

MINUTES OF REGULAR MEETING

CHAMPAIGN COUNTY ZONING BOARD OF APPEALS

**1776 E. Washington Street
Urbana, IL 61802**

DATE:	May 26, 2022	PLACE:	Shields-Carter Meeting Room
			1776 East Washington Street
TIME:	6:30 p.m.		Urbana, IL 61802

MEMBERS PRESENT: Ryan Elwell, Lee Roberts, Jim Randol, Larry Wood, Tom Anderson, Nolan Herbert, Thaddeus Bates

STAFF PRESENT: John Hall, Susan Burgstrom, Stephanie Berry

OTHERS PRESENT: Roger Henning, Kim Decker, Ed Decker, Andrew Miller, Justin Leerkamp, David Bosch, Traci Bosch, Marty Wilson, Bob Schlorff, David Happ, Adam Watson, Tom Cler, Lynn Rice, Darrel Rice, Benjamin Rice, Todd Herbert, Ted Hartke, Jan Carter Niccum, Brandon Hastings, Larry Negangard, Shannon Reel, David Reel, Kate Boyer, William Mitsdarfer, Robert Mitsdarfer, Benjamin Rice, Ted Hartke, Roger Negangard, Stephen Smith, Randy Wells, Lisa Ellis, Matt Ellis, Sarah Ellis, Anthony Valente, Paul Wilson, Julie Daly, John Rothermel

1. Call to Order

The meeting was called to order at 6:30 p.m.

2. Roll Call and Declaration of Quorum

The roll was called, and a quorum declared present.

Mr. Elwell informed the audience that anyone wishing to testify for any public hearing tonight must sign the Witness Register.

3. Correspondence - None

4. Minutes- April 28, 2022

Mr. Elwell asked if there was any discussion and entertained a motion to approve the April 28, 2022 minutes.

Mr. Randol moved, seconded by Mr. Roberts, to approve the April 28, 2022 minutes. The motion carried by voice vote.

5. Audience participation with respect to matters other than cases pending before the Board

Mr. Elwell asked if there was any audience participation with respect to matters other than cases pending before the Board. Seeing none, he called continued Case 037-AT-22.

6. Continued Public Hearings

Case 037-AT-22

Petitioner: Zoning Administrator

Request: Amend the Champaign County Zoning Ordinance as follows:

1. Add new paragraph 6.1.4 A.3. regarding Right to Farm Resolution 3425.
2. Amend Sections 6.1.4 C and D regarding WIND FARM TOWER height.
3. Revise paragraph 6.1.4 D.7. regarding Aircraft Detection Lighting Systems (ADLS).
4. Add new Section 6.1.4 R to require conformance to the State of Illinois Agricultural Impact Mitigation Agreement.
5. Revise Section 9 Regarding WIND FARM fees.

Location: Unincorporated Champaign County

Mr. Elwell asked John Hall, Zoning Administrator, if he would like to state a little more about his request.

Mr. Hall stated that there was a new Supplemental Memorandum #3 at tonight’s meeting and attached to it is a resolution of protest from the Village of Philo. He said that Philo has protested the entire text amendment, so for any part of the amendment to pass at this time would require a three-quarters majority of the County Board. He said personally he doesn’t think that should affect the Zoning Board of Appeals recommendation, but they can make of that what they will. He said that a municipal protest doesn’t have to have any justification, they can just protest, but to their credit, the Village of Philo provided what they referred to as reasons for protesting. He said he was going to read the reasons that the Village of Philo gave for protesting the text amendment: the text amendment would increase the height of wind turbines creating increased noise levels, visual intrusion, visual blight, diminished television, radio, and internet reception, negative effects on birds and other wildlife, compromised public safety, particularly during storm events, and nuisances. He said the text amendment would create insufficient spacing of wind turbines from residences and/or principal buildings regardless of whether they are participating or non-participating, thereby exposing residences and buildings to noise, visual blight, visual intrusion, safety, compromised television, radio and internet reception, and nuisances, so that is the Village of Philo protest.

Mr. Hall said since the Village of Philo mentioned some things that they hadn’t actually included as evidence in the Finding of Fact, P & Z Staff is proposing some additional evidence to be added regarding wind farm tower height under item 19, including 19.K., the existing Zoning Ordinance Section 6.1.4H includes standard conditions to mitigate electromagnetic interference, including consultation with applicable microwave transmission providers and local emergency service providers. He said adopting no maximum wind farm tower height shouldn’t reduce the effectiveness of Section 6.1.4H. He said regarding new subparagraph 19.L., the existing Zoning Ordinance Sections 6.1.4J. and L. include standard conditions for endangered species consultation and acceptable wildlife impacts, including consultation with the Illinois Department of Natural Resources and other qualified professionals such as ornithologists and wildlife biologists. He said adopting a no maximum wind farm tower height should not reduce the effectiveness of mitigations provided for endangered species and other wildlife. He said new subparagraph 19.M., regarding radar detection of severe weather events including tornadoes, Champaign County is far enough from the National Weather Service doppler radar at Lincoln, Illinois that there will be no more than minimal interference from wind turbines. The Lincoln weather station is approximately 50 miles (80 km) from the western Champaign County line. He said subparagraph 19. M.1., the NOAA National Weather Service Radar Operations Center (ROC) has acknowledged that radar interference has occurred

1 due to wind turbines and has created an online resource titled “How the ROC Analyses Wind Turbine
2 Siting Proposals” that outlines how ROC does a case-by-case analysis of proposed wind farm
3 developments. He said the ROC has developed a four zone scheme that takes terrain, distance, and the
4 number of elevation angles impacted into account: no build, mitigation, consultation, and notification. He
5 said that P & Z staff go on to review those four zones and they attached a two page handout from the ROC
6 that illustrates those zones.

7
8 Mr. Hall said item 19.M.1.(a) is a No Build Zone, which is a four kilometer radius around the radar station
9 in order to avoid the potential for serious impacts, including turbine nacelles blocking the radar beam and
10 potential receiver damage if sited in the radar’s near field. He said item 19.M.1.(b) is the Mitigation Zone,
11 which is the area between 4 km and 36 km where a 160-meter turbine would penetrate more than one
12 elevation angle. He said there is the potential for moderate to high impacts and the ROC will work with
13 the developer to get detailed project information, do a thorough impact analysis, and discuss potential
14 mitigation solutions. He said item 19.M.1.(c) is the Consultation Zone, which is the area between 4 km
15 and 36 km where a 160-meter turbine only penetrates the first elevation angle or when a 160-meter tall
16 turbine will penetrate more than one elevation angle between 36 km and 60 km. He said due to the
17 increased potential for impact to operations, the ROC is requesting consultation with the developer to
18 track the project and acquire additional information for a thorough impact analysis. He said item
19 19.M.1.(d) is the Notification Zone, which is the area between 36 km and 60 km (Champaign County is
20 80 km from the Lincoln, Illinois site) where a 160-meter tall turbine will only penetrate one elevation
21 angle, or any area beyond 60 km that a 160-meter tall turbine is in the radar line of site (RLOS). He said
22 since impacts are typically minimal beyond 60 km and workarounds are available for penetration of only
23 one elevation angle, the ROC is making consultation optional; however, NOAA would still like to know
24 about the project. He said that is the new Supplemental Memorandum #3, including the Village of Philo
25 protest, and some new evidence that staff is proposing to add as a response to that protest.

26
27 Mr. Elwell thanked Mr. Hall and asked if there were any questions from the Board. Seeing none, he
28 informed the audience that anyone wishing to testify for the public hearing tonight must sign the witness
29 register for the public hearing. He reminded the audience that when they sign the witness register, they
30 are signing an oath. He called Stephen Smith to testify.

31
32 Stephen Smith, 454 County Road 2400 East, Broadlands, said the first item he has tonight is his next door
33 neighbor’s testimony; she lives at 525 County Road 2400 East, Broadlands. He said his neighbor is sick,
34 so she wanted him to bring her testimony tonight and read it on her behalf. He said it says, “Is the Wind
35 Industry ‘Blowing Smoke?’ Did you know the wind industry is changing rapidly? There are many new
36 inventions coming along that are much lower profile but higher output than these gigantic wind turbines
37 we see currently sweeping across the country. I challenge you to google it. We have a President who thinks
38 green is better at all costs, we are also seeing entrepreneurs stepping up to the plate to bring in more
39 suitable alternatives. These inventors are in their own race to capture the market for wind energy, and we
40 can only hope it doesn’t use more of our tax dollars to do so. It is time to slow down the current
41 monstrosities of wind turbines trying to come into our backyard and think this through. Currently the Wind
42 Industry is trying to sign a contract with our County Officials and local landowners for a period of 50
43 years. Does it make sense to do this when you consider how much things will change in that time period?
44 They already have new alternatives that don’t kill birds. One alternative is a wind vortex that works to
45 make electricity, but it doesn’t cause health issues to your neighbor. Although we are seeing fists full of
46 money put in front of our faces right now, we need to move away from instant gratification and embrace
47 a legacy view that fits our landscape, our values, and the generations to come. There are reasons there is
48 so much pressure, attacks on other ideas, and money being thrown around by these corporate wind
49 companies: they don’t want us to wake up and see the other possibilities out there; instead, they need you

1 to sign up right away so they can exit before the ink dries and you start to understand the future hidden
2 high costs of doing business with outsiders,” that was from Kelly Vetter.

3
4 Mr. Smith referred to Attachment A on page one of three in Supplemental Memorandum #3, item 2.A.(2),
5 to change the minimum required separation from 1,000 feet to 2.4 times the maximum allowed total wind
6 farm height between a wind farm tower and any nonparticipating dwellings or principal buildings. He said
7 it should be an absolute minimum of 3,250 feet from the property line, not the dwelling itself. He referred
8 to item 2.B.(5), to change the maximum wind farm tower height from 500 feet to having no limit, subject
9 to conformance to all FAA requirements including an FFA Determination of no hazard with or without
10 conditions. He said that they should not change it from the 500 feet height limit and leave it as it is. He
11 said that if staff wanted a copy of what he read from Kelly Vetter, then he could give that to them.

12
13 Mr. Elwell said he would appreciate it and asked the Board if there were any questions for the Board from
14 this witness. Seeing none, he thanked Mr. Smith. He called Randy Wells to testify.

15
16 Randy Wells, 55 County Road 2300 East, Broadlands, said he was here tonight because he would like to
17 share his family’s experience they have had with windmills. He said they live exactly one and one-half
18 miles north of the Champaign County and Douglas County line, and the Board is well aware of the 48
19 wind turbines that were put up in the very northeastern edge of Douglas County. He said they have 48
20 wind turbines to the south of where they live and about half of those wind turbines are probably less than
21 a quarter of a mile from the Champaign County line. He said that they have lived here all their adult lives
22 and built their house 38 years ago, and they have raised their family here. He said they are concerned
23 about the proximity of windmills to residences. He said as Stephen Smith had just stated, those windmills
24 in Douglas County right now are probably about 3,500 feet, 3,900 feet, or whatever it was is around three
25 quarters of a mile away. He said they can hear the windmills when they are outside, they see the flashing
26 lights during the night, and they see rotating blades during the day. He said based on the height of those
27 windmills, of which the tallest of those windmills is 587 feet tall, then one of those 587 feet windmills
28 could be within a quarter of a mile to his house. He said right now the windmills are three quarters of a
29 mile, so he couldn’t imagine what it would be like if they were any closer.

30
31 Mr. Wells said another thing he would like to address is the project’s construction issues that began about
32 four years ago. He said the roads that the wind farm company are using to install the windmills are still a
33 mess right now and the wind farm company has just started working on repairing those roads. He said the
34 roads are dusty when the weather is dry and when it rains the roads are rather sloppy, so if they are going
35 to get into bed with more wind farm companies, then he hopes they know for sure who that is. He said
36 that his final concern is about decommissioning the windmills and more than likely the decommissioning
37 will have no impact on him, because he will probably be gone by the time that happens; however, it will
38 impact their heirs. He said it just seems to him like Stephen Smith had said earlier while representing his
39 neighbor, Kelly Vetter, that they don’t know what is going to happen in the next 30 to 40 years and things
40 are going to change drastically, and he is very concerned that this decommissioning and having the funds
41 to decommission these windmills at the end of their life expectancy is going to actually not happen. He
42 said that he thinks the funds won’t be there to decommission these windmills when it is actually time for
43 those windmills to be decommissioned and not only be stuck with windmills for the next 30 years but
44 even beyond that. He said the only other comments he had today are things that he has heard and hearsay,
45 but he thinks are warranted for consideration. He had heard that some of these wind farm companies allow
46 the residents to negotiate their setbacks and he thinks that is something that sounds very fair. He said
47 another thing he had heard was that wind farms are selling multiple times, creating a lot of havoc for
48 landowners and farmers. He said finally, he had heard one of the windmills near them had iced up during
49 the winter and when it started to thaw it threw ice into the road from the blades, and it was a two lane

1 roadway, so rather dangerous he would say. He said there was one more thing he would like to mention,
2 they get the woosh-woosh sound of the windmills quite frequently and sometimes they don't hear the
3 windmills at all – it just depends. He said this winter when he and his wife were both at home from a
4 snowstorm, they kept thinking a snowplow was driving by from inside their home. He said he doesn't
5 know if the Board all knows what a snowplow sounds like when it's plowing snow down a road, but it is
6 very loud and they kept thinking it was the snowplow, but in fact it was the windmills. He said it seems
7 like the colder the weather is, the noisier the windmills are.

8
9 Mr. Elwell asked the Board if there were any questions for this witness.

10
11 Mr. Wood said the distance of the windmills from Mr. Wells's house was a little over 3,000 feet or so as
12 he had stated. He asked if they had experienced any of the typical symptoms.

13
14 Mr. Wells said they have not, and they both work outside of the home, so they are not farmers and at home
15 all the time.

16
17 Mr. Wood asked when they are out in the country around there if they are fairly noticeable.

18
19 Mr. Wells said sometimes, it just depends.

20
21 Mr. Wood said no other sensations other than just what they hear.

22
23 Mr. Wells said yes.

24
25 Mr. Wood said okay.

26
27 Mr. Wells said the flashing lights are pretty annoying right now, flashing all night long. He said they can
28 see windmills and flashing lights out of every window of their house.

29
30 Mr. Wood said that he wouldn't worry about 30 years down the road, because they don't know what is
31 coming five years down the road.

32
33 Mr. Wells said that he was right there.

34
35 Mr. Elwell asked if there were any other questions for this witness.

36
37 Mr. Wells said thank you very much.

38
39 Mr. Elwell thanked Mr. Wells and called Lisa Ellis to testify.

40
41 Lisa Ellis stated her home address was 22527 East 2650 Road, Chrisman, Illinois, and that is located in
42 the corner of Vermilion and Edgar counties. She said that she comes tonight as an Edgar County Board
43 member, but she doesn't officially represent their Board. She said she had told her fellow Board members
44 that she was coming to tonight's meeting, and they were totally in favor, but she had discussed what she
45 was going to share with the Board tonight with their Board Chair. She said she is here to tell them what
46 they have already experienced. She said they took their 2010 ordinance and updated it in 2021, but they
47 are not a zoned county and a lot of what she is going to share with the Board doesn't matter whether they
48 are zoned or not, it's just that there is another layer of decision making for the Board. She said their focus
49 on wind and solar ordinances was to balance the property rights of a landowner, especially a farmland

1 owner versus the property rights of someone who does not monetarily gain from a wind farm. She said
2 that her fellow Board members didn't think there would be a lot of controversy or issues involved in this
3 and she kept telling their Board they would hear it at the public hearings, and they did. She said the room
4 was overflowing and they had to move, but they had two or three very meaningful meetings with
5 testimony. She said her statement to those who had asked her was that emotions run high, but what she
6 needed from them were facts, because that is what they were going to operate off of. She said here are
7 some of the takeaways from the hearings, and this is what they ended up with; they set a very conservative
8 setback of 3,250 feet, because that is the most they are going to hear around here. She said the reason was
9 that it protects mostly homeowners who are not involved or homeowners who are also farmers and
10 landowners who don't want them nearby. She said the wind company, however, has the opportunity to
11 converse with those folks and make a separate contract, and their ordinance says the minimum setback
12 from a primary structure with a contract to do so is 1,000 feet. She said that would protect those who don't
13 want the windmills versus those who don't mind the windmills.

14
15 Ms. Ellis said they have a big concern with local roads and drainage tile, and their Board has heard from
16 the farmers of Douglas and Edgar County about the issues they have encountered with drainage tiles and
17 roads, and they had a very negative experience. She said that she has attended county board official
18 meetings and not everybody had a negative experience; it is the Board's and County Board's responsibility
19 to build an ordinance that provides some structure in case they run up against a situation like the one in
20 Douglas County. She said there are other counties who will tell them their roads are in better shape now
21 after they have had them restored than they were before. She said she is not here to say it is all gloom and
22 doom, but it is the Board's or county government's responsibility to build some ordinances and framework
23 to try to set themselves up for success. She said farmers had stated their drainage tiles were destroyed by
24 both the heavy equipment and construction process. She said the landowners may include language if they
25 have a good attorney about restoring, repairing, and improving the drainage tile on their own property, but
26 that doesn't protect the landowners around it. She said she would tell the Board in case they didn't know
27 that she wrote their recently approved solar ordinance in Edgar County. She said she took Champaign
28 County's solar ordinance language on drainage tiles, it's awesome, the best she has found, and she did a
29 lot of research. She said that the Board already has the language in Champaign County on drainage tile,
30 and it is good, so she strongly encourages them to take a look at that. She said the only thing is their Board
31 strengthened it further where they have the language about drainage district tile; their Board took out the
32 phrase drainage district and put drainage tile instead. She said it is as protective for their farmers as they
33 could get and she can tell the Board that she is a farmer, so that was very important to her. She said that
34 the gentlemen before her had talked about Douglas County roads; their wind farm project officially ended
35 in July 2020 and they are just now starting the process of getting their roads back up to speed. She said
36 the reason was they couldn't agree on the amount it would take to restore the roads, again, that is within
37 the County's right and their responsibility to work on their separate Road Use Agreement, which goes
38 through the County Highway Department and the County Highway Engineer. She said one thing that she
39 wanted to make sure they got into both their wind and solar ordinances had to do with emergency services;
40 the needs were different, but they needed to make sure they had the language in there. She said for Edgar
41 County, they wanted to make sure that their emergency services network, which would include the fire
42 departments, and especially the volunteer fire departments out there in the smaller communities, had the
43 physical tools and training they needed. She said with the wind turbines it is going to be fighting a fire up
44 in a wind turbine and no little old volunteer community fire department is going to have what they need,
45 so that was a concern. She said for Edgar County it was going to run through ESDA, the Emergency
46 Services and Disaster Agency, so they could make sure wherever the wind turbines ended up if they do,
47 then that would be the entity that would have to have the training they would need then; of course, for
48 solar the issue would be different. She said their ordinance is a living document and they are going to
49 continue updating it. She said somebody in the County's group needs to be clued into what other counties

1 are doing and constantly looking at what is best for whatever they determine and the best ordinances from
2 what other counties are doing and keep looking at the language. She said Clark County, which is south of
3 them in Marshall, Illinois, just did a wind ordinance that has some really good language, and she will be
4 using that and going back and looking at the solar ordinance that the County has to make sure she makes
5 the best document that she can. She said it isn't all restrictive, but it is to try to provide some support and
6 balance in the wind ordinance that they can to the landowners and homeowners, because that is their
7 responsibility.

8

9 Mr. Elwell thanked Ms. Ellis and asked if there were any questions from the Board.

10

11 Mr. Randol asked Ms. Ellis if the 3,250 feet was from the property line or the structure.

12

13 Ms. Ellis said it is to the structure, and they had a lot of conversation about that, and that is what they
14 came up with. She said she would tell them, not right now but at some point, they have talked about it,
15 they probably should have come up with a formula that would use the tip height, so they were always
16 coming up with about 3,250 feet, but it wouldn't be so inflexible.

17

18 Mr. Wood asked if the separation distance doesn't vary with height.

19

20 Ms. Ellis said no, it doesn't right now.

21

22 Mr. Wood said she indicated that homeowners have the ability to negotiate a different separation distance,
23 because she mentioned something about a 1,000 feet setback. He said he wasn't clear on what she was
24 saying.

25

26 Ms. Ellis said that if there was a homeowner who was willing because they wanted the money, or they
27 didn't think that the wind turbines are going to bother them, the homeowner has the right to negotiate and
28 have their own contract with the wind turbine company, but it still cannot be less than 1,000 feet from a
29 wind turbine.

30

31 Mr. Wood said that it could be less than the 3,250 feet.

32

33 Ms. Ellis said yes.

34

35 Mr. Wood said okay.

36

37 Ms. Ellis said if the Board wants to look at theirs on EdgarCounty.com and under the Board tab they will
38 find the document. She said she is not saying it is perfect, but she is just saying that it is pretty good.

39

40 Mr. Herbert asked her what they were doing on height restriction.

41

42 Ms. Ellis said that they don't have a height restriction she doesn't think, they do not have a restriction.

43

44 Mr. Anderson asked her if their wind ordinance covered infrasound at an extremely low frequency.

45

46 Ms. Ellis said they do have some language in there and she will tell the Board something that is kind of
47 related to this; the Illinois Pollution Control Board is the entity they are supposed to go to, but if they go
48 to it, it is inactive – that is a concern.

49

1 Mr. Anderson said yes, there is a lot of unknown information about infrasound, and it is the sound that
2 someone can't hear, but they can feel it.

3
4 Ms. Ellis said it internalizes.

5
6 Mr. Anderson said for some people that is an unhealthy experience and having some language drawn up
7 that spells out some caution regarding infrasound would be difficult, because not only can the equipment
8 not measure, but people also don't bother to assess it either pre- or post-construction of a windmill. He
9 said one of the handouts that they had received at the first public hearing recommended a setback of at
10 least 1.25 miles. He said that until they learn more about the infrasound, he would find a setback distance
11 less than 1.25 miles disagreeable.

12
13 Ms. Ellis said that she could respect that statement very much and different people have a different ability
14 to handle noise and the infrastructure sound than others; she respects those that are tolerant and those that
15 can't tolerate it. She said they do have a very scientific way to measure decibels and there could be some
16 framework set. She said that it may not be adequate for everyone, but again, that is something that needs
17 to be in the County's ordinance, and they need to decide what decibel level they think is appropriate for
18 the largest portion of their population.

19
20 Mr. Wood referred to Mr. Anderson's last comment and said he has done a lot of research on this in the
21 past few weeks and most of it is related to what is audible above 20 Hertz, which is about the threshold
22 for human hearing, but he hasn't been able to find a lot of research on the lower frequencies that would
23 generate from that. He said the other thing is how long it would take to dissipate and how the power would
24 be measured at a certain distance away from the wind turbine. He said that it is not just one frequency, it
25 is a composite of a lot of different frequencies, maybe as low as five cycles per second, but that is a really
26 long wave and there is a lot of pressure there in soundwaves. He said the other thing that they haven't
27 really talked about, and he was thinking about this, and it had to do with Mr. Hartke's comments about
28 waking up in the middle of the night for a period of time and feeling something that was uncomfortable
29 but then it went away. He said the point is if there are two or more towers within a couple thousand feet
30 of a homeowner's house, they will get an interference pattern and an interference pattern between those
31 two soundwaves is going to create nodes and anodes where there are maximums and minimums of where
32 the two soundwaves cancel each other out or the two soundwaves add together. He said the fact that the
33 wind is constantly changing and the power level going into those wind turbines changes where that pattern
34 is, it could pass over a homeowner's house and they would feel it and then it would be gone, so they really
35 don't have any way of doing it. He said the point is the homeowner needs to be far enough away to have
36 that energy dissipated, so they really don't have a whole lot of sensation around that. He said the
37 infrasound bothers him because of the fact that there is not a lot of research on it, but there is a lot of
38 discussion around the symptoms that some people feel, and he thinks some people are just more sensitive
39 than others, but the point is they don't want there to be an unhealthy impact.

40
41 Ms. Ellis said that this is on the personal side and as she had stated earlier she lives on the Vermilion and
42 Vermillion, that is Vermilion County, Illinois, Vermillion, Indiana, and Edgar County, Illinois corner. She
43 said that Highway 71 runs parallel on the Vermillion, Indiana side to the Edgar County, Illinois line; and
44 at night she can see the wind turbines a county away. She said there is a county in between and she can
45 see the lights, and she can see all of them, so that would be visual pollution. She said if she and her husband
46 are not sleeping well at two to three in the morning, and it is not every morning, but it has to depend with
47 what she imagines is the barometric pressure and they can hear it, it sounds like the train is hooking up
48 five miles south of them, because sometimes people can hear the trains on the tracks, but that is not what
49 it was – it was the wind turbine noise. She said it is not every night, it has to do with the environmental

1 factors, but it is actual, it is there, because they couldn't figure out what it was at first and then it dawned
2 on them that was what it was.

3

4 Mr. Wood said that he thinks it depends on which way the wind is blowing.

5

6 Ms. Ellis said yes.

7

8 Mr. Anderson said that another problem with infrasound is it is difficult to block, because barriers, wind,
9 and rain do not seem to be a function that seems to slow them down, but an obnoxious noise can be blocked
10 out. He said the setback distance is the only known thing that will help.

11

12 Ms. Ellis said apparently so, and they also have a big wind break to the west of their house that doesn't
13 seem to affect the windmills either; they can't see the windmills, but they can still hear them.

14

15 Mr. Wood said the higher frequencies can be dissipated, because the soundwave length is really short and
16 it would be absorbed by foam or things that could be used to separate it, but at 20 cycles per second, the
17 soundwave length on that is 51 feet. He said in other words, the first 25 feet of it is compressed air and
18 the other 25 feet is a rarefaction of air behind it, so they are basically getting swamped with that, but they
19 are getting hit by it 20 times every second.

20

21 Ms. Ellis said if anyone does a field trip, don't stand underneath a wind turbine and then come back and
22 say they didn't hear anything, because they are not going to if they are standing directly underneath it –
23 law of physics there.

24

25 Mr. Elwell asked her how far the closest windmill was from her house.

26

27 Ms. Ellis said a county apart, so she is going to say around 25 miles away.

28

29 Mr. Elwell asked if there were any other questions from the Board. Seeing none, he thanked Ms. Ellis. He
30 called Ted Hartke to testify.

31

32 Ted Hartke, 1183 County Road 2300 East, Sidney, said he was not going to read these big, long, and super
33 boring articles at all, just small portions of them. He referred to a publication from a Wisconsin testimonial
34 done in 2013 from Attachment B in Supplemental Memorandum #2. He said that Dr. Paul Schomer, world
35 renowned acoustician, got called in to testify at a proposed wind farm hearing in Highland, Wisconsin.
36 He said they asked Dr. Schomer various questions about who he was, was he qualified, and so on and so
37 forth. He referred to line seven on page six of 26, and they asked Dr. Schomer, "Are you still concerned
38 about the health impacts of large mega turbines such as those proposed in the town of Forest?" and the
39 wind turbines that were proposed were 500 feet tall. He said that Dr. Schomer responded, "Yes. There is
40 significant evidence from all over the world that large turbines placed too close to residences cause very
41 serious health problems. While the research is underway, there is continuing focus on balancing the size
42 and output of wind turbines with public health. I do not believe that the right balance has yet been struck.
43 The wind industry continues to claim that there is no known link between wind turbine noise and health
44 effects. In a recent paper, which is being submitted as Ex.-Forest-Schomer-20, I show that for a small
45 group of specially selected people, the probability that motion sickness-like symptoms experienced by
46 wind farm residents are unrelated to wind turbine noise is less than two in a million. This analysis proves
47 that it is virtually certain that these individuals are adversely affected with serious health effects that result
48 from the acoustic emission of nearby wind turbines. This changes the dynamic of the situation since it can
49 no longer be said that there are no known health effects related to wind farms, it follows that the industry

1 must prove that there will be no adverse health effects from what they plan to do, or that the industry must
2 state what the adverse health effects will be.”

3
4 Mr. Hartke continued reading the next question on line three from page seven of 26, “Is there a sound
5 scientific basis for imposing a 40 dBA noise limit for day and night, as proposed by the PSC, for the six
6 homes that are identified as ‘sensitive’?” He said Dr. Schomer answered, “Yes, George and David Hessler
7 have coauthored an article that recommended a noise limit of 40 dBA for wind farms, which has been
8 shown to virtually eliminate noise related complaints and health problems. I have done independent work
9 and concluded that 39 dBA should be the maximum limit to avoid annoyance and health impacts from
10 wind turbine noise. A recent paper that George Hessler and I coauthored, which is being submitted as Ex.-
11 Forest-Schomer-21, explains how we independently arrived at these limits of 40 and 39 dBA.” Mr. Hartke
12 said that one of the acousticians put his noise level he thinks at 40 dBA based on the actual reaction from
13 neighbors and the other one put his limit at 39 dBA by pushing and pulling through the data from reactions
14 of the historical noise measurements versus reactions, and a much more scientific approach on that, and
15 that was Dr. Schomer and he was way more thorough. He referred to line 16 on page seven of 26 and read,
16 “Have some jurisdictions adopted the 39 or 40 dBA maximum limit? Jurisdictions all over the world have
17 adopted a wide range of limits. Europe and South Australia tend to have limits in the range of 35 dBA,
18 sometimes even as low as 30 dB. On the other extreme, some jurisdictions have a limit of 55 dBA. George
19 Hessler and I wrote this paper together because we thought it was important to show to the scientific
20 community that we arrived at essentially the same answer, even though we used different methods and
21 approaches to get there.”

22
23 Mr. Hartke said they wanted to talk about a study done in Massachusetts and that study is where some
24 people got together and did an analysis of some articles and publications, and at the end of the study, they
25 said there was no known connection between wind turbine noise and health problems – the wind
26 companies love it. He referred to line four on page eight of 26 and read, “Have the Massachusetts study’s
27 conclusions on adverse health effects from wind turbines held up to recent scrutiny?” He read the answer,
28 “No. In a paper to be presented and to be published in December 2013, which is being submitted as Ex.-
29 Forest-Schomer-22, we show that the Massachusetts study’s conclusions about the lack of connection
30 between human health and infrasound and wind turbine noise are flat out wrong.” He referred to the next
31 question on line 10 from page eight of 26 and read, “Do you believe that a 40 dBA limit is needed to avoid
32 adverse health effects from audible and infrasound?” and Dr. Schomer replied, “Yes. All the experts in
33 this proceeding agree that the louder the turbines are in audible noise and the larger the turbines are in
34 structure, the more infrasound will be produced.” He said the taller the wind turbine, the louder and more
35 infrasound there will be, and the reason he is pushing this is because he tuned in on the January 16, 2022
36 ELUC committee meeting, and the chairman of the ELUC committee of this County said, “hey, these
37 larger and taller wind turbines are quieter than the short ones.” He said he is telling the Board that the
38 chairman said that, and that alarmed him so much, so he wanted to make sure this was on the record
39 tonight, specifically this item, and continued to read Dr. Schomer’s answer, “The larger mega turbines
40 seem to correlate very starkly with health impacts. It is significant that in a wind farm with only eight
41 turbines,” he was talking about a Duke Energy Project in Shirley, Wisconsin. He continued reading, “three
42 families have left their homes in the Town of Glenmore,” that is in Brown County, Wisconsin, “As I
43 testified earlier, if this farm is built as designed, it is likely that the same result will occur – with or without
44 curtailment.”

45
46 Mr. Hartke said that he was going to skip a whole bunch of stuff and go to line 15 from page 11 of 26,
47 and Michael Hankard said the loudest these wind turbines are going to be is such a volume and Dr.
48 Schomer wanted to point out that the nighttime noise is louder from a wind turbine than it is in the daytime.
49 He said when people around here go cruise around and visit the wind farms, if it is daytime, they are not

1 going to catch the loudest time – it’s just not going to happen. He said that he might have complained
2 once or twice during the day when the wind turbines were noisy, but 19 out of 20 of his complaints were
3 all at nighttime; it was louder at night. He said that Dr. Schomer answered, “The Hessler data show that
4 turbine noise tends to be louder at night.” Mr. Hartke said Hessler measured noise downwind from a series
5 of wind turbines that were in line with each other, that in the daytime it was never as loud as it was at
6 night. He continued reading Dr. Schomer’s answer on line two from page 12 of 26, “Although data
7 collection of turbine noise levels during various times of the year would likely produce different average
8 sound levels, the important point is that there is a significant increase in noise levels at night which is
9 between 3 and 6 dB.” He said he was going to continue reading the next question on line four from page
10 12 of 26, “How does this relate to the requirement that nighttime levels not exceed 45 dBA?” and what he
11 is trying to do is instead of using a 24 hour noise prediction, it averages out over day and overnight. He
12 said the 24 hour prediction lets them have that lower noise level all day long to make up for the extra noise
13 at night.

14
15 Mr. Hartke referred to line 16 on page 13 of 26, and read the question, “Are bigger wind turbines better
16 for people?” and Dr. Schomer answers, “The history of wind turbines, as young as they are, is one of ever
17 increasing size. Current units go from 1.5 to 3.5 Megawatts, and bigger units can be expected in the future.
18 Larger turbines may have the advantages of greater efficiency and net profit, but they create more
19 problems for people living close by. There is strong evidence that the very low infrasound frequencies
20 produced by large wind turbines are the sources of acoustic emission that are adversely affecting people.
21 As the power generated by wind turbines grows, the blades grow and hence the tip’s speed is reduced to
22 avoid too high of an advancing blade tip Mach number,” that is so the blade tips don’t break from moving
23 so fast it could fracture. He continued reading, “According to a paper by van den Berg (2004), which is
24 being submitted as Ex.-Forest-Schomer-22, the increase due to a typical nighttime wind profile (the
25 change in velocity with altitude),” and at the last previous public hearings he had talked to the Board about
26 how the ground level noise is low, because there is no rustling of the corn, leaves, and there is nothing to
27 mask the noise at nighttime conditions when the wind is sheer and the upper wind is what is catching these
28 wind turbines and making them spin, and when that blade goes from a lower wind to where there is no
29 wind to upper higher speed wind that blade flex happens, which causes the air pressure pulse, which is
30 infrasound noise. He continued reading Dr. Schomer’s answer, “the increase due to a typical nighttime
31 wind profile (the change in velocity with altitude) was 5 dB for a wind turbine with a 58 m hub height,
32 and up to 15 dB for a turbine with a 98 m hub height.” Mr. Hartke said so here is another repeat part; these
33 taller wind turbines are going to be a huge problem for them if these things are approved. He said if there
34 is a taller wind turbine then maybe their setback needs to be instead of a regular multiplier, it needs to be
35 like an exponential multiplier – something like that. He said this is not just a double decibel, this is a triple
36 decibel when they double the height from 58 m to 98 m, it’s not quite doubled, but it tripled in noise level;
37 that is a huge problem for taller wind turbines. He continued reading Dr. Schomer’s answer, “That is, the
38 increase in low frequency energies in size and magnitude may be substantial because of this blade-loading,
39 wind-gradient effect, much greater than what is predicted for constant blade loading.” Mr. Hartke said
40 they don’t have good acoustical noise study prediction software that takes into account the upper blades
41 catching wind and the lower blades not catching wind – that is a big difference. He continued reading Dr.
42 Schomer’s answer, “The conclusion is that unless mitigation methods and strategies can be developed and
43 implemented, bigger turbines are not necessarily better. They may actually be much worse for people.”
44 Mr. Hartke said he had two short ones to talk over and this last one was the big one, and he wants to know
45 if the Board had any questions about this one before he moves on to other things.

46
47 Mr. Elwell asked Mr. Hartke if he could explain to a non-engineer mind why the nighttime noise is louder
48 than during the daytime.

49

1 Mr. Hartke said the police department doesn't get many noise complaints during the daytime, the police
2 department gets noise complaints at nighttime, because there is not much other activity going on to mask
3 and hide the noise of the party. He said there are people during the daytime jack hammering, concrete
4 trucks, and people don't call that in, but when there is a party with heavy subwoofer base, that is much
5 more bothersome and carries farther – it just doesn't cancel out. He said at nighttime, if they have ever
6 heard of something called noise inversion, noise carries at night better because the air is cooler, and it
7 carries noise farther. He asked Mr. Elwell if that was a pretty good explanation or does he want him to
8 make another example.

9
10 Mr. Elwell said thank you.

11
12 Mr. Hartke referred to the next article from Attachment B on page 15 of 26, "Big Wind Is Better Than
13 Big Oil, But Just as Bad at P.R." He said that there is this lady and she thought green energy was cool,
14 they built the wind turbines near her home, and she didn't care, then they turned them on. Mr. Hartke said
15 he didn't complain about anything until they turned on the wind turbines either. He said that a few nights
16 later, the couple could hear the wind turbines spinning and the closest wind turbine was 2,200 feet away
17 and it sounded like a jet repetitively flying over their cabin and neither of them could sleep, so they drove
18 through a snowstorm to another property that they had several miles away and felt better immediately. He
19 said similar symptoms have been reported worldwide by people who live near wind turbines, but the
20 American wind industry says their condition is psychological. He said that he produced this article today,
21 because at the last ELUC meeting when he submitted these three PDF's, the helpful person, he doesn't
22 know if it was a Board member on that committee or some staff member that came and submitted an
23 article that said the anti-wind farm noise complaining people are just angry and they have a mental
24 problem, and it was a gas lighting type of thing. He said that he has lived through this, and he can tell the
25 Board that the wind farm companies that produce those articles and push that stuff – that is complete
26 bologna. He said this article he just got done talking about, this happens all over the world where people
27 constantly have things that fly in the face of the claims from the wind companies.

28
29 He referred to the next article from Attachment B on page 21 of 26, "The Noise From Wind Turbines:
30 Potential Adverse Impacts on Children's Well-Being." He said that they are going to skip a whole bunch
31 of stuff in this article too, it talks about kids that are in school that have trains next to their schools, and
32 every time a train goes by it causes 10 minutes of lost education time, and the kids get bad scores – it's
33 proven. He said that no one did anything about the noise until they did the study and figured out that, oh
34 my gosh these trains actually do hurt the kids, and then they did something about it. He said that he lived
35 this and could personally testify this happened in his household right here. He referred to the section in
36 the article on page 23 of 26 called "When Parents Are Stressed, Children May Suffer!" and read, "Another
37 point that I would like to make concerning the impacts of noise on children's lives deals with the effects
38 noise has on their parents. There are sufficient studies linking noise to adverse health effects (Bronzaft &
39 Hagler, 2010) in adults. Even if we were to argue that the best data linking noise to well-being centers on
40 a diminished quality of life rather than specific health ailments, as noted by the World Health
41 Organization, then living near a noisy source would most likely diminish quality of life. Good health is
42 not merely the absence of symptoms, it is the ability to experience a decent quality of life. Parents
43 experiencing this poorer quality of life, or suffering from a noise-related ailment, may have less patience
44 with their children and, as a result, express more anger at their misdeeds. I need not illustrate further how
45 good parent-children relationships affect the health and well-being of children. If noise prevents a parent
46 from getting a good night's sleep because of overhead aircraft, then one could expect this tired parent to
47 be less able to deal with the obligations of parenthood." Mr. Hartke said this also applies to employees,
48 clients, government staff, ZBA members, the County Board, and local police departments. He said he
49 burned a lot of bridges because he was really angry all the time, because he was suffering from this, and

1 his kids took the brunt of it and it was extremely hard on his marriage. He said that he would like to go so
2 far as to say the wind turbine noise causes child abuse or physical harm to children, and if someone has a
3 bad day at work they could take it out on their pets when they get home.
4

5 Mr. Hartke referred to the section in the article on page 24 of 29 called “A Growing Interest in the Impacts
6 of Wind Turbine Noise.” He said that if wind turbines weren’t problematic and noisy there would not be
7 a growing interest in wind turbine noise impacts. He said Garret Keizer has a book called “The Unwanted
8 Sound of Everything We Want.” He said they want clean green energy, but they don’t want the
9 consequences of it. He read, “that while he is not an expert on wind turbine noise, he can still write as an
10 individual who personally researched the issue of noise and wind power, including the works of van den
11 Berg and Pedersen, for his book. He also personally visited residents in Maine who described how the
12 wind turbine noise affected their lives. Mr. Keizer concluded that “wind turbines produce a devilishly
13 complex form of noise that, combined with the imprudent siting of certain wind installations, is making
14 some people sick” (p.221). Additionally, Mr. Keiser, in thinking about future environmental debates,
15 states that “in debates over wind energy, noise will be front and center” (p.221).”
16

17 Mr. Hartke referred to a letter from the Superintendent of Armstrong Township High School from
18 Attachment B on page 26 of 26. He said that he may have showed the Board this once already, but he
19 can’t remember, and he thinks he sent it to the ELUC committee to make sure they had seen it in its
20 original unmolested version. He said that he went up to Bureau County, Illinois and he got cross-examined
21 under oath and all this stuff at some wind farm hearing up there. He said the attorney for the citizens was
22 asking him questions and the attorney for the wind company said that he objected to this letter, because it
23 was not relevant or a part of the docket, but he can’t remember what the attorney all said, he just objected
24 to it, because it was harmful to his cause. He said the judge/hearing officer asked him how this letter was
25 relevant, and he told him that this letter was relevant because this letter was about his children, and the
26 judge said he would allow it. He said this letter is from his children’s Superintendent, Bill Mulvaney, and
27 it says, “My name is Bill Mulvaney, and I am the Superintendent of Schools for Armstrong Township
28 High School and Armstrong-Ellis CUD #61. I also served on the wind panel that met to try and give
29 direction to the County Board on wind turbine ordinances.” Mr. Hartke said he was on there because his
30 school was going benefit hugely financially from the wind farm and was a perfect person to put on the
31 wind panel if they want wind turbines. He continued reading, “Our panel did not come up with any
32 recommended changes, but I would like to share a few thoughts with you. I have noticed that we have
33 some children in our district that appear to be having some medical issues related to the wind turbines.
34 Headaches, lack of sleep and jaw issues seem to be the most common. The students also complain about
35 not being able to sleep or not getting a full night's sleep due to sound issues. We have also been advised
36 that we will be losing a couple of families because the wind turbines were placed close to homes and the
37 families can no longer handle the flicker and noise issues. While these issues were brought up at our panel
38 discussions, I was not fully aware of the impact that the wind turbines would have to my school districts.
39 It is never a good thing when children have health issues or families have to leave their homes to get away
40 from the turbines. The revenue generated by the turbines is a blessing to our schools, but the unintended
41 consequences are real. I hope this letter sheds some light on real issues that affect districts that house wind
42 farms. I also hope that when ordinances are discussed in the future, that these issues are considered.” Mr.
43 Hartke said that this letter was not dated but it was in 2013 and the family that left the community was the
44 Hartke family, and he and his wife left Vermilion County and came to Champaign County. He said that
45 he doesn’t want them to ruin Champaign County like a lot of the Vermilion County areas that are ruined.
46

47 Mr. Hartke said that he hopes the Board doesn’t think he has come across as lecturing, aggressive,
48 provocative, giving them unneeded correspondence, or relentless, well he’s probably that he would say,
49 but he hopes he can be forgiven for that stuff after what he has been through. He said that he is very happy

1 that the Board has been very gracious with all the time they have given him, it really makes a difference.
2 He said that he hopes they can have the same amount of discussion and debate with the people that decide
3 this above them, so that way what they do here doesn't get turned upside down. He said his last notes he
4 made while sitting over there tonight is that it seems to him that if the Board just votes up or down on this
5 unlimited wind turbine height and the aircraft detection light system, that up or down vote is going to put
6 them in the same ballpark where they have IPCB noise limits, and they will be stuck with that. He said
7 that his request of this Board is to propose some serious changes, discuss, and pass, and see an amendment
8 asked from someone on this Board. He said that this is what he would like to have happen to protect
9 citizens; they want the noise to not exceed 39 dBA and he gave a lot of information for that and nobody
10 else gave anything that was contrary to that information, so he is like batting a thousand to one on this.
11 He said 39 dBA and a setback of 3,250 feet, the reason for that is because they got the study from Dr.
12 Schomer when he went to Livingston County and gave the chart that said 220 of the homes were still
13 unprotected. He said Livingston County approved a setback of 3,250 feet and they have not been sued
14 over it, and it still stands in a bunch of other counties that have copycatted it; it is a pretty safe thing to put
15 in there and not have any worries.

16
17 Mr. Hartke said that if they want a tip height conversion, that is 6.5 times the tip height, that takes care of
18 this phenomenon of wanting unlimited height wind turbines, because 500 feet is no longer commercially
19 available or whatever excuse the wind companies come up with. He said take it from Ford and Edgar
20 counties; if the citizens want wind turbines, then let them have their waivers and have the wind company
21 go lease, rent, and buy up as many homes they want to plow down and get out the way. He said don't let
22 the County Board be the middleman and give away people's use of their bedroom; let the citizens that
23 have to deal with it decide for themselves, they don't tell them what color to paint their house unless they
24 are in a homeowner's association, and they don't tell people how to do several things. He said they have
25 zoning to protect the neighbor and if the neighbor is cool with it, they should be cool with it too. He said
26 earlier one of the Board members asked about specific noise levels for infrasound and this could apply to
27 wind turbines, metal stamping businesses that they have in town, and if someone wants to do a really noisy
28 thing out in the country that happens to not be a wind turbine, and they have no way to regulate this
29 thumping, oil pumping, well drilling, subwoofer bass listening, or whatever activity they are doing. He
30 said there are some noise regulations written specifically for the infrasound levels and a way to measure
31 it, they use something called a barometric sensing machine and he actually has one of those. He said these
32 infrasound specific noise level regulations have been created for other communities, like up in Michigan
33 is one of them he knows of. He said that the guys that have written those and have consulted with the
34 communities were Rick James, Stephen Ambrose, and Robert Rand. He said that Robert Rand happened
35 to manufacture the low frequency noise measuring device that he has, and they have improved by no
36 longer having to run off of a computer; they are a standalone unit that records and measures all in one
37 compact little device and it was about \$2,500 when he bought his. He thanked the Board for all their time,
38 and he would be glad to answer any questions that they have today or any time in the future.

39
40 Mr. Elwell thanked Mr. Hartke and asked if there were any questions from the Board.

41
42 Mr. Anderson asked him what dB he came up with using his infrasound equipment in his house.

43
44 Mr. Hartke said that he thinks the decibel reading in his house from the microparameter was about 70 to
45 80 dB at these lower level frequencies, but he would have to get back to the Board on that because he
46 doesn't want to misspeak. He said he can't promise that is the exact number, but he would like to tell the
47 Board that is what he remembers.

48
49 Mr. Anderson said okay and asked him to recommend an infrasound noise level.

1
2 Mr. Hartke said he thinks 50 dBC would be a good maximum limit for the infrasound lower level from
3 the property line, so someone could enjoy all their property. He said that a dBC is something that can read
4 out on less expensive testing and measuring equipment, and 50 dBC would be a good number he thinks.
5
6 Mr. Anderson asked if the wind turbine blades cavitate and have bubbles popping around them.
7
8 Mr. Hartke asked when he is talking about cavitation is he talking about the turbulence behind the blade
9 that causes moisture in the air to become condensation.
10
11 Mr. Anderson said no, he comes from a submarine culture, and they were always measuring the cavitation
12 of these blades of propellers as a function of depth and speed.
13
14 Mr. Hartke said when he thinks of cavitation, he thinks of when a blade is moving so fast it causes such a
15 negative pressure behind it that it causes water to vaporize behind the blade and that would start to pull
16 off the surface and damage the blade, and he asked Mr. Anderson if that was what he was referring to.
17
18 Mr. Anderson said yes.
19
20 Mr. Hartke said he thinks the reference from Schomer is talking about the blades getting longer, bigger,
21 taller, and needing to slow down the rotation. He said Dr. Schomer called it the Mach speed of the tip of
22 the blade and the Mach speed has to be under a certain level before it would start damaging or delaminating
23 the tips, he thinks that is what he meant by that.
24
25 Mr. Elwell asked if there were any other questions from the Board. Seeing none, he thanked Mr. Hartke.
26 He called on Stephen Smith from the audience.
27
28 Mr. Smith said he just wanted to ask if cold or hot temperature weather had different effects on the noise
29 level.
30
31 Mr. Elwell said that unfortunately with this case they are not able to cross-examine the witness, but if Mr.
32 Hartke would want, he could come back to the testimony microphone and state a little bit more.
33
34 Mr. Hartke said that he thinks during all ZBA public hearings anybody should be able to cross-examine
35 anybody else, he thinks they should check the rules on that.
36
37 Mr. Elwell said this is not an Administrative Case.
38
39 Mr. Hartke said okay, so since this is a public hearing the public can give statements only and no one can
40 ask questions except for Board members.
41
42 Mr. Elwell said that is correct.
43
44 Mr. Hartke said it must have been an administrative hearing when the solar company was here, and they
45 were able to cross-examine the petitioner and stuff.
46
47 Ms. Burgstrom said an administrative hearing is for Special Use Permit and Variance cases, but not for
48 Text Amendment cases.
49

1 Mr. Hartke said he understood and thanks for clarifying that, because he would have been asking questions
2 and jumping in there if he ever had one. He said the question was cold versus warmer temperatures; in the
3 wintertime it is noisier, and it is due to not only temperatures, but to cloud cover as well. He said in the
4 wintertime when they are living in the wind farm or on a cold day where it was rainier and more overcast,
5 it tended to trap the noise closer to the ground and be much more impactful, because it doesn't just let the
6 noise dissipate and spread in all directions, it collapses noise and wedges it into a smaller air space. He
7 said the other thing with the cold versus warm weather was during cold weather, the fields and ground
8 around them are more susceptible to reflect off the ground more. He said there is no corn, beans, and
9 sound deadening follicle hair or whatever they want to call it, sticking up out of the ground that would cut
10 down on noise. He said that during wintertime on cold and wet days it would be much noisier than a warm,
11 sunny, and nice day.

12
13 Mr. Elwell thanked Mr. Hartke and asked if anyone else would like to testify in this case; if so they would
14 need to sign the Witness Register.

15
16 Roger Henning Jr., 1664 East County Road 600 North, Philo, and said he would like to thank the Board
17 for hearing him tonight, but he has heard some comments made about the setback of 3,250 feet from a
18 principal structure on a residence and that has really got him concerned. He said that he has bought a
19 couple pieces of property over the years for his children and grandchildren to maybe build a house on
20 someday. He said there is no house or structure there now, so they need to kind of think of that down the
21 road for future generations. He said that he thinks the setback being from a property line, then that person
22 should have the right to decide whether they want something within 3,250, 4,000, or 5,000 feet from their
23 property line, not a structure. He said he has heard that several times tonight and that has really got him
24 concerned about where they are leaning toward in the Board's eyes. He said that is basically all he wanted
25 to say, and he just wanted to make sure he was heard.

26
27 Mr. Elwell thanked Mr. Henning and asked if there were any questions from the Board. Seeing none, he
28 called Todd Herbert to testify.

29
30 Mr. Herbert introduced himself and said his address was 435 CR 1700E Philo. He said he was a concerned
31 citizen and would like to maintain the height limit under 500 feet in Champaign County, and at least a
32 3,250-foot setback, or six times the height from the property lines. He referenced Mr. Roger Negangard
33 and said he also felt the setback should be measured from the property line of someone who opposed the
34 plan, and not the dwelling. He referred to Ms. Ellis's idea and said he agreed with the 1,000 foot setback
35 for those who agree. He said he thinks it was a bad decision for future property owners because they might
36 not live there forever, and the property would lower in value. He said the setbacks, the shadow flicker,
37 and the noise pollution were all disturbing. He said there were health issues affecting a lot of people from
38 that. He said he agrees with the mile and a quarter Mr. Anderson spoke about. He said it would be great
39 but then referred to the ag mitigation part. He thinks the aircraft detection system was a valuable addition.
40 He said he was the drainage commissioner and there were several others in the room. He said he spoke to
41 Mr. Hall about a month or so ago and his comment to him was to have them put in new tile. Mr. Herbert
42 said that would be great if they were able to do that, but putting in new tile was a huge expense. He said
43 they would not be farming the ground unless there was undamaged drainage tile present. He said everyone
44 knew the county was swamp ground 100 years ago. He said the Board should at least put in some language
45 about drainage and drainage tiles. He said he thinks there should be setbacks from the drainage tile lines.
46 He said most of the Drainage tile lines in his district were mapped out already and it would not be difficult
47 to locate them all. He said he wants setbacks from that because some of those tiles are sixty- to seventy-
48 year-old clay and were very fragile. He said a 100-ton crane moving around would not do them any good.
49 Mr. Herbert said he would like to see some language in there about drainage.

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Mr. Elwell asked if there were any questions from the Board.

Mr. Anderson asked to help him understand why the drainage was important.

Mr. Herbert said 100 to 150 years ago, Champaign County was swamp ground. He said the pioneers worked hard to drain the ground by digging ditches and putting in clay tile by hand. He said without that drainage they could not farm, and we would have swamp ground like Douglas County right now. He said there was a big issue when building their wind towers. He said they cannot farm if the ground is mud and swamp.

Mr. Anderson asked what that has to do with acoustics.

Mr. Herbert said that was not on the acoustics end of the argument. He said he was referring to the drainage issue, the ag mitigation part. He said he hoped everyone there would make the right decision for the taxpayers, homeowners, and Champaign County residents.

Mr. Elwell asked if there were any questions from the Board. He thanked Mr. Herbert. He asked if anyone else would like to testify in this case. Seeing no one, Mr. Elwell entertained a motion to close the Witness Register.

Mr. Roberts moved, seconded by Mr. Randol, to close the Witness Register. The motion carried by voice vote.

Mr. Randol moved, seconded by Mr. Roberts, to have a 7-to-10-minute break and reconvene 10-minutes after the hour. The motion carried by voice vote.

Mr. Elwell called the meeting back to order at 8:12 p.m. He asked how the Board would like to proceed.

Mr. Wood said they had two choices in front of them and if they don't do anything it would just default to what they already had. He said everything he heard and read about issues surrounding public health and noise was that separation distance was more the issue than height of the tower. He said the distance they currently have was probably not acceptable considering the number was established back in 2010. He thinks that it needed to be upgraded based on the knowledge and information they have now. He said a lot of people were speaking to the 3,000 to 3,250 number in terms of feet. He said from everything he read that looks as if that distance was the minimum required to keep the decibel level to an inaudible level from any residence. He said establishing the distance from the property line does not make sense to him because the county is chopped up into many little sections. He said the myriad of shapes, sizes, and distances of lots within the county would be a tough one to manage. He said the real issue was ensuring the distance is from the property line so the people who live there can be well assured there was not going to be a problem or nuisance issue with the noise coming from the wind turbines. He said he could not speak on the infrasound issue because there does not seem to be nearly as much research on that topic. He said that seemed to be where the health problems were coming up. He said without having more information on it, it would be tough to decide. He said if he had to draw the line, he would draw it at 3,250 feet to ensure they would mitigate that as much as possible. He said the height of the towers remaining under 500 feet and if it's 3,250 and anything below 500 feet, you maintain that level and anything above that you maintain the ratio of six and a half to one. He said he can't say scientifically if that will cover the additional noise of larger wind turbines, but he would suspect that once you get up to a certain height like around 800 feet, the separation distance would be close to a mile. He said he did not know if anyone around here lived less

1 than a mile or more away from anybody else, so that would basically mean you have to have a mile radius
2 all around the turbine. He said he does not know if there were any places in Champaign County to even
3 satisfy that requirement. He said the height is really restricted by the separation distance at that level. He
4 said Edgar County did not put a limit on that, but they did not have the six and a half to one on it either.
5 He said that's what he wanted and the direction he would probably be inclined to go. He said it would
6 probably restrict wind farms to a large extent, like how many they were able to put out there. He said
7 Champaign is a very densely populated county compared to a lot of the surrounding counties. He said the
8 thing that would make the most sense is to put the turbines in an area with less population density, so you
9 don't have health issues or anything else. He said he can only imagine growing up in the Northeast and
10 the kind of health issues they have there with such a high population density. He said it was hard to find
11 any location that was not within a proximal distance from a residence. He said the other issues on the
12 amendment are perfectly good issues and already have requirements for the drainage issues which was
13 established that last time one of these was installed here. He said there was also a side agreement for the
14 roads to be taken care of. He said he did not see any problems with the drainage when he drove out to
15 California Ridge. He said of course it has only been ten years since it was put in. He said he thinks they
16 had a gentleman down from Royal talk about that and he did not seem to have any issues with it. He said
17 the thing he has not heard yet was testimony from someone who lives next to a windfarm come down and
18 tell us what kind of issues they had. He said he would like to hear from somebody like that.

19
20 Mr. Elwell asked Mr. Wood where in his opinion does the current ordinance fail. He said they already
21 have one wind farm in Champaign County and have not heard any testimony from residents surrounding
22 it. He asked if that was evidence towards the ordinance doing its job.

23
24 Mr. Wood said he does not have an answer to that because he does not know. He would like to hear from
25 some people up there as to any issues they may have had. He said given the information and what he has
26 read, they might just be putting up with it. He said he cannot address that and if there were any complaints
27 filed about it, they would know.

28
29 Mr. Hall said that it was pointed out to him recently that there are two windfarms seeking landowners to
30 sign-up for in Champaign County, one south of Sidney and Philo and one up near California Ridge. He
31 said it was pointed out to him that there was not anyone from the northern part of the county coming to
32 give their concerns, but the folks south of Sidney and Philo have. He said he does not know because there
33 are two windfarms being drummed up right now.

34
35 Mr. Anderson said he was looking at page thirty-one of forty-two in the draft, paragraph eighteen at the
36 bottom, wind turbine noise effects on human health, slide thirty. He said the literature said that between
37 one half and two-and-a-half-mile setback distance for industrial wind turbines, research most often
38 recommends one and a quarter mile, which is 6,640 feet.

39
40 Mr. Elwell said we have testimony for between one point five and two point five miles. He asked why not
41 two point five miles.

42
43 Mr. Anderson said he tends to be more on the generous side.

44
45 Mr. Elwell said wouldn't two point five miles be more generous.

46
47 Mr. Anderson said yes.

48
49 Mr. Elwell said they were given information understanding it to be truth and arbitrarily setting this limit.

1 He asked what the difference between one and a quarter and a two point five mile limit was.
2
3 Mr. Anderson said it was the only way to handle industrial wind turbine noise effects.
4
5 Mr. Elwell said they have not had any complaints from the residents who currently live next to a wind
6 farm.
7
8 Mr. Anderson said that was not true.
9
10 Mr. Elwell said not from the one here in Champaign County. Mr. Elwell asked Staff.
11
12 Mr. Hall said there has been none in Champaign County, from 2012 to present.
13
14 Mr. Bates said this was something new brought before the Board to revisit and update what they were
15 currently going through. He asked Mr. Hall if that was how it was presented.
16
17 Mr. Hall said the only thing the Board was asked to update are the things in the legal advertisement.
18
19 Mr. Bates asked if Mr. Thorsland asked to have things revisited and be updated to current standards.
20
21 Mr. Hall said not everything. He said he asked for ADLS, and it wasn't what Mr. Thorsland asked for. He
22 said it was what the committee voted on. He said the committee voted to add the right to farm resolution,
23 amend the separation to a multiple of height for two for participating and two point four for
24 nonparticipating, and they voted for requiring aircraft detection lighting systems, and they voted for
25 requiring the Agriculture Impact Mitigation Agreement, and that is all they voted on. He said that is all
26 the legal advertisement had. The legal advertisement said Champaign County was going to delete the 500-
27 foot maximum height and move to no height and change the separation from 1,200 feet to two point four
28 times the maximum.
29
30 Mr. Bates said so therefore opens the discussion to what we feel it needs to be.
31
32 Mr. Hall said they may discuss and formulate their opinions, but there has been a legal advertisement for
33 those changes. He said more importantly, it is what he was told to bring to the ZBA. He said the discussion
34 about how good the 3,250 feet separation would be a message they could give to the County Board but
35 said again that is not what was advertised. He said they cannot change that at this point. He said he would
36 not send out a legal advertisement saying that without direction from ELUC.
37
38 Mr. Bates said he was trying to understand the process.
39
40 Mr. Elwell said they could now make that recommendation to the County Board.
41
42 Mr. Bates said now back to what Mr. Elwell said, how do they determine between one and a quarter and
43 two point five miles.
44
45 Mr. Hall suggested that could be discussed at another public hearing. He said he doesn't know what the
46 Board Members are suggesting. He asked if they were going to recommend a denial and base their decision
47 on the idea they heard enough testimony to determine the current basic separations are inadequate and do
48 not have confidence in them. He said it does not matter what the separation is because there was a noise
49 limit. He said he did not know if the Board was convinced the noise limit was inadequate. He said ideally

1 noise limit and separation were coordinated. He said there were lots of things they could discuss, but
2 eventually they need to vote on the changes that were advertised. He said the Staff would be happy to
3 draft those statements but to date have not received any guidance.
4

5 Mr. Randol said having not been involved in the original ordinance drafting that he could say that he was
6 not happy with the current separation distance. He felt it needed to be greater and thinks it should be
7 distance from the property line, and not structures. He said there are two instances; one, like the gentleman
8 who said in the future he would like his children and grandchildren build on his property and if there was
9 a wind tower already there than they would be very limited to where they could possibly build and by
10 property line that wouldn't be the case, and two, he doesn't think there should be an unlimited height. He
11 said they do not know what will happen in the future and they might have a tower that is 1,000 feet tall
12 and what kind of a noise impact that will have. He said now at 500 feet, they had all kinds of information
13 available to them on what the noise impact was. He said he was not comfortable with those two the way
14 they were being presented to the Board today. He said that he did not have a problem with everything else
15 that was in there, increased fees, the mitigation, etc.
16

17 Mr. Hall asked Mr. Randol if there was a tower height he would be more comfortable with.
18

19 Mr. Randol said under 500 feet.
20

21 Mr. Hall asked if Mr. Randol read all the information provided about wind tower heights and if he still
22 agreed that the under 500 foot limit was reasonable.
23

24 Mr. Randol said yes.
25

26 Mr. Hall said okay.
27

28 Mr. Randol said that was his opinion.
29

30 Mr. Herbert asked if he could add to that.
31

32 Mr. Elwell said go ahead.
33

34 Mr. Herbert said he thinks they should stay at under 500 feet and that every case should be brought before
35 ZBA. He does not think it needs to be an unlimited height and wants to hear each case individually. He
36 said if someone wanted to come and say they want a 1,000 foot tower, then he thinks we need to hear a
37 case about a 1,000-foot tower. He said he does not want to give a shoo-in with an unlimited height. He
38 said he would also support adding distance from the property line as well. He said a piece of land was a
39 large investment and he would not want to take options away from his children.
40

41 Mr. Wood said he assumed if they voted on this then they could have four of the amendments pass and
42 vote no to the tower heights and keep that as it is.
43

44 Mr. Hall said that is why they divided it up into parts, but the Philo protest is against the entire thing.
45

46 Mr. Wood said Amendment one, three, four, and five are fine from what he was hearing. He said they just
47 need what to send back to ELUC and tell them they need to do more research on the separation distances
48 and the height issue.
49

1 Mr. Hall said at some point he would like the committee to vote on the height and see if the
2 recommendation from the Board was to keep it at under 500 feet. He said if that was what the Board votes,
3 then it should be entered into the Finding of Fact.

4
5 **Mr. Randol moved to keep the 500 foot height limit.**

6
7 Mr. Elwell said they have not had any complaints from residents living next to California Ridge. He said
8 he does not agree with an unlimited height. He said he doesn't know if increasing the distances was going
9 to lead to an increase in being good neighbors. He said he felt the role of this Board was to make sure his
10 piece of ground and your piece of ground that we can enjoy both pieces kind of thing. He asked if
11 increasing the distance does not unfairly punish one person over the other when there was not an issue
12 between both parcel owners.

13
14 Mr. Herbert said they were only talking about the past 10 years.

15
16 Mr. Elwell asked Mr. Hall if it was true there were no complaints received in the last 10 years.

17
18 Mr. Hall said the only complaints he could recall were complaints about small drainage problems which
19 always got fixed.

20
21 Mr. Bates asked if he could infer increased wind tower height would equal an increased number of wind
22 turbines, in which case there would be an increased number of complaints. He said they were basing
23 something on something that was ten years old and people have grown to live with. He said if something
24 new moves in people disagree with change. He said the change would be the wind towers from something
25 they were already doing.

26
27 Mr. Elwell said he was not advocating for changing the separation or the height. He said what he was
28 advocating for was if it's not broke don't fix it.

29
30 Mr. Herbert said they have ten years' worth of data they didn't have before.

31
32 Mr. Elwell said they have not been presented with a problem.

33
34 Mr. Randol said they do not have a windfarm yet either. He said not to the extent they were going to have.

35
36 Mr. Elwell said with their current ordinance they were going to have more. He said he does not know, but
37 there probably was a reason why ELUC sent this to us.

38
39 Mr. Herbert asked how they would undo it once it was built. He said now was the time to talk about that.
40 He said he can see how Mr. Elwell said it was unfair to limit the setbacks now, but today was the day and
41 not ten years ago.

42
43 Mr. Elwell said if they had a laundry list of people who were complaining than absolutely, but they do
44 not. He said all the information has come in from surrounding counties and he doesn't know what their
45 setbacks are. He said he doesn't know from what specifics they were formed and did not know what they
46 had experienced. He said the wind farms already in Champaign County have not produced an issue. He
47 said he's advocating to keep the ordinance as it was because there haven't been any reported issues thus
48 far.

49

1 Mr. Randol said so when the wind farm was built in general and issues arise, they should address the
2 problems then.
3
4 Mr. Elwell said wind farms could already be built now with the current ordinance. He said if they wanted
5 to build something bigger, that was why they were there. He said that was why he was advocating for the
6 ordinance to stay the same.
7
8 Mr. Bates asked Mr. Elwell if a wind farm company could receive a special use permit for a decreased
9 setback.
10
11 Mr. Hall said they could make any request they wish but would most likely not have any luck.
12
13 Mr. Herbert asked what the difference in population density was between the surrounding California Ridge
14 area and the Southern part of the County.
15
16 Mr. Hall said he has not done that calculation.
17
18 Mr. Elwell asked if someone advocating for an increase in separation could tell him where it affected their
19 citizens and give him an instance where there was an issue, he would feel like they were doing good for
20 the county by addressing an actual problem. He does not believe an unrestricted height limit was in the
21 best interest of the county.
22
23 Mr. Anderson asked if by separation he meant setback.
24
25 Mr. Elwell said yes.
26
27 Mr. Anderson said okay.
28
29 Mr. Elwell asked why a member of the Board would think the current 1,200 foot setback distance for
30 nonparticipating households was not enough and why they want to triple it.
31
32 Mr. Herbert said that was the idea. He said they opened this up for discussion and does not understand
33 why they want to take the chance of finding out if there would be more issues by waiting for complaints.
34 He said once they are built, they are not being taken down.
35
36 Mr. Elwell asked Mr. Herbert if ten years was not enough time for complaints to come in.
37
38 Mr. Anderson asked how you can complain about something you do not have.
39
40 Mr. Elwell said we do have the California Ridge Wind Farm in northern Champaign County with the
41 original Zoning Ordinance and have not had any complaints. He said he was advocating for not changing
42 something they have not received any complaints over. He said he does not think it is prudent to have
43 unlimited height.
44
45 Mr. Anderson said yes.
46
47 Mr. Elwell said without the unlimited height, they do not need the distance.
48
49 Mr. Anderson said but you do need distance from the infrasound range.

1
2 Mr. Elwell said we cannot point to one instance in Champaign County.
3
4 Mr. Bates asked if Mr. Hartke could come back and explain it because it was what they were talking about
5 for the last five sessions.
6
7 Mr. Elwell said with California Ridge...
8
9 Mr. Bates asked if they are going to base the world off California Ridge. He asked if that was what Mr.
10 Elwell was telling him. He said that does not make any sense.
11
12 Mr. Elwell said this was an answer looking for a problem.
13
14 Mr. Anderson said he leans more on the side of caution.
15
16 Mr. Hall asked Mr. Randol for his justification for leaving the tower height at under 500 feet because Mr.
17 Randol previously began to start a motion.
18
19 Mr. Randol said he believes it should remain under 500 feet because of all the testimony they have heard
20 from four nights of meetings. He said the public is against anything higher and we should represent the
21 public.
22
23 Mr. Herbert asked for clarification on memorandum number two, page three in red, letter B.
24
25 Mr. Hall confirmed the feet before meters was a typo and apologized for that. He confirmed the height of
26 the California Ridge Wind Farm would be 492 feet including the height of the tower, and half the diameter
27 of the propeller.
28
29 Mr. Bates asked how they came up with the increased wind farm fees. He asked if that was exponential,
30 or just where they were at today compared to ten years ago.
31
32 Mr. Hall said he believed the increase was based on the increase in CPI.
33
34 Mr. Wood said he thinks the only thing they must vote on right now was the motion to keep the maximum
35 allowed tower height under 500 feet. He said but from what he understood, they cannot vote to change the
36 separation distance. He said they could only make a recommendation back to ELUC. He said they should
37 vote to do that, and then vote on the other four amendments.
38
39 Mr. Hall said what he was thinking was there would be two statements added to the Finding of Fact; one
40 would be something to the effect that ZBA is convinced that the maximum allowed wind tower height of
41 500 feet should be retained. He said a second statement would be about separations; the ZBA is convinced
42 that the minimum required setback separations to principal structures is inadequate and should in fact be
43 increased to 3,250 feet from both property lines and dwellings. He said now he knows what the County
44 Board will ask: why 3,250 feet. He said read the minutes, read the findings, and see what was discussed
45 hundreds of times. He said we can add that to the Finding of Fact if at least four Board Members agree.
46 He said ZBA just needs to get something in to let the County Board know what they are thinking to help
47 them.
48
49 Mr. Wood asked for clarification on the sound limit out there. He said the only other thing he would

1 suggest telling the County Board was to have the separation distance at a level that ensured the health and
2 safety of the public. He said not necessarily for California Ridge, but the data gathered from across the
3 county.

