 very important, since we are here today to talk 25 about industrial wind farms proposed for this

area.

I have grave concerns over these projects, as they will greatly impact my family, home, surrounding area where I reside, and I have three major concerns with this project that I hope the Power Siting Board takes into account.

One is the impact that these wind turbines will have on our water system in this county. You see, many people, actually many of my neighbors, rely on their wells for their main and only water source for their home, barns, and animals. Many families today cannot afford another water source, or have one brought in. Especially since most wells are a free water source, helping to make it financially easier for families to help pay their other monthly bills.

In one community in Chatham-Kent,
Ontario, there are major problems with water
wells being contaminated with black shale
sediments. This has effected over 200 homes,
which was first noticed during construction and
operations of the North Kent Wind project. This
is believed to have been caused by what is called
pile driving, along the different types of
vibrations from the operations of the turbines.

Why would we want to take a chance of affecting our freshest water sources in this county which families desperately rely on?

Secondly, with this being said, it's very important for the Ohio Power Siting Board to consider the large karst area in Seneca County.

With the large amount of sinkholes in this

County, it is very important to consider what

lies below the surface. And I can only pray that this is highly research and considered before allowing these wind projects.

On our family farm there are five sinkholes, five, and a sixth one is in the process of opening up. This is very concerning for my family, as we do not know how many more sinkholes could or would open up during and after construction of these large wind turbines. The vibrations caused from these larger industrial wind turbine is sure to have negative side effects here, just like they have in other communities. The fact of matter is, new sinkholes could open up and the current sinkhole could open even larger, making this a very serious problem. I urge you to look at the two maps I am including in my statement attached

here. Which I have given you a copy of already on pages 3 and 4. According to our report, "Evaluating Karst Risk At Proposed Wind Power Projects" by William Bangsund of Barr Engineering Company, and Kenneth A. Johnson of Oklahoma Geological Survey, I quote, Karst can lead to a wind turbine tilting and even toppling," end quote. I ask you all, is this something that you would want to topple near your home or your family? Especially, since wind companies are pushing for shorter setbacks.

Lastly, want to urge the Ohio Power
Siting Board to consider our local parks which
would also be negatively affected by these wind
projects. We need the our area wildlife as they
are essential to farming operations, with the
many benefits they bring, such as bats. An
estimated 600 birds are killed annually by wind
turbines, so why would we want to participate in
this slaughter? Some of the most beneficial
birds being bats, which eat large numbers of
night-flying insects, which include mosquitoes,
and the pollinate seeds and fruits we eat.
Furthermore, our eagle population has finally
returned and these large turbines threaten the

species once again. Bird watching is a real thing in this area, which brings tourists to the area.

In the Public Utilities Commission mission statement, they assure all residential and business consumers access to adequate, safe, and reliable services at fair prices. I sure hope you keep that statement in mind along with the words "safe" and "reliable" when voting on this project. These large industrial wind turbines are neither safe nor reliable, if you take a look at these wind turbines and other projects, in other areas.

Why would we want to risk all of this for wind turbines which are really not green at all? The major impacts far outweigh any minute monetary benefits the turbines could bring. I urge the Ohio Power Siting Board to deny the certificate and do not let these industrial wind farms into Seneca County.

Included with my map, which I put key with, you'll notice one red circle dot I want to highlight. This map is a map from the Karst Interactive Map by the ODNR Division of Geological Surveys. This is a recent map, we

1	
1	just updated it.
2	The sinkholes circled in red was not
3	accounted for in this particular map. The
4	interesting factor, if you turn to page 4, Apex
5	said it proposed a transmission line running feet
6	within this large sinkhole that has not been
7	accounted for on our family farm.
8	I urge you to closely follow all of the
9	transmission lines and overlay it with all of the
10	proposed and known sinkholes in our county.
11	You'll be pleasantly surprised. That is it.
12	MS. SANYAL: Thank you. Any questions?
13	MR. PARRAM: No questions.
14	MS. SANYAL: Any questions?
15	MR. AGRANOFF: No.
16	MS. SANYAL: William Seaman. And if
17	you'll just wait.
18	And then Ms. Hudok, am I pronouncing
19	that correctly?
20	MS. HUDOK: Yes. Thank you.
21	MS. SANYAL: Right hand.
22	Do you solemnly swear or affirm that
23	the testimony you're about to provide is the
24	whole truth?
25	MS. HUDOK: Yes. My name is Diane

1 Hudok, D-I-A-N-E, Hudok, H-U-D-O-K. 2 MS. SANYAL: Could you get the 3 microphone a little closer to you? 4 MS. HUDOK: Diane Hudok, D-I-A-N-E, 5 Hudok, H-U-D-O-K. I live at 6300 Township Road 6 151, Eden Township, Seneca County. I am not in 7 the footprint, but I am within the radius of the 8 infrasound wind effects. 9 MR. AGRANOFF: Please proceed. 10 MS. HUDOK: Your Honor, my husband, 11 Joe, and I live in Eden Township in rural Seneca 12 County. We oppose the construction of Republic 13 Wind. Industrial wind turbines here in this area 14 are so wrong on so many levels. There are many 15 facts and much anecdotal evidence that you will 16 be hearing today and tonight from others for this 17 conclusion. I am asking that when you listen, 18 please listen also with your heart. 19 There are trade-offs when you live out 20 of town, out in the country. Those who live in 21 the country have traded pizza delivery, big deal; 22 cable TV, and reliable cellphone WiFi service. 23 We traded it for fireflies at dusk, eagles in 24 flight, starry night skies, and barn owls in the 25 wood, just to mention a few. We have longer

distances to schools, work, grocery stores, doctors, and church, but shorter time in actual traffic. One tractor and one car constitutes a traffic jam in our county. We've traded the nonstop noise of the city for the throaty growl of our neighbors' tractors at planting and harvest. We've learned to sniff the air or check which way the breeze blows before hanging out laundry. We have sky-scapes instead of skyscrapers, and we like it that way.

To us, a wind farm is not a farm. We know farms. This is an industrial project that is systematic organized vandalism of our beloved rural area.

The proposed industrial wind turbines here make us fear for our health, our homes, our water, our community ethos, and the rural beauty that surrounds us.

Industrial wind turbines here would be monstrous metal structures testifying to short sightedness and greed. Okaying construction of this wind project okays destruction of this rural area and rural living. And that is not okay and not just or fair. So we ask please deny the application. Thank you, Your Honor.

1	MS. SANYAL: Counsel, any questions?
2	MR. PARRAM: No questions.
3	MS. SANYAL: Okay. Any questions? No.
4	Thank you. If you have a copy of your remarks,
5	you don't have to give it to us, but if you do,
6	we'll take it.
7	And then Jim Feasel, if you would come
8	up here to be on deck. Thank you so much.
9	Right hand.
10	Do you solemnly swear or affirm that
11	the testimony you are about to provide is the
12	whole truth?
13	MR. SEAMAN: I do.
14	MS. SANYAL: Okay. And then address,
15	name, township, project area. Thank you.
16	MR. SEAMAN: This is not my first
17	rodeo.
18	MR. SANYAL: Okay.
19	MR. SEAMAN: My name is William Seaman,
20	W-I-L-L-I-A-M, last name Seaman, S-E-A-M-A-N. My
21	address is 4584 State Route 547, Bellevue, Ohio,
22	44811. I do not live in the project area. I do,
23	however, exist in the cumulative viewshed of the
24	Republic Wind project.
25	MR. AGRANOFF: Do you live in the

township?

MR. SEAMAN: I live in Lyme Township, excuse me. My name is William Seaman. I'm a resident of Lyme Township in Huron County. My family has farmed, owned property, and lived in Lyme township for 172 years. Lyme Township is adjacent to Seneca County and Sandusky County. And as I previously said, I reside in the viewshed of the Republic Wind project and I'm in the project footprint on the Emerson Creek Wind project.

Just a little story before I get into the rest of my statement. In my travel to Tiffin for this event I passed, as I was entering Scipio Township, a sign that said, "Scipio Township zoned for your protection." So for the record, I would like every single one of those signs that we see in all the rural townships in Ohio to state the same thing. "Oxford Township, zoned for your protection," but underneath it would be a little sign except -- that would say "Except for industrial wind turbine." Because we all live -- I know Franz Copta and John Paul Stark and whoever wrote Allison In Wonderland would appreciate that sense of humor.

1 MS. SANYAL: Lewis Carroll. 2 Thank you for the MR. SEAMAN: 3 opportunity to speak at this public hearing 4 today. My comments are directed to the seven 5 voting members on the Ohio Power Siting Board, 6 Sam Randazzo, Dorothy Pelanda, Lydia Mihalik, 7 Laurie Stevenson, Amy Acton, Mary Mertz, and 8 Gregory Murphy. These are the individuals who 9 ultimately will approve or deny APEX's 10 certificate for the Republic Wind project. 11 I'm not a young person, so hopefully 12 the many years I've lived have given me some 13 My current wife may disagree with that, wisdom. 14 but she's not here to listen to that statement. 15 In my 39 years of employment with the 16 Federal government I have seen, up close and 17 personal, public policies that are destructive, 18 unnecessarily expensive, and downright wrong. 19 And often these public policies start out with 20 the best of intentions. 21 First and foremost, we can all agree 22 that we want Ohio to be a better place to live. 23 We want an environment safe for ourselves, our 24 children, and our grandchildren. We want our 25 natural resources protected. We also want our

economy to grow and prosper.

And for the record, by itself, Ohio has the 7th largest economy in the United States and the 27th largest in the world.

The backbone of our robust economy is our electrical grid. Reliable, robust, and reasonably priced electricity is essential to keeping businesses currently based in Ohio here, and attracting new businesses from other parts of the United States and overseas.

The arrival of big wind to our area, with projects in Seneca, Sandusky, Huron and Erie County, does not make our electrical grid more reliable, more robust, or cheaper.

A study released by the University of Chicago in April 2019, shows that states with renewable portfolio standards inevitably have higher costs for electricity. Higher costs per energy reduced Ohio's ability to attract businesses. Companies expand or come to Ohio in part because we have a reliable electric grid. Intermittent energy sources are not what Ohio needs.

Every single watt of power produced by an industrial wind turbine must be backed up by

another power source, be it nuclear, natural gas, coal, et cetera. This doesn't sound like a recipe for simplicity.

Germany, despite 29,000 operating wind turbines in a nation the size of Montana, has not reduced its carbon emissions at all. There's growing resistance to wind development in Germany, with installations down 80 percent this year. How does Germany handle the shortfalls from wind? They fire up their coal powered plants and are now building a natural gas pipeline to Russia. Their cost of electricity is the highest in Europe, and two and a half times higher when compared to our electrical cost in the United States. This does not appear to be a sound energy policy.

The arrival of big wind in our area also endangers human health, animal health, and our environment.

As you've heard previously, setback distances, under current Ohio law, are grossly inadequate. The operating manual for one model of turbines used in these projects in our area states the minimum safety zone around an industrial wind turbine is 1640 feet, which is

several hundred feet longer than our current setback rules. In Hillsdale County, in Michigan, the regulation is one mile from any home. The French Ministry of health recommends 4,291 feet setbacks, although they only enforce the 1640 feet rule. In Bavaria, in Germany, the setbacks are ten times the height of a wind turbine. So on the Republic Wind project that would make the setbacks 5,860 feet.

In addition to the threat of being struck by ice throws or various parts from a wind turbine because of inadequate setback distances, our state health officials should be concerned about the cumulative negative effects of noise, shadow flicker, and infrasound from industrial wind turbines. Has this topic been discussed or researched at the Ohio Department of Health? If it has not been studied or discussed, why not? There's substantial data already there due to the extensive history of wind power in you Europe.

By now we should all be aware of the threats to our water, by siting wind turbines in an area where the karst is prevalent, which is smack dap in the Republic Wind project, and also in parts of the Emerson Creek Wind project.

Siting wind turbines in the most fragile Great

Lake, Lake Erie, and siting wind turbines in the

karst does not sound like rational public policy

to me.

Despite mounting contra evidence around the globe, however, we continue to see more wind development in Ohio. There's money to be made, and federal tax credits to be received by crony capitalists who live nowhere near a wind turbine.

At the heart of this is the marginalization of the rural residents in Northwest Ohio. If these projects were anywhere near Indian Hill or Madeira or Powell or New Albany or Upper Arlington or Hilliard or Maumee or Shaker Heights or Hunting Valley or Chagrin Falls or Hudson they would be dead upon arrival. Wind developers hope our marginalized rural communities do not have the energy or means to fight these projects.

These projects are not wanted, despite what APEX clean energy may say. For example, in Huron County, in the Emerson Creek Wind project, only 38 families in five townships will potentially host a wind turbine in the Emerson Creek Wind project. I'm sure the numbers are

1 equally small in Seneca and Sandusky County. 38 families should not be allowed to 3 set public policy for 60,000 residents of Huron 4 County. And if you're keeping track of these 38 5 families, only one person out of those 38 6 families is an elected official, a township trustee in Lyme Township. 38 families are not my 7 8 rulers, anymore than people from New York or 9 California get to tell me who will win the next 10 presidential election. 11 Please deny the certificate for 12 Republic Wind project and send a message of sound 13 energy policy and common sense to those who would 14 desecrate our rural landscapes and threaten our 15 economy, our environment and our health. Protect 16 all the citizens in Ohio, not just those who live 17 in the suburbs and the cities. Thank you. 18 MS. SANYAL: Roger Walters, if you'll 19 come up on deck. And then Mr. Feasel, correct? 20 MR. FEASEL: Yes. 21 MS. SANYAL: Okay. Do you solemnly 22 swear or affirm that the testimony you're about 23 to provide is the whole truth? 24 MR. FEASEL: Yes. 25 MS. SANYAL: Okay. And then name,

1 address, township, and if you're in the project 2 area. 3 MR. FEASEL: My name is Jim Feasel, last name is spelled F-E-A-S-E-L, at 1121 East 4 5 County Road 16, Tiffin, Ohio, my address. in the viewshed of the Republic Wind project and 6 our farm is in the footprint of the Seneca Wind 7 project, and that's in Eden Township. 8 9 MS. SANYAL: Thank you. And you may 10 proceed. 11 I'm opposed to this MR. FEASEL: 12 project being built in Seneca County for public 13 safety reasons. The seven voting members of the 14 Power Siting Board, who were just mentioned, will 15 determine whether Republic Wind receives a certificate to build. Yet, for the most part, 16 17 these voting members are insulated from the details surrounding the project. On the off 18 19 chance that the voting members will hear my words 20 today, I would like to address my remarks 21 directly to them. 22 By now, everyone on the staff should be 23 aware of that fact that wind turbines already 24 build in Ohio and surrounding areas have 25 experienced failures, throwing several pound

blade fragments hundreds of feet farther then the setback distances used in the design of this Republic project. The evidence of this is on file at is Siting Board's office. This evidence is signed and stamped by professional engineers.

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This evidence proves beyond a shadow of a doubt that many of the turbines in this project are far too close for public safety. On average, 3,800 wind turbine wind blade failures occur each year. These include three brand new turbines in the United States that have suffered catastrophic failure already this year, and two more new turbines in other countries also this year, proving that the new technology is still not reliable and cannot be counted on to solve the safety problem. Yet the staff report makes no mention of the safety risks designed into this project.

Also on file at the Board's office are safety manuals for the turbines proposed to be installed. Although deemed proprietary information, it is widely believed that the safety distances recommended by the turbine manufactures are far greater than the setback distances allowed in the design of this project.

Whether this is true or not, it's inexcusable that this information be withheld from the public who will be direct exposed to any possible hazards. The safety recommendations in these manuals can be made public without exposing trade secrets. There is absolutely no excuse for not doing so.

The process that the Power Siting Board staff is using to approve wind projects shows complete and utter disregard for public safety. And this disregard comes with the full knowledge of the staff, and hopefully by now every voting member on the boards. It is not a matter of opinion. It is not a matter of lacking information. It is not a matter of misinformation. Rather, it is a matter of a complete failure of this agency to adhere to its number one directive, that being to protect public safety.

Being the judge over whose property rights are most important is not what this Board was created for. Judging the safety and need of manager projects is what the Board was created for. Determining whether more tax money for local schools would be a good thing or not is not

the duty of this Board. Making determinations on public safety is the duty of this Board.

Deciding whether some more income for lease holders would help their financial condition is not this Board's job. Deciding how best to protect public safety is this Board's job. Protecting the world against climate change is not in this Board's mission statement.

Protecting Ohio citizens by properly locating energy projects is this Board's defined mission.

I could go on, but it shouldn't be necessary.

I ask the members of the Board to remember when deciding, that as a society we only accept risks to safety if there is an offsetting benefit that cannot be attained by any other method with lower risk. Every benefit this wind project purports to bring can be attained with lower risk by other methods. Solar would be one such alternative method. Your vote will become part of your permanent legacy. It could be used to help guide the renewable industry towards safer and more sensible projects, while protecting public safety at the same time. If I had a vote, that's how I would use it.

Perhaps in the near future local

citizens will obtain some control with a vote in these projects, by gaining the right to a referendum on that. At that point, we, the public, can decide if any benefits that may come with the wind project are worth the costs and the risk of turning our area into a heavy industrial zone. In some areas they may well be. In others they will not. Only the local residents can make that decision correctly.

Until a better method of local control is brought to bear on these projects, the Board should not even consider granting certificates to any more wind projects.

When local control is re-established then we, the local public, will undoubtedly be very motivated to watch out for public safety. It is our safety that is on the line here, and that of our families, and our children, our neighbors, and our loved ones. Until that time comes, and the ills of this process are healed, we must rely on you, the voting members of the Board, to protect our safety. I respectfully ask that you do not let us down. Thank you.

MR. PARRAM: Mr. Feasel, just one clarifying question.

1	MS. SANYAL: Counsel has a question for
2	you.
3	MR. PARRAM: Mr. Feasel, just one
4	clarifying question. Do you live within the
5	footprint of the Republic Wind project?
6	MR. FEASEL: I do not. I live within
7	the viewshed of the Republic Wind project and our
8	farm is in the footprint the Seneca Wind project.
9	MR. PARRAM: Thank you.
10	MS. SANYAL: Thank you very much.
11	And then Kathryn Walters, would you
12	please come up to the podium on the left.
13	And Mr. Walters, would you please raise
14	your right hand.
15	Do you solemnly swear or affirm that
16	the testimony you're about to provide is the
17	whole truth?
18	MR. WALTERS: Yes.
19	MS. SANYAL: Okay. And then name,
20	address, township, and whether you're in the
21	project area.
22	MR. WALTERS: Roger Walters, R-O-G-E-R
23	W-A-T-E-R-S. I do live in the Republic project
24	area.
25	MR. AGRANOFF: What is your address,

1 sir? 2 MR. WALTERS: 6556 North State Route 3 18, Clyde 43410. MR. AGRANOFF: And which township do 4 5 you reside in? 6 MR. WALTERS: Thompson. 7 MR. AGRANOFF: Please proceed. 8 MR. WALTERS: For full disclosure, I 9 manage and lease land to APEX, and there's no 10 probability that we'll ever see a turbine on this 11 land. Oil and gas leaks has been a fact of life 12 in this area. Leases have and continue to 13 provide some stability to farm income affected by 14 weather and market calamities. 15 Alternative energy will provide some 16 additional stability to rural communities. 17 Wind project will benefit not only landowners, 18 but schools, townships, and counties. All the arguing over this issue led my 19 20 wife and I taken a road trip to the Van 21 Wert/Paulding area last year. We are all 22 different. We look at these things differently. 23 Personally, I would rather sit on my porch and 24 look at this slowly spinning turbine blade than a 25 cell phone tower or the new electrical poles if

you go east on 224 from Tiffin.

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While walking under turbines north of Paulding we found no dead birds, no dead animals of any kind. Unless they all decomposed, they weren't there. I had to ask my wife if she could hear the blades turning. I couldn't hear the blades turning.

Traffic two miles away, the farmers grain augers running and loading grain 1,500 feet away, and even the birds close around us at the tower site made more noise than the noise from the turbine that I couldn't hear.

My trees give me shadow flicker for a short period of time every day, and I'm not cutting the trees down.

Semi's hitting the grooved pavement on the edge of my road is pretty annoying. So I see that as not a perception for me. That's the way I look at it.

Folks that we talked to in that Van Wert/Paulding hadn't seen or heard concerns about real estate prices being affected. No one said that they thought the turbines were awesome, and no one said that they had hated them. The attitude was generally one of ambivalence across

1	the board. And no one complained about the
2	benefits of the additional funding or denied the
3	additional funding come into their communities.
4	You have my wife on deck next. She has
5	a vocal cord disorder. She has a signed a
6	written statement, if you'll accept that.
7	MS. SANYAL: Any questions?
8	MR. PARRAM: No questions.
9	MS. SANYAL: And then did you want to
10	give us your's? Did you have questions?
11	MR. AGRANOFF: I don't.
12	MS. SANYAL: Okay. I'll take a copy
13	and then
14	MR. WALTERS: Would you like that
15	statement?
16	MS. SANYAL: Yes. We'll just take it
17	and include it as correspondence.
18	MRS. WALTERS: I have all of my
19	information on there. Thank you.
20	MS. SANYAL: Okay. Perfect. Thank
21	you.
22	MR. PARRAM: Your Honor, just a brief
23	statement.
24	MS. SANYAL: Yes.
25	MR. PARRAM: I would just ask that I

1 heard some laughing or snickering when the witness was testifying. I would just ask 2 3 everyone be respectful on both sides as we proceed forward. 4 MS. SANYAL: Thank you. 5 May I call up Michael Curran and then 6 7 Garta Moyer. And then, Ms. Moyer, if you would come up to the middle podium and just wait until 8 9 Mr. Curran is done. Thank you. 10 Mr. Curran, do you solemnly swear or 11 affirm that the testimony you're about to provide 12 is the whole truth? 13 MR. CURRAN: I do. 14 Thank you. And then name, MS. SANYAL: 15 address, township, and if you're part of the 16 project area, please. 17 MR. CURRAN: My name is make Michael 18 Curran, M-I-C-H-A-E-L, C-U-R-R-A-N. 19 residence, my farm is 26026 County Road 47, and 20 that's in Seneca County. As far as the footprint 21 of the Republic project, I'm not in the direct 22 footprint of the project, however, the research 2.3 on infrasound, it shows it travel miles and 24 miles, so I probably in the footprint of the 25 infrasound.

MR. AGRANOFF: Which township you do
you reside it?
MR. CURRAN: It's Seneca County
Township.
MR. AGRANOFF: I'm sorry?
MR. CURRAN: Seneca Township.
MR. AGRANOFF: Seneca Township. Thank
you.
MR. CURRAN: I would like to thank the
Ohio Power Siting Board for allowing me to give
my testimony this afternoon concerning some of
the potential health effects which quite possibly
could be produced by the large size and numerous
wind turbines being proposed for construction in
Seneca County.
My name is Captain Michael Curran, I'm
retired from the United States Navy. While on
active duty I was stationed at the Bathesda Naval
Hospital, directly across the street from the
National Institutes for Health, that is NIH,
which is the home of the on-line medical
literature service called Pub-Med.
The articles utilized by the Wind Power
companies to minimize concern for the potential
harmful effects of infrasound generated by wind

turbines on human, referenced articles they said were found in the Pub-Med database. The Wind Power companies basically claimed that there was no real research which clinically documented harmful health effects of infrasound on humans or other living creatures.

To my knowledge, none of this research presented by these companies cited the research performed in the Soviet Union in the 1970's and 1980's. The Soviet research publications are not available on-line through Pub-Med. To obtain access to the Soviet research articles, an individual must be personally on site at NIH's National Library of Medicine and must have an identity card issued for research at the library. I have a National Library of Medicine research card and have used it to investigate Soviet research findings on site, at the library.

In my research at the library, I discovered that there are, in fact, a very significant collection of Soviet investigations concerning the damage effects of infrasound on laboratory animals and also on healthy human male subjects. One particular area of concern was the adverse effects of infrasound on cardiac

function, heart function. These effects included changes in cardiac rate and rhythm, included arrhythmias. Microscopic inspections of sacrificed laboratory animals' heart tissue showed multiple areas of pathological cell changes. The heart was only one of the many internal organs adversely affected by infrasound studied by the Soviets. Society research articles at the library are written in Russian using the Cyrillic alphabet. In my folder here, which I will submit, I have included three of those articles which I have had translated into English, with attached photographs of the Journal cover, which has the date stamp NIH, National Institute of Health, acquired the Journal. I have also included photographs f the first page of each articles in Cyrillic.

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Today, as I am speaking to you here in Tiffin, Ohio, ongoing clinical research is being performed by the department of Cardio and Vascular Surgery at the University Hospital of Johannes Gutenberg University in Mainz, Germany. After watching a documentary concerning adverse effects of infrasound generated by the wind turbines, produce by ZDF television in Germany, I

wanted to meet the researches at their hospital and ask them more specific questions concerning their testing techniques and their findings.

In January of this year, I flew directly to Frankfurt, Germany, and then made the short drive across the Rhine River to Mainz. Arriving at the office of Professor Christian-Friedrich Vahl, I was introduced to his main researcher on this suggest, Dr. Ryan Chaban, who is a cardiothoracic surgeon on staff at the hospital. Over two days he enlightened me as to research materials and methods and the findings of his investigations. And I think that one aspect of his ongoing research in Germany is extremely important and relevant to this meeting today.

To the best of his knowledge and of my knowledge, Dr. Chaban's research is the first to directly expose and measure the immediate adverse effects of infrasound on living human cardiac tissue.

The University Hospital team used two heart tissue samples harvested from human patients undergoing cardiac surgery. One of the samples was used as a control and the other

1 sample was exposed to infrasound. Samples were exposed to infrasound as 16 hertz frequency, 3 decibel levels of 100, 110, and 120 decibels. decibel weighting system, such as dB(A), which is 5 utilized by the wind turbine research that they 6 present. 7 If you could just, for MR. AGRANOFF: 8 the purposes of the record, indicate what dB(A) 9 stands for. 10 MR. CURRAN: dB(A) is -- okay. 11 is -- that was my next statement here. Since 12 dB(A) weighting system is used to measure only 13 sound levels which are audible above 20 hertz 14 frequency. The samples were stimulated 15 electrically at a rate of 75 beats per minutes 16 for 120 minutes. The decrease in force of the 17 infrasound exposed the cardiac tissue was found 18 to measure almost seven and a half percent for 19 every 10 decibel increase over the 100 decibel 20 baseline, resulting in an almost 15 percent 21 decrease in heart tissue contracting force at 120 2.2 decibels. 23 Beside the adverse effect on heart 24 function, I asked Dr. Chaban is there could be 25 and cognitive complications that could affect an

individual due to decreased heart performance over time. He told me that Cardiac Induce Dementia could very possibly result in the decrease in the hearts ability to circulate an adequate blood supply to the brain.

I questioned him that since a 7.5 decrease in contraction force was seen at 110 decibels, would it be possible that the contraction force could be decreasing a certain amount between 100 decibels and 110 decibels. He stated that result could potentially occur, but that he could only vouch for the changes demonstrated at his testing points of 110 and 120 decibels.

I had also asked Dr. Chaban if there could be effects on heart tissue contractile ability at levels of 100 decibels or less expose if the exposure to infrasound extended over years and decades instead of only 120 minutes. He relied that even though that was an interesting question, he could only confirm the results of his team's testing at the 110 and 120 decibel power of level points.

Prior to his training in Medicine and specialization in Cardio and Thoracic Surgery,

Dr. Chaban told me that his undergraduate education was heavily involved in Physics. explained to me the characteristics of infrasonic acoustic energy where, because of its long wavelength, infrasound can travel long distances with out dissipating its energy level and also has the ability to penetrate into buildings. also discussed the phenomenon known as Helmholtz Resonance, whereby infrasound energy can be condense in a closed room, reaching energy levels 100 times greater than the energy level measured

I would think that the potential health research in the 20th Century and confirmed by the Century would dispel forever the notion of clean, safe, green energy produced by wind turbines. themselves use in their attempt to support their construction plans state that most of the sound energy produced by wind turbines is in the low and infrasonic range and that the larger the size of the wind turbines, the greater the amount of

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1 turbines being 600 feet tall are going to produce a huge amount of infrasonic acoustic energy, 3 externally unheard, but internally, working on 4 internal human organs in a slow, ongoing, insidious manner. 5 Therefore, I am stating in my official 6 7 testimony that I most strongly recommend against 8 the Industrial Wind Turbine project proposed by 9 the entity known as Republic Wind, Case No. 10 17-2295-EL-BGN. The Ohio Power Siting Board 11 should not, in good conscious, allow this to 12 happen to the population of Seneca County. 13 Thank you for the courtesy of allowing 14 me to testify to you publically today on this 15 issue. 16 No questions, Your Honor. MR. PARRAM: 17 MS. SANYAL: No questions. Okay. 18 And then does this include all the 19 research you referred to? MR. CURRAN: Yes I have a -- this top 20 21 part here. This is presented at the Congress for 22 German Specialty in Surgery by Dr. Chaban and his 23 group. And then I have the three articles from 24 the -- three of many articles from the NIH. 25 MR. SANYAL: Thank you.

1	Ms. Gail Miller.
2	MS. MOYER: It's Moyer.
3	MS. SANYAL: I know. I'm calling out
4	the next person so they can wait.
5	MS. MOYER: Okay. That's a Gail, too.
6	Huh?
7	MS. SANYAL: And, Ms. Miller, if you
8	could just wait on deck. And then, I'm sorry, I
9	could not read your name.
10	MS. MOYER: I'm sorry. I should have
11	printed it. It's Gail, G-A-I-L, Moyer,
12	M-O-Y-E-R.
13	MS. SANYAL: Moyer.
14	MS. MOYER: My address is 3040 South
15	State Route 67 in Tiffin, Ohio, in Bloom
16	Township. And I've lived there since 1981. I
17	know you want to know
18	MS. SANYAL: I have to swear you in.
19	Do you solemnly swear or affirm that
20	the testimony you're about to provide is the
21	whole truth?
22	MS. MOYER: Yes.
23	MS. SANYAL: Okay. And I interrupted
24	you, so tell us your township again.
25	MS. MOYER: This question is always

1	whether or not I live in the footprint. I have
2	an explanation as to why I'm testifying today.
3	That I don't leave in the footprint. I live
4	across the street from the township or a township
5	that is in it, but I have other explanation why I
6	am testifying okay.
7	MS. SANYAL: Sure. And what township
8	do you live across from?
9	MS. MOYER: Bloom Township. I said
10	that. Bloom, B-L-O-O-M.
11	MR. AGRANOFF: That's the one that you
12	reside in?
13	MS. MOYER: That's the one I reside in.
14	MR. AGRANOFF: And you live across the
15	street from?
16	MS. MOYER: Scipio.
17	My name is Gail Moyer, I reside 3040
18	South State Route 67, Tiffin, Ohio, Bloom
19	Township, and I've lived there since 1981. I was
20	born and raised in Bellevue, Ohio, where I met my
21	husband, Keith, who grew up in Flat Rock, Ohio,
22	which is a part of this Republic Wind. We were
23	married in Ebenezer United Methodist Church in
24	Flat Rock, and owned property in Flat Rock when
25	the application re for the Republic Wind Farm was

initially initiated. And just as a noted, we did not receive notification at that time, even though we owned property in Flat Rock.

I would like to state that I am opposed to the proposed Republic Wind Farm for many reasons, including excessive noise levels, harmful levels of shadow flickering, harmful effects from infrasound, dangers of ground water impacts and well water contamination due to karst in the area, negative impacts to our local airports, Life Flight service, property values, nature preserves, local bald eagles and other wildlife, the siting of the wind turbines very close to Flat Rocks Children's home, and the overall improper siting of the over 600 foot tall industrial wind turbines in a densely populated rural environment.

However, today I will focus my remarks on Ohio Administrative Code 4906-4-08, health and safety, land use and ecological information,
Section 4 Land Use Plans, Part D, which states:
assess compatibility of the proposed facility and the anticipated resultant regional development with current regional plans. I am basing my remarks on the Seneca County Regional

Comprehensive Plan Update 2001 and the Sandusky County Comprehensive Plan Update 2013, because Republic Wind is in both Seneca County and Sandusky County. I have a written copy of excerpts from these documents as well as a copy of my statements concerning these excerpts to give to the court reporter.

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The Comprehensive/Regional Plans are long-range plans used to guide growth and development according to the Ohio Revised Code 713.23. They are statements of development policy for the counties and work best with public support and understanding, as well as far-sighted leadership by public agencies to support the vision and goals of the respective plans. All decisions should made in light of the strong history of private rights enjoyed by citizens of our county. Sandusky and Seneca County residents have chosen to allow most land-use control to be exercised at the township level in order to ensure that these controls are responsive to the needs and wishes of residents. The plans do not advocate the expansion of these controls at the expense of property rights or the deduction of local authority.

In order to promote positive economic growth countywide, there should be a co-operative understanding between all agencies, citizens, and public officials so that all parties can be involved in new industry proposals.

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Economic development must me considered within a land-use framework in order to have maximum benefit on the regional and local economies while having minimum negative impact on the environment, service capacity, and character of the area. Furthermore, the use of economic development agreements through intergovernmental coordination should be promoted.

Sandusky County's housing goal is to ensure adequate supply of housing to meet the diverse needs of Sandusky County households promoting housing developments in a safe, quiet environment that is healthy, convenient, and attractive, ensures stable property values, and affords opportunities for all citizens.

Sandusky County desires to establish conservation, restoration, and preservation methods to assist in the retention of natural amenities and scenic beauty and encourage site design that protects the natural terrain and

groundwater, preserves or restores significant vegetation and scenic views, and protect areas that are sensitive to change: wetlands appearing in corridors, other environmentally sensitive areas, and habitats. One such area us the Shelley Wetland located at the intersection of County Road 177 in York Township, Road 292, less than 1 1/2 miles from a proposed wind turbine over 600 foot tall.

1.4

Seneca County provides an example of the value of open space and natural resources to its residents. Throughout the County's past, the natural environment has played an important role in defining Seneca's identity. Seneca County prides itself on its rural character and agricultural resources. Citizens want to maintain the rural character of the County by preserving farmland and other natural resources.

To protects the County's rural character, growth management techniques need to be used to encourage compact development in existing urban areas, plan ahead for growth, and prevent further environmental degradation of the land. We need to encourage growth that builds on existing municipalities and supports new

residential commercial and industrial grown only within identified urban growth boundaries where public infrastructure is available.

We need to preserve prime farmland recognizing agriculture as a viable economic resource. We need to develop and implement an aggressive program to preserve agricultural uses in those areas identified for permanent agricultural preservation. Citizens and officials alike acknowledge that the encroachment of development on farmland is a critical county issue.

We need to protect sensitive
environmental area such as wetlands, woodlands,
steep slopes, endangered species habitats, native
species habitats, and flora and fauna from the
impacts of development. We need to restrict
development in critical resource areas, such as
in the 100 years flood plain and in perennial
stream buffers. We need to maintain and preserve
natural open space corridors that are important
to wildlife and plant life habitat.

Again, these ideas are not my original thoughts. They are all part of the documents that were accepted as guides for Seneca County

1	Regional Planning Commission and the Sandusky
2	County Comprehensive Plan. They can be found on
3	their websites. These plans were created to
4	advice elected officials on actions relevant to
5	growth and change.
6	I requested that the Ohio Power Siting
7	Board reject the application for a license to
8	erect an industrial wind turbine farm submitted
9	by Republic Wind, LLC, OPSB No. 17-2295-EL-BGN as
10	it is not compatible with the current Seneca
11	County Regional Plan or the Sandusky County
12	Comprehensive Plan and will negatively impact our
13	farming and airports, and decimate our rural open
14	spaces and sensitive environmental areas. Thank
15	you.
16	MS. SANYAL: Do you have a copy of your
17	comments?
18	MS. MOYER: I do.
19	MR. PARRAM: No questions.
20	MS. SANYAL: They don't have any
21	questions.
22	MS. MOYER: Okay. Thank you.
23	MS. SANYAL: Dennis Shriner, if you
24	will come up and wait at the middle podium.
25	And Ms. Miller, will you raise your

1 right hand. Do you solemnly swear or affirm that 2 3 the testimony you're about to provide is the whole truth? 4 MS. MILLER: I do. 5 6 MS. SANYAL: And then -- I feel like 7 I've been through this spiel. Name, address, 8 township. 9 MS. MILLER: My name is Gail Miller, 10 G-A-I-L M-I-L-E-R. My home is at 14411 U.S. 11 24, Attica, Ohio. I live in Venice Township. 12 I'm in the Seneca Wind project. 13 MS. SANYAL: And you may proceed. 14 Thank you. Throughout MS. MILLER: 15 history man has advanced in knowledge and 16 technology through a trial of ideas and by 17 learning and responding to the experiences of 18 others on these ideas. Currently Ohio is being 19 besieged by Wind power comes seeking, under the 20 guise of renewable energy, to install wind 21 turbines and line their own pockets before the 22 advantage of government subsidies run out. 23 are doing this at the expense of local residents 24 who will be facing loss of property values, 25 infrasound, shadow flicker, and the destruction

of a peaceful rural way of life. When will Ohio learn from others?

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Let's talk about the prices of electricity. And I quote from an article by Michael Shellenberger, Forbes, April 25, 2018, entitled: "Yes, Solar & Wind Really Do Increase Electric Prices." Two reasons: Unreliability and Transmission lines. The following increases occurred from 2009 to 2017: In North Dakota electricity prices rose 30 percent, while electricity from solar grew from 2 to 8 percent. In South Dakota electricity prices rose 40 percent, electricity from solar and wind grew from 25 do 30 percent. In Kansas electricity prices rose 33 percent, electricity from solar and wind just grew from 6 to 36 percent. In Iowa electricity prices rose 21 percent, electricity from wind and solar grew from 14 to 37 percent. Oklahoma, electricity prices rose 18 percent, electricity from wind and solar grew from 4 to 32 percent.

The value of solar and wind decline in economic value as they become larger shares of the electricity grid for physical reasons. They produce too much energy when society don't need

it and not enough energy when they do.

2.3

A quote from another article in Forbes,
September 4, 2019, the "The University of Chicago
from earlier this year that renewable energy
mandates significantly increased average retail
electricity prices." Thanks to the hefty
deployment of renewable electricity prices in
California between 2011 and 2018 rose seven times
more, 28 percent, than they did in the rest of
the country, 5 percent, while electricity prices
have risen 50 percent in Germany in 2006."

Another quote from an article in Bloomberg.com, August 26, 2019, "The road to a world powered by renewable energy is littered with unattended consequences. Like a 40,000 percent surge in electricity prices. Texas power prices jumped from less than \$15 to as much as \$9,000 a megawatt-hour this month as coal plants retirements and weak wind left the region on a brink of blackouts during a heat wave. It's a phenomenon playing out worldwide. Germany averted three blackouts of its own in June, and the UK more than a million homes lost power on August 9th in part because the wind farm tripped offline.

1 Let's talk about safety from the 2 turbines themselves. It has been reported that 3 there's an average of 3,800 wind turbine blade 4 failures. I found two articles from March 2019, 5 one in Nova Scotia, and one in Germany. 6 sure there were many more in between. But just 7 since July there have been blade failures, fires, 8 blackouts, and other problems with turbines in 9 Brazil, New York, Texas, Spain, Ireland, England, 10 Wales, Wisconsin, Minnesota, Michigan, Pennsylvania, Washington, South Africa, Nebraska, 11 12 New Mexico, Oklahoma, Australia, and Scotland. 13 And what about setbacks? Quoting from 14 an "Analysis of Throw Distances of Detached 15 Objects from Horizontal-Axis Wind Turbines," 16 March of 2018, for normal tip speeds the 17 potential blades throw distance for a 5 megawatt 18 turbine is 900 meters or 2,953 feet. 19 "extreme" tip speeds the corresponding distance 20 for the 5 megawatt turbine was 1,500 meters or 21 4,921 feet. Does Ohio's current setback distance 22 from property lines reflect safety from blade 23 throws? 24 What about setbacks due to the 25 dangerous infrasound? The history of infrasound

can be traced back to the fifth operational wind turbine being installed in Boone, North Carolina in 1979. NASA and SERI fully investigated acoustic, seismic and atmospheric aspects using turbine operational information and data recordings in a series of field experiments. In March 1982 NASA's Guide to the evaluation of human exposure to noise from large turbines showed that even with windows shut houses do not stop LFN, low frequency noise, sound energy. Measured levels inside the home are significantly higher than predicted within the LFN range. The house acts like a drum for LFN.

In 1987 the wind industry was told, and I quote, "The dB(A) filter shuts out the LFN and is therefore unsuitable. G-weighted scales were better correlated with noise, annoyance, vibrations, and pulsations. Finland, February 1, 2019, and article, "Home Wreckers: Finish Study Finds Wind Turbine Infrasound Unsafe For Residents Living Within 15 Kilometers, 49,212.6 feet." Germany, May 7, 2019, another article, "Far Out: German Study Find Pulsing Wind Farm Infrasound 20 Kilometers, 65,616.8 feet, From Turbines." September 3, 2019, New York, Number

Three Wind told to listen to World Health Organization turbine noise standards.

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Residents, councils speak against wind turbines; January 2019. Policymakers in Spotsylvania, Virginia, "and that is what is say, Spotsylvania, Virginia, "voted to block the building of a solar farm, after local residence organized themselves in opposition of a concern for the impact on the environment, property values, and electricity prices. February 2019, Lafayette, Indiana, from the Lafayette Journal: Ordinance proposes to ban wind farms, other counties have either banned wind farms, set restrictive ordinances that make farms impractical, or put a moratorium on the turbines until more health studies.

Also February of 2019, a Kansas bill was proposed setting minimum setbacks for a commercial wind turbine. The bill sets out minimum setbacks of not less than 12 times the system height, which is the total height of a wind turbine measured with the in a vertical position, or, 7,9 20 feet, whichever is greater from any residential property or public building. It also proposes a setback of 20 times the system

1 height or three miles, whichever is greater, from any airport or local, state, or federal wildlife 3 refuge, public hunting area or public park. Mark 4 2019: The largest county in California, San 5 Bernardino, banned the building of any more large 6 solar and window farms over the opposition of 7 renewable energy lobbyists and labor union. 8 did so on behalf of conservationists and locals 9 seeking to protect fragile desert ecosystems. 1.0 March 17, 2019, New York, Worth Town Council arms 11 for Wind Law Adoption in May. Turbines that 12 generate more than 100 kilowatts of electricity 13 are limited to 400 feet. Developers would have 14 to erect turbines away from property lines, 15 structures, and roads at a distance of five times 16 their height. They will not be allowed to emit 17 noise louder than 35 A weighted decibels 7:00 18 a.m. to 7:00 p.m. and 25 weighted decibels from 19 7:00 p.m. to 7:00 a.m. 20 March 2019, Illinois, from the Harold 21 Review.com. Zoning Board votes against DeWitt 22 County Wind Farm. Members expressed concerns about public safety risks with weather radar 2.3 24 interference, shadow flicker for 25 non-participating residents and potential water

drainage issues. March 2019, Scotland: Council confirms wind farm objection. Councillors were recommended to object on several grounds, including the fact that the proposed development would have a significant impact on the protected area, which has a "sensitive landscape, high visual prominence, high wilderness, and recreation value." Scotland Officers were also advised that the applicants had not demonstrated that the proposal by the wind company would not have a "detrimental impact upon aircraft and aviation." Locally Life Flight cannot land within 1.5 miles of a wind turbine. And what about crop dusting?

September 5, 2019, Wind Daily. "Angry residents send German wind industry spinning."

And I quote, "After years of breakneck growth in the capacity and uptake that has seen wind power delivering a th of Germany's total energy production, vocal 'not-in-my-backyard' opposition by residents and a lack of government support have seen investment shrink in the sector. More than 600 citizen initiatives have sprung up the giant installations, with a district called Saale-Orla even offering 2,000 euros to anyone

taking action to get expert opinions opposing wind farms. And only a few dozen new turbines were installed since the beginning of this year, down 82 percent from a year ago, said Germany's Wind Energy Association."

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How, when, and why has a questionable promise of money and jobs become more important than the help and welfare of the residents in Ohio? One of the Ohio Farm Bureau's commercial recently stated that they wanted to preserve Ohio farmland for future generations. A farmer builds up his soil through the years be adding fertilizer and nutrients to it. Wind power companies will be dragging 200 plus foot heavy turbine blades across the field, that is the distance of about four 53 foot semi trucks end to end, dumping tons of cement into a big hole in the field and putting up 600 foot turbines, and that's a distance of two football fields, high in the area into that hole. How does all of this preserve the farmland for future generations?

It is time Ohio, and particularly the Ohio Power Siting Board, paid attention to previous and current reports of problems with wind turbines in the United States and in other

1 countries and stop to look at the consequences 2 resulting from these problems. Please learn from 3 the experiences of others, to take action to 4 prevent these problems from occurring in Ohio. 5 In closing, I would like to thank you, 6 the members of the Ohio Power Siting Board, for 7 the opportunity to speak. I am not a doctor, a 8 scientist, or a lawyer. I am a great-grandmother 9 who is very concerned about the health and 10 wellbeing of the residents of Seneca. I am 11 hoping that the Reineke Referendum when presented 12 will be passed so that our residents may vote to 1.3 protect the rural farmland that we all dearly 14 I will be turning a copy of my testimony, love. 15 along with copies of many of the articles from 16 which I quoted. Thank you. 17 MS. SANYAL: Go ahead. 18 MR. PARRAM: Just one clarifying 19 question. 20 MS. SANYAL: Sure. 21 MR. PARRAM: Ms. Miller, do you reside 22 in the footprint of the Public Wind project. 23 MS. MILLER: I am not sure, sir. 24 MR. AGRANOFF: Which county, again, do 25 you reside in?

1.	MS. MILLER: I'm sorry?
2	MR. AGRANOFF: Which county do you
3	reside in?
4	MS. MILLER: I believe Seneca County,
5	and I live in Venice Township, which was within
6	the Seneca County Wind project.
7	MR. AGRANOFF: Okay.
8	MS. SANYAL: Thank you.
9	Kip Siesel, if you'll go to the further
10	microphone and wait on deck there. And then
11	Schreiner. Correct?
12	Do you solemnly swear or affirm that
13	the testimony you're about to provide is the
14	whole truth?
15	MR. SCHREINER: Yes, I do.
16	MS. SANYAL: And then address,
17	township, and whether you're in the project area.
18	MR. SCHREINER: My name is Dennis
19	Schreiner, that's D-E-N-N-I-S S-C-H-R-E-I-N-E-R.
20	I live at 8403 State Route 99, Sandusky, Ohio.
21	That is in Groton Township of Erie County. And I
22	do not live within the footprint of Republic
23	Wind, but I am in the cumulative viewshed. I
24	also have a couple of sinkholes and an artesian
25	well on my property that's connected through the

1 karst areas that are in Seneca County. 2 Your Honor, Chairman Randazzo, 3 Representative Stein, and you know, my name is Dennis Schreiner and I am here to talk to you 5 today about Margin and Safety. Due to a lack of local control under 6 the current Ohio Law, I'm going to offer 7 8 testimony that shows a need for the Ohio Power 9 Siting Board to place public safety as a top 10 prior when considering projects such as this. Ιt 11 should be incumbent upon the wind developer to 12 prove their equipment is safe, not for the public to show that it is not safe. 13 14 The Ohio Power Siting Board is charged, 15 in part, with promulgating regulations to ensure 16 the safety of all of Ohioans. 17 One of the reductions in safety is a 18 reduction in physical personal safety. 19 people have talked about this before. Setbacks 20 should clearly be established as to minimize of 21 any risk of an undesirable event due to the 22 proposed industrial Wind Generating Facilities. 2.3 There have been turbine accidents here 24 in Ohio, three of them as a matter of fact, that 25 are of note. Timber Road II, the Paulding Wind

Farm, on April 24, 2012. A turbine was in service for only two years. It failed due to a manufacturing defect. The developer stated in their May 2010 application, that project setbacks between the turbine sites and permanent residences and property lines should be able to protect the public from the already minimal risk of blade throws. The distance to the residences in that time period was 914 feet, and to a property line it was 505 feet. In the formal incident report that was issued, turbine manufacturer Vestas established an emergency clearance distance of 500 meters, that is 1,640 In summarizing the blade damage, Vestas reported that the largest fragment that they recovered was more than. 6.6 pounds and was found at 764 feet from the power base. A Van Wert County Hoaglin Township Trustee further document fragments that were thrown 1,158 feet and 1,561 feet from the tower, however, he did not estimate the weight. On April 4th the Hog Creek Wind Farm in Harden County had a blade shear event. No report was filed, because in Ohio reporting of incidences are not a requirement. So if --

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unless a newspaper would report it and then the wind companies say exception to that, basically just being a high quality hearsay instead of anything formal to be used. But speculation is high, that there were high variable winds and lightning that cause the blade to fail.

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On August 25, 2018, the Blue Creek Wind Farm in Van Wert County, a 10 foot section of the blade broke loose and traveled 825 feet. All of their safety systems failed and the unit continued to rotate for 10 minutes and then separated. Debris was thrown 300 feet further than the property line setback distance. believe it is a matter of Public Safety and non-participating Property Owner Rights that industrial wind turbines be no closer than the manufacturer required 1640 feet. Now, I want to recall, in the failure report Vestas, the turbine manufacturer, gave us this proprietary and confidential information that's isn't available in other applications that says the safety setback is 500 meters or 1640 feet.

I think the distance should be 1640 feet or the distance calculated in a credible blade throw analysis, whichever is the greater.

As the previous person stated, some of these turbines travel, the tips travel to speeds that give ejection per second files that are much greater than 1640 feet. So we ought to take a look at that. Just because the turbine is safe doesn't mean it has to rotate very quickly, so it really is a functional blade than speed how far those blades are going to go. So either 1640 feet or whatever the distance if the blade throw analysis should be used.

Please do not allow Ohio to become the laughing stock of the Nation and the World with respect to setbacks since virtually everyone is increasing setbacks to address the effects of blade failures, noise, especially the infrasound or low frequency noise, and shadow flicker. Setback distances of a mile or more from occupied structures are not uncommon.

A reduction in ecological safety. The extreme description of the subsoil in and around karst features alone should give the Power Siting Board reason to pause and ask what controls are going to be put in place to protect our drinking water. When we talk to members of APEX and asked about protection of our drinking water, well,

they said, "Well, we put these foundations in and if it creates a problem, you know, we'll remediate it. We'll maybe shift you over to public water or something like that." Well, many of us out in the country don't have access to public water, so I guess we'd have to just cart water in. And then there was never a firm answer of how that would be taken care of. Is it just our poor luck from living there or were they going to provide water for the rest of our life or if life of the project.

There's also a concern with the dissolution of carbonate rocks that are exposed to the slightly acidic groundwater in the Republic Wind project. I would urge that independent third party reviewers be brought into the project that are both agreeable to the State of Ohio and the developer if this project moves forward.

As in some previous testimony, we know Doug Aiden of the Ohio Department of Natural Resources is the author of a number of these karst reports and he very clearly points out some of the cautions you should take. I would think he would be a great resource to use to be able to

come up as a state representative to find out whoever we bring in as a third party reviewer to be acceptable for the state.

There's also a reduction in the level of safety provided to preserve and protect wildlife. I think we have -- in order to keep this shorter I'm not going to go through my whole statement. But we have birds, bats, whatever, and in this area, it's Republic Wind, it's very similar to the Seneca Wind, in that they, DNR thinks we're very underestimating the number of bird kills. So that is the reduction in ecological safety, in the fact that what we're using for bird kills may not be a conservative value.

There will be reduction political sustainability due to the absence of local control. I don't believe these projects will be politically sustainable, because Ohio Law has removed local control over the siting of green energy industrial complexes in land zoned for residential/agricultural use by bypassing our local zoning procedures that are here for our safety for facilities under the Ohio karst Siting Board control. The short-sidedness of preventing

local control has significantly divided our communities. Surprisingly, the Ohio Chamber of Commerce states that a local referendum sets a dangerous precedence. Let that sink in.

In this age of information, continually telling people their opinions don't matter or they don't deserve a seat at the decision-making table, will be politically unsustainable.

Politicians are elected to serve the people and the elections and referendums allow the people to vote with their voice — or have a voice with their vote. Pardon me.

Other reductions in the margin of safety. Intermittent wind generation disrupts the entire electrical grid resulting in blackouts, as evidenced by just in this years, loss of power in Chicago, New York, Washington State, and Texas, just to name a few. Chemical hazards exist with industrial wind turbines, within the additional of 450 gallons plus of lubricating oil in the unit that often leaks. And there basically the thing in the pictures of turban fires that you see all the black smoke building from the turbines. That's a result of the oil burning up.

With the current setbacks road safety is reduced in Ohio. I would offer that maybe the roads should be posted with a sign kind of like with do for deer crossings. Just put a sign with a wind turbine falling over and hitting a car to let people know maybe they shouldn't go down that road.

The margin of safety is reduced for emergency medical systems and other emergency services. Industrial wind turbines interfere with Life Flight, weather radar, and the reception of emergency broadcast and other radio signals. Autonomous farm vehicle navigation systems can be affected if they're within 2.4 miles of an industrial wind turbine.

Lacking industrial wind turbine
reporting criteria and rule making is a problem,
in that the assurance of public safety is
reduced. Turbine failures are not rare, they are
not isolated incidences with little or no
consequence. Industrial wind turbines fail at a
rate of one failure per turbine per year. And my
definition of failure is that the wind turbine
stops producing energy when it could be producing
it. I'm not talking about the wind going away.

800-247-8360

And that it isn't an easy fix. They have to keep the unit off line until somebody goes up and does something to it to get it back in fruit. So one failure per turbine per year.

Blade failures are at about 5 percent. So if you just count the turbine blades, 5 percent of the them are going to fail over the course of the project's lifetime. And that failure rate isn't getting any better. I don't know if it's because the blades are getting longer and they're putting a little more stress on them. But the bigger units aren't getting more reliable with respect to blade failures.

Five industrial wind turbines have suffered catastrophic failure and subsequent collapse so far in 2019. Three of those were in the U.S., two were in foreign countries. What reasoning can the Ohio Power Siting Board apply that would allow the construction of these much taller industrial wind turbines in Ohio without knowing what the cause is and the corrective actions that have been taken to prevent reoccurrence?

In conclusion, the responsible siting of wind turbines should preclude Seneca County

1	and Sandusky County as being host counties. And
2	I therefore, recommended denial of this project
3	for this reasons that I have specified. Thank
4	you.
5	MS. SANYAL: Thank you. I have a quick
6	question. So earlier in your statement you
7	mentioned there are three turbine accidents and
8	you noted Timber Road and Blue Creek Wind Farm.
9	MR. SCHREINER: Yes.
10	MS. SANYAL: Which one was the third
11	one?
12	MR. SCHREINER: The third one was the
13	Blue Creek in Van Wert County, and it's in my
14	testimony.
15	MS. SANYAL: And Timber Road was
16	another one. And then
17	MR. SCHREINER: Yes. Timber Road II,
18	Hog Creek, and Blue Creek.
19	MS. SANYAL: Hog Creek?
20	MR. SCHREINER: Yes. And they all I
21	have it open to here.
22	MS. SANYAL: Thank you very much.
23	Mr. Chairman has a question.
24	MR. RANDAZZO: Mr. Schreiner, you
25	indicated in your testimony that your view of the

1	setback should be no less than 1660 feet?
2	MR. SCHREINER: 1640.
3	MR. RANDAZZO: 1640?
4	MR. SCHREINER: Yes.
5	MR. RANDAZZO: I assume, based upon
6	your testimony, that you would measure that from
7	property line; is that correct?
8	MR. SCHREINER: Yes.
9	MR. RANDAZZO: And with regard to your
10	testimony, could you give us a sense of what your
11	qualifications and background are?
12	MR. SCHREINER: My professional career
13	started as being a drafty in the Vietnam War and
14	I was assigned as a nuclear reactor on a spy
15	submarine. And I got out of the Navy and went to
16	work at Davis Besse. And I worked at Davis Besse
17	until June of this year. So I was there for 43
18	years. I was there when they built the plant and
19	I put together decommission plans for the plant,
20	however, we're not using those right, so that was
21	a good thing. I was also the reliability
22	engineer for about 20 years. Also I was in
23	charge of the Independent Safety Engineering
24	Group. I was a shift supervisor. I started up
25	the plant. I ran the plant for a number of

years. And I taught operators how to operate the plant.

The other thing I did is, in my job and in chivalry job, is I worked with the Nuclear Regulatory Commission when we had things that happened at the plant, so I'm very knowledgeable about what the Nuclear Regulatory Commission requires for incident reporting for when you need to do cause analysis and when you need to take corrective actions to prevent reoccurrence. I would be more than happy to work with you or your staff. As you well know, there are rules, because I said this at testimony for the rule making, there are already reporting rules for the wind industry on their turbines, yet there is only 3 percent compliance with those rules, because there are not mandatory. And I would think Ohio, being the 7th largest economy in the United States and the 27th largest in the world, we should surely have a good, clean set of rules so that we know what are happening at these industrial complexes and why the public should feel safe being near them, or not.

MR. RANDAZZO: Thank you.

MS. SANYAL: Jan Sampson, if you'll

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1	come up and wait on deck at the middle podium.
2	And then Mr. Siesel, right hand.
3	Do you solemnly swear or affirm that
4	the testimony you're about to provide is the
5	whole truth?
6	MR. SIESEL: I do.
7	MS. SANYAL: Okay. And then your
8	address, whether you're in the project area, and
9	what township you reside in.
10	MR. SIESEL: I'm kip Siesel, K-I-P
11	S-I-E-S-E-L, 2412 South Reynolds Road, Toledo,
12	43614, in Lucas County. I do not reside in the
13	footprint of the Republic Wind project. Am I
14	good?
15	MS. SANYAL: Yes.
16	MR. AGRANOFF: Proceed.
17	MR. SIESEL: On behalf of the Operating
18	Engineers Local Union 18, I am here to support
19	the approval of the Republic Wind Farm project.
20	The members of Local 18 and the State
21	of Ohio have benefited greatly from the wind farm
22	projects built in Northwest Ohio for the past
23	several years. There have been several phases
24	and years of work for our members as a result of
25	these projects, and the Republic Wind Farm will
	<u></u>

help contribute to the creation of jobs. In turn high paying wages, healthcare benefits and training programs can continue to grow because of the wind industry.

The areas in which these projects have already been constructed have seen numerous benefits in the townships and the counties involved. If approved the Republic Wind Farm will not only create jobs, but you can expect an economic impact, additional tax money, and clean energy for Ohio as a result from the project.

The members of Local 18 have the experience to build this project safety and on time from their involvement on the other wind farm projects. They also have been provided the proper training required to build a project of this size safely and on time. The ongoing maintenance of the Republic Wind Farm would also continue to employ our members during the project's existence.

We encourage the Ohio Power Siting
Board to support the jobs of men and woman of
Local 18 by approving the Republic Wind Farm
application. That's all I got.

MS. SANYAL: Thank you. Questions?

11.

1	MR. PARRAM: No questions.
2	MS. SANYAL: Paul Jones, if you'll wait
3	up at the podium.
4	Ms. Sampson, right hand.
5	Do you solemnly swear or affirm that
6	the testimony you're about to provide is the
7	whole truth?
8	MS. SAMPSON: Yes.
9	MS. SANYAL: Okay. Name, address,
10	township, and what project area or not.
11	MS. SAMPSON: My name is Jan Sampson,
12	J-A-N S-A-M-P-S-O-N. I live at 6305 South
13	Township Road 151, Tiffin, Ohio, I'm in Seneca
14	County, in Eden Township, and I am not part of
15	the footprint for Republic Wind.
16	I recently spoke the opposition to
17	Seneca Wind Case No. 18-0488-EL-BGN, whose
18	developer has since withdrawn his application for
19	certification. I'm here today at this public
20	hearing to speak in opposition to Republic Wind,
21	Case No. 17-2295-EL-GGN, which would impact
22	properties of my neighboring property owners in
23	Seneca County.
24	Beginning in April of 2017, I began
25	researching industrial wind turbine projects.

1 Based on many research articles I have read and 2 videos available online about this issue, I do 3 not think these projects belong anywhere near populated areas. Although I have other reasons, 4 5 here are six of the most compelling reasons that 6 I submit for my opposition to industrial wind 7 projects in rural Seneca County: No. 1, the setback distances between industrial turbines and 8 neighboring properties and homes, as permitted by 9 10 Ohio Law, are unsafe. Statical studies of blade 11 failure have proven that debris throw, whether 12 from ice or mechanical failure, exceed the 13 current minimum setback distance by hundreds of 14 feet putting people in Ohio at risk. 15 statistics were presented to the Ohio Power 16 Siting Board at a workshop the Board hosted in 17 the spring of 2019. In Europe and in various 18 states in the United States, the minimum setback 19 distances are increasing because of these 20 concerns. The setbacks proposed for Republic 21 Wind are unsafe. 22 No. 2, Ohio Law and authority of the 23 Ohio Power Siting Board supersedes any local 24 zoning ordinance in the various townships, which 25 forces Ohio residents to reside in industrial

zones that they do not approve. It is similar to the idea of no taxation without representation. The voice of Ohio residents has been stripped from them by developers whose sole purpose is to make money, regardless of whose rights they trampled. Property owners seeking income and government entities seeking tax revenue also need to remember that they cannot and should not force this burden on Ohio residents who do not approve.

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No. 3. In addition to the issue of safety because of blade throw, numerous other safety concerns are not being adequately addressed. The audible noise of industrial turbines and the shadow flicker in too many cases exceeds the maximum recommendation of the World Health Organization. The existence of infrasound, that is inaudible noise and pressure waves from industrial wind turbines on an ongoing 24 hours a day, 7 days per week has been shown to create adverse health conditions for many people. Also, various reports exist indicating that it is not possible, or at a minimum it is hazardous for Life Flight emergency helicopters to safely land in areas near industrial wind turbines.

No. 4. Studies by forensic real estate

appraisers demonstrate that property values for homes of nonparticipating property owners are negatively impacted, in many cases by more than 25 percent reduction in their market value. For many rural residents their home is their primary investment and it is simply wrong to permit wind developers and a relative few property owners to negatively impact the property rights of others who are have no hope or voice in the matter.

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No. 5. The environmental impact to bats, migratory birds, and other birds such as bald eagles is naturally being minimize by wind developers. Also, when industrial wind turbine projects are repowered after only about 10 to 15 years, the environmental impact on local landfills is not being taken into consideration. In 2017 MidAmerican Energy began repowering 200 turbines they owned in Iowa for projects constructed in 2004 and 2005. To me, this seems to be a short lifespan for the original construction. MidAmerican Energy says they will be repowering a total of 706 turbines by 2020 with increased blade lengths. This sounds very costly and sends lots of materials to landfills. I suspect the wind developer can only afford to

do this because the economic advantages are made available to them from Federal, State, and Local tax breaks. Please see the 2017 article from Urbandale, Iowa entitled "MidAmerican Begins Repowering Hundreds of Wind Turbines" available at this internet net website. The website is listed in my printed material, which I'll make a copy available to you.

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No. 6. The amount of electrical capacity added to the electrical grid is minimal for all the negatives above. When the wind capacity is insufficient to generate, back-up power must be available in the electrical grid to avoid what is known as brown outs or black outs. At this time there is no economically feasible way to use batteries to store sufficient energy generated by wind turbines for use when the wind is not capable of meeting the electrical needs. Currently all back-up generating capacity must come from fossil-fueled generation, that is coal or gas, or nuclear generating plants. sources cannot be eliminated to "save the environment." Well, I suppose they could be if we all want to risk sitting in dark. Additionally, new studies are showing that grid

instability is often created by the inclusion of 1 more and more electricity brought into the grid 3 from industrial wind turbines. 4 I will not take more of your time and I 5 thank you for affording the public this 6 opportunity for input, since it is our only voice 7 in this entire project. Please take a few 8 minutes to go online and at link I provided under 9 Item No. 5 and review the article about 10 repowering the industrial wind project in Iowa. 11 Please consider this when thinking about what is 12 in the overall best interests of Ohio and it's 13 residents. 14 In light of the above reasons, I respectfully ask that you deny approval of the 15 16 Republic Wind project, Case No -- I'm sorry, I 17 have the wrong case number on there -- Case No. 18 17-2295-EL-BGN in Seneca County. Thank you. 19 MR. AGRANOFF: Thank you. 20 MS. SANYAL: Katherine Smith, if you'll 21 come and be on deck in middle podium. 22 And Mr. Jones, correct? 23 MR. JONES: Correct. 2.4 MS. SANYAL: Do you solemnly swear or 25 affirm that the testimony you're about to provide

1	is the whole truth?
2	MR. JONES: Yes.
3	MS. SANYAL: And your address,
4	township, and if you're in the project area.
5	MR. JONES: I live at 9140 East
6	Township Road 122, Republic, Ohio, a few miles
7	from the Seneca East schools.
8	MS. SANYAL: And you may proceed. Go
9	ahead.
10	MR. JONES: Yes. Thank you. Snicker
11	if you'd like. I don't really mind. So
12	whatever. What I'd like to do is, I'd like to
13	tell you that. Free napkins, free table
14	settings, free workdays no oh, I'm sorry,
15	those are my notes for a Bernie Sanders rally. I
16	got the wrong one.
17	Recently, I'd say about a year ago, I
18	was having coffee with an ex-fried, a very
19	intelligent, hardworking man, and he questioned
20	my reasons for speaking no wind turbines in
21	Seneca County. And he had three valid points,
22	and they are as follows: 1, the Seneca East
23	School system needs the tax revenue from those
24	turbines. 2, how can you and others, a pillar of
25	the community, be against of renewable energy?

Planet earth is being destroyed. His third was this, a man has the right to build or lease whatever he wants on his own land. I hope that I can show you I differ with all three.

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But I have to tell you, after I spoke the last time I visited Seneca East schools about the second week of school, and the principal directed me down to the third grade. When I walked through the door this little third grader said, "Oh, you're Mr. Jones." And I said, "Yes." She said, "I heard one of mom's friends refer to you as a dumb hillbilly from Kentucky. Are you?" You don't answer a question from a third grader without some thought. So I said, "Am I dumb or am I from Kentucky?" She said, "Oh, I know you're not dumb. But are you from Kentucky?" Another little girl saved me from having to answer further. She said, "So you're Mr. Jones?" And I said, "Yes." And you can find an attitude in the third grader, you don't have teach for And I said, "Yes, I am." She said vears. "You're grandmother's favorite teacher." Now, my ego was deflated. And before it got too far a little boy over by the door said, "Mr. Jones, grab a spare Mac Book Pro, I want to send you an

Apple document. It's my research paper, the title is "The life-style of the operations in Southern Australia." What I want you to do, is I want you to check my thesis statement and see if it is ambiguous or could you suggest some writing means of clarifying?" I was out the door.

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I got outside and I have to tell you this, I thought I could have been at Saw Mill Creek having lunch with my daughter. You see, my daughter is Vice President of Cedar Fair, Cedar Point. They just bought the Saw Mill Golf Course and all that, and that's not bad for a father who is a dumb, actually I prefer to be called or referred to as a southern sophisticated gentleman, or better yet, in this politically world, I would like for you to call me a blue grass American. Thank you.

I just I just thought I'd brag on my daughter a little bit there. Actually her mother deserves all the credit. I know that.

Seneca East Schools. Did you realize that Seneca East Schools had more than a million dollars carryover into this school year?

Actually, I didn't write it down, it was public knowledge. I think it was closer to a million

and a half.

Now, the Seneca East Schools, only five schools in our area rated a bronze medal in educational merit. Seneca East was one, along with Edison, Huron, Vermilion, and Ontario.

Principal Don Vogt at a recent board meeting said only 2 percent of schools in Ohio made gold. 11 percent made silver. Seneca East is in the top 16 percent of the State of Ohio, enrollment is up. Open enrollment. Dr. Laura Kagy, her staff, the school board, the employees of Seneca East deserve all the credit.

I can tell you, said the first myth, we do not need wind turbines lording over our school. Certainly open enrollment would certainly be affected. We are doing quite well without wind turbines. Thank you.

Now, his second point was, how can, you a pillar of the community, be against renewable energy? We're not against renewable energy.

That's a myth. We're against nonfunctional, nonworking renewable energy.

Now, I have to tell you this, that my son called me last night from Dallas, Texas, he's Vice President of the Niagara Corporation located

in Dallas. His mother deserves all the credit for that too, I understand that. But that's not bad for a blue grass American. In two weeks he's going to Europe, he's going to Munich, Germany, and he's going to go on to Florence, Italy. 6 said, "Dad, you want to go to Europe with me?" No, I lied, he didn't say that. He's not going to take me there, he's going to go. But listen to this, last year, two weeks before Christmas, 10 he gave his mother and I a great Christmas gift. 11 He sent us to Hawaii. We toured Pearl Harbor. 12 We toured the Space Observatory, and on the way 13 up we spent a whole day watching turbines rust 14 out on the barriers and on the reefs. They don't 15 They're 10 years old. Now, you know, I 16 didn't spent a whole day watching them rust, but 17 when you're 75 years old watching turbines rust actually is more important than having a free day 18 19 at Cedar Point, which I can get. 20 The third myth is this, a man has a 21 right to build at lease whatever he wants on his

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own land. No, he doesn't. You have to have consideration for your neighbors. You have to understand the health issues that these things I've read, you know, I knew nothing about aet.

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them until a third grader asked me, "Mr. Jones what's your take on wind turbines?" I said, "You got to be good." And then I realized that I shouldn't said that. So he told me, he said, and this is when we stopped having coffee with each other, he said, "I should be able to build anything. I can lease anything I want." And I said, "Okay, so I'm your neighbor, I'm going to start a free range rattlesnake farm right next to you. I'm going to go to Texas and get 1,000 rattlesnakes and we're going to raise them for meat." And he said, "That's not the same." And I said, "You're right. You can see a rattlesnake. They even warn you and you can hear them, and if you wear those big hip boots that come to your knees you're probably not going to get bitten." That's not true with all the health issues that face our neighbors and our kids in school. It's real. And I implore you to read, please, the letters that I submitted from my former students. And I thank you for listening, but please don't show up Heidelberg looking for me at a Bernie Sanders rally. I'm not going to be there.

MR. PARRAM: Mr. Jones, do you reside

1	within the project area?
2	MR. JONES: Yes.
3	MR. AGRANOFF: Which township do you
4	reside in? Mr. Jones, which township?
5	MR. JONES: Scipio.
6	MR. AGRANOFF: Scipio. Okay. Thank
7	you.
8	We're going to take a break right after
9	We have Ms. Smith's testimony.
10	Do you solemnly swear or affirm that
11	the testimony you're about to provide is the
12	Whole truth?
13	MS. SMITH: I do.
14	MS. SANYAL: Okay. And then name,
15	address, whether you're in the project area, and
16	what township area.
17	MS. SMITH: My name is Katherine Smith.
18	My husband and I own farmland at our home in
19	Thompson Township, Republic, Ohio. Our address
20	is 12199 East Township Road 148, Republic, Ohio.
21	And we are in the footprint.
22	MS. SANYAL: And I'm sorry, I didn't
23	catch it, what township are you in?
24	MS. SMITH: We're in Thompson Township.
25	MS. SANYAL: Thank you.
	F .

MS. SMITH: I'm going to make this short and sweet. We also love our farm and we have a deed signed by Andrew Jackson. My husband's family has resided on the family since the time of Jackson. I see many strangers in this room today, I also see quite a few neighbors, and I see some very good friends who are on the opposite side from me. Isn't this America a wonderful country where we can give our opinions that may not agree, but we can still be respectful of one another.

After we get our wind turbines I hope that we can still be friends. I support the project. I think it is very exciting and I look forward to seeing the windmills and having a new type of energy in our area. I think there is room for all types of power in our country and we should put up windmills.

I also would like to address an issue that several people have mentioned about bats. We have a woods on our farm and several years ago the scientists came in and did a study on the bats. We talked to the these folks. They put up nets every 15 minutes through the night and said there were no bats in our woods and in the area

1	where wind turbine would be.
2	I would also, just for your
3	information, like to let you know that Thompson
4	Township is not zoned. Thank you.
5	MS. SANYAL: No questions.
6	MR. AGRANOFF: Ms. Smith, if you could
7	come back for just a second.
8	MS. SANYAL: Do you have a copy of your
9	comments?
10	MS. SMITH: No.
11	MS. SANYAL: Were there any questions?
12	I'm sorry, I didn't quite catch that.
13	MR. PARRAM: There were no questions.
14	MS. SANYAL: Okay. Thank you. I'm
15	sorry to make you walk back. Thank you very
16	much.
17	MR. AGRANOFF: We're going to take a 10
18	minute break and then when we return it will be
19	Mr. Ronald Smith and then Steve Shuff.
20	MS. SANYAL: And I know quite a few
21	people want to know what number we are on. We
22	just finished No. 20 and I believe we have 69
23	people.
24	THEREUPON, there was a brief recess.
25	MR. AGRANOFF: Mr. Smith, please raise

1 your right hand. 2 Do you solemnly swear the testimony 3 you're about to give in this proceeding is the 4 truth, the whole truth, and nothing but the 5 truth? 6 MR. SMITH: I do. 7 MR. AGRANOFF: Thank you. Please state 8 your full name, your address, your township, and 9 whether or not you reside in the project area. 10 MR. SMITH: My name is Ronald Smith, 11 12199 East Township Road 148, Republic, Ohio, 12 Thompson Township. And yes, I do reside within 13 the imprint of the Republic Wind Farm. 14 I want to address a little different 15 subject matter than the other people have 16 addressed. Basically I'm going to do so, because 17 I have the background of 47 years experience as a 18 lawyer, licensed in Ohio, as well as the State of 19 I am semi-retired, but I feel that the Florida. 20 Siting Board should be aware that there are 21 certain laws that must be followed and I'm going 22 to address some of the comments made by some of 23 the people made here, especially pertaining to 24 property rights. 25 I just want to remind the Siting Board

that the property rights are important because it's protected by the Constitution of the United States under Article 1, Section 10, Clause 1. But more importantly the Ohio Constitution also protects the property rights of citizens. The Ohio Constitution under Article 1, Section 19 states: "Private property shall ever be held inviolate." That means owners of private property can enters into a legal agreement without fear of it being interfered with any way by the State.

Now, when APEX and their predecessors first came to our community and Thompson Township and throughout the area I was skeptical, and I'm a person who delves into things factually and prepared my cases over the years, over 100 jury trials, I made sure the facts are correct before I do anything.

Since I am a landowner and own farm ground, I was very concerned about the wind turbines coming to our vicinity. And yes, I'm very familiar with the karst regions, because I have over a half a dozen sinkholes throughout my farm, and they're large ones, 15 feet deep, 25 feet across. Yes, they hold water and, yes, the

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water does go down to the Sandusky Bay. have done my research and done due diligence and I feel that they have also done their homework when he came here. I pointed out to them very earlier, when they first came to Thompson Township, that the karst reason may be a problem and they should look into it very thoroughly. they proceed to do so. So in that respect though I've looked at some of the results of their research, and I find that the foundation that they're going to put down would certainly be sufficient enough to hold the large turbines that we're talking about. I do not believe, in my experience with the karst region of the sinkholes I have on my farm, that the sinking of these large bottoms of the turbines would cause any issue with our karst area and our sinkholes.

So I feel they have done their homework and I feel basically working with them over the years and observing them, that they have crossed all the T's and dotted all the I's. So I feel basically that not only do we have to keep in mind the property rights of the farmers, which I do have farmers by the name of Hummer farming my farm for the last 40-some years. They farm over

1 2,000 to 3,000 acres and they own 1,000 acres themselves, that they are very much for the wind 2 3 turbines in the area, because of the fact that they would help generate income to the community, 4 as well as the county. So under those 5 circumstances, I feel that the property rights 6 7 would still be important. And I'm just going to point out 8 9 basically what Mr. Jones said, that, yes, the 10 property owners should be able to lease and 11 contract with APEX, which I have done. If I felt that that was not proper I would not have done 12 13 so, based on my homework and due diligence. And 14 I think the farmers have the same ability and the same attitude as I do, in order to do their 15 16 homework ahead of time to make sure everything is 17 proper. As far as some the dangers or concerns, 18 19 that will be left up to the experts that will be 20 testifying down in Columbus. So I would ask that 21 you accept the application. Thank you. 22 MR. AGRANOFF: Thank you. 23 MR. PARRAM: No, questions, Your Honor. 24 MS. SANYAL: Okay. Thank you, 25 Mr. Smith.

1	MR. RANDAZZO: I do have a question.
2	MS. SANYAL: Mr. Smith, we do have one
3	question.
4	MR. RANDAZZO: Thanks for your
5	testimony. And you indicated you do have
6	sinkholes on your property?
7	MR. SMITH: I have over a half a dozen
8	sinkholes on my property.
9	MR. RANDAZZO: And are all of them
10	about the same size?
11	MR. SMITH: No. They're different
12	sizes. I didn't indicate, there are two large
13	ones. I had one sinkhole that I had put down a
14	large tile, since it's a working sinkhole. In
15	fact, all of them are working, but when you have
16	high water that's when you have a lot of water
17	there standing around.
18	MR. RANDAZZO: You indicated that you
19	felt the applicant had done its homework with
20	regard to the potential risks associated with the
21	karst and the sinkholes in this area?
22	MR. SMITH: Yes. Because they had
23	informed they would have, obviously, experts come
24	in, geological experts, to make sure there's
25	going to be no interference with the karsts or

1	anything that's erect.
2	MR. RANDAZZO: If you know, are you
3	aware of whether or not the applicant has
4	completed geotechnical drilling, subsurface
5	drilling to identify potential
6	MR. SMITH: I'm not aware of that.
7	They indicted they would have that done before
8	anything with it is being constructed.
9	MR. RANDAZZO: So your understanding
10	is, is that would be done sometime in the future?
11	MR. SMITH: Yes, that's my
12	understanding.
13	MR. RANDAZZO: Okay. Thank you.
14	MR. SMITH: You're welcome.
15	MR. AGRANOFF: Thank you.
16	MR. SHUFF. And Mr. Bishop, Frank
17	Bishop, would be on deck.
18	Please raise your right hand.
19	Do you solemnly swear the testimony
20	you're about to give in this proceeding is the
21	truth, the whole truth, and nothing but the
22	truth?
23	MR. SHUFF: I do.
24	MR. AGRANOFF: Thank you. State your
25	full name and your address, your township, and if
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1 you reside in the project area. 2 MR. SHUFF: Steve Shuff, S-T-E-V-E. 3 Shuff is S-H-U-F-F. I live at 91 Golf View, Tiffin, Ohio, Eden Township. I am not in 4 Republic Wind, I am in Seneca Wind, but I'm in 5 the viewshed of Republic Wind. 6 7 MR. AGRANOFF: Please proceed. MR. SHUFF: As I said, I'm Steve Shuff, 8 9 and so the record is clear, I'm here as a private 10 landowner and a private citizen, not in any 11 official or professional capacity, but in a 12 private capacity. 13 I've lived in Seneca County all my 14 life. I'm a 5th generation Shuff in this County. And I'm testifying on aviation issues. 15 Republic Wind project will adversely affect the 16 17 Seneca County Airport. Let me repeat that. 18 Republic Wind project will adversely affect the Seneca County Airport. Where are the facts for 19 that statement? Brad Newman and Kim Newman have 20 21 operated the Seneca County Airport for 30 years. 22 They have indicated clearly that these industrial 23 wind turbines adversely effect the Seneca County 2.4 Airport and the operation of the airport.

fact, they went in so far as to do a full page ad

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in the Tiffin Advertiser Tribune dated July 20, 2019. I co-authored that with them. And along with them and their statement in the Advertiser Tribune, which I'd like to mark as an exhibit at this hearing, were various industrial, business, and professional leaders of our communities supporting the airport.

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So why do they feel that it effects the airport? Why do we feel that it effects the airport? The Mansfield approach control for the Seneca County Airport is being merged with Cleveland Approach Control, which will effect radar coverage under 3,000 feet. This will effect line of site, LOS.

The next point, Bowling Green State
University has an active flight training program.
300 students that practice instrument approaches,
VFR take off and landing all at the Seneca County
Airport. 33 of the proposed wind turbines, their
location and height will exceed the obstruction
limit set forth in 14CFR part 77.1783. It would
constitute an obstructions to air navigation for
various instrument flight rules procedures. This
would require an increase in various instrument
flight rule terminal minimum altitudes. The

proposed wind turbines would exceed the obstructions standards and cause the initial approach altitude and the midst approach altitude to increase. This increase will cause less operations for the Seneca County Airport.

In the event of bad weather, in the event of icing conditions single engine aircraft flying under VFR would be adversely effected.

Where I know Life Flight is adversely effected.

We also know crop sprayers are adversely effected.

The Seneca County Airport conducts over 60,000 operations per year. Well, what's an operation? One flight is one operation. One landing is one operation. Our airport does 60,000 of those in a year. Over 60,000, okay? Here's the ironic thing. Funding, Federal funding for our airport is based on how many operations. If we reduce the operations because of industrial wind turbines, we reduce the opportunity for Federal funding to help strengthen and improve our airport, including extending our runways to 4,000 feet. Future investment in the Seneca County Airport would be effected, economic development for the area would

1	be effected, and all the years since 1968, under
2	Governor Rose, 1968, all the improvements made to
3	the airport and all the tax payer investment
4	would be lessened by not having the ability to
5	have operations, substantial and adequate
6	operations of the airport. How ironic that we
7	put all the money into the airport through
8	Federal money and local money, and now because of
9	subsidies and tax credits by the Federal
10	Government we're getting a less airport.
11	Because of these aviation issues, which
12	I'm sure will be expounded upon more at the
13	adjudicatory hearing, I ask you deny the
14	application of Republic Wind for Certificate.
15	MR. AGRANOFF: Any questions?
16	MR. PARRAM: No questions.
17	MR. AGRANOFF: Thank you, sir.
18	We have now Mr. Frank Bishop.
19	MR. BISHOP: I'll pass on mine. I
20	think it's been covered.
21	MR. AGRANOFF: Okay. Thank you, sir.
22	MS. SANYAL: You want to sign your
23	rights.
24	MR. BISHOP: Okay. I handed in my
25	file. My comments upfront and signed. Is that

1	good?
2	MS. SANYAL: Okay. Yes.
3	MR. AGRANOFF: Thank you.
4	Next, we have Mr. Jim Schumacher. If
5	you could come to the microphone to my left. And
6	then on deck would be Mr. Bob Risener. Is
7	Mr. Risener here? Then how about Jane Fox.
8	Mr. Schumacher, please raise your right
9	hand.
10	Do you solemnly swear the testimony
11	you're about to give in this proceeding is the
12	truth, the whole truth, and nothing but the
13	truth?
14	MR. SCHUMACHER: I do.
15	My name is James Schumacher,
16	S-C-H-U-M-A-C-H-E-R. I live at 16094 Township
17	Road 104, Attica. That's Venice Township. And I
18	am not in the Republic Wind footprint.
19	MR. AGRANOFF: Which township was that?
20	I'm sorry.
21	MR. SCHUMACHER: Venice Township.
22	MR. AGRANOFF: Venice?
23	MR. SCHUMACHER: Yes.
24	MR. AGRANOFF: Thank you. Please
25	proceed.

1 MR. SCHUMACHER: Thank you. My Jim 2 Schumacher. I'm a resident of Venice Township 3 and within the proposed Seneca Wind project area. My family has been a member of this 4 community for over 57 years. I've been involved 5 in farming all my life. I strongly support the 6 7 Republic Wind project. This project will help provide economic 8 9 boost, especially our schools, our libraries, and 10 our county, and our Local communities. 11 schools will get much needed funding to 12 continually improve the education of our 13 students. These students are our future. 14 should give them what is needed for them to excel 15 in the world today. This economic boost to our schools could help relieve the financial burden 16 17 that our homeowners and property owners are asked 18 to bare. This is a win win for everyone. 19 This project will help provide clean energy and diversify our electric needs. 20 21 cannot just depend on energy sources of the past. 22 We have a natural resource of abundant wind in 23 this area and we should use this resource for 24 help in our electric energy needs for the future. 25 Many people in the area will benefit

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1	with jobs during the construction and operation
2	of the Republic Wind project. These are jobs
3	that will help families and businesses.
4	This project will produce clean energy
5	that does not pollute the air or contribute to
6	global warming. We all need to protect the
7	environment for future generations. Thank you.
8	MR. AGRANOFF: Any questions?
9	MR. PARRAM: No questions, Your Honor.
10	MR. AGRANOFF: On deck will be Sally
11	Norman.
12	And Ms. Fox, please raise your right
13	hand.
14	Do you solemnly swear the testimony
15	you're about to give in this proceeding is the
16	truth, the whole truth, and nothing but the
17	truth?
18	MS. FOX: I do.
19	MR. AGRANOFF: Please state your full
20	name, your address, the township in which you
21	reside, and whether or not you're in the project
22	area.
23	MS. FOX: My name is Jane Fox, J-A-N-E
24	F-O-X. I reside at 8236 State Route 269,
25	Bellevue. And I'm a resident of Thompson

1 Township in Seneca County. And I am not within 2 the project, but I'm within view shot. 3 MR. AGRANOFF: Please proceed. 4 MS. FOX: Okay. Being a resident of 5 Thompson Township, in Seneca County, I oppose the 6 development of the Republic Wind project. 7 I am recently retired. My husband and 8 I build our house 41 years ago. We raised our 9 family in the peaceful countryside not far from 10 Bellevue. Our home is an investment in our 11 future, or so we thought. 12 We have maintained and improved our 13 house and property. We never assumed our home 14 could be devalued due to the close proximity to 15 industrial wind turbines. Nor did we imagine 16 that our health and safety may be compromised by 17 the development of these projects. We do believe that landowners should be able to do what they 18 19 want with their property, as long as there is no 20 potential to compromise the wellbeing and safety 21 of others. 22 I've been involved in education for 43 23 I have been an early childhood teacher 24 for over 30 of those years. I do know the 25 negative effects that light flicker and constant,

as well as intermittent noise can have on children. Some children, especially those with sensory disorders, whether they're diagnosed or undiagnosed, may cry, scream, hit, complain of headaches, cover their ears, and/or crawl under a desk or a table trying to get away from the site, sound, or other stimulants that is making them uncomfortable in their own skin. These behaviors that I've witnessed over the years are real and they are not imagined. It has been shown that living with noises pollution can have adverse, cognitive, as well as behavioral and emotional effects on children.

As an educator, it was my obligation to

As an educator, it was my obligation to help provide a safe learning environment in my classroom by acting to reduce no stressors on my students. I provided soft lighting in order to minimize the use of overhead fluorescent bulbs. I utilized paper towels instead of air dryers. And if needed, I encouraged students to wear headphones to lessen the effects of nuisance noise. By supporting the health and welfare of all students I was enabling each to work and grow to their full potential.

The same basic theory holds true for

adults. In order to live a healthy productive life, stressors need to be eliminated or greatly reduced, not enhanced. Industrial wind turbines situated in close proximity to residents are known to produce negative health and safety concerns resulting from the swoosh and hum of blades and engines, infrasound, vibrations, shadow flicker, and ice debris throw. No longer can it be said that shadow flicker and noise pollution are mere annoyances. These can and have adversely impacted the health and safety of people and that is why many parts of the country, and other countries as well, discussions are taking place recommending more restrictive setbacks from industrial wind turbines in order to reduce the chance of ill-effects.

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I sought out and I continue to seek information regarding wind turbines to better understand what I've become a part of. One difference that holds true for me is that I am still pursuing information both pro and con; while most wind turbine lease holders were pursued. I'm not bound by a gag order prohibiting me from expressing my concerns and my thoughts. And with regard to wind turbine

projects, can there ever be an accurate report on citizen health and safety impact due to wind lease agreement holder's code of confidentiality; their inability to express adverse health, safety, and property concerns without the possibility of negative ramifications being taken against them?

Industrial wind turbines do have the potential to be devastating and cause damage that can be harmful and costly. It is not acceptable to allow a wind turbine project in an area based on the fact that fewer people are at risk due to rural areas being less populated than urban areas. Nonetheless, these areas are populated. It is not acceptable to consider the wellbeing and safety of some citizens as major priority, but not value all citizens the same. A trade-off of quality of life should not be justified.

Members of the Ohio Power Siting Board, you do have the means to promote safety measures. And it's time to update the one true safety measure of industrial wind turbines and that is setbacks. You have the means to greatly increase setbacks to reduce negative impact for the health and safety of all life, especially

1	nonparticipating residents residing in and near
2	projects.
3	Please err on the side of caution for
4	the health and safety all of these things. Thank
5	you.
6	MR. AGRANOFF: Next we'll have Sally
7	Norman and Tami Andrews is on deck.
8	Please raise your right hand.
9	Do you solemnly swear the testimony
10	you're about to give in this proceeding is the
11	truth, the whole truth, and nothing but the
12	truth?
13	MS. NORMAN: I do.
14	MR. AGRANOFF: Please state your full
15	name, your address, your township, and whether or
16	not you reside in the project area.
17	MS. NORMAN: My name is Sally Norman,
18	S-A-L-L-Y N-O-R-M-A-N. I live at 6647 Young
19	Road, Lyme Township, Huron County. I do not live
20	in the Republic Wind project, but I live across
21	Route 269 South of Bellevue and I'm within a mile
22	of the project. My property does abut the
23	Emerson Creek Wind.
24	I have many reasons to voice my opinion
25	against these industrial wind turbines, but I
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will keep it short and to a minimum.

At this hearing I would like to address the effect of the karst on our well water if these projects are approved. We do know that we have had people that live very close to me that have lost their wells just in the quarries that are being — used to be near us when they would use the dynamite to blast for them. People lost their wells, they were contaminated. Since we we're on very edge of the karst we probably would be in the area that would have impact on our wells.

If our wells are destroyed or contaminated by the building of these complexes, will the developer or subsequent owners of the project guarantee our future water supply at no cost to us? I refuse to call these wind farms, because they're about as far as from being a farm as you can get.

We build our dream home about a mile and a half south of Bellevue on a three and a quarter acres of land 26 years ago. We did this after living on Route 20 in Bellevue for 20 years. And we moved to the beautiful area for a quiet rural life-style. And I often take

1 pictures of the beautiful sunrises and sunsets from my backyard, which will no longer be 3 possible with the landscape covered with 600 foot turbines to the west and 655 foot turbines to the 4 5 north, east, and south in another project. Many 6 sleepless mornings I look to the east and I see 7 this beautiful starlit sky about our row of pines The constellation Orion is so 8 and spruces. 9 beautiful. But with flashing red lights of the 10 wind turbines that site will be lost forever. 11 Our home is one our most important 12 investments, and despite the claims of the winds 13 companies, we will almost certainly lose value in 1.4 our home and property. Will the wind companies 15 or their successors quarantee our home values? 16 Industrial wind turbine may have their 17 place, but it is not in populated rural areas 18 situated so closely to homes. 19 I ask that the Power Siting Board not 20 approve this or any other project in our area. 21 Let them be located in areas where no one lives 22 for miles and miles. Thank you. 23 MR. AGRANOFF: Next we have Tami 24 Andrews, and Beth Walliser will be on deck. 25 Do you solemnly swear the testimony

you're about to give in this proceeding is the 1 2 truth, the whole truth, and nothing but the 3 truth? MS. ANDREWS: I do. 4 MR. AGRANOFF: Please state your full 5 6 name, your address, and your township, and 7 whether or not you're in the project area. 8 MS. ANDREWS: My name is Tami Andrews, T-A-M-I A-N-D-R-E-W-S. I live at 1178 East U.S. 9 10 Highway 224, in Attica. I live in Venice 11 Township, three miles south of this project area 12 in the Seneca Wind project area. And I am very 13 concerned about infrasound. For those of you that remember the TV 14 15 show Golden Girls, I would like to borrow from 16 Sophia Petrillo, the oldest of the four main 17 characters. "Picture it! Downtown Columbus, 18 summer of 2019. Traffic. Shops. Tall 19 buildings. Traffic. Restaurants. Busy 20 sidewalks. Traffic." 21 You decide to spend part of your lunch 22 hour in a brisk walk to help you meet your daily 23 goal of 10,000 steps. You have enough time to 24 walk four blocks. You enjoy the sights as you 25 walk and do a little window shopping on your way.

1 Suddenly at the end of your four block walk you 2 are confronted with a 60 story machine, four city 3 blocks away. 4 Picture it! You are a citizen of rural eastern Seneca County. The current setback for 5 6 wind turbines from property lines is 7 approximately 1,330 feet, which according to a 8 conversion chart at convertunits.com, is 4 city 9 blocks, for Midwest U.S. You now are facing this 10 real possibility, an industrial wind turbine is 11 planned for 4 city blocks from your property. 12 Easy walking distance. 13 You are not a country bumpkin and 14 realize that machines break down. What happens 15 when a 60-story machine breaks down? You know 16 how to do research and discover that when these 17 machines break down it's not a pleasant scenario. 18 There have been documented blade throws 19 at varying distances, as some of your neighbors 20 have shared. Some, like one in Ontario, have 21 flown the equivalent of 5.6 city blocks.

You are not a hayseed. Other neighbors share the information they found in their research that shows that these machines catch on fire. You have to watch the episode of "Dirty

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Jobs" where Mike Rowe goes up in a nacelle to clean out all the accumulated grease and oil, to help prevent such fires. Sadly, you learn that Mike Rowe will not be not part of any wind turbine in Seneca County. You know that these massive machines would be located in fields of potentially dry crops near or around your property. You also know that your local fire department, as wonderful as they are, have no capability to fight a 60-story fire.

You are not a rural rube. You know that machines can make noise, and you figure that 60-story machine, four city blocks away, with turning blades could do just that.

One of your neighbors finds a recording of turbine noise from a homeowner living near an actual turbine, and you hear the actual unpleasant noise they make. The World Health Organization has determined safe and unsafe decibel levels. Sadly, there will be homes in this project in the unsafe levels due to the location of the turbines near them. Others do excellent research on the sound you can't here, infrasound. One neighbor does his research at the National Institutes of Health, where he looks

into Soviet research in the 70's and 80's on infrasound. The then travels to Germany to talk with a doctor whose researched he studied.

Another neighbor translates an article written in German about the dangers of infrasound. Rural rubes indeed!

Because you did not check your IQ at the county border when you moved to rural Seneca County, you surmise that 60-story machines could interfere with aircraft. More research supports this. These machines have prohibited crop dusting in some areas. They will prevent Life Flight from being able to land in some areas for the ultimate effect on your health and safety.

Because your neck did not turn red the minute you moved to your rural area, you theorize that 60-story machines will have some effect on your property value. Several neighbors have looked into this and found that property values in areas overrun with these machines have gone down, and some places anywhere from 12 percent to 55 percent. You start to question whether why now you are asked to make such sacrifices, when all you wanted to do was live out in the country in Seneca County.

1 Because hick is not a word that describes you, you marvel at the combined 3 research conducted and knowledge gained and 4 wisdom shared by all of your neighbors in the 5 same boat as you. And you realize that not once, 6 not ever, at any meetings where you all have gathered, has anyone ever said, "Hey, let's spend 7 8 these untold hours and hours of time away from 9 our families and daily lives in research and 10 tedious work because we want to prevent our 11 lease-holding neighbors from making extra money." 12 It is all about, and has only been about 13 protecting the health, safety, and property 14 values for you and your neighbors. 15 You realize that you cannot remain 16 silent. You must speak and share and share and 17 The sacrifice you are being forced to 18 make, against your will, is too great. You need 19 to be heard. 20 And so in closing, I asked one thing, 21 please hear us. Really, really hear us. 22 you. 23 MR. AGRANOFF: Next on deck would be 24 Chris Aichholz. 25 Please raise your right hand.

1	Do you solemnly swear the testimony
2	you're about to give in this proceeding is the
3	truth, the whole truth, and nothing but the
4	truth?
5	MS. WALLISER: Yes.
6	MR. AGRANOFF: Please state your full
7	name, your address, the township in which you
8	reside, and whether or not you're in the project
9	area.
10	MS. WALLISER: My name is Beth
11	Walliser, W-A-L-I-S-E-R. I live at 40 Thomas
12	Street in Tiffin, Ohio, in Clinton Township. And
13	I am not in the footprint.
14	MR. AGRANOFF: Please proceed.
15	MS. WALLISER: Hello. I would like to
16	thank the Ohio Power Sighting Board for traveling
17	up here to Tiffin to hold this forum.
18	I'm am here not only for my friends and
19	family who could potentially live under the
20	industrialized wind turbine, but as a concerned
21	citizen. There are pros and cons to any issue we
22	may confront. I believe the cons to
23	industrialized wind turbines are far worse than
24	the pros known.
25	The industrial wind turbine folks say

our townships will receive a small X amount of money per year. That each property owners who signs a lease will receive a small X amount of dollars per year. This small amount of monies does not balance out at all of the negative consequences.

There is documented dangers, side effects, that those industrialized wind turbines concrete. No human, livestock, or wildlife should be forced to live near these dangers.

Other rural areas are to populace. Our health and quality of life should come first.

I do have a few questions that I still have yet to be answered. If these industrialized wind turbines are given the go ahead the who's going to pay for all the damages to our rural roads cause caused by their huge machinery?

Who's going to pay to inspect every single turbine the ensure that all aspects of the infrastructure is up to code? Who is going to pay for the ongoing inspections that each turbine will require? Who is going the pay to investigate any complaint filed in regards to adverse side effects people, livestock, or wildlife may obtain? Who is going to pay the

1 damages caused by the side effects? Who is going 2 to pay for the demolition of these turbines when 3 they become obsolete? Who is going to pay to fix someone's contaminated well? How many of the 4 5 property owners that will or do receive a check 6 would still be in favor if the money was taken 7 away? 8 In closing, I must say I am an 9 environmentalist. I truly believe we need to 10 lessen our dependence on fossil fuel. I truly 11 believe we need to develop more green energy, 12 including turbines. However, the key to success 13 for these turbines is location, location, 14 locations. These industrialized wind turbines 15 should not be near our homes, our schools, our 16 barns, and/or our parks and native preserves. 17 Thank you. 18 MR. AGRANOFF: Any questions? 19 MR. PARRAM: No. MR. AGRANOFF: On deck is Deborah 20 21 Didion. 22 Please raise your right hand. 23 Do you solemnly swear the testimony 24 you're about to give in this proceeding is the 25 truth, the whole truth, and nothing but the

1 truth? 2 MR. AICHHOLZ: Yes, I do. 3 MR. AGRANOFF: Please state your full name, your address, the township in which you 5 live, and whether or not you're in the project 6 area. 7 MR. AICHHOLZ: My name is Chris Aichholz. I live at 5739 East Township Road 58. 8 9 You spell my name C-H-R-I-S A-I-C-H-H-O-L-Z. 10 live in Bloom Township. I do not live in the 11 footprint of Republic Wind project; however, I am 12 in the viewshed of the project and have other 13 concerns and that is why I am here today. 14 MR. AGRANOFF: Please proceed. 1.5 MR. AICHHOLZ: So as previously stated, 16 my name is Chris Aichholz. I'm a life-long 17 resident of Seneca County and I would like to 18 talk to you today about one of the major reasons 19 why I am in opposition of Republic Wind project 20 as proposed. 21 As an Eagle Scout and avid outdoorsman, and advocate for conservation, I was appalled to 22 23 see the Republic Wind plan to completely inundate 24 Bowen Nature Preserve with 600 foot tall 25 industrial wind turbines. According to the

1	coordinates that APEX and Republic Wind submitted
2	to the Federal Aviation Administration, they plan
3	to put 21 industrial wind turbines within a two
4	and a half mile radius of Bowen Nature Preserve.
5	Up here, I know it's tough for everyone
6	to see, I have the map with coordinates of the
7	turbines and I'm to going each one of you a
8	laminated map of that, too.
9	Per the website "Birding in Ohio" their
10	description of the preserve of
11	MR. AGRANOFF: One minute, sir.
12	Did counsel want a
13	MR. PARRAM: Thank you.
14	MR. AGRANOFF: Please proceed.
15	MR. AICHHOLZ: Per the website "Birding
16	in Ohio" their description of the preserve is as
17	follows: The Bowen Nature Preserve is a 65-acre
18	nature preserve with 58 acres restored
19	grassland/prairie, a restored wetland, hardwood
20	and pine woodland areas, abundant wildlife, a
21	variety of wildflowers, picnic tables, resting
22	benches, and a combination of 2.7 miles of hiking
23	and equestrian trails.
24	The preserve became a reality in 2007
25	with a gift of 58 acres of land from Jonathan E.

Bowen. In 2008, 6 acres of woodland was donated to the park district through his parents Yvonne J. And Norman Bowen. The Bowen name was well known in West Lodi, which is the area where the park preserve is locate, because of Jonathan's great-grandfather Dr. Albert Bowen. Jonathan lived on this farm in his early years with his parents and grandparents. After his grandparents, Merle and Louise Bowen died he acquired the farm. As manager of the property, Jonathan developed the grasslands and reinstalled a wetland to encourage the development of wildlife.

Also listed on the "Birding in Ohio"

Also listed on the "Birding in Ohio" website there's a section where qualified birders know 42 different bird species, some of it which include wood duck, great blue heron, turkey vulture, coopers hawk, red tailed hawk, yellow warbler, and the yellow-rumped warbler. This shows that this preserve is a high attractive area for birds.

I also think that the definition of "nature preserve" should also be noted as well.

"A nature preserve is a protected area of importance for flora, fauna or features of

geological and other interest, which is reserved and managed for conservation and to provide special opportunities for study or research.

Now, if you refer to the map, as mentioned earlier, Republic Wind looks to place 21 industrial wind turbines within 2.5 miles of Bowen Nature Preserve. Of these 21 industrial wind turbines, 17 of them will be within two miles of the preserve, 13 of them will be within 1.5 miles of the preserve, 10 of them are within one mile of the preserve, and last but not least, there are eight 600 foot tall industrial wind turbines that are planned to be cited under 2700 feet of this nature preserve. This is completely unnecessary and defies all logic when it comes to safe and sensible siting of industrial wind turbines. If.

This project is allowed to proceed as proposed, the Ohio Power Siting Board would be egregiously going against almost every core reason for establishing a nature preserve such as Bowen Nature Preserve. This is why I believe the experts at the Seneca County Park District have come out in opposition of these proposed industrial wind turbine locations. The Seneca

County Park District is intervening in the Republic Wind project all in an effort to try and protect our preserves. They have asked for a more than reasonable two and a half mile buffer to protect this preserve from being completely rendered useless.

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The Seneca County Park District also submitted a letter as well that was written by Park Director Sarah Betts. It states that, "less than 10 percent of Seneca County exists as natural areas, which are found in fragments across the landscape of the county. Adding industrial sized turbines in close proximity to the nature preserves would cause additional extreme vertical fragmentation of the landscape and further fragmentation of habitat on a landscape and a macro-landscape scale. This is for wildlife migrating from Canada to South America. Protecting nature preserves, these natural gems, and safe corridors between them is crucial for the wildlife that use them for access in their most essential components of life, food, water, shelter, and space."

She also goes on to say, "We've been entrusted by the public with the care of the

Seneca County Nature Preserves, and are bound by our mission statement to act in the best interests of the parks, wildlife, and patrons. Therefor, we feel it is our duty to request a minimum turban-free buffer of two and a half miles to be incorporated all around Seneca County Park District Nature Preserves for any industrial wind turbine project proposed in Seneca County. We believe that the proposed buffer zone will allow Seneca County Park District and the industrial wind turbine projects to meet the needs of their respective stakeholders, and strongly urge you to consider adopting this

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The preserve was entrusted to the

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In addition, this preserve and all of our preserves under the Seneca County Park District are funded by the tax payers and property tax. In November 2016 the Park District was able to pass a first tax levy to help support and build and grow our existing preserves. After voters approved the county's first ever parks levy big changes have happened for the part district. They previous managed their 10 parks with a budget of less than \$50,000 per year and only the two part-time employees. The rest of the parks needs and operations were all covered The Park District used to operate by volunteers. out of a small office in the basement of a downtown Tiffin building. With the levy they now generate around \$571,000 per year for the district. Lee Martin, who was the co-chair of the levy said that when the levy passed "those funds are transformational" and "they're going to really allow us to become the park district that we'd like to be." Since passing the levy the district has been able to hire a director, a natural resource coordinator, a naturalist, a naturalist assistant, a part-time preschool

teacher, a part-time business manager, and a seasonal maintenance crew.

The reason I bring all this up, is that I also want to highlight another risk to our County Park District. The Republic Wind project will negatively impact property values in our area. This in turn will negatively impact the amount of money the Park District is currently receiving.

This project aims to place 600 foot tall wind turbines as close to 1330 feet non-participants homes. Set-aside the fact that the Ohio Power Siting Board has documented cases of blade failures in which wind turbines have thrown chards of blade over 1800 feet. There are many, many negatives with living close to these massive industrial turbines.

There will be many people who will see a dozen or so wind turbines within a two mile radius of their homes. This will lead to excessive sound levels, shadow flicker amounts, the negative impact on their local nature preserves, potentially unsafe hazards from wind turbine failures. How could anyone question that there would not be some level of negative impact

to peoples property values? Republic Wind will employ many so called experts on this topic that without a doubt has little to no experience with Seneca County. The Republic Wind has already cited studies that have little specific relevance to what we are facing here in our County.

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I, on the other hand, have spoken with several real estate agents in the area who either own an agency or employed by some the area's most premier real estate agencies. These folks are without a doubt experts on the local real estate market and therefore their insights are far and away more relative to this topic than the people Republic Wind have and will utilize. They have contacted me personally through our Seneca Anti-Wind Union Facbook page regarding the proposed projects. They wanted to know where certain properties fell in the industrial wind turbine projects, how close their clients would be to the nearest wind turbine, and other information regarding leases, good neighbors agreements, and several of them made it abundantly clear that their clients did not want a home that would be anywhere close to the proposed wind turbines.

disrespectful to cutting you off. But if you  could more or less try to get to the major points  so that we can continue to get through  MR. AICHHOLZ: This is a major point.  MR. AGRANOFF: Oh, it is. Oh, I  understand.  MR. AICHHOLZ: I'm just confused why  I'm the first one that's been cut off.  MR. AGRANOFF: Well, because  MR. AICHHOLZ: I guess I'll just  continue on.  MR. AGRANOFF: Well, if you could do  more of a synopsis that would just help in terms  of being able to get through the list.  MR. AICHHOLZ: I have a little bit of a  page left.  MR. AGRANOFF: Okay.  MR. AICHHOLZ: The first real estate  agent's gave me a statement that I was able to  read tonight, it says, "As a local real estate  agent I see no positive impact on the real estate	1	MR. AGRANOFF: Sir, I don't mean to be
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12 continue on.  13 MR. AGRANOFF: Well, if you could do 14 more of a synopsis that would just help in terms 15 of being able to get through the list. 16 MR. AICHHOLZ: I have a little bit of a 17 page left. 18 MR. AGRANOFF: Okay. 19 MR. AICHHOLZ: The first real estate 20 agent's gave me a statement that I was able to 21 read tonight, it says, "As a local real estate	10	MR. AGRANOFF: Well, because
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agent's gave me a statement that I was able to read tonight, it says, "As a local real estate	18	MR. AGRANOFF: Okay.
read tonight, it says, "As a local real estate	19	MR. AICHHOLZ: The first real estate
	20	agent's gave me a statement that I was able to
agent I see no positive impact on the real estate	21	read tonight, it says, "As a local real estate
<b>;</b>	22	agent I see no positive impact on the real estate
community if wind turbines are to become a part	23	community if wind turbines are to become a part
of our landscape. We, as realtors, must do our	24	of our landscape. We, as realtors, must do our
due diligence when showing properties in these	25	due diligence when showing properties in these

areas by letting our clients know of the potential upcoming projects. More times than not buyer do not want to take a chance of purchasing a home that may lose its value or have an obstruction to look at each day. A home is supposed to increase in value, correct?

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I would have a hard time selling a property or even a lot that I knew that there were going to be huge turbines hindering the beautiful landscape that we have here in Northwest Ohio. Not to mention selling a lot only to find out that they can't build due to different restrictions.

I'm going to skip ahead to the next real estate statement. This gentleman is the owner of a real estate agency. He says in regards to your question of the proposed wind turbines affecting home values in our area we can speak to the following. The current market situation favors the seller and even with the scarcity of home many of our home buyer clients are very reluctant to or are not willing to list their homes or look at homes that would be close to any of the proposed wind turbines. Although it's too early to put an actual percentage or a

1 dollar figure to the effect the seller's home 2 value, it stands to reason that limiting the potential buyer pool for a seller's home would 3 4 have a negative effect on the home's value. 5 purchaser client is looking for a home in one of 6 the proposed wind turbine installation area this is one of their first questions, "How close would 7 8 the projects be?" 9 I guess -- I was going cite the issues 10 with studies that Berkeley studied how only 10 11 percent of homes that are in it are close to wind 12 turbines, but I'll skip all that. 13 So in closing, I would just like to say 14 that the Republic Wind project, as proposed, is 15 an all-around bad deal for Seneca County and its 16 residents, the County Park District, The Bowen 17 Nature Preserve, and therefore I am asking the 18 Ohio Power Siting Board deny the Republic Wind 19 application. Thank you. MR. AGRANOFF: Next we have Deborah 20 21 Didion. And on deck is Mary Musco? Is Mary 22 here? 23 MS. SANYAL: She's right there. 24 MR. AGRANOFF: Thank you. 25 Please raise your right hand.

1	Do you solemnly swear the testimony
2	you're about to give in this proceeding is the
3	truth, the whole truth, and nothing but the
4	truth?
5	MS. DIDION: Absolutely.
6	MR. AGRANOFF: Thank you. Please state
7	your full name, your address, your township, and
8	whether or not you reside in the project area.
9	MS. DIDION: Okay. My name is Deborah
10	Didion, D-E-B-O-R-A-H, Didion, D-I-D-I-O-N. 6040
11	County Road 113, Bellevue, Ohio, York Township.
12	I most certainly reside in this area. And I have
13	copies. Don't get threatened, they're just
14	pictures. There's one for her. You're going to
15	want to open this up so you can see.
16	MR. AGRANOFF: You should have been in
17	management.
18	MS. DIDION: I should have. The
19	booklets are for your reading pleasure. I'm all
20	about it.
21	With respect to the Ohio Siting Board,
22	I would like to start by reading you mission
23	statement. I know you guys already know it, but
24	maybe some of them don't. "Our mission is to
25	support sound energy policies that provide for

the installation of energy capacity and
transmission infrastructure for the benefit of
the Ohio citizens, promoting the state's economic
interests, and protecting the environment and
land use."

That is a strong, powerful statement,
especially "protecting the environment and land

That is a strong, powerful statement, especially "protecting the environment and land use." If you permit these wind turbines to be built over one of the most expansive karst in the state you will fall short of your mission statement.

There are many reasons to oppose the proposed wind turbines in Seneca, Sandusky, Erie, and Huron Counties. I have not separated the counties, because the karsts that underlays those counties are one and the same.

Our water supply from Seneca goes filtered all the way through those counties and end up if Lake Erie.

According to the American Geological Institute, karst areas are among the world's most diverse fascinating, resource-rich, yet problematic terrains. They contain the largest springs and most productive ground water supplies on earth. Many critical processes in karst

underground, require monitoring of groundwater flow and exploration. They are also the landscapes most vulnerable to environmental impacts. Their groundwater is the most easily polluted.

Karst reasons require special care to prevent contamination of vulnerable groundwater supply and to avoid building in geologically hazardous areas. Living in karsts environments may result in destabilization of a delicate equilibrium between surface and underground components of karst resulting in alteration of drainage patterns and increasing incidents of catastrophic sinkhole collapse, particularly in areas of planned urban growth.

One of the best resources is our own
Department of National Resources, which has
studied the karsts in Ohio and especially the
four county area where the turbines are proposed
to be built. The ODNR have multiple resources
available to the public to learn about the karst
area. If that were not enough, they have done a
remarkable job putting an interacted karst map on
their website that shows how extensive the karst
area is.

There are hundreds, if not thousands, of articles explaining that building over a karst with be catastrophic. I have brought two different resources for your viewing pleasure.

They explain the fragility of a karst system, how the aquifer system works within the karst system, and high risk of collapse and contamination to an ecosystem.

The aquifer that is within the karst area directly flows into Lake Erie. We already have seen the algae bloom. That is what happens when farm chemicals, animal waste, and other pollutants make their way into a very delicate ecosystem.

On the next page you're going to see a screen shot of the ODNR's interactive karst map. This screen shot includes Seneca, Sandusky, Erie, and Huron Counties. Underneath all those dots with either a field verified karst, suspected karst, and natural springs. This map is wonderful, as it shows the magnitude of the karst area that covers our four counties. APEX would like them to be divided by area, but that is impossible because the four county area is one big karst.

The next page shows one dot of the many dots above. With the interactive program from the ODNR you can see that each dot has the potential to be massive. Each dot is interconnected in ways that you can't see from a dot on a map. This is a close-up of approximately three of the proposed wind turbines. They sit in my backyard. The stars on this indicate private wells that draw off the karst area. So this is one little dot and I want you to see how large that karst area is. Most of the karst is unseen. You can't see it. It's fractured rock underneath the soil.

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On the next page, the two pictures that are there, are of some water that is lying on the surface of the karst. That is the small part of the underground karst stuff. The blue dots shows where this picture was taken from. But the biggest thing I want to say is these sinkholes. This is a great explanation of how our -- this is our fractured rock. It's all over the four counties. This is where the aquifer runs through. You start drilling down in those railing pilings you're going to fracture, even though it might not look like a karst on the

karst map. This aquifer system runs all the way through. The following are excerpts from the Fremont News Messenger article that was written by Daniel Carson and it was published August 2 of 2019. And I enclosed that article with your packet.

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The APEX clean energy spokesperson was interviewed via email and she stated that a 'series of steps were laid out to detect karst and avoid groundwater sources." Had APEX checked out with the ODNR they would have found extensive research regarding the karst region and how the groundwater is affected with the karst is disturbed. And then she also said that "APEX is developing projects in Oklahoma and Texas that has karst features." Kenneth S. Johnson, Williams J. Bangsund, Neal A. Hines published an article regarding the risk in siting wind turbines in Blaine County, Oklahoma. "Catastrophic collapse of a wind turbine is clearly unacceptable, and minor settlement could also be a risk. Differential settlement by even 3 centimeters across a 15 meter wide turbine foundation could lead to the turbine tilting out of tolerance."

I have done extensive research on the developing projects that is stated above, but have not found one turbine located over a karst in Oklahoma. There were some that were planned in 2017, but have never come to fruition. APEX is welcome to correct me if I'm wrong.

"If a turbine location is determined" -- this is the spokesperson again.

"If a turbine location is determined to be a potential karst area additional testing is conducted." Hello. Did they not even look at our Ohio Department of Natural Resources?

Because they have mapped the karsts. They started mapping them in 1980. This is so -- there are so much information on karsts that I was able to gain multiple government sources stating that building over a karst can be catastrophic. Why would APEX choose one of the largest, most vulnerable areas in Ohio to place 600 feet turbines on? That's my question.

Oh, this is another one. She said,
"The typical and expected foundation of the
turbine models under consideration in northern
Ohio wind projects extend to a maximum depth of
approximately 10 feet, as not significant enough

to impact groundwater. Turbines have intentionally sited away from wells and other water sources."

Well you can tell by the close-up that's not true. And you do not understand how a karst in aquifer works. The soil filters the groundwater, it then filters through the karst into the aquifer system. Our state -- our Ohio National Resources states, "The many passageways formed in karst terrain allow for high connectivity between the land surface and the water table." The pilings that APEX will have to put in to stabilize the turbine can be up to 30 feet deep with multiple pilings for each turbine. Imagine the damage that will do to the karst system and aquifer system. You visually can see it by the sinkholes what that will do.

Also existing turbines are 400 feet tall. Ours will be over 600 feet tall. You cannot compare foundations or make a claim the same type will work. That is physics. When something goes up the foundation must be bigger.

Our own Department of National
Resources has wonderful information for all of
us. All academia versed in karst specifically

mention how unstable the limestone is and how easily it is to destroy or contaminate an aquifer system. We have some of best experts in the country, specifically the ODNR, versed in karst and aquifer systems and yet we're not even listening to them.

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Sinking pilings into the ground will only fracture the karst even further and compromise the drinking water by letting groundwater go directly into the aquifer. see how massive our karst is and it supplies fresh drinking water to thousands of residents within a four county area. How much will it cost to repair the damage that these turbines will do to the aguifer system? Once an ecosystem is destroyed you can't bring it back. There's no bringing that back. How has this project even gotten this far in the process with the locations that they have proposed? We are talking the entire four county area and Lake Erie is at a critical risk. It's concerning to me that we are taking something that could be detrimental to our quality of life, water, and compromising its integrity. It's also concerning that we are talking about the money this project will bring.

1	What will it cost be if hundreds, if not
2	thousands of wells and Lake Erie are
3	contaminated? What will the cost be if the 600
4	foot turbines subside? I guarantee it will cost
5	the state more money than these wind turbines
6	will ever contribute to the State of Ohio.
7	I respectfully ask that you deny the
8	application of 17-2295-EL-BGN, Republic Wind Farm
9	for the reasons stated above. And I included
10	websites and there are hundreds of them. And far
11	as I know, there are no known wind turbines built
12	over a karst area because of the fear of the
13	ground subsiding.
14	MR. PARRAM: I don't have any cross.
15	MS. SANYAL: I just have one for you, a
16	clarification. You are in the project area,
17	correct?
18	MS. DIDION: I am in project area. I'm
19	in the footprint.
20	MR. AGRANOFF: I have no questions.
21	MS. DIDION: I absolutely am. But it's
22	one big thing. It's one big karst area. So all
23	these little ones that they're trying to
24	Emerson Creek and Seneca Wind and Republic Wind,
25	that karst affects me and thousands of others.

1 If they drill in Republic, it will effect Huron, 2 it will effect Seneca, because a karst is 3 That aquifer runs beneath the rocks interactive. 4 and it's all one thing. And to put these turbines is going to be catastrophic, I can tell 5 you, because I did lots of research on this. And 6 7 the ones in Oklahoma was denied because of it, 8 and I have that. I have that. 9 MR. PARRAM: Your Honor, I have a 10 question with respect the scheduling. 11 MR. AGRANOFF: Yes. 12 MR. PARRAM: It's my understanding 13 there are a number of witnesses that actually 14 live in the project area who had sort of a --1.5 UNIDENTIFIED SPEAKER: Step up to mike. 16 MR. PARRAM: Your Honor, it's my 17 understanding that there are number of witness 18 here in support of the project that had a hard 19 stop at some point tonight that actually live in 20 the project area. I want to respect everyone's 21 timing, but I wanted to get a sense of how many 22 more people are testifying and if there's a way 23 have those individuals that may need to leave 24 come up and testify. 25 MR. AGRANOFF: Excuse me. We need to

maintain the quorum, please. How many individuals are you aware of that have a time issue that reside in the project area?

MR. PARRAM: Your Honor, I could double check, but I believe it's approximately ten. And I just raise the issue, because yes, I don't want to limit anyone's time, Your Honor, but just there's been a number of individuals that did not reside within the project area. I want to make sure everyone has a enough time to testify considering we don't a hard stopping point.

MR. AGRANOFF: I understand.

## (Conference between the three Board Members.)

MR. RANDAZZO: Here's what we're going to do. We're obviously running long in terms of expected time, which is fine. We're here as long as we need to be, within a reason. But what we'd like to do is to give a priority to those folks that are in the project area, regardless of whether you're for or opposed to the project. Try to get those folks' testimony in this evening, as best we can. And if we have time after that we will entertain comments from folks who are outside the project area. And I recognize that may be a little bit frustrating

1	for those of you that have been here since 3:00
2	and want to testify. But we need to be
3	respectful of the time that's available and also
4	to try to focus on the folk that are more
5	directly effected, which are those that are in
6	the project area. So that's our sense. We're
7	not going to give a priority to the opponents or
8	the proponents.
9	But anybody that's in the project area
10	that wishes to testify, we're going to try and
11	identify you as best we can. We'll call your
12	name in the order you signed in. If you're
13	MS. SANYAL: Or we could have them line
14	up if you're in
15	MR. RANDAZZO: We'll call the name in
16	the order you signed in, if you're in the project
17	area, come up, if you're not, then we'll come to
18	you later on. Thank you.
19	MR. AGRANOFF: Mary Musco, are you in
20	the project area?
21	MS. SANYAL: Your Honor, it's my
22	understanding that Ms. Musco actually has her
23	written testimony and prepared.
24	(Disruption by someone in the audience.)
25	MR. AGRANOFF: Excuse me.
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1	UNIDENTIFIED SPEAKER: Sorry.
2	MR. PARRAM: It's my understanding she
3	has her testimony written, prepared, if she's
4	allowed to go up. She can just submit that in
5	writing, if that is fine with you? She already
6	has it prepared. She was standing here, so we're
7	trying to be as quick as possible.
8	MR. AGRANOFF: Okay.
9	MS. MUSCO: Do you want me to say it or
10	give it?
11	MR. PARRAM: We can submit it to you in
12	writing. Thank you very much.
13	MR. RANDAZZO: Anybody that wishes to
14	submit a statement, can avoid coming up here and
15	testifying. You can sign-in outside and submit
16	your written statement. You don't have to go
17	through this process. It will have the same
18	effect as you doing the testimony. So, again,
19	we've got a lot to do here, we just want to try
20	and make sure we get as many people as possible
21	within the time period.
22	MR. AGRANOFF: Okay. Chris Holpop
23	papa.
24	MS. HOLPOP: I'll just submit mine.
25	MR. AICHHOLZ: She said she would

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1	submit hers.
2	MR. AGRANOFF: Okay. Could you please
3	bring it up so we can have it.
4	Next would be Dominic Miller. Do you
5	have a statement or are you part of
6	MR. MILLER: I'm in the footprint, but
7	I would to read it.
8	MR. AGRANOFF: Okay. Are you in the
9	project area?
10	MR. MILLER: No, I'm not.
11	MR. AGRANOFF: Okay. If you could
12	simply provide us with that statement then.
13	MR. MILLER: I don't get to read it
14	then?
15	MR. AGRANOFF: In order for us to be
16	able to do things in an expedient manner.
17	MR. MILLER: I'll wait.
18	MR. AGRANOFF: Okay. Next is Dennis
19	Alt.
20	MR. ALT: I'll wait.
21	MR. AGRANOFF: Next is Greg Smith.
22	MR. SMITH: I'll wait.
23	MR. AGRANOFF: Next a Valerie Myers.
24	Yes.
25	MR. RANDAZZO: Are you in the project
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1	area.
2	MS. MYERS: Yes, and I'd like to speak.
3	MR. RANDAZZO: Okay. Please come
4	forward.
5	MR. AGRANOFF: Please raise your right
6	hand.
7	Do you solemnly swear the testimony
8	you're about to give in this proceeding is the
9	truth, the whole truth, and nothing but the
10	truth?
11	MS. MYERS: I do.
12	MR. AGRANOFF: Please state your full
13	name, address, and
14	MS. MYERS: My name is Valerie Myers.
15	Valerie, V-A-L-E-R-I-E. Myers, M-Y-E-R-S. My
16	address is 1858 County Road 270, Clyde, which is
17	York Township. I also have owned we own and
18	operate farmland in the northwest corner of
19	Seneca County Road 34 and Thompson Township Road
20	80, which is in Thompson Township.
21	MR. AGRANOFF: And, again, you are in
22	the project area?
23	MS. MYERS: Yes. Okay. I am speaking
24	in opposition to the Republic Wind project.
25	My husband and I own approximately 150

acres of farmland in Thompson Township. And this farm is within approximately one to two miles of four of the wind turbines and probably within three to five miles of another seven turbines.

And, of course, all of those turbines, along with several others that are proposed, as mentioned several times tonight are sitting within the Bellevue/Castalia karst plain. Obviously an area that's characterized by underground aquifers, caves, and sinkholes.

The ODNR karst map, which Deb so elegantly referenced earlier, identifies 12 areas of karst suppression on our farm alone. And as the owners of this farm since 1974, we can definitely verify the presence of these sinkholes.

The main problems of farmland that have sinkholes is that in extremely wet conditions the water from the underground aquifers rises up through the sinkholes and it actually creates areas of flooding. We have one particularly large depressed area with two sinkholes within the area. And that did flood for years during the spring rain and then it would typically dry up in time for planting and — or at worse case

scenarios might cause the loss of one to four acres that would be remain wet, something that only happened four times within the first 20 years when my husband was farming it himself.

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Before we understood the nature of karst terrain my husband actually contacted the Seneca County Soil and Water Conservation District and asked about whether there's a way that we could plug some of these sinkholes in order to prevent this rising water from flooding our farmland. He was told at that time that plugging sinkholes was something he definitely should not do. But that was an unacceptable soil and water practice. And so as people tried to be conservationists we did not plug the sinkholes. Unfortunately, as construction of various facilities around the area has occurred there have been many sinkholes plugged in order to prevent flooding on those building sites. particular building complex, which is approximately three miles north of our property, was allowed to plug several known sinkholes. Since the construction of that facility the flooding in our sinkholes has gotten much greater than we had ever seen before, including the loss

1 last year of about 95 crop acres out of the 150, and this year with the extremely wet conditions 3 with experience all 150 acres were lost. me understand why this happens, I think it's 4 5 important to consider an analogy that was provided to me by an Ohio Department of Natural 6 7 Resources karst expert mentioned earlier several 8 times, Doug Aiden. When I talked with him about 9 it he said you need to think of the analogy of a sponge. The aquifers that flow underneath the 10 11 ground are like the channel in a sponge. 12 put pressure on one end of the sponge the water is going to travel through the other channels and 13 14 escape up through the surface openings. Think of 15 washing your car. After you dip a sponge in the water, you squeeze on the sponge to force the 16 17 water out onto your car. If sinkholes and 18 aguifers were plugged in one part of our karst 19 sponge, the water is going to be forced out the 20 other sponged channel openings, or, in other 21 words, the other sinkholes that exist all over 22 the area. 23 A large percentage of Republic Wind 24 turbines are to be built into the cars plain. 25 According to APEX's own geotechnical report that

was done by Hull Engineering, karst areas may include sinkholes, solution cavities and cave systems. These voids may need to be grouted in order to provide adequate foundation support. So that is Hull Engineering saying you'll probably have to be filling in aquifers and sinkholes. Okay?

So if it's squeezed in these turbine foundations that's going to cause higher surface water in areas that are already containing sinkholes. And it could potentially decrease water flow into aquifers where people dig their wells. This obviously has potentially serious consequences for our farms and for the City of Bellevue, which is already known to be subject to flooding.

We need the OPSD to take into consideration the unique terrains that our farms and towns are built on and to ensure that water systems that underlie our land are not disrupted. This is not just a property rights issue. The impact of turbines that disrupt our underwater aquifers is a critical issue for whole community of people who live on the Bellevue-Castalia karst plain.

1	And in addition, although I did not
2	plan to speak to the issue of decreasing property
3	values, I would like to point out that as
4	farmland becomes wetter the value of that land
5	decreases. So there's a large potential to
6	impact peoples' property values if sinkholes and
7	aquifers are grouted. Thank you.
8	MS. SANYAL: Questions?
9	MR. PARRAM: No.
10	MR. AGRANOFF: Jack, and I can't see
11	the last name, is it Growed, Growney?
12	UNIDENTIFIED SPEAKER: It's Jack Ryan.
13	MR. AGRANOFF: Ryan. I'm sorry.
14	UNIDENTIFIED SPEAKER: He had to leave.
15	MR. AGRANOFF: Okay.
16	UNIDENTIFIED SPEAKER: He left a couple
17	hours ago.
18	MR. AGRANOFF: Evelyn Snavely. Do you
19	live in the project area?
20	MS. SNAVELY: Yes, I do.
21	MR. AGRANOFF: Is that a yes? Ma'am,
22	do you live in the project area?
23	MS. SNAVELY: Yes, I do.
24	MR. AGRANOFF: Thank you. Please raise
25	your right hand.
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1	Do you solemnly swear the testimony
2	you're about to give in this proceeding is the
3	truth, the whole truth, and nothing but the
4	truth?
5	MS. SNAVELY: I do.
6	I'm not going to dwell on my report,
7	plain and simple.
8	MR. AGRANOFF: If you could please
9	state your full name.
10	MS. SNAVELY: My name is Evelyn,
11	E-V-E-L-N, Snavely, S-N-A-V-E-L-Y.
12	My husband and I live in Adams township
13	and we are from a family that came to our area
14	four generations before.
15	MR. AGRANOFF: What is your address?
16	MS. SNAVELY: 9735 East Township Road
17	138, Republic, Ohio.
18	MR. AGRANOFF: And do you live in a
19	township?
20	MS. SNAVELY: Adams Township and we are
21	in the footprint of the wind turbine.
22	MR. AGRANOFF: Thank you.
23	MS. SNAVELY: Before I really I know
24	we're trying to, in the interest, time keep
25	moving, but wasn't it ironic the train that we

1 heard -- how many times? Our forefathers, would 2 they have talked about, the way we're talking about a silent wind turbine if they knew what 3 those trains were going to do? We live with it. 4 And I think we can live with the wind turbine, 5 too, because of what it would do for us. 6 7 I feel -- my reasoning is that I think the schools, the County, and the Townships in our 8 9 area would greatly benefit from this wind 10 project. And it would be an economic boom to 11 Seneca County like no other economic boom we've 12 ever seen. 13 And I don't have a problem looking at 14 the wind turbines. I think they're kind of --15 and I've seen them. We have gone to the sites. 16 I've not heard the noise. I haven't experienced 17 the stuff they're talking about. And I think I 18 put my trust in the group that is doing this that 19 they will look at the safety issues in the 20 construction of these turbines. 21 I live in Adams Township, so I don't 22 deal with the what they're dealing with in

personally, my husband and I, feel that you

should vote yes for the project of the Republic

I don't know how that effects it.

Thompson.

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1	Wind turbine. And that's all I have to say.
2	MS. SANYAL: No questions.
3	MR. AGRANOFF: Michal Shumway. Do you
4	live in the project area?
5	MR. SHUMWAY: I do.
6	MR. AGRANOFF: And just for those that
7	are concerned as to where we are relative to the
8	number of witnesses. Right now we're on witness
9	No. 40 based on the list that you signed in on.
10	Please raise your right hand.
11	MR. SHUMWAY: I do.
12	MR. AGRANOFF: Please state your full
13	name, your address, the township in which you
14	reside, whether or not you're in the project
15	area.
16	MR. SHUMWAY: Michal Shumway.
17	M-I-C-H-A-L, S-H-U-M-W-A-Y. I am in the
18	footprint of the project. I live in Thompson
19	Township at 14568 East County Road 34, Bellevue,
20	Ohio.
21	I did not prepare anything for this
22	today. I came here because I've been silent for
23	much to this project. I've been a supporter for
24	it in the background. When someone asked me, I
25	spoke about it. I give my honest opinions. I
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1	did a little research in the beginning of it and
2	found endless amounts of conflicting data, which
3	I see piled up in front of you. I trust and hope
4	that you can sort through all that data and find
5	the factual information to lead us in the
6	direction that we need to go.
7	I believe that it is the right
8	direction. Clean energy that's renewable and
9	doesn't impact our community in negative ways,
10	like nuclear power.
11	I'm a fourth generation owner of
12	property in this county and I intend to leave
13	this property for my family and I would not do
14	something I believe would destroy it, because
15	this is all I have to give to them.
16	So it is my belief that you should go
17	forward with the wind project and I thank you for
18	the time.
19	MR. AGRANOFF: Any questions?
20	MS. SANYAL: No questions.
21	MR. PARRAM: No questions.
22	MR. AGRANOFF: Robert Manz.
23	MR. MANZ: Manz. I will wait.
24	MR. AGRANOFF: Okay. Thank you.
25	Shanna Price.

1 MS. PRICE: I will wait as well. 2 MR. AGRANOFF: Cheryl Mira. 3 MS. MIRA: Right here, and I'll wait. 4 MR. AGRANOFF: Zachary West. Do you 5 reside in the project area? 6 MR. WEST: I'll get to the Mike here. 7 So I do not reside in the project area, but I'm a 8 quarter mile away. And I would like to object to 9 the change that was made this far into the 10 proceeding, because there are plenty of 11 individuals that were here before the rule 12 change. 13 And let me stop right here and say that 14 a quarter mile away from the project boundary, 12 years those that are financially to gain from 15 16 this are the developers or the lease holders. 17 years they had planning this. Five hours we have 18 to give testimony. So I call into the legitimacy 19 the actual change that was made. I think that 20 that should have been put in as a ground rule to 21 begin with. Making everyone wait until the end 22 so folks can go ahead is wrong. I will be 23 writing my Congressman, both the House and the 24 Senate, and calling into question the legitimacy 25 of that change. I'll be glad to wait, but I

1	think that that change should not have been made.
2	MR. RANDAZZO: All right. I appreciate
3	your perspective. You can write letters to
4	whoever you wish, that's your right, as is to
5	come up here and say whatever you want to say.
6	But we want to try and give to priority to the
7	folks that are in the project area.
8	If you're willing to wait and speak
9	your issues or speak your concerns, that's great.
10	So I just would ask everybody to respect that
11	ruling. We've made it and we're going to proceed
12	in that fashion.
13	MR. AGRANOFF: Deon West. Is that
14	individual here?
15	MS. WEST: It's Diane.
16	MR. AGRANOFF: I'm sorry. Diane.
17	MS. SANYAL: It's J. Diane West.
18	MS. WEST: Diane.
19	MS. SANYAL: Okay. Sorry.
20	MR. AGRANOFF: Do you live in the
21	project area?
22	MS. WEST: I live one quarter mile
23	outside the project area.
24	MR. RANDAZZO: Ma'am, as we explained
25	previously, we're going to first get to the

1	individuals that live in the project area and
2	then if times allows we'll provide
3	MS. WEST: I'm going to ditto what he
4	said. Pulling out the Ohio Power Siting Board
5	Rules and Regulations, it clearly states that
6	this is for people to give testimony. And
7	there's nowhere in there that it talks about who
8	gets to go first.
9	MR. RANDAZZO: Here's a practical
10	project. We're scheduled to be here from 3:00 to
11	8:00, all right?
12	MS. WEST: Sure.
13	MR. RANDAZZO: All right. So we've
14	been letting everybody testify in the order that
15	they signed in.
16	MS. WEST: Absolutely.
17	MR. RANDAZZO: We can do that. But
18	what is going to happen, is lot of folks that
19	live in the project area are going to get bumped
20	out of the opportunity to testify. So if
21	MS. WEST: Then maybe we need to make
22	it a two-day event. They've got 12 years and we
23	get 5 hours.
24	MR. RANDAZZO: I'm really asking you to
25	please respect the ruling that we made. I
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1	understand your frustration with the change, but
2	we need to move forward.
3	So those folks that are in the project
4	area, we're going to prioritize their testimony.
5	And if you're willing to wait to testify, great.
6	MS. WEST: So one quarter mile outside
7	isn't relevant enough?
8	MR. RANDAZZO: Ma'am, please.
9	MS. WEST: That's all I'm asking.
10	MR. RANDAZZO: Yes. We've made the
11	ruling. We're moving on.
12	MR. AGRANOFF: Theresa, is it
13	Cleveland?
14	UNIDENTIFIED SPEAKER: She left.
15	UNIDENTIFIED SPEAKER: She also had to
16	leave. She left two hours ago.
17	MR. AGRANOFF: Chris Beckman.
18	UNIDENTIFIED SPEAKER: The same thing.
19	Mr. AGRANOFF: Linda Schubach.
20	MS. SCHUBACH: Yes.
21	MR. AGRANOFF: Do you reside in the
22	project area?
23	MS. SCHUBACH: Yes.
24	MR. AGRANOFF: Please come forward.
25	Please raise your right hand.

1 Do you solemnly swear the testimony 2 you're about to give in this proceeding is the 3 truth, the whole truth, and nothing but the truth? 4 5 MS. SCHUBACH: Yes. 6 MR. AGRANOFF: Please state your full 7 name, your address, the township in which you 8 reside, and if you're in the project area. 9 MS. SCHUBACH: My name is Linda 10 Schubach, L-I-N-D-A S-C-H-U-B-A-C-H. I reside at 11 5921 North Township Road 169, Green Springs, 12 Adams Township. And I'm in the project. 13 MR. AGRANOFF: Please proceed. 14 MS. SCHUBACH: Okay. Members of the 15 Ohio Power Siting Board, thank you for allowing 16 me to address you regarding my support of 17 Republic Wind project. My name is Linda Schubach 18 and I am a lifelong resident of Seneca County. 19 As someone who has lived in the 20 Republic Wind area for 50 years, I can tell you 21 there is plenty of wind blowing all year long. 22 Why not harvest this national source of energy? 23 This project will produce enough energy to power 24 over 5,200 homes. That is enough for all of 25 Seneca County. The project will be a step

1	forward in frighting climate change by providing
2	renewable energy of electricity grid.
3	Wind energy production does not produce
4	any toxic fumes or product. The wind is free,
5	let's use it.
6	Please approve the Republic Wind permit
7	application. Thank you for hearing my support of
8	the project.
9	MR. AGRANOFF: Thank you. Any
10	questions?
11	MR. PARRAM: No questions.
12	MR. AGRANOFF: Kim Root. Do you reside
13	within the project?
14	MS. ROOT: Yes.
1.5	MR. AGRANOFF: Please come forward.
16	Please raise your right hand.
17	Do you solemnly swear the testimony
18	you're about to give in this proceeding is the
19	truth, the whole truth, and nothing but the
20	truth?
21	MS. ROOT: I do.
22	MR. AGRANOFF: Please state your full
23	name, your address, the township in which you
24	reside, and whether or not you're in the project
25	area.

MS. ROOT: Okay. I am Kimberly Root.

I reside at 14801 East County Road 34, Bellevue

Ohio. I live in Thompson Township, Seneca

County. We are in the project.

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All right. We do own property in the town -- or in the incorporated town of Flat Rock as well as 100 acre farm, but we will not be receiving a wind turbine, okay? I am here to support Republic Wind project. I believe, just as our ancestors gave us the progress of automobiles, phones, electricity, running water, and so many other conveniences that we have at our hands now, this is a time for us to give and prepare for our future generations that will be coming after us. The wind turbine project is only preparing us and future generations to have another secure resource in addition to our fossil fuels for energy.

I am sure there was opposition back in the day when automobiles, phones, electric, running water, et cetera came into existence at their birth, but think about all taking all those things away from us now. Where would we be if our ancestors didn't have a foresight to see into the future that things we now take for granted.

1 I believe wind turbine fall into the same 2 category. Where will we be if the Wind project 3 is not able to go forward? 4 And in all reality aren't we seeing 5 history repeat itself? The windmill to generate 6 energy is not a new idea. Our ancestors actually 7 came up with it. 8 I always want to add, that as I've been 9 sitting here to data and statistics I have become 10 confused. And one of the statements that was 11 mentioned, I ended up texting my brother. He 12 lives in the state of Iowa in a wind turbine area. And so I said, "Don't you have a turbine?" 13 14 And he said, "Yes. They will probably say they 15 kill birds. They don't. They will probably say 16 they make too much noise. They don't. A large 17 percentage of Iowa's electricity comes from wind 18 turbines." 19 I thought that's a different take on 20 what we've been hearing tonight. Thank you. 21 Thank you. MR. AGRANOFF: 2.2 MR. RANDAZZO: Ma'am, have you read the 23 application that's been filed in this proceeding? 24 MS. ROOT: Not completely. 25 Have you read the staff MR. RANDAZZO:

1	report that was submitted in this proceeding?
2	MS. ROOT: Not completely.
3	MR. RANDAZZO: Are you aware that the
4	applicant's information indicates that on an
5	annual basis the applicant estimates that there
6	will be 980 to 2,200 bat deaths per year as the
7	result of this project?
8	MS. ROOT: Well, I understand that's
9	why they do their pre-investigation as far as
10	different areas that will be effected and so that
11	they honor those areas.
12	MR. RANDAZZO: Are you aware that
13	that's their estimate of the number of bats that
14	will be killed each year?
15	MS. ROOT: Yes.
16	MR. RANDAZZO: Now, and did your
17	brother know that?
18	MS. ROOT: Well, he's in another state,
19	that's where as far as data you know, we are
20	the State of Ohio, so listening to data from
21	Africa and Brazil, that's not going to be the
22	same for us.
23	MR. RANDAZZO: Thank you, very much.
24	MR. AGRANOFF: Is Wynn Schubach here?
25	Do you reside within the project area?
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1	MR. SCHUBACH: Yes.
2	MR. AGRANOFF: Please come forward and
3	raise your right hand.
4	Do you solemnly swear the testimony
5	you're about to give in this proceeding is the
6	truth, the whole truth, and nothing but the
7	truth?
8	MR. SCHUBACH: I do.
9	MR. AGRANOFF: Please state you're full
10	name, your address, the township in which you
11	live, and whether or not you're in the project
12	area.
13	MR. SCHUBACH: My name is Wynn
14	Schubach, it's S-C-H-U-B-A-C-H. My address 5921
15	North Township Road 169 Green Springs, Ohio.
16	That's Adams Township and in Seneca County. And
17	I am within the Republic Wind Farm.
18	MR. AGRANOFF: Thank you. Please
19	proceed.
20	MR. SCHUBACH: I live within the
21	Republic Wind Farm in Seneca County and my
22	property has been in my family for generations.
23	I've lived here 75 years now. The Wind project
24	has been in development for at least 10 years.
25	I've been here for all of it and I'm ready to see

1 the project built. I know what this wind farm will do the 3 community. This community means everything to me, my livelihood, my family, and we're all here 4 5 for the long run. 6 There are many reasons why my family 7 and I support the wind turbines, but one of the 8 reasons for my being here today is express my 9 absolute detest for how the opposition has 10 dismantled APEX Clean Energy's and my family's 11 mission not only to provide additional income 12 into my family farm. But I feel this project is a very positive change for our county. Not only 13 14 will the turbines bring money to our suffering 15 economy, but it will provide jobs to residents 16 who will spend that money right here in the 17 county. 18 Please seriously consider granting this 19 permit and help bring this money to our area. 20 That's it. 21 MR. AGRANOFF: Thank you. Is Ed Clark 22 here? 23 MR. CLARK: Yes, I am. I'd like to 24 submit my testimony. I find it very interesting 25 to be here in the construction phases.

1	MR. RANDAZZO: Is a lot of it in the
2	construction phases?
3	MR. CLARK: Yes, sir.
4	MR. RANDAZZO: Some of it.
5	MR. CLARK: That's all new. That's all
6	new data.
7	MR. RANDAZZO: Great. Thank you.
8	MS. SANYAL: Barbara Baldosser.
9	MS. BALDOSSER: Yes.
10	MS. SANYAL: Are you in the project
11	area?
12	MS. BALDOSSER: Yes, I am.
13	MS. SANYAL: Okay.
14	MR. AGRANOFF: Raise your right hand.
15	Do you solemnly swear the testimony
16	you're about to give in this proceeding is the
17	truth, the whole truth, and nothing but the
18	truth?
19	MS. BALDOSSER: I do.
20	MR. AGRANOFF: Please state your full
21	name, your address, the township in which you
22	live, and whether or not you're in the project
23	ara.
24	MS. BALDOSSER: My name is Barbara
25	Baldosser, that's B-A-R-B-A-R-A
	<b>i</b>

1 B-A-L-D-O-S-S-E-R. My address is 5393 Township 2 Road 78, Green Springs, Ohio. And I do reside in 3 Adams Township and I'm within the footprint of 4 the project. 5 MS. SANYAL: You can go ahead. 6 MS. BALDOSSER: All right. Thank you. 7 I want to thank the Committee for making some relaxations of some rules here to allow to all to 8 9 present our side of the issue. 10 My name is Barbara Baldosser and I am a 11 resident of Adams Township. I'm here in support 12 of the Republic Wind project. My husband's 13 family has lived and farmed in this township for 14 80 plus years, generations back, and the care of 15 the land has always been a priority, as well as 16 the welfare of the township. 17 We currently are on our fifth 18 generation on our farm and we're so pleased that 19 the young ones can be a part of the farming 20 operation. Adams Township is an entity without 21 any industry and relies solely on real property 22 tax to fund our schools. This wind project is an 23 opportunity to fund the education system for our 24 children, our grandchildren, and in my case

great-grandchildren, without adding a greater

financial burden on the tax payers of this township, be it a farmer a landowner or a house owner, they all bear that burden. It also provides an opportunity to upgrade to our infrastructure.

2.2

Yes, landowners, who are not all farmers, will recognize some financial compensation if they have a wind turbine on their property or are signed in as a project neighbor. This is how capitalism works. Is it wrong for a landowner to determine how the property which he owns and controls is to be used in a way that he or she desires? We are talking now about renewable fuel in a time when it is becoming clearer across the globe that it's necessary to have renewable fuels to benefit our community.

I have researched wind turbines and I find many studies that are sited, but are not scientifically proven to be accurate, that are being used to support some of the arguments against this project. It's interesting how we pick and choose to ignore studies by reputable universities and scientists because they don't say what we want them to say.

I find a wind turbine more esthetically

pleasing to look at than say a cell tower or an electric tower. And as for setbacks, extremely tall electric poles have been installed on the right-of-ways along a major highway in our county. There is no setback for these poles and if a storm happens that is strong enough to bring down, it's more than likely to bring down these poles also, and they're close to many homes and buildings.

If you're a person who has had the benefit of travel in the United States or abroad, you know that wind turbines have been around for a long time across the world and they have not affected the ability to live a good, long life.

We've heard plenty of testimony today from the opponents, but very few of these people live within our project. They don't speak for my community. I live within the Wind project.

In summary, I do support the Republic Wind project for the good I can see it's doing for our schools, the good for our community, the good for our township, and the good for our overall economy. This is a clean source of energy for all. Thank you for listening to my point of view.

1	MR. AGRANOFF: Thank you. Is Vernon
2	Burkhalter here?
3	UNIDENTIFIED SPEAKER: Dan, is it
4	White?
5	MR. WHITE: I'm out of the footprint,
6	but in the viewshed.
7	MR. AGRANOFF: Okay. If you can wait
8	until we get through everybody, unless you'd like
9	to submit your testimony now in writing.
1.0	MR. WHITE: I will wait.
11	MR. AGRANOFF: Okay. Suzanne Hopple,
12	do you reside within the project area?
13	MS. HOPPLE: Yes, I do.
14	MR. AGRANOFF: Please come forward.
15	Please raise your right hand.
16	Do you solemnly swear the testimony
17	you're about to give in this proceeding is the
18	truth, the whole truth, and nothing but the
19	truth?
20	MS. HOPPLE: Yes, I do.
21	MR. AGRANOFF: Please state your full
22	name, your address
23	MS. HOPPLE: My name is Suzanne Hopple,
24	S-U-Z-A-N-N-E H-O-P-P-L-E. I live at 29569 North
25	Township Road 179, Republic, Ohio 44867.

MR. AGRANOFF: 1 And which township do 2 you reside in? MS. HOPPLE: I am Scipio Township. 3 And you do reside within MR. AGRANOFF: 5 the project area? MS. HOPPLE: Yes. I'm in the footprint 6 7 of the project. I did not bring any papers. I did not write it out, because I figured that with 8 9 your knowledge that you have already done your 10 homework. You know what has been going on here, 11 I believe. 12 My husband and I had bought our farm in 13 1963. We farmed that all these years, until 14 three years ago, and sadly he passed away. 1.5 We were very excited when the original 16 people came and talked to us about wind turbines, 17 because we had been on a wind farm in California 18 and stood under the wind turbines there, drove through them in a small bus, and talked to the 19 20 people there. Subsequently, we went to a wind 21 farm in Pennsylvania and one in Michigan. 22 have driven through Van Wert, Ohio, and in 2.3 Rochester, Minnesota so that we feel like we were 24 acquainted with wind turbines. We stood under 25 We did not hear a lot of noise, like we've

1 been told. 2 And also another thing that's been 3 brought up today, is about the flicker from the 4 wind turbines. And I think that anyone that 5 knows, the earth rotates. The flicker is not 6 going to be there very long. 7 We have a windmill on our farm and when 8 the sun is at a certain point, at a certain time 9 of the year, if the sun is out there is a 10 flicker, you can see it, but it's a pretty 11 pattern, according to me, and it does not, you 12 know, it does not disrupt anything. And I think 13 the wind turbines would be comparable. I'm fully in involved in wanting this 14 15 wind farm, because I believe we need more of a --16 we need solar and wind and all the kinds of 17 electricity that we can get, because demand is 18 increasing every year. Thank you. 19 MR. AGRANOFF: Is Charles Growth here? 20 MR. GROWTH: I'll wait. MR. AGRANOFF: Donna Huddoll. 21 22 MS. HUDACEK: Hudacek. 23 MR. AGRANOFF: I'm sorry. 24 MS. HUDACEK: We're a half a mile 25 outside the footprint.

MR. AGRANOFF: Okay. If you can wait.
William Hudacek, again. That's my wife.
MS. SANYAL: It looks very different up
here. We live in the same house, so I'll wait.
MR. AGRANOFF: Okay. Different
handwritings.
Keith Moyer.
MR. MOYER: Yes.
MR. AGRANOFF: Do you reside within the
project area?
MR. MOYER: No, I do not. I'm within
the viewshed. This is a shortcoming of
application. I'm part of the viewshed. I just
want you to have some consideration.
MR. AGRANOFF: Okay. Thank you.
MR. MOYER: Thank you.
MR. RANDAZZO: You'd be giving similar
testimony you offered before?
MR. MOYER: Yes.
MR. AGRANOFF: Stephanie Miller.
MS. MILLER: I'll wait.
MR. AGRANOFF: Bob Rine.
MR. RINE: I will pass right now.
MR. AGRANOFF: Jason Bowers.
MR. BOWERS: Yes.

1	MR. AGRANOFF: Do you reside within the
2	project area?
3	MR. BOWERS: I sure do.
4	MR. AGRANOFF: Please come forward.
5	MS. SANYAL: And just for the record,
6	for those of you who are keeping count, we're on
7	No. 63 on the list and we have 75 total signed
8	up.
9	MR. AGRANOFF: Please raise your right
10	hand.
11	Do you solemnly swear the testimony
12	you're about to give in this proceeding is the
13	truth, the whole truth, and nothing but the
14	truth?
15	MR. BOWERS: I do.
16	MR. AGRANOFF: Please state your full
17	name and your address.
18	MR. BOWERS: Jason Bowers, J-A-S-O-N
19	B-O-W-E-R-S. 8797 East Township Road 148,
20	Republic, Ohio 44867.
21	MR. AGRANOFF: And which township do
22	you reside in?
23	MR. BOWERS: Adams.
24	MR. AGRANOFF: And do you live within
25	the project area?

1 MR. BOWERS: I sure do, unfortunately. MR. AGRANOFF: Please proceed. 3 MR. BOWERS: My wife and I live in the 4 proposed project area and we are in opposition of 5 Republic Wind Farm, Case No. 17-2295-EL-BGN. are in opposition for several reasons. 7 Infrasound, consent sound levels, blade throw, 8 shadow flickers, these are some of our reasons. 9 These are health and safety issues that will 10 decrease the quality of life of those living 11 within and around the footprint of the project. 12 The World Health Organization has deemed constant 13 sound levels above 40 decibels, they say that will lead to diminished health. 14 15 What else could ruin the quality of 16 life for residents? Well contamination most 17 certainly would ruin the quality of life for the 18 residents and our property. Regarding turbine 19 foundations, the Ohio Power Siting Board staff report states, "An alternative that could be used 20 21 is a rock anchored pile-supported foundation." 22 Also the reports states, "The Applicant has noted that 27 of the 64 wind turbines are situated in 2.3 24 areas exhibiting karst features. Where the 25 Applicant conducts future geotechnical studies

that identify karst features, those areas would be avoided for siting wind turbines." So why is okay for 27 turbines to be sited on top of karst and not 28 or more? To the logical person, it sounds like siting turbines on karst is a problem. Karst is not stable ground and therefore APEX would likely have use to their alternative foundation method of anchored pile foundations. Using this alternative method could cause wells in our area to be contaminated.

Driving piles to anchor turbines in the Chatham, Ontario region, which lies just across
Lake Erie, is believed to have contaminated those wells there. In July of this year charges have been filed against industrial wind companies, the environment minister, and his staff. The Ontario Court of Justice in Chatham-Kent determined there were reasonable and probable grounds for these charges.

According to the Chatham Daily News, a group of citizens banned together after the announcement of a wind farm being constructed in their area back in 2018. Many of these citizens expressed concerns that the vibrations of the construction and operation of the wind turbines

1	would cause damage to private water wells in
2	their area. Sound familiar, doesn't it? Well,
3	more than a year later it seems that this may
4	have been the case. Hopefully our group of
5	citizens doesn't have the same fate. It is
6	simple for us not to come to that same fate as
7	our neighbors to the north. You, the Ohio Power
8	Siting Board, can deny APEX's application for
9	this industrial wind farm. We ask as Seneca
10	County residents that you deny APEX's
11	application. Thank you.
12	MR. AGRANOFF: Is Melissa Clapp here?
13	MS. CLAPP: Yes.
14	MR. AGRANOFF: Do you reside within the
15	project area?
16	MS. CLAPP: Yes.
17	MR. AGRANOFF: Please come forward.
18	Please raise your right hand.
19	Do you solemnly swear the testimony
20	you're about to give in this proceeding is the
21	truth, the whole truth, and nothing but the
22	truth?
23	MS. CLAPP: Yes.
24	MR. AGRANOFF: Please state your full
25	name and address.

1	MS. CLAPP: My name is Melissa Clapp,
2	C-L-A-P-P. I live at 8355 County Road 29,
3	Bellevue.
4	
	MR. AGRANOFF: And which township is
5	that?
6	MS. CLAPP: Thompson.
7	MR. AGRANOFF: And you do live within
8	the project area?
9	MS. CLAPP: I do.
10	MR. AGRANOFF: Please proceed.
11	MS. CLAPP: Okay. Currently where I
12	live, if this does go into effect, there will be
13	five turbines across the street from my house and
14	two behind my house.
15	MS. SANYAL: Can you use the mike?
16	MS. CLAPP: I'm sorry.
17	MS. SANYAL: It's okay.
18	MS. CLAPP: Do you want me to state
19	that again?
20	MR. RANDAZZO: Please. Yes.
21	MS. CLAPP: Okay. Currently where I
22	live, if this is approved, I will have five
23	turbines across the street from my house and two
24	turbines behind my house. And I'm sure you guys
25	know this, but I did look up your mission

statement and it is to support sound energy polices that provide for the installation of energy capacity and transmission infrastructure for the benefit of Ohio citizens, promoting the state's economic interests and protecting the state's environment and land use.

The OPSB website states wind farms must be designed to avoid unreasonable adverse shadow flicker at nonparticipating residents within 1,000 meters of any turbine. What do you consider unreasonable shadow flicker? I personally consider any shadow flicker unreasonable.

Also, the OPSB website says that nonparticipating residents within one mile of the project boundary must not exceed nighttime average sound levels by 5 decibels. According to a sound study submitted to the OPSB in June this year there will be homes that experience sound levels considered dangerous by the World Health Organization. How can you guarantee that the sound levels be kept within safe limits?

Also, there is a high probability Ohio residents living near wind turbines can become ill from the unsafe noise levels. I believe that

nonparticipating residents should not have to listen to any sound noise from wind turbines.

Bellevue and its surrounding area is situated on karst. Even if wind turbine foundations do not go down into the ground to disturb the karst, the pilings that will stabilize and support the wind turbines will go into the karst levels. There si a high probability the pilings for the turbine will ruin some peoples well water. If this happens how will this be for their benefit?

There's also a high probably the wind turbines can cause sinkholes to form and cause flooding. How can public safety be maintained if that happens? The OPSB, there proof in your files of wind turbines having blade throw and what the safety setback distance is for wind turbines. Knowing this information, how can you allow this project to go through knowing this product does not follow public safety protocols for blade throw? How can the high probably of blade throw damage to animals, humans, and probability benefit Ohio citizens? If damage occurs to my property from wind turbines, who will pay for this? Most insurance companies do

not cover damage from wind turbines.

Life Flight has limits on how high in the air they can fly and close to a wind turbine they can land. There is an intersection a half a mile down the road from my house where there have been accidents, and even someone killed. The wind turbines would be located between my house and this intersection. How can the public safety of Ohio motorists be guaranteed when Life Flight has limits on how close they can land to a turbine?

The OPSB also states that its mission is to protected the environment. If this is true, how many birds and bats have been killed by the wind turbines? I'm sorry, I didn't know that before.

If the OPSB wants to protect the environment, how can you allow turbines to kill any wildlife?

There has been a study showing the possible side effects on children who are exposed to continuous noise. The study shows that children who are constantly stimulated do not develop all their brain vessels, which then causes developmental delays. This issue is

1 personal to me since I am a mother to young children. I have two girls, one is six, the 2 Both of my girls were premies and 3 other is two. born six weeks early. Both of my girls had 4 issues with breathing when they were born. My 5 older daughter has overcome her breathing issues, 6 7 while my younger daughter still struggles with it. 8 My youngest has been diagnosed with 9 10 Reactive Airway Disease. She gets bronchitis very easily and was hospitalized last Christmas 11 12 when she had pneumonia and RSV at the same time. 13 My older daughter has trouble with her eyes floating and loses her vision. 14 You see, my children do not need to be 15 16 exposed to anything else that can hinder their 17 development or put their health at risk. Recently there has been a cardiologist 18 in Iowa who has shown there is a possible 19 20 connection between wind turbine and affecting the electrophysiology of the heart. My dad had 21 22 congestive heart failure and atrial 23 defibrillation. He has recently passed away, but 24 his house is within one mile of my house. 25 My family, my dad's family comes from a family of farmers. My third great-grandpa this house and land and we've been here for a long time. If he was still alive he would be living near these wind turbines. I would not have wanted him to be exposed to something that could possibly give him heart disease or worsen it.

1.6

If all of he possible issues in this speech are not enough to be concerned about, I also have live with the fact that the wind turbine issue is personal. You see, I have family members and friends who have signed lease agreements with the Wind companies. I also have family members who are for wind turbines. This issue has caused heated discussions, unpleasant and uncomfortable conversations, strife and a division in my family.

You are forcing wind turbines on us without giving us a say. OPSB, how can you support and energy policy without protecting the citizens of Ohio first? Every member of the OPSB has family and friends who are precious to them. How would ou feel if your family and friends were being forced to live near unwanted wind turbines? Before you go to a vote, I urge each of you to think of every person that's your family and

1	friends who is near and dear to you, then decide
2	would I want my family and friend to live with
3	wind turbines knowing the possible negative
4	effects caused by them? How will shadow flicker,
5	turbine noise, blade throw and pilings driven
6	into karst benefit Ohio citizens? OPSB, if you
7	care about supporting the sound safe energy that
8	benefits Ohio citizens, protecting the
9	environment and protecting the public safety you
10	will not allow these turbines in Ohio. The
11	answer to wind turbines is no.
12	MR. AGRANOFF: Any questions?
13	MR. PARRAM: No.
14	MR. AGRANOFF: Thank you. Don Voyt.
15	MR. VOYT: I'll wait.
16	MR. AGRANOFF: Nathan Root. Is Nathan
17	Root here?
18	MR. ROOT: I am.
19	MR. AGRANOFF: Do you reside within the
20	project?
21	MR. ROOT: I do.
22	MR. AGRANOFF: Please come forward.
23	MR. ROOT: And I would be more than
24	happy just to submit my testimony and to save
25	time.

,	
1	MR. AGRANOFF: Okay.
2	MS. SANYAL: Thank you.
3	MR. AGRANOFF: Thank you. Ashley
4	Beaver? Is Ashley here?
5	UNIDENTIFIED SPEAKER: She had to
6	leave.
7	MR. AGRANOFF: Robert Voska.
8	MR. VOSKA: Outside the area.
9	MR. AGRANOFF: Don Zieber.
10	MR. ZIEBER: Here.
11	MR. AGRANOFF: Do you reside within the
12	project area?
13	MR. ZIEBER: Yes, I do.
14	MR. AGRANOFF: Okay. Please raise your
15	right hand.
16	Do you solemnly swear the testimony
17	you're about to give in this proceeding is the
18	truth, the whole truth, and nothing but the
19	truth?
20	MR. ZIEBER: I do.
21	MR. AGRANOFF: Please state your full
22	name, your address, and the township in which you
23	reside.
24	MR. ZIEBER: My name is Don Zieber,
25	Z-I-E-B-E-R. I reside at 8327 North Township

1 Road 82, Bellevue, Ohio. Thompson Township, Seneca County. Yes, I live within the Republic 2 3 Wind project. 4 MR. AGRANOFF: Please proceed. MR. ZIEBER: First, I'd like to say, I 5 6 respect all of the opponents' views. This is a 7 great country. I respect their opposition. I am not only speaking for myself, but 8 9 I'm speaking for my brother Jerry, my nephew 10 Scott, and his son Cory. That is four households 11 within the project. They were not able to be 12 here tonight. 13 I am a farmer. I own farmland. 14 Farmers are proud people. They don't want 15 handouts. They want to harvest their crop and 16 they want to harvest the wind. This would help 17 with the payment. It would help diverse their income, so in bad years they can make it better 18 19 living. 20 It would not only help schools, county 21 and township, there wouldn't be additional levies. We all know how hard it is for levies to 22 2.3 be passed. So this money would not be coming out 24 of my neighbor's pocket or out of my pocket. 25 There's a wind turbine next to the

1 Bellevue High School, but I've not heard of a 2 petition to remove it. Where are these good 3 peoples' concerns for the student safety and health? We hear about the safety and health 5 issues, but there's one right next to the 6 Bellevue High School. 7 I visited an industrial turbine project 8 in Michigan a few years ago with my brother. 9 was located just 1,100 feet from the road. When 10 we got out of our vehicle we listened -- we 11 didn't listen, we, you know, we were looking at 12 it 1,100 feet away, and someone says, "You need 13 to listen for the noise." This was 1,100 feet, 14 which is closer than what the regulations for 15 this project. And if they didn't tell me to 16 listen for it, I would not have noticed it. And 17 if someone also said the trains, the whistles you 18 hear for miles. And that's all I have. 19 you. 20 MR. AGRANOFF: Thank you. 21 Thomas Buffington. Do you reside 22 within the project area? 23 MR. BUFFINGTON: I don't. I support 24 the project and I'd like to deliver a written

statement.

25

1	MR. AGRANOFF: Thank you, sir.
2	MR. BUFFINGTON: Thank you.
3	MR. AGRANOFF: Sherry, is it Rouse,
4	Rice?
5	MS. SANYAL: Rike?
6	MS. RIKE: I'm not in the project, but
7	I'll just submit my papers right now.
8	MS. SANYAL: I'm sorry, we can't hear
9	you. Did you want to submit testimony?
10	MS. RIKE: Yes.
11	MS. SANYAL: Okay.
12	MS. RIKE: I have a lot to say about
13	bullying us and that's why none of us are here.
14	We got bullied and our yards got tore up.
15	MS. SANYAL: Albert Myers. Brenda
16	Greed. Bradley
17	MS. GREED: Brenda.
18	MS. SANYAL: Okay. And are you in the
19	project area?
20	MS. GREED: I personally don't live in
21	the project, but our family farm is and our
22	windmill was going.
23	MS. SANYAL: So would you mind waiting
24	until we
25	MS. GREED: I think there are three

1	things in mind
2	MS. SANYAL: I think that would be
3	unfair for the people who are already waiting.
4	MS. GREED: Well, what I was going to
5	say is
6	MS. SANYAL: No. Ma'am
7	MS. GREED: my brothers and sisters
8	live in the project.
9	MS. SANYAL: Ma'am. Ma'am, you haven't
10	been sworn in and it would unfair to the people
11	who are waiting.
12	Bradley Rine.
13	MR. RINE: I don't live in the project
14	area.
15	MR. AGRANOFF: Okay. Is Robert Manz
16	still here?
17	UNIDENTIFIED SPEAKER: He left.
18	MR. AGRANOFF: Okay. How about Shanna
19	Price?
20	MR. PRICE: Yes. Are you calling me
21	forward?
22	MR. AGRANOFF: Yes.
23	MR. PRICE: I think you missed some
24	people.
25	MR. AGRANOFF: I'm sorry.
	<b>,</b>

1	MR. PRICE: Greg Smith.
2	MR. AGRANOFF: Yes, you are correct.
3	Dominic Miller. Is Dominic here?
4	MR. MILLER: Yes.
5	MR. AGRANOFF: Please come forward.
6	Please raise your right hand.
7	Do you solemnly swear the testimony
8	you're about to give in this proceeding is the
9	truth, the whole truth, and nothing but the
10	truth?
11	MR. MILLE: I do.
12	MR. AGRANOFF: Please state your full
13	name and your address, please.
14	MR. MILLER: I am Dominic Miller,
15	D-O-M-I-N-I-C, Miller, M-I-L-L-E-R. I live at
16	1582 State Route 4, Bellevue, Ohio; Huron County,
17	Sherman Township. I do not live in the footprint
18	of Republic Wind, but I do live in the footprint
19	of the proposed Emerson Wind Creek Wind project,
20	which is adjacent to Republic Wind. I live
21	within four miles of the nearest proposed
22	Republic Wind turbine.
23	Tonight I'm going to talk about weather
24	radar interference from industrial wind turbines.
25	This information was taken from article written

by Anthony Watts on April 29, 2018, titled "NOAA/National Whether Service document: Wind turbines affect weather radar, create false storm impressions."

"How Rotating Wind Turbine Blades
Impact The NEXRAD Doppler Weather Radar."

Rotating wind turbine blades can impact the radar in several ways. Wind turbines can impact the NEXRAD radar based data, algorithms, and derived products when the turbine blades are moving and in the radar's line of sight, (RLOS); and, if turbines are cited very near to the radar their large nacelles and blades and also physically block the radar beam or reflect enough energy back to the radar to damage the radar's receiver hardware.

Turbines in the RLOS can reflect energy back to the radar and visually contaminate the reflectivity, velocity, and spectrum width data. Forecasters look for certain signatures in the data that indicate the severity of the storms. The wind farm clutter can sometimes look just like showers or thunderstorms, or can alter the appearance of a storm such as hook echoes. This visually corrupted data adds uncertainty to the

analysis and could forecasters to delay or miss a severe weather warning or to worn unnecessarily.

The base reflectivity, velocity, and spectrum-width data are also used by many algorithms in the radar processor to determine certain storm characteristics, such as mesocyclones, relative storm motion, hail, turbulence, et cetera. Corrupted data can cause the radar algorithms to generate false alerts or to miss alerts. The radar also generates many additional product using this data, such as wind profiles and rain estimates. Wind turbine clutter can impact the accuracy of these derived products.

You may wonder why we can't filter out this clutter since we know where the wind farms are located. The NEXRAD has a sophisticated clutter removal scheme. Since weather is usually in motion, the scheme was designed to filter our returns that have essentially no or very low emotion. This is effective for removing the return signals from terrain buildings and other nonmoving structures. However, the radar sees rotating wind turbine blades as targets having motion, hence processes these returns as weather.

At this time, there is no filtering scheme available to identify and remove wind turbine clutter while preserving real weather returns.

wind turbine clutter has not had a major negative impact on forecasting weather operations yet. However, with more and larger wind turbines coming on line radars in some parts of the country will have multiple wind farms in their line of sight. Cumulative negative impacts should be anticipated, which, at some point, may become sufficient to compromise the ability of radar data users to perform their missions.

Most, if not all of us, that live in the footprints of these industrial wind projects live in rural areas that do not have any tornado warnings sirens that they can hear. We rely on TV, radio, cell phones to get warnings for severe weather. Any delays or inaccurate forecasts could prove to eventually have deadly consequences. The more industrial wind projects that are built in an area will cause a bigger area that have scramble signals and blocks the area behind the turbines from the radar. We have the possibility of being in the midst of Republic Wind, Emerson Creek, Emerson Creek West, Buck

1 Springs, Seneca Wind, and Honey Creek Wind 2 projects. If all these are built, the weather 3 forecasting for the entire area will likely be 4 thrust back to pre-Doppler era accuracy. 5 This falls back into the hands of you, 6 the OPSB, that are required to site these project 7 in a safe manner. This and all other issues brought here tonight all end up in the same 8 9 overflowing basket of public safety. If you were 10 to site all these projects it would make a large 11 part of Ohio not a very safe place to live. 12 part of Ohio is our home. It's where we live. 13 We have all worked our entire lives to make our 14 homes in this area a place that we are extremely 15 proud of. Please do not destroy it. Please do 16 not approve Republic Wind or any other project in 17 this area. 18 Thank you for your time in listening to 19 my opinions. 20 MR. AGRANOFF: Do you have any 21 questions? 22 MR. PARRAM: No. 23 MR. AGRANOFF: Thank you. 24 Dennis Alt. Please raise your right 25 hand.

1 Do you solemnly swear the testimony 2 you're about to give in this proceeding is the 3 truth, the whole truth, and nothing but the 4 truth? 5 MR. ALT: Yes, I do. 6 MR. AGRANOFF: Please state your full 7 name and your address. 8 MR. ALT: Dennis Alt, A-L-T, Dennis, 9 D-E-N-N-I-S A-L-T. I live at 1448 State Route 4, 10 Bellevue, Ohio, Huron County, Sherman Township. 11 MR. AGRANOFF: Thank you. And are you 12 part of the footprint? 13 MR. ALT: I am not part of the Republic 14 Wind footprint. I live on the Seneca-Huron line 15 and the nearest turbine from Republic Wind is 16 within several miles. 17 Before I start, I would like to state 18 that the Bellevue High School turbine is 125 feet tall. And I have been in Bellevue and I have 19 20 heard the wind noise. It turns, it clunks, and 21 here -- I don't know, they had commencement there 22 several years ago, a turkey buzzard was hit by it 23 and the pieces flew all over. So I don't where 24 they get their idea that it's not there, but it's 25 there.

Okay. I would like to thank the Ohio
Power Siting Board members present today for the
opportunity to address my concerns of the
Republic Wind project.

My concerns are the negative effect of noise and the effect it has on the public safety. Noise is measure in decibels and has a wide range as to our hearing the noise. Some people can hear very low audible noise and some people can't, and others can hear it all. You might ask why, and this has to do with exposure to certain noise levels at extended periods of time. Also, some individuals have small but different anatomy structures, so this explains some of the difference in noise tolerance and recognition of different noise levels.

The great State of Ohio does not have a State Plan, which means not a plan approved by the Federal Occupational Safety and Health Agency. This means Ohio follows Federal safety standards for private sector workplace employees, but not State workers, they have their own standards. The standard of noise decibels starts around 10 to 15 decibels and it goes all the way up to 140 and above. Noise can and will damage

1 your ability to hear sound. Also, according to 2 the CDC noise can harm more than your ears and 3 your ability to hear sound. It has conducted studies and found links that exposure to loud 4 noises or high decibels can affect other body 5 systems. It has found links in 14 percent of 6 7 hearing loss people to have higher blood pressure and cholesterol levels. Both of these conditions 8 are some of the leading causes of death, strokes, 9 10 and heart attacks in the U.S.A. This has also 11 been found to be true by the World Health 12 Organization, especially with long continuous 13 exposure times. The longer the time exposed, the 14 greater the chance of doing lasting damage. Federal standards with regard to this is not more 15 16 than eight hours continuous exposure and 90 17 decibels, which is city traffic. Most people 18 don't to hear city traffic noise in the country. 19 The higher the number, decibels, the shorter the 20 exposure time allowed. This means your body 21 needs a longer time away from the noise to undo 22 the harmful effects. APEX's new model turbine 23 that they are proposing has listed on it as a 110 24 decibel noise. This could be continuous for 25 days. Wouldn't that be great.

How does one escape the noise? Built a wall 30 feet deep and 10 feet tall and insulate it, as one study suggested. It's not very feasible. This makes as much sense as pulling down your shades to block shadow flicker.

In APEX's application for sound propagation they show numerous houses that will be impacted by the decibels of 35 to 55 and because of turbine will not shut down after an eight hour run time, these houses will be impacted beyond the World Health Organization limits for health safety.

The people of Germany have found that noise generated by industrial turbines to be a health risk to the people around them. Max Planck, a leading independent researcher, came to find long exposure to continuous noise levels leads to sleep disruption, which causes stress, which leads to hypertension and other heart related problems. You might ask why this is so important, Germany was on the leading edge of industrial wind turbine farms and development. They have been able to collect the data because of a number of turbines and also the years in use. Germany is also heavily populated, much

like the area of the Republic Wind farm. Max's research has found that the noise travels much farther than suggested, and that the more turbines there are the greater the distance, they amplify the sound.

1.5

In the USA, Number Three Wind, which is in New York I'm pretty sure, has been told to comply with the World Health Organization recommendations, in noise. It has been suggested that they change the setbacks standards to 1.5 miles from residences, and to shut down the turbines for the entire night if the conditions warrant it so the people can get a good night's sleep so their body would adjust.

Will industrial turbines be shut down during the night so affected people can get a good night sleep, or will they be forced to become midnight shift workers without being asked? I hope not. Will the State or Ohio make wind farms follow Federal standards of noise. They call them industrial. Will I be made to install an alarm to notify me of over exposer to continuous noise levels? Will the Ohio Power Siting Board look to the West and see the problems of other states have had to address?

1	Will all these be addressed? Maybe. Will I or
2	others be compensated for illness caused by the
3	noise of the turbines? Maybe. Will I or other
4	become a marginal minority because of the turbine
5	noise? Don't know. Will we the citizens of Ohio
6	become test dummies so the answers to 655 foot
7	tall turbines can be known? I hope not.
8	I urge the Ohio Power Siting Board to
9	follow the guidelines for the safety of all
10	residents and not approve the application for
11	Republic Wind. Thank you.
12	MR. AGRANOFF: Any questions?
13	MR. PARRAM: No.
14	MR. AGRANOFF: Thank you, sir.
15	Is Greg Smith here? Please come
16	forward, sir.
1.7	MR. SMITH: I'm giving you some maps
18	here.
19	MR. SANYAL: And if you want to give a
20	copy to counsel.
21	MR. SMITH: Yes. I got another one.
22	MS. SANYAL: Thank you.
23	MR. AGRANOFF: Please raise your right
24	hand.
25	Do you solemnly swear the testimony
	<u>                                     </u>

1 you're about to give in this proceeding is the 2 truth, the whole truth, and nothing but the 3 truth? MR. SMITH: I do. 4 5 MR. AGRANOFF: Please state your full named and your address. 6 MR. SMITH: Greg Smith, 5139 East 7 Township Road 44, Bloomville, and it's in Bloom 8 Township. I'm not in the footprint of the 9 10 Republic Wind project. 11 MR. AGRANOFF: Thank you, sir. 12 MR. SMITH: I'm going to focus my 13 testimony on three specific points that I think should be the primary points for Ohio Siting 14 Board's consideration. 15 16 The first point is public safety. 17 current minimum setbacks in Ohio are shorter distance than the distance agreed that has been 18 thrown and documented blade failure cases. 19 20 fact that we have politicians at the local and 21 state levels who want to reduce setbacks is 22 especially frustrating rating when you consider 23 that the turbines being today are much taller 24 than what was built previously. Instead of 25 considering shorter setbacks, we should be

talking about increasing the setbacks.

1.5

The Ohio Power Siting Board does not have the authority to modify the setback law. However, the board does have the ability to site turbines at any distance greater than the minimum distance dictated by law in the name of public safety. Public safety should be the first priority.

The second point I'd like to raise is a concern with heavy conservation of karst in the project footprint. I've provided you with tow different maps that will help define the extensiveness of the karst in area the. The first map from the Ohio EPA that designates a large portion of the project footprint as high risk of ground water contamination.

The Board needs to seriously consider the risk and the consequences that this project poses to the areas ground water.

The other map is from the ODNR, which was just recently updated. This map shows the tremendous concentration of karst relative to the proposed locations of the Republic Wind turbine. If you look at the large amount on that map, the little pink circles with the pluses on them are

the proposed turbine sites relative to all the dots that represent the different karst areas.

2.3

In addition to the risk with public drinking water, the stability of the wind turbine foundations in this area should be a primary concern to the Board. When you look at these maps, common sense would suggest that this area would be the last place that would you ever want to build a project like this.

As a reminder, the directors of the Ohio EPA and the ODNR are two of the seven voting members of the Siting Board. So that's their maps and their votes.

The third point that I'm making tonight, is whether there is a basis of need for the Republic Wind project. By law the Board must evaluate eight points when considering a project. Point No. 6 is for the Board to determine whether the facility will serve the public interests, convenience, and necessity. I am questioning whether there is a need for the Republic Wind facility in the State of Ohio.

Ohio is served by the PJN electrical grid that serve all or parts of 13 states in the District of Columbia. Per PGM statistics over

the last 12 months, the actual efficiency of an 1 installed base of wind power sources within the 3 grid is only 29.6 percent. That's over 12 4 months. The dataset included a sample size of 5 6 over 8,600 data point. So that's meaningful. In 7 recent testimony regarding House Bill 6, I'm 8 going to mispronounce this, Asim Haque --9 MR. RANDAZZO: Yes. 10 MR. SMITH: -- who previously was the 11 Chairman of the Ohio PUCO, is now PJM's Executive 12 Director of Strategic Policy and External 13 Affairs, stated that the two nuclear power plants 14 in Ohio would be shut down. The loss of 2,100 15 megawatts of power generation would not, in 16 quote, "adversely affect the liability," end 17 quote, of the PJM grid. 18 So the case of Republic Wind, the Board 19 needs to consider that A, PJM stated that they 20 weren't concerned about loosing 2,100 megawatts 21 of 90 percent plus efficient carbon free power 22 generation, and B, Republic Wind will only 23 generate approximately a net of about 60 24 megawatts of power generation. 25 So I have to ask the Board, if PJM

	<u></u>
1	didn't feel it needed 21 megawatts to carbon
2	freely highly efficient nuclear power generation,
3	where is the basis of need for 60 megawatts of
4	additional wind power generation, especially when
5	you consider the strong public opposition against
6	it?
7	Based on these three points, I
8	encourage the power Ohio Power Siting Board to
9	deny this application. Thank you.
10	MR. AGRANOFF: Robert Manz.
11	MR. MANZ: Yes. Copy that oh, I'm
12	sorry.
13	MR. AGRANOFF: Please raise your right
14	hand.
15	Do you solemnly swear the testimony
16	you're about to give in this proceeding is the
17	truth, the whole truth, and nothing but the
18	truth?
19	MR. AGRANOFF: Please state your full
20	name and your address.
21	MR MANZ: My name is Robert Manz,
22	M-A-N-Z. I live at 225 East Township Road 42,
23	Tiffin, that's in Eden Township.
24	You have asked us, do we live in the
25	project area? I take that as a general term. I
	Ī

do not live in what's deemed the footprint, but I am most certainly within the area.

2.3

I will divert a little bit of the written testimony I'm going to present to you, because I'd like to address some recent comments. There was a comment made by turbine that's located at the Bellevue High School. In June of 2011 a high school student decided to crawl up such a turbine and was killed. Please note that. A safety issue for sure.

I'm a retired audit manager from the
Ohio Department of Taxation. I have heard many
times the statement that I will make to you. I
welcome you to Tiffin, but I hope I never have to
see you again in this function.

I'm totally opposed to the placement of any industrial wind turbine in the proximity of our homes, as this area's population density is no place for industrial machines like those proposed. As members of this Board, you've been very diligent in turning and acknowledging those who speak to you. But how much of what is said do you actually hear? There's no doubt anyone in your position can "zone out" after a few speakers. I asked that you hear the pleases

before you, as your decisions will affect the lives of all of this area's residents. I respectfully ask of you to ponder what this decision will entail. We speak before you not with a battery of attorneys and representatives, but as individuals who have to live with these things.

You, as a Board member, moved into the area that you live knowing the negatives of that vicinity. Those of us in Seneca and surrounding counties did the same. However, now we have an out of state entity attempting to change our entire life-style by making it an industrial zone. How would you feel if that happened where you live? This project creates many detrimental effects upon people who should not have any such thing placed upon them. Most of those who speak in favor of these projects, rather than most, I'd say almost the majority, are lease holders. You've heard from a union rep seeking short-term jobs and others with a monetary interest.

As a retired law manager, it's all about the money. While those opposed to this project, I'm merely asking to be able to maintain a life-style we sought when we purchased and

1	built our homes. This Board has the
2	responsibility to the citizens of Ohio, not to
3	out of state companies with no other interest
4	than to use to make some money.
5	Please put yourselves in our position.
6	I respectfully ask you to vote no on Republic
7	Wind. Thank you.
8	MR. AGRANOFF: Thank you.
9	Shanna Price. Please raise your right
10	hand.
11	Do you solemnly swear the testimony
12	you're about to give in this proceeding is the
13	truth, the whole truth, and nothing but the
14	truth?
15	MS. PRICE: I do.
16	MR. AGRANOFF: Please state your full
17	name and your address, please.
18	MS. PRICE: Yes. My name is Shanna
19	Price. S-H-A-N-N-A, my last name is Price,
20	P-R-I-C-E. My address is 6438 South Township
21	Road 159, Tiffin, Ohio 44883. And I have live
22	in Seneca County and I'm a resident of Eden
23	Township.
24	MR. AGRANOFF: And you are not
25	residing within

1 MS. PRICE: I am not within the project 2 area. 3 MR. AGRANOFF: -- the project area? 4 Thank you. 5 MS. PRICE: But I am within the viewshed of the Republic Wind project. And I 6 also wanted you to know that I had previous plans 7 8 at 7:00 p.m. tonight and I chose to cancel those 9 plans to stay here. Even though I may not be in 10 the footprint, this project impacts all of us. 11 So as I stated, I'm a lifelong resident 12 of Eden Township in Seneca County. My home was 13 in the footprint of Seneca Wind project. Like 14 many people testifying here tonight, I am 15 involved in my community, I read the newspaper, 16 and I try to stay informed on local issues. 17 Also, like many of the people here tonight, I was 18 completely blind-sided by the industrial wind's 19 project being proposed in the areas in which we 20 live and call home, highlighting the huge issue of absolutely no transparencies with these wind 21 22 projects until the projects are well underway. 23 If law and our law in Ohio gives an 24 advantage to the big wind companies allowing them 25 to slither into our communities and closing in an amenity, getting wind leases signed, good neighbor contracts signed, people are -- 99 percent of us have any clue that a wind project is being proposed in our home.

Needless to say, I've become very educated if the past year and a half on what living with a 600 foot wind turbine project would mean for me and my family.

Like many people have testified here tonight, I took a trip to Van Wert, to the Blue Creek Wind project. I had a very different experience then those people who have previously testified tonight. I met with four individual families. All of these families had very similar complaints and issues with living in the footprint of a wind turbine project. The first issue was noise. And they talked about noise being constant when these turbines are running. I, like many of those who testified tonight, did not stand under the turbine, but I stood in the yards of these people' homes, I stood on their front porches and I could hear a constant noise, like a jet plane circling but never landing.

I don't know about you, but I didn't choose to build my house beside a big airport

like Columbus or Detroit. They also talked about noise, clunking and clanging, that started late at night when the air temperature changes and early in the morning when that atmosphere changes as well. They described this as clunking noise they hear, a vibration and a thumbing that they feel in their chest. The sound and the vibration prevents them from going to sleep at night and often times wakes them up the impairing their sleep patterns.

Another effect they talked about was shadow flicker. They talked about not be able to escape the shadow flickers during times when it is at its heaviest. I can't imagine not being able to go any place in my home to escape the shadow flicker.

They talked about the obnoxious blinking lights that are almost as bad as the shadow flicker that happens every night. They have the darkening blinds on their windows, but that is not enough at times to stop this blinking that they see at night.

They talked about the inability of Life Flight to land in a project. They all had stories about having to transfer patients to

Route 30 or even over to the hospital to get them transferred and picked up by Life Flight. And that is, you know, risking the patient's life and risking precious moments where you could be getting the patient care that they needed, besides transferring them to a safe area for Life Flight to land.

They discussed decrease in home values. After visiting with these families I asked each of them, "If it is so bad being in the middle of a wind project why don't you move?" They all had the same response, "Who is going to buy my home?" All of them talked about looking at selling their home and having to take such a financial loss of their house that it wasn't worth selling. That they'd rather live with the effects of the wind turbine than suffer that financial loss.

And finally, they discussed seeing birds of pray and large birds being killed buy these wind turbines. And that was something that I wanted the address after hearing many of testimony. That birds will be killed. We see this in the application and it's even stated that they are going to be applying for an eagle take permit.

So with all of these issues, and some that I didn't even address tonight, I am opposed to these projects. But glaringly, the safety issues are what have me concerned the most. As the Ohio Power Sighting Board, you have documented evidence that the current wind turbines in Ohio have blade throw incidences greater than 1,500 feet, which is further than the minimum setback requirements here in Ohio. Mind you, these blade throw incidences are for turbines that over 450 feet tall. How far do you think the 600 for the industrial wind turbines can throw debris in the event of a blade failure?

As a nurse practitioner, health, safety, and wellbeing of my family, my friends, and my community are of the utmost importance.

As the members of the Ohio Power Siting Board, you are the government entity given the authority to approve or deny industrial wind projects.

Please use your authority to protect Ohio residents from the safety issues posed by industrial wind turbine projects. Please remember that money never justifies harm to other humans and harm to their safety. You have a responsibility to protect the residents who are

1 in the footprint of the Republic Wind project. 2 Republic Wind project is proposing too many 3 industrial wind turbines in a densely populated rural area too close to residential homes. 4 Please consider the residents in the 5 footprint of this project who are not lease 6 holders and have nothing financially to gain and 7 whose health, safety and wellbeing depend on 8 their future. We are asking you to do your job. 9 10 Please protect the safety of those in the 11 footprint of the Republic Wind project and deny 12 the Republic Wind project. 13 MR. AGRANOFF: Is Cheryl Mira here? 1.4 MS. MTRA: I'm here. In the interest 15 of time, and the young lady ahead of me spoke so 16 elegantly on so much of the same wind stuff, I 17 only have -- well, here. I don't have a speech, 18 because I've changed it so many times, but I have 19 all the documents. 20 I just wanted to say -- if it's okay, I wanted to say one thing. Do I need to swear? 21 22 MR. AGRANOFF: But first I have to 23 swear you in. 24 MS. MIRA: If you make sure that my 25 entire speech gets in, I'll be quiet, and after

1 the three things. I keep changing it. Cheryl 2 Mira. 3 MR. AGRANOFF: First I have to --MS. MIRA: Oh, sorry. 4 5 Do you solemnly swear the testimony 6 you're about to give in this proceeding is the truth, the whole truth, and nothing but the 7 8 truth? 9 MS. MIRA: Yes, it is. 10 MR. AGRANOFF: Now please state your 11 full name. 12 MS. MIRA: My full name is Cheryl Mira. 13 I live at 11110 State Route 269, Bellevue, Ohio. 14 I am inside the Emerson Creek Wind project. And 15 I have wind turbines eight-tenth of a mile from 16 my house, and nine of them within two and a half. 17 My whole presentation is about property 18 value -- I'll move back -- property value. And 19 what I really want to say is, if you approve 20 these wind turbines in this area you could say 21 goodbye to the cities of Bellevue, Flat Rock, 22 Monroeville, and Republic. There is no way. 23 You're surrounding this whole area with so many 24 turbines, it's going to be a ghost town in five 25 years. Thank you.

1 MR. AGRANOFF: Zachary West. Please raise your right hand. 2 3 Do you solemnly swear the testimony you're about to give in this proceeding is the 4 truth, the whole truth, and nothing but the 5 6 truth? I do. 7 MR. WEST: 8 MR. AGRANOFF: Please state your full 9 name and address. 10 MR. WEST: Zachary West, W-E-S-T. legal residing address is 3040 North Township 11 12 Road 155, Tiffin, Ohio. The property in question 13 of which I have concern is 5724 North County Road 14 15, Green Springs, Ohio. 15 And I'll explain the significance of 16 that property. That property belonged to my 17 grandmother who was deceased in 2017. Her name 18 Ellen Gibson. That was left to her youngest 19 daughter, my mom's sister, younger sister, and 20 she is deceased as of December 2018. And now 21 that's been left to both my parents. And that is 22 the property of interest, because the intent of 23 me moving back to the area was to take over that 24 property and move in. 25 And so I'll open by saying, you heard

about individuals talk about next generations coming in and moving back. You've heard testimony about the property values. I've been sitting, standing idling for 20 months at this point since I first became aware of these projects. I'm not really wanting to invest in that property, to expand it, to renovate it. And I'm currently residing with my parents, which is not ideal.

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So like I said, I'm a third generation Seneca County resident in Pleasant Township. what did I do in the last 12 years? Well, I was throughout Ohio pursuing a higher education. went to grad school, med school, residency training. I'm board certified in internal medicine, a licensed physician in the State of Ohio, with a graduate degree in public health. My roots run deep in this area and I've always considered Seneca County my home, even though I've been throughout the entire state at times. It was always my goal to return here and practice medicine, perhaps start a family of my own, taking care of my friends and neighbors. However, during those 12 grueling years of my intense training I and many others were left

unaware of developing wind projects in Seneca

County by nature of the various process in which
the projects are unfolded. So it wasn't until
the public information hearing officially
announcing Republic Wind when we all became
aware.

I would observe that it was during those same 12 years that an absolute decision on the matter of wind turbines in this county could have been given to the people, but it has not done such. During those 12 years, I guess you could say while I was away the jackals were at play.

My professional oath charges me with the responsibility to preserve the health and wellbeing of others and to aid in the general welfare of my community. As a contributing member of the overall health of my community, I wish to express my concerns as it pertains to the proposed industrial wind project.

A growing bed of evidence exists with regard to the health effect of industrial wind turbines. The World Health Organization defines health, which we must do, we must defined what health is, quote, "a state of complete physical,

mental, and social wellbeing and not merely the absence of disease or infirmity, end quote." The effects of wind turbine on health can be classified, or I like to classify them into three different categories: Ecological impacts, emergency services impacts, and those direct threats to public health and safety.

The ecological impacts, you heard the talks this evening, a lot of evidence presented as far as karsts. The region in consideration for Republic Wind has a large karst area by the Ohio Department of Natural Resources own evidence, evidence presented tonight. There is concerns that those karst structures could be impacted by the construction of this wind turbine project. And the Ohio Department of Natural Resources said the karst and the associated sinkhole formation serves as a direct conduit to the water table and are a high risk for pollution. That very same concern was acknowledged by testimony of those in favor of the project.

Likewise, houses with a water well in the karst area have a high risk of surficial contamination from anything that enters a

sinkhole. So the World Health Organization considers safe water supplies and good water management to be fundamental to global health. Unfortunately, wind turbine projects have already effected the safe drinking water in wind project's communities. On July 12, 2019, the Ontario Court of Justice determined there were reasonable and probable grounds to believe environmental offences had been committed under the Environmental Protections Act by the environmental minister, ministry staff, and three industrial wind companies as the charges stem from contamination of residential well water for those residing near an industrial wind project. So we have the evidence there and it has occurred.

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Other ecological impact include the direct effect on the health of our community with regards to the bat population. You you've heard those concerns expressed tonight as well. Bats have been found to be worth, I'm talking about the ecological impact, in the monetary impact three billion U.S. dollars annually due to the disruption of agricultural pests. That's what they contribute. Likewise, bats are known to

assist in pollination and seeds disbursement.

Unfortunately, with the global increase of industrial wind facilities, collisions with industrial wind turbines are now the leading cause of mass mortality events. In fact, this poses a then indirect threat to the local food supply and pestilence control.

Now, we've heard the concerns expressed by impeding the access to air ambulance services. Trauma related injuries is one of the leading causes of death in America. Expeditious treatment has long been a tenet of trauma care and patients have been shown to have improved survival. And then one study indicated a 57 percent decrease in mortality when transferred by air compared to a ground ambulance.

Access to emergency services in Seneca County continues to improve and a lot of different multiple organization contribute to that structure. The region is largely serviced by Mercy Health Life Flight and the nearest adult level one trauma center as being located in Toledo, Ohio. In the unfortunate event that such services are needed, and they often are, we've had many instances just within the last week

where they've been air lifted from the scene and transported to those trauma centers. It has been concluded, You Honor, that these factors with the wind turbine project that would then require air ambulances services the need to arise and utilize a Predesignated Landing Zone, which would require patients to be transferred from the scene of the incident to an area safe for landing. This poses a potential increase in time as far as delaying the care delivered to that patient.

2.4

The turbine structure itself poses a potential direct threat to the health and safety of the county residents. Fires is a potential challenge to the regions first responders and I have a genuine concern regarding the adequacy of current emergency response teams to address such incidents. We have had reports this year of turbine fires already contributing to significant wildfires covering hundreds of acreage damage.

Wind turbine blade failures occur, as has been stated before, 3,800 times annually. It's been repeatedly said tonight that the current minimum setback distance as outlined in the Ohio Revised Code is insufficient for these wind projects. You have on your records

documented blade failures in State of Ohio that have debris fields extending far beyond that.

And it should go without saying that that creates discrepancy between a minimum setback distance and the current risk of threats to those in the immediate vicinity of a failing wind turbine.

1.3

So Seneca County, according to the US
Census Bureau, has a population density of 103
person per square mile. By comparison, Van Wert,
which is the host to the Blue Creek Wind project,
which is Ohio's largest wind project, has a
population density of 70 persons per square. If
you compare Paulding County, just to the north,
host to the greatest number of current or planned
wind turbines, has a population of only 47
persons per square mile. These discrepancies in
size between Van Wert, Paulding, and Seneca
Counties means that there are a great number of
citizens that are subject to risk and no effects,
a wind turbine.

Finally, the noise generated by them currently is under review and is being debated in literature. I know the wind companies and developers will present their evidence and conflicting evidence also in turn be reported.

I share in the concerns expressed by the World Health Organization in its 2018 report as it pertains to noise of wind turbines and the impacts on health. They acknowledges that wind turbines can generate infrasound or lower frequencies of sound in addition to audible noise. The World Health Organization maintains the standard methods of measuring sound may not capture the low-frequency sound and amplitude characteristics of the wind turbine noise.

1.9

While the body of evidence is growing, and limitation on a direct cause of infrasound generated by wind turbines should not be interpreted that exposure to such is safe. There is research, as you've heard, about the impact of infrasound cardiac, brain, and auditory tissues. Cases have reported symptoms of stress, headaches, dizziness, nausea, annoyance and nuisance, motion sickness, sleep disturbance. All of these symptoms are real to the patients that are afflicted. All of these are legitimate concerns overall in the health and quality of life of that individual. And now, remember that health and quality of life, and I'll come back to that in a minute.

The debate on that matter, as far as infrasound, might remain unsettle for the moment, but as healthcare providers in the region, it will be those of us, us responsible for taking care of these individuals with which this occurs.

Entities and governing bodies tasked

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with the review and siting of wind turbine projects must take into consideration human health and safety. The World Health Organization makes the recommendation that, quote, "Proper public input, communication, consultation of affected citizens living in the vicinity of industrial turbines during the planning state of future installation is expected to be beneficial as part of the health environmental impact assessments," even quote. I'll remind you it's been 12 years that they've been developing this thing before it was announced publically. I question whether that was involvement during the planning state.

I personally and professional agree with such a statement and request acknowledgement by the Power Siting Board.

Now, Article 1, Section 1 of the Ohio State Constitution, which was so conveniently

1	brought up by an individual testifying tonight,
2	they failed to mention all of the components,
3	quote, "All men are by nature, free and
4	independent, and have certain inalien-able
5	rights, among which are those of enjoying and
6	defending life and liberty, acquiring,
7	possessing, and protecting property, and seeking
8	and obtaining happiness and safety," end quote.
9	These same rights extend to everyone of Seneca
10	County.
11	The diagnosis here is an uninvited and
12	unwarranted malignant wind project. The
13	treatment is the rejection of this application.
14	I thank you for your time.
15	MR. AGRANOFF: Dian West. Please raise
16	your right hand.
17	Do you solemnly swear the testimony
18	you're about to give in this proceeding is the
19	truth, the whole truth, and nothing but the
20	truth?
21	MS. WEST: I do.
22	MR. AGRANOFF: Please state your full
23	name and address.
24	MS. WEST: My full name is the initial
25	J. Dian, D-I-A-N, West, W-E-S-T.

1	MR. AGRANOFF: And your address,
2	please.
3	MS. WEST: The property that I'll be
4	discussing will be one following Dr. West, who by
5	ironically enough, I house him currently. So
6	where he lives is currently with myself and his
7	dad.
8	Now, the property that we're discussing
9	is the home of 5724 North County Road 15, Green
10	Springs, Ohio 44836, which has now been left to
11	myself and my husband.
12	MR. AGRANOFF: And the township that
13	that is in?
14	MS. WEST: Pleasant Township, Seneca
15	County.
16	MR. AGRANOFF: And that is not inside
17	the project?
18	MS. WEST: It is less than a quarter of
19	a mile from the outskirts of the project. The
20	closest turbine is less than a mile.
21	MR. AGRANOFF: Please proceed.
22	MS. WEST: I stand here today to
23	express a few of my concerns with the Republic
24	Wind project.
25	To be begin my story, I must share that

I did not become aware of this project until
December 2017. Just prior to public disclosure
of the project my mother, Dr. West's grandmother
that he referenced, had been involved in an
automobile accident. At a result of medical
negligence and the fortitude of an unfortunate
event, my mother succumbed to her injuries and,
again, the result of medical negligence after 145
days. It was during those darkest of hours
surrounding her unexpected death that the public
filing was completed for Republic Wind. I can
remember hearing of the wind project and was
astonished at the very notion that building such
wind turbines would even exist here in Seneca
County.

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I began my independent research into wind turbines. My higher level of education affords me a very curious mind. Evenings turned into weeks, weeks into months, and now I find myself a year and a half later, I continue to learn about wind energy, the details of this project, and the implications. What presented to me initially was the gut wrenching question of why was this project hidden behind a dark curtain for so many years? Only those who stood to

financially gain would know about this project. 1 2 The very same neighbors that I had gone to school 3 with, my parents had interacted with, had kept a 4 very dark secret; a secret which ultimately 5 impacts more than just them. While they get 6 financial gains, the rest of us are left with all 7 the negative impacts from these wind projects. 8 Where was my say in the determination of whether 9 to bring a project into my community? Where is 10 the local control? Where is the democracy and 11 the process in deciding the future of our 12 communities? Shut out. Condemned if we speak. 13 14 Targeted as if we don't want green energy. 15 today's current state of affairs, I would say 16 that we, anti-wind folks, have been the target. 17 We have nothing to gain and everything to lose. 18 We are misunderstood and significantly 19 underestimated. I believe just a mere presence 20 tonight of the yellow shirts show our 21 determination. 22 My childhood home, which is now my 23 home, again, is less than a quarter mile outside 24 the Republic Wind boundary edge and a mile from 25 the closest turbine. Yet I get no local vote, no local say at the township level, no local say at the county level. I tried to file as an intervenor since my family will deal with the negative effects of the project. However, as a result of the current flawed process, and because I live outside the project boundary line, the very same wind project developer up for consideration denied me that opportunity. Not surprising considering it's the same developer that has spent years working behind the scenes to sign leases and actively has worked to block any and all attempts of local control, including a vote by the people.

I stand before each of you this evening to ask for you not to just hear my voice, but to truly listen, because there is a difference.

I am a second generation. My three sons, third generation to the very community. Professionally, my education affords me a license by the Ohio State Nursing Board as a registered nurse. I also maintain a master's of business administration in healthcare administration. My career consists of being a registered nurse for more than 20 years in the intensive coronary care unit at the hospital.

I know firsthand how important time can be for sudden serious illness or life threatening accident. Time matters. And time can make clearly the difference between life, death, or disability. Our local hospitals are not trauma units. We have been blessed for many, many years with air ambulance services through ProMedica, Life Flight, and Cleveland Metro. The ability to airlift patients from the scene of accidents we largely take for granted. Air support from the scene affords prompt medical intervention. wind turbines placed throughout the many townships, this will obviously present the inability and interference to fly when the ceiling a decreased due to weather. Also depending on the location of the accidents, the area ambulance may have to land miles away from the turbines, thus requiring duplicate transfer and staging on the ground prior to getting to the helicopter. This process takes time. Something that can make the difference between life and death. I ask, does anyone not hear about this? The Seneca County area, as we've heard

the projected number and height of these

tonight, is very populated for wind turbines of

turbines. Hindrance to medical support should never be compromised due to wind turbines. Where is the local say or control in this? My life or the lives of my family members could clearly be in jeopardy with this wind turbine project.

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I ask about the safety from the local fire department as it relates to wind turbines. The Republic Wind project projected to be built in Seneca County also presents the issue of what to do when a wind turbine fire occurs. You may be saying, such an occurrence really doesn't occur very often. I challenge you to research that topic and some of that has been brought up Beneath these monstrosities are this evening. acres of fields and homes; innocent homes that belong to folks just like me who had no say if they even wanted these turbine projects. really believe that our local volunteer township fire departments do not have the equipment, probably nor the training to handle hundreds of acres of fires or fire 600 feet in the air?

Now, I have raised my three sons in Pleasant Township, just as my siblings and I have also grown there. We've been amongst the tractors, the pigs, the horses, the cows, fields

and fields of crops situated amongst the homes of numerous families. We choose to live there where the crops suck up the raindrops and dance in the sunshine. We appreciate the hardworking farmers. We value the country life. Wind turbines have no place in Seneca County.

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Some in this room may have had the pleasure of knowing my mom. She was a homemaker, a mother, a grandmother, and was left widowed at a very young age. She would take care of many of the elderly living in the community affording them to opportunity and the ability to stay in their homes as long as they could. Despite her years of care, compassion, and consideration to others, many of those very same families that she helped care for, their loved ones, have brought the decisive issue of wind turbines to our community. My mom loved to talk and could start a conversation with just about anyone. she is not here in person, I assure you she would have no trouble getting up here and making her opinion in this matter clearly known.

My deceased parents, whose home lies just outside the wind turbine project of Republic Wind, would not approved of this project. My

1	family does not approve of this project. I do
2	not approve of the project. And for the plethora
3	of reasons given tonight, I ask that you also not
4	approve this project. Thank you.
5	MR. AGRANOFF: Dan White. Is Dan here?
6	MR. WHITE: Yep.
7	MR. AGRANOFF: Please come forward.
8	MR. WHITE: I appreciate everyone's
9	patience.
10	MR. AGRANOFF: Thank you. Please raise
11	your right hand.
12	Do you solemnly swear the testimony
13	you're about to give in this proceeding is the
14	truth, the whole truth, and nothing but the
15	truth?
16	MR. WHITE: Yes.
17	MR. AGRANOFF: Please state your full
18	name and your address.
19	MR. WHITE: My full name is Daniel
20	White. Address is 4080 East Township Road 58,
21	the sprawling metropolis of Bloomville. The
22	township is Eden.
23	MR. AGRANOFF: And you do not live
24	within the project area; is that correct?
25	MR. WHITE: I'm within the my notes

1 at top, okay? I'm not in the project, but I'm a 2 visual. 3 MR. AGRANOFF: Viewshed? 4 MR. WHITE: Yes. 5 MR. AGRANOFF: Please proceed. 6 MR. WHITE: Okay. I have a lot of good 7 stuff, fortunately there were people far smarter 8 than myself covering it earlier and I do respect the time of 9:04 and the additional time that 9 10 you've given us. 11 You can read what I've given you and 12 you hope that you do. But I'm going to read what 13 would be my last thought after giving you the 1.4 hard stuff. 15 That is the Native American people of 16 Iroquois had a way of making decisions that is a 17 robust testament to the long view. Long view. 18 When faced with a decision as a community they asked themselves, "How will this course of action 19 20 effect our people seven generations from now?" 21 As the resident of Seneca County, I, 22 we, want to work towards what is good, right, 23 true, noble and just. Often times at great cost 24 in time, treasure and talent. I ask that you 25 consider at least our next 30 years, our next

1 generation and a half. 2 There is overwhelming opposition to 3 this project in both Seneca County and Sandusky 4 County, as attested by this evening's attendance 5 of my fellow yellow brothers and sisters. Ι'm 6 kind of curious, if you take a look at the 7 population right now at 9:05 and you were a 8 research biologist doing tissue sampling, you got 9 a lot of yellow shirts. 10 I strongly, strongly urge you to deny 11 the construction certificate for this specific 12 project, Republic Wind. Thank you. God Bless. 13 Have a safe drive. Tonight is almost a Harvest 14 moon, so no kidding, the deer are very active. 15 Please be careful. Any questions? 16 MR. PARRAM: No questions. 17 MR. WHITE: Thank you. 18 MR. AGRANOFF: Thank you. 19 Charles Groth. 20 MR. GROTH: Yes. 21 MR. AGRANOFF: Please come forward. 22 Please raise your right hand, sir. 23 Do you solemnly swear the testimony 24 you're about to give in this proceeding is the 25 truth, the whole truth, and nothing but the

1 truth? 2 MR. GROTH: I do. 3 MR. AGRANOFF: Please state your full 4 name and your address. 5 MR. GROTH: My name is Charles Groth, 6 C-H-A-R-L-E-S. Last name is G-R-O-T-H. 7 address is 7245 South County Road 43, Bloomville. 8 I live in Bloom Township. I'm not in the 9 Republic footprint. I am in the viewshed. 10 also in the Seneca Wind project footprint and 11 would be also in the upcoming Honey Creek 12 project. 13 MR. AGRANOFF: Please proceed. 14 MR. GROTH: I would like to share some 15 statistics from the public comments filed with 16 Ohio Power Siting Board in the project. 17 here a list of comments filed through September 18 9th, and I have an extra copy that I will leave 19 with the Board following my testimony here today. 20 First, I will state that roughly the 21 equal number of people have filed comments 22 supporting and opposing this project. But beyond 23 that the similarity stops. One of the first 24 things noticeable when reviewing comment, is that 25 some of the comments on both sides have been

filed repeatedly. Of comments opposing the project, six were filed in duplicate, meaning that the same letter signed by the same person filed two separate times with the OPSB. But there is a much more noticeable pattern of duplicate filing among comments in support of the project. Overall, 24 comments have been filed in duplicate with the OPSB. Four comments in support have been filed in triplicate. And one comment in support that's the same letter signed by the same person was filed four times in a five month period.

Another statistic I want to point to the Board, is that fewer than half of the comments in support of the project are from Seneca County residents. By comparison, 90 percent of the comments in opposition are from people who live in the county. And if you add residents to neighboring Sandusky and Huron County, that figures rises to 95 percent.

I understand why a union employee might not object to this project. For them Republic Wind is a paycheck for a few months and they get to go home. They're not forced to carry the burden for the next 20 to 30 years, like those of

us who lives will be.

A final pattern I want to point out, that the overwhelming prevalence of four letters among comments in support of a project. In fact, 93 percent of all public comments in support of this project are form letters. By comparison, only 23 percent of the comments are in opposition are form letters.

One of the dangers on relying heavily on form letters, is that you end up with situations such as the gentleman from Crosby, Texas who submitted a form letter stating that he is a resident of the area surrounding Republic Wind project. I suppose that depends on how define the area surrounding Republic. But that over 1,200 miles away, I think Crosby, Texas is rather a stretch.

I would like to also point out that it is much easier to simply sign your name to a letter that someone else wrote and that someone else will submit on your behalf, than it is to take the time and effort to find your own words and figure out to navigate the LPS fee system to submit your comment yourself. There is a level of time, effort, investment in the many heartfelt

1 comments in opposition that is lacking in the 2 form letters of support. 3 In closing, I would like to make the following comments: To whom it may concern, 4 5 Seneca County is really my home and I have an interest in decisions that impact our future. 6 Wind energy is a complex subject, but I've 7 educated myself over the last few years to 8 9 understand exactly what this project means to my 10 family, my community, and other legacy. 1.1 I'm not alone, as I've seen widespread 12 opposition to this project from my neighbors and 13 family. Most don't want it and I share their 14 opinions. As for me and my family, we will welcome the denial of this project and the 15 16 avoidance of all the damage that the wind project 17 would bring. 18 We've been voicing our concerns on the 19 project for over a year. Now that the Ohio Power 20 Siting Board is finally here, I urge you to hear 21 the overwhelming opposition from the foundation 22 of this community, the people who really live 23 here. Thank you. 24 MR. AGRANOFF: Donna Hudacek. 25 UNIDENTIFIED SPEAKER: She left.

1	MR. AGRANOFF: Okay. Stephanie Miller.
2	Please raise your right hand.
3	MS. MILLER: I do.
4	MR. AGRANOFF: Please state your full
5	name and your address.
6	MS. MILLER: Stephanie Miller,
7	S-T-E-P-H-A-N-I-E, Miller, M-I-L-L-E-R. 13531
8	East County Road 36, Republic, Ohio. I live in
9	Reed Township. And I am not in the footprint.
10	MR. AGRANOFF: Thank you.
11	MS. MILLER: Before I begin, I would
12	like to point out that there are many individuals
13	that are here, or were here, today and live in
14	the footprint that would like to speak in
15	opposition but legally unable to, because they
16	will be speaking in Columbus in the future.
17	Also, even though many here don't live
18	in the footprint, it doesn't mean they won't be
19	affected by these wind turbines any less than
20	several of us who live very close to this and the
21	surrounding projects.
22	Again, my name is Stephanie Miller and
23	I'm a resident of Reed Township in Seneca County,
24	My home is located in the proposed Seneca Wind
25	project and in the viewshed of the Republic Wind

project. Though the arguments of opposition of these wind turbines are considerable here, one hits very close to home for myself and my family. And Mrs. West did a wonderful job pointing out excellent points.

Should something happen to us or another resident within our county lines, I worry about the accessibility of emergency personnel, the safety of those involved, and the precious crucial seconds.

12 years ago, this past August, I was in a horrible accident that almost took my life. This accident occurred in Venice Township, which is about four to five miles my hone, and I had to be Life Flighted from the scene. The location of my accident was proposed to have three wind turbines located right there.

I have done on Life Flight, the ability for them to land and aid those in need is not guaranteed and will be compromised by a variety of obstacles. The height of these turbines and the air pressure they create are just two of the obstacles. Due to the air pressure around these turbines I have read that Life Fight may have to

land anywhere from two to six miles or more away from the actual site of the emergency. This is a huge distance when these wind turbines are widespread and located in clusters, which make it difficult for emergency personnel to get close.

Also, this past November the Director of Operations Life Flight in Toledo released a comment that they do not have specific regulations regarding wind turbines. However, they do have to follow FAA regulations that govern how Helicopter Air Ambulance helicopters in the United States operate. Pilots must be able to clear all obstacles by 300 feet during the day or by 500 at night, while still seeing 500 feet below the cloud ceiling above them. This becomes a major obstacle when Life Flight is necessary to save a person's life.

These turbines proposed in the Republic Wind project are much higher than the other wind turbines in Ohio. Therefore, there is much more of an issue surrounding the approximately 600 feet turbines proposed in this project when it comes to Life Flight.

I have been in contact with local Life Flight personnel and all I have been told is not

to worry, because Life Flight and the local fire department will be in contact with one another if something were to happen so that a decision can be made as to how to proceed.

However, it is in these situations where Life Flight is needed that every second counts. Through discussions with local fire department personnel, they too are looking for answers to these same questions. There is not time when something happens to discuss a plan with the necessary local emergency personnel in these life or death situations. If this had been the case 12 years ago, I may have not be here today with my family and I don't want this to become a reality for someone else.

In conclusion, the citizens living in and around this proposed project need to be heard. Most importantly, it is time we stop to; listen to the concerns of our local airports and those that are experts in flight when it comes to these wind turbines. The wind companies only tell what we want to hear regarding these emergency situations and not the entire truth. It is time for us to take the citizen in the surrounding area's safety into concern and make

1	sure these wind turbines don't become and
2	unwanted part of the next 30 plus years of our
3	life.
4	MR. AGRANOFF: Thank you.
5	MS. SANYAL: Thank you.
6	MR. AGRANOFF: Bob Rine. Is Bob here?
7	MR. RINE: Yes.
8	MS. SANYAL: Just so everyone knows, we
9	appear to have only about three people waiting to
10	speak after Mr. Rine.
11	MR. AGRANOFF: Please raise your right
12	hand, sir.
13	Do you solemnly swear the testimony
14	you're about to give in this proceeding is the
15	truth, the whole truth, and nothing but the
16	truth?
17	MR. RINE: Yes, I do.
18	MR. AGRANOFF: Please state your full
19	name and address.
20	MR. RINE: My name is Robert Rine,
21	R-I-N-E. I live at 10442 County Road 34, Green
22	Springs, Ohio. That is Adams Township. I'm also
23	representing 10587 East County Road 32, Green
24	Springs, Ohio. That is a home farm and my other
25	farm.

1	MR. AGRANOFF: And you do not live
2	within the project area; is that correct?
3	MR. RINE: I live within the area that
4	was carved out because of the bat study. So to
5	answer your question, no, I do not. I was
6	involved in it until the study, okay?
7	MR. AGRANOFF: Okay. Please proceed.
8	MR. RINE: So part of which I would
9	start with that. That we do not know. We were
10	not able to be told where the bat was. But
11	because of the tags left in the trees and the
12	markings left in the woods, we have about 20
13	tags, we can pretty much figure out where the bat
14	was. Okay.
15	Many different first off, I wanted
16	to address you, but I feel like I need to give a
17	little bit of pre-history, and I will deal with
18	the ramifications of that afterwards.
19	I am, I have been labeled as enslaving
20	people. I have been labeled as being greedy. I
21	have been labeled as a terrorist. And as
22	Dr. West just mentioned tonight, I've been
23	labeled as a jeckle.
24	I'm Bob Rine. I live in Adams Township
25	in Seneca. And I thank you for allowing me to

speak tonight.

I am really excited about the possibility of Wind turbines generating power in our community. I am a fifth generation that has been raised on the same parcel of land, with the same passion for the land that I have tried to instill in the generation yet to come, that I believe is one of the three speakers. We embrace both the successes and challenges of managing a family farm. We hope to pass our land on in a better condition than we found it. We have to be flexible and open to change to keep our operation viable.

I plant cover crops and no till my crops in an effort to be a good steward of the land. This has certain costs to me, yet I believe it is the right thing to do. We do utilize three phase power on our farming operations that is supplied by both Toledo Edison on one end and North Central Rural Electric on the other end. Keeping my farm operational is not just about me or my family, it trickles down to the dozen or so local businesses that work with our family farm.

I see the wind turbines as being

similar. No sources of energy is perfect or without cost. I think this type of power shows a positive cost benefit ratio and is in the keeping with the spirit of leaving things better than we found them.

There has been quite a struggle in the development of this idea, but the right thing is not always easy. That is why I remain committed to this process. Energy costs are high for my business and I'm certain many others. Having a renewable source that brings revenue to the community is a win/win.

Monday through Friday finds me teaching physics and math. I like numbers and facts. We have to make a decision based on facts and not on emotion or fear. I am not aware that many of the studies mentioned are peer-review quality. I am fully aware of the cost of a great education and very clear that my tax dollars cannot climb any higher to provide that. If this project can only offset a portion of the rural tax burden that would be huge.

Earlier this week I have a plane fly cover crops on 600 acres. I discussed with the pilot how turbines might affect my plan moving

1 forward. He replied that he must follow FAA 2 rules regarding flight patterns, but they would 3 not be prohibited to my farming operation practice in general. This is an adjustment I can 4 5 make. And this is my choice as a landowner. And 6 it is my decision. 7 I will add in there, many people have 8 been concerned about that for me. Many people 9 have expressed that crop dusters cannot operate. 10 That is between me and the contract with my crop 11 duster. It does not affect across the fence 12 road. 13 I researched this topic and fully 14 understand what a wind farm would mean for this 15 community. I believe it would be a very positive 16 addition to our neighborhood. I would like to 17 see us moved forward responsible to ourselves and 18 generations to come. 19 Thank you again for your time. 20 MR. AGRANOFF: Thank you, sir. Don 21 Voyt. Please raise your right hand. 22 Do you solemnly swear the testimony 23 you're about to give in this proceeding is the 24 truth, the whole truth, and nothing but the 25 truth?

1 MR. VOYT: I do. 2 MR. AGRANOFF: Please state your full 3 name and your address, please. MR. VOYT: My full name is Donald Dean 4 5 Voyt, Jr. My address is 13740 Township Road 136, Bellevue, Ohio. I live in Seneca County and in 6 7 Thompson Township. MR. AGRANOFF: Thank you. And you're 8 9 not within the project area? 10 MR. VOYT: I am not, but unfortunately 11 for us, we live in a pocket that will surround 12 our house on three sides, to the north, east, and 13 west. 14 First of all, before I start, I just 15 wanted to thank you guys for going overtime with 16 us tonight. I know there was some frustration 17 early, but you guys have to realize that, besides 18 our elected officials, you guys are the only voice that we have until we have a vote at the 19 20 township level, which we don't have right now. 21 So we do, I think on behalf everybody, appreciate 22 your time and going the extra mile with us this 23 evening. 24 I'm here really solely as a concerned 25 citizen, not necessarily living in the drawn

footprint of the Republic Wind project, but surrounded by up to 12 turbines within a two mile radius of our house.

We moved here seven years ago not just for the change of my employment, but to enjoy the duty of the country life here in North Central Ohio than mimicked the rural area that I grew up in in Indiana. I don't have precise the statistics for you this evening, but many of my neighbors can peers have already provided those for you.

I want to take this opportunity to express more human perspective as a person who has read studies on various negative aspects of the installation of wind turbines. Studies relayed to us from agencies, like in Van Wert County, have shown the decrease of property values that accompany a building of wind farms.

Ten years ago I lost 80 percent of my hearing in my left ear, so research on the negative effects of infrasound caused by the blade rotation concerned me, and should also be concerning to those susceptible to hearing loss.

You've also heard testimony on setbacks being too close to property lines and the

concerns of building on potentially unstable bedrock topped with large karst formations.

In the early stages of our fight to protect our land hear in Seneca County, I attended meetings on both sides of the issue and decided to see them for myself. I happen to be taking my son on a college visit to Purdue University in West Lafayette, Indiana near where I grew up. And just north of West Lafayette there are three little towns in White County that are replicas of our hometowns here in Attica and Republic.

Near Brookston, Chalmer, and Reynolds there stands a gigantic mass of wind turbines that stands just over 300 feet, half the height of the proposed wind turbines in the Republic Wind farm. This sounds a little crazy, and maybe a little creepy, but I decided I was going to find somebody would lived amongst the turbines so that I could hear from a direct source who was impacted by the wind farm.

In the middle of the countryside I spotted a lady carrying in her groceries, so I pulled up her lane and struck up a conversation with her that lasted a good two hours. And what

I heard really horrified me, but backed up much of th statistics and research on the negative aspects that you have heard today.

As we talked the noise was overtly noticeable and did interrupt our conversation only because it caused me to lose my focus in disbelief. I know you've heard from other people tonight that they had to strain to hear it. That was not my case. There were five or six turbines right there in that general area and they were very noticeable, and I'm half deaf. So for me to hear it says something.

She was renting property and it was a scenic piece of land and there was a fire pit that was prevalent in the backyard. And I asked her how she liked her outdoor space, noticing the irritating shadow flicker at the same time. And the if woman replied that she didn't use it anymore because within a half mile of her house not only did she have wind turbines, but there was a substation there that had a noticeable hum that she said went on 24/7 and 365 days a year. It just never stopped. And so because of that she could not go outside. It made her unbearable to be there for extended periods of time.

She cited irritation levels that were heightened in her three dogs. But really what sadden my heart the most was that she was a single mother raising an autistic child who before the turbines was making so much positive progress, but became overly agitated when the turbines came.

In additional, her landowner allowed power lines to cross the property, but had to use a portion of the initial payment to restructure the water source to the home. It seem by both her and the property owner, who is in favor of the wind turn turbine, that the construction of the turbines caused the rerouting of the water aquifer.

I left the home just as the flashing red lights on the tops of the turbines began pulsing at dusk, and I admit I was deeply affected in ways that I don't think I could put into words.

I am not against green energy, but I am against property infringement, property devaluation, and the infringement on the right to live a life unburdened by unnecessary health risks. Many of us here tonight, including

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1 myself, are imploring to you as the Power Siting 2 Board, to err on the side of caution and make a 3 decision that protects us who lives in and near 4 the Republic Wind project, and in other wind 5 turbine projects in Ohio. 6 The effects, as I found out, are real. 7 I'm telling you straight as sure as long as I'm 8 standing here. Everything that these people are 9 telling you, the research. I doubted it to begin 10 with and I went out found out for myself, and it 1.1 exists. It's there. 12 Going ahead and improving the Republic 13 project puts us in adverse situations that 14 negatively impact our lives in various ways, just 15 it had for this woman and her son in Indiana. 16 know she's only one person, but that should be 17 enough. Thank you. 18 MS. SANYAL: Sir, could you come back? 19 He's has a question. He has a question real 20 quick. 21 MR. PARRAM: I just want to clarify a 22 question. You indicated you are near 12 23 turbines; is that correct? 24 MR. VOYT: Correct. 25 MR. PARRAM: Are all 12 of the turbines

1	Republic Wind project turbines?
2	MR. VOYT: Yes, sir.
3	MR. PARRAM: Okay. Thank you.
4	MR. AGRANOFF: Brenda Greeves. Is
5	Brenda here?
6	Bradley Rine. Please, raise your right
7	hand.
8	Do you solemnly swear the testimony
9	you're about to give in this proceeding is the
10	truth, the whole truth, and nothing but the
11	truth?
12	MR. RINE: I do.
13	MR. AGRANOFF: Please state your full
14	name and address.
15	MR. RINE: My name is Bradley Rine.
16	B-R-A-D-L-E-Y, last name R-I-N-E. I live at
17	10442 County Road 34, Green Spring, Ohio 44836.
18	And that is Adams Township.
19	MR. AGRANOFF: And you do not live
20	within the project area?
21	MR. RINE: I do not, correct. My
22	father just spoke three or four persons ago. As
23	he said, we were originally a part of the project
24	and then there was a bat study done to ensure
25	that there wasn't an abundance of any type of

aviation or endangered species in that area that would prevent a wind turbine. Which they didn't find. But they found enough evidence to carve us out of it, so they had a big U in the map. So we could not be a part of it. However I'm still in favor of the wind turbines.

I just turned 21, so I don't have any land in my name. Like I said, our family farm is not entirely a part of the project. We are not receiving a turbine, so we are not getting any money from that. I heard several people bickering in the back throughout the evening, talking about "Oh, the farmers are just — they're greedy. It's all about the money. This is lazy farming." That's not the case.

I'm very passionate about farming and I love what I do. I went to school in Columbus for a year, I commuted home every weekend. I care about the area. I don't want to do anything to harm it. And my brother and my sister and I, we are all looking to be the sixth generation in our family farm and take it over. My grandpa was not able to speak tonight. He is a landowner, and two of our neighbors. With the filibustering going on earlier, they had to leave and were not

given the chance to talk. They didn't want to stay the full eight hours, which I appreciate you guys doing whether its for or against. It's good that we are heard and you guys are giving us that chance.

And then I'm not going to bring up any research tonight. There is -- I've been going to these township meetings and for or against them for three years now and there's a lot of people that bring up research and it concerns me. I can pull out my Smart Phone right now and in 30 seconds I can Google and find ten scientists that argue 2 plus 2 doesn't equal 4.

So I just ask that you guys take into consideration the research that you guys do. I know you're all intelligent and capable of figuring out what is creditable and not. That was just another concern that I had on my part as being for the project.

Oh. As I am arguably the youngest person in this room, I understand there's been a lot of people, for and against, talking about the younger generation being involved in this. I just want to ask that there are younger generations of the opposing side that are saying,

"Well, what about me? I want to live in this area, but." And that's kind of out of place, that's why I brought that up earlier about me going to school in Columbus and coming home every weekend.

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I grew up in Bellevue -- or Green Springs, but I went to school in Bellevue. I just consider that more of my hometown. I never really want to leave the area and I never plan on leaving the area. And I plan on eventually having a future generations and taking over the family farm and keeping the traditions that we have. So I just ask that you also take into consideration the people that don't want to move, but they say that will if you build a wind turbine. The people that will stay and continue to take care of the land that we currently are caretakers and passion about. You guys allow us to harvest corn and harvest soybeans and harvest wheat. I'm just not really sure why a few people can't say that the farmers that farm a majority of the farm can't harvest the wind as well. It's their free will. The wind is free, it's there, and it will always be there. Thank you for your time tonight.

1	MR. AGRANOFF: Thank you.
2	That's all the names that I had on the
3	list. Is there anybody else that is here that
4	would like the provide testimony before we
5	conclude?
6	UNIDENTIFIED SPEAKER: I just want to
7	say kudos to the recorder. She has typed this
8	entire time. That's a lot of time for her.
9	MR. AGRANOFF: Okay. If there's
10	nothing else. On behalf of the Board, I would
11	like to thank you all for being here this
1.2	evening. I know if was a very long proceeding
13	and appreciate everybody's cooperation.
14	As I mentioned previously, the
15	evidentiary hearing in this matter will now take
16	place on November 4th at the Board's offices.
17	And I hope everybody has a good night. Thank
18	you.
19	THEREUPON, the Public Hearing conclude
20	at 9:45 p.m.
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2	CERTIFICATE
3	STATE OF OHIO )
4	) ss. COUNTY OF OTTAWA )
5	T Taud T Dalbaga Ctonatura Danoutan and
6	I, Lori L. Delhees, Stenotype Reporter and Notary Public within and for the State aforesaid,
7	duly commissioned and qualified, do hereby certify that the foregoing, consisting of 292
8	pages, is a true and complete transcript as taken by me in stenotype and later transcribed under my direction of the proceedings conducted on the
9	12th day of September, 2019. I do further certify that I was personally present in the room
10	during all of the proceedings.
11	IN WITNESS WHEREOF, I have hereunto set my <u>h</u> ąnd
12	and seal of office at Sandusky, Ohio this day of O(+0)1/2 , 2019.
13	
14	Louis J. Dacheen,
15	HUNTLEY REPORTING SERVICE
16	Lori L. Delhees Notary Public
17	P. O. Box 1067 Sandusky, Ohio 44870
18	My commission expires 11/24/2022
19	Thy Commands for Capitos 11/24/2022
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