

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Highland Wind Farm, LLC for a
Certificate of Public Convenience and Necessity
to Construct a 102.5 MW Wind Electric
Generation Facility and Associated Electric Facilities, Docket No. 2535-CE-100
to be Located in the towns of Forest and
Cylon, St. Croix County, Wisconsin

DIRECT TESTIMONY OF JOSEPH YUNK

Q. Please state your name.

A. Joseph Yunk

Q. What is your current address?

A. N2630 Townhall Road, Kewaunee, WI

Q. How long have you lived there?

A. Since October, 2009

Q. Do you have a family living there with you?

A. No, I live alone.

Q. What is the purpose of your testimony?

A. I am testifying to provide the Commission with my personal experience living near the Glacier Hills Farm in the Town of Scott, Columbia County, Wisconsin.

Q. Where did you live before your present residence?

A. I lived at north 7905 Count Trunk P, Algoma, Wisconsin.

Q. Why did you move?

A. That house was located in the Wisconsin Public Service Corporation's wind farm in the Town of Lincoln, in Kewaunee County. I moved to get away from the wind farm because it made living there unbearable. I had a wind turbine just about 1300 feet from my house. As soon as the wind farm began operating in the summer of 2000, I experienced disturbing noise, sleeping problems, and terrible

Public Service Commission of Wisconsin
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shadow flicker. The turbines made me feel irritated and uneasy; I was physically very uncomfortable. Living in that house was miserable, but that farm had been my home for all of my then 54 years and I hated to leave. It was very emotional for me, and very upsetting.

I worked nights at the paper mill in Green Bay and it was nearly impossible for me to get a good night's sleep when the turbines were running. I was constantly sleep deprived and the irritation of the shadow flicker during the day and the noise convinced me I had to move for my own good. The noise was worse at night when it was often the only significant noise; during the day other noises tended to lessen the wind turbine somewhat, but it was still very noisy.

No matter which way the wind blew I could almost feel the noise hit me. I couldn't stand to work outside, and I've worked outside all my life.

The shadow flicker was particularly bad every March, when the sun was at certain angles. The flicker came through my bay window, on the west side of my house, and it was very disturbing for me. It was like a constant flashing light, and it was almost impossible to concentrate or think clearly.

I was also losing my beef cattle. Before the turbines began operating I had a healthy herd, but soon afterwards, my cattle started to become ill. One by one, they stopped eating, and a couple of days later they would go down and die. Nothing changed in terms of their feed or care. I ended up selling the few remaining cattle and lost about \$5000 worth of livestock over two years. I had previously not had any similar problems.

Q. Did you sell your home?

A. I put up with these problems for several years and after a while I contacted the company and asked them to buy my home, since they had already purchased two homes in our community and razed them. The company offered to buy me out, but the price they were offering was way below market value. The company offered me only \$110,000. I finally sued the company in court and after several years of litigation, they finally agreed to pay \$163,000 for my house and attorney fees. After I paid the attorney, I netted \$158,000 for the house.

Q. What became of the house, if you know?

A. The utility subsequently sold it for \$112,000.

Q. When did you move?

A. I was finally able to move in October 2009.

Q. Have the problems you were experiencing gone away?

A. Yes, after living with those turbines for more than nine years, I now can sleep well, and there is no shadow flicker. However, I am worried, because now another wind farm is being proposed for my new neighborhood, and I am afraid I will go through all the same problems again. My experience has convinced me that wind turbines should be at least 1.5 miles from property lines in order to protect human health.

Q. Is your testimony in the matter true and correct to the best of your knowledge?

A. Yes.

Q. Does this conclude your testimony?

A. Yes.

Ex. 41

PSC REF#:171130

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Docket No. 2535-CE-100

Public Service Commission of Wisconsin
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DIRECT TESTIMONY OF ANN WIRTZ

1 Q. Please state your full name and address.

2 A. My name is Ann Wirtz. My current address is 324 Oakview Circle, Oakfield, WI
3 53065.

4 Q. What is the purpose of your testimony?

5 A. My family and I lived in the midst of the Forward Wind Energy Center in from
6 1997 to 2009. Our house was located less than 1300 feet from two turbines and I
7 wanted to share how the turbines crippled both our health and our financial
8 situation. Exhibit 1 shows pictures of our house to illustrate the proximity to the
9 turbines.

10 Q. Please explain what your life was like prior to the turbines being erected near
11 your home.

12 A. My husband and I moved to our property in 1997. We purchased an old country
13 farmhouse on eight acres of land inside what was to become the footprint of the
14 Forward Wind Energy Center. At the time of the purchase, we both were excited

1 to be able to live less than a few miles from where we both had grown up. We
2 looked forward to raising our children in the country.

3 **Q. What kind of work had you done to improve your home before the wind**
4 **turbines were erected?**

5 A. For more than a decade we spent all of our extra money and spare time renovating
6 this property. This was an old farmhouse, and needed a substantial amount of
7 work. We buried barn ruins that had laid charred for years. We took down old
8 buildings and fixed the ones we chose to leave. We dismantled three old silos.
9 We spent \$12,000 putting in a swimming pool and deck. In 2005 we refinanced
10 our home to add \$60,000 for all new cedar siding and new windows. Exhibit 2 is a
11 state certified appraisal of this property that was done in 2007, just prior to wind
12 turbines being built around us.