4
5 Mr. Hall asked if they were looking at a third statement saying ZBA is convinced the Illinois Pollution
6 Control Board noise limits were inadequate for protecting public health and safety.

7
8 Mr. Wood said he doesn't think the Illinois Pollution Control Board addressed it.

9
10 Mr. Hall said the Pollution Control Board set the noise limit the Zoning Ordinance is based on right now.

11
12 Mr. Wood said yes, but they were just addressing the noise level. He said they were not addressing where
13 that noise level would be met and what distance. He said stronger winds are going to produce more power
14 and more power equals louder wind compressions coming off the fan. He said to ensure it would not cause
15 a problem out there, they need to make sure they are just beyond that level. He said it was a guess right
16 now on what that limit should be.

17
18 Mr. Hall asked what limit he was referring to.

19
20 Mr. Wood said the separation limit of 3,000 feet, or 3,250 feet, whatever they end up going with. He said
21 it was important to find out where they could guarantee the sound level would be below a 39 decibel level.

22
23 Mr. Hall said okay and that was his point. He said that they want a noise limit of 39 dba rather than the
24 Pollution Control Boards noise limit.

25
26 Mr. Wood said yes.

27
28 Mr. Hall said okay.

29
30 Mr. Wood said 3,000 feet would 99% of the time guarantee the setback distance would be below that dba
31 level. He said 1,000 feet would not do it in his opinion.

32
33 Mr. Hall asked if the Board wanted to recommend a noise limit.

34
35 Mr. Elwell asked who they were to say 39 or 40 dba. He asked if the Illinois Pollution Control Board
36 should be the entity to take up this question.

37
38 Mr. Randol said yes, that was not their business.

39
40 Mr. Elwell said specifically to have the 39 dba number.

41
42 Mr. Randol said they have a right to say 40 dba if that was what their information said, and if their
43 information said 39 dba than they would have the right to say that. He asked who tells them what to do,
44 the EPA. He said no one tells them what to do. He said if they wanted 39 dba than they should be able to
45 put that into their ordinance.

46
47 **Mr. Bates moved to keep the current maximum allowed wind tower height at less than 500 feet, and**
48 **increase the setback distance to 3,250 feet from the property line, and put the noise limit at 39 dba**
49 **if Mr. Randol retracted his previous motion.**

1
2 Mr. Anderson asked about the infrasound. He said there was an 80 dba limit requirement.

3
4 Mr. Elwell said that was what his problem with this was. He was unsure with all the different numbers
5 being mentioned.

6
7 Mr. Bates said he agreed with Mr. Elwell and that discussion was opening a whole other can of worms,
8 but he said they had a motion before them right now and that was to keep the maximum allowed tower
9 height to be less than 500 feet and to make a recommendation to ELUC.

10
11 Mr. Anderson said he would not support anything less than the 3,250-foot setback, and he would support
12 keeping the maximum allowed tower height at less than 500 feet.

13
14 Mr. Randol said the 3,250 number would only be a recommendation.

15
16 Mr. Elwell asked if they should go one-by-one with the 500 feet and then the next one they could
17 recommend the 3,250 feet. He said there could be at least one person who would say no to the 3,250 feet.
18 He said to Mr. Nolan that Mr. Randol and Mr. Wood have already seconded the 500 feet.

19
20 Mr. Randol said yes, that was the motion he made with the recommendation the County Board to look at
21 and change the separation distance. He asked Mr. Hall if he said they could add that as a recommendation.

22
23 Mr. Elwell asked if they could take it one at a time.

24
25 Mr. Randol said he thought Mr. Elwell was being argumentative with each of them.

26
27 Mr. Elwell said he was trying to make it to where they gave this to ELUC as a check, check, check, check
28 and not everything all together.

29
30 Mr. Herbert asked if Mr. Elwell was suggesting voting on each individual item and continue to put in the
31 suggestions on each individual item.

32
33 Mr. Elwell said yes. He liked Mr. Randol's original motion and believed it would be the right way to
34 present this to ELUC.

35
36 Mr. Randol said that was fine.

37
38 Mr. Elwell asked Mr. Randol to re-state his motion.

39
40 **Mr. Randol moved, seconded by Mr. Roberts, to keep the maximum allowed wind tower height to**
41 **be less than 500 feet.**

42
43 Mr. Hall said if they were to vote on this it would be a recommendation of denial for Part 2. He said they
44 would not need to add to the Finding because they were recommending keeping it the way it was.

45
46 **The motion passed by voice vote.**

47
48 Mr. Elwell asked Mr. Hall if they move on to the separation next.

49

1 Mr. Hall said the separation can be nothing more than a statement added to the Finding of Fact as item 21,
2 the ZBA is convinced that the existing minimum required separation to principal structures is inadequate
3 and in fact should be increased to at least 3,250 feet from both property lines.
4

5 Mr. Randol said there is another reason to keep it from the property line. He said if you went by structure
6 and someone wanted to rebuild their home bigger, or in a different location on the lot, they would be
7 limited by the location of the wind tower.
8

9 Mr. Hall said if the Board wanted to add Item 21 to the Finding than that would take care of the separations.
10

11 **Mr. Bates moved, seconded by Mr. Wood, that the ZBA is convinced that the existing minimum**
12 **required separation to principal structures is inadequate and in fact should be increased to at least**
13 **3,250 feet from property lines. The motion passed by voice vote.**
14

15 Mr. Hall asked if they wanted to add a statement regarding noise limit.
16

17 Mr. Wood said yes.
18

19 Mr. Hall read what would be Item 22 added to the Finding of Fact; that the ZBA is convinced that the
20 existing Illinois Pollution Control Board noise limit is inadequate and a noise limit of 39 dba at the
21 property line would better protect Champaign County Residents. He asked if there was a motion and a
22 second on that.
23

24 Mr. Anderson said he thinks they should say what kind of noise that would be.
25

26 Mr. Hall asked what the Board would like to do with that. He said just to be clear they only needed four
27 affirmative votes for an action and not all ZBA members needed to agree with that action.
28

29 Mr. Anderson said 80 dba, the slope on the noise curve points upward.
30

31 Mr. Hall said he thinks if the noise level was 39 than overall the lower frequency sounds would also be
32 lower.
33

34 Mr. Anderson said no. He said you can't hear them, but you can feel them. He said 12 cycles per second
35 would be in the range of 80 dba.
36

37 Mr. Bates asked Mr. Anderson if they needed a 39 dba noise limit and add 80 dba for infrasound. He asked
38 if he wanted both.
39

40 Mr. Anderson said yes, and it takes special equipment for the infrasound because measures wave lengths
41 from me to Mr. Wood.
42

43 Mr. Elwell said his recommendation was to vote on what they have on the table because he thinks there
44 would be at least four supporters of a 39 dba noise limit. He said they could certainly entertain a
45 recommendation for the 80 dba infrasound noise limit separately instead of putting them together. He said
46 they are talking about two different types of noise.
47

48 Mr. Anderson said yes.
49

1 Mr. Hall said okay, so they could go back and say 39 dba from the property line for audible noise and
2 80db for infrasound. He said this is a recommendation from ZBA at this point. He said he thinks they
3 should speak with a noise engineer to make sure they were being consistent, but that would get the message
4 across now.

5
6 Mr. Elwell said he thinks it would be better to vote twice than combine them. Mr. Elwell entertained a
7 motion.

8
9 **Mr. Herbert moved, seconded by Mr. Wood, that the ZBA is convinced that the existing Illinois**
10 **Pollution Control Board noise limit is inadequate and a noise limit of 39 dba for audible noise at the**
11 **property line would better protect Champaign County Residents. The motion passed by voice vote.**

12
13 Mr. Elwell entertained a motion.

14
15 **Mr. Anderson moved, seconded by Mr. Randol, that the ZBA is convinced that the existing Illinois**
16 **Pollution Control Board noise limit is inadequate and a noise limit of 80db for infrasound at the**
17 **property line would better protect Champaign County Residents. The motion passed by voice vote.**

18
19 Mr. Hall said the only other thing to do was for the Board to vote on Items one, three, four, and five. He
20 said they could do that as an omnibus motion, or individually.

21
22 Mr. Randol said he doesn't know that there were any issues when discussing those items.

23
24 **Mr. Randol moved, seconded by Mr. Bates, to accept items one, three, four and five of the agenda.**
25 **The motion passed by voice vote.**

26
27 **7. New Public Hearings- None**

28
29 **8. Staff Report – None**

30
31 **9. Other Business**

32
33 **A. Review of Docket**

34
35 Mr. Elwell asked if there was any other business.

36
37 Mr. Randol said he would like to thank everybody for their orderly participation. He said it made it much
38 more pleasurable to sit on the Board.

39
40 Mr. Elwell said absolutely.

41
42 Mr. Elwell asked if there were any absences coming up.

43
44 Mr. Wood said he would be gone the 16th of June.

45
46 **10. Adjournment**

47
48 Mr. Elwell entertained a motion to adjourn the meeting.

49

1 **Mr. Roberts moved, seconded by Mr. Bates, to adjourn the meeting. The motion passed by voice**
2 **vote.**

3
4 The meeting adjourned at 9:25PM

5
6 Respectfully submitted,

7
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9
10 Secretary of Zoning Board of Appeals
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