13 **Q. What did you do when you learned there would be turbines built around your**
14 **house?**

15 A. At first, we were not concerned. However, as construction progressed and we
16 learned more about the project, we started to worry that the wind farm would
17 adversely affect our property value. In the summer of 2006, we decided to try and
18 sell our home. Even without the remodeling complete all realtors who came
19 through thought it should bring a price of over \$300,000. We had an appraisal
20 done that appraised the property for \$320,000. Initially, a number of people
21 expressed interest. However, just prior to the turbine construction we showed the

1 house to several people and every interested party had concerns about the “roads”
2 going in and around our property. As soon as people learned that they were
3 driveways for wind turbines that were to be constructed, the interest in the
4 property stalled. We decided to switch realtors. Because of the wind farm project,
5 some realtors refused to even list our homes. One realtor told us it would have to
6 be listed for “well under” \$200,000 in order to generate any interest at all. We
7 found another realtor to list the house. After months of getting the house perfectly
8 cleaned for showings, to no avail, we decided to take it off the market.

9 **Q. What happened when the turbines became operational?**

10 A. I could feel the turbines. I could hear them too. The sound drove me crazy but for
11 me that wasn't the worst of it. When I stood on my porch I could feel a lot of
12 pressure. It was like the feeling you have for the few seconds when you are at the
13 top of a rollercoaster just before you go down. But the feeling was constant. I
14 could also feel the “swoosh, swoosh” of the turbines. The swoosh along with the
15 pressure made me feel nauseous. I started having a terrible time sleeping. The
16 turbines also made me generally dizzy and constantly on edge.

17 **Q. How else did the turbines affect your health?**

18 A. As soon as the turbines went on line I became unable to sleep. I went to the doctor
19 and was given prescriptions for sleep. None of them helped. It was not just that I
20 didn't sleep well; most nights I didn't sleep at all. The noise was so bad I was
21 forced to sleep on a couch in the living room. A fan and a pellet stove helped

1 partially mask the noise. The longer I was exposed to the turbines the worse it got.
2 I know the sleep deprivation was caused by the turbines because I would sleep if
3 they were off for any reason. The direction of the wind made some nights worse
4 than others. I felt the vibrations through my body and it affected my thoughts.
5 One night I remember getting up and going down stairs at around 1:00 a.m. I ran
6 a glass of water and placed it on the table just to see that it was still. Seeing the
7 water still in the glass calmed me, because then I knew the house is not vibrating.
8 I did that many times.

9 **Q. How have the turbines affected your family's health?**

10 **A.** My sixteen year old daughter started having stomachaches as soon as the turbines
11 went on line. At first I just thought it was typical teenage stomachaches. However,
12 these stomachaches escalated out of control. We went from doctor to doctor and
13 then to the Children's Hospital in Madison. Eventually she had a colonoscopy and
14 we found that she had ulcers all the way through her intestines. She was put on
15 several different types of medication but her symptoms persisted and did not
16 improve until we moved away from the turbines. She laid around for months in
17 agony, extremely worn out. She never had any stomach problems before the
18 turbines came in. All of my children have also complained of headaches and not
19 sleeping well, although my son, who was 17, and my husband were not as affected
20 as me and my daughters.

1 **Q. What did you do as a result of the turbines?**

2 A. I did the only thing I felt I could do. In September 2009, after 18 months of living
3 by the turbines, my family and I left our home. I was desperate to get away from
4 this property. I knew I would never get used to this. I was forced to abandon my
5 home and lose everything my family and I had worked for.

6 **Q. How have you felt since leaving your home?**

7 A. Since leaving my home, I have spent hours working with a counselor dealing with
8 depression and the aftermath of this life changing event. However, physically I am
9 doing much better. I can sleep again.

10 **Q. How has your daughter felt since moving away from the turbines?**

11 A. She immediately started sleeping better and her stomachaches improved. Six
12 months after we left our home, we took her for a colonoscopy, and her ulcers were
13 completely gone. I couldn't believe it.

14 **Q. What happened to your house after you left?**

15 A. No one would buy our house. It was up for sale at a sheriff's sale and eventually
16 was sold back to the bank for \$106,000 (a third of what it was worth prior to the
17 wind farm going in).

18 **Q. Have you tried to seek recourse from the Public Service Commission?**

19 A. Yes. I filed a complaint with the PSC to seek compensation from Invenergy for the
20 various injuries to my health and financial welfare that I sustained as a result of
21 the wind farm.

1 Q. Did you receive any compensation?

2 A. No. The PSC found that it did not have authority to grant our request.

3 Q. Before the turbines went in were you concerned that you'd suffer adverse
4 health effects?

5 A. No. I never even considered that there could be health problems other than maybe
6 an occasional headache. I initially did not support the project because I was
7 concerned about property values, but after the decision was made to permit the
8 turbines, I thought, "I'm ok with this." If someone would have told me, before the
9 turbines went in, what would happen to me and my family, I would never have
10 believed them. It's just too unreal.

11 Q. Have you heard anyone say there is no scientific evidence that industrial wind
12 turbines harm human health?

13 A. Yes.

14 Q. How do you respond to that?

15 A. If you haven't lived through it you don't know that. Having lived inside a wind
16 farm, and having experienced what I felt and what my family went through, there
17 is no doubt in my mind that wind farms harm human health. Wind companies are
18 aware of these health effects—people from all around the world who live close to
19 industrial wind farms have experienced severe and debilitating health problems
20 that coincided with a new wind farm's operations.

1 Before the wind farm came into my neighborhood, I may have even said the same
2 thing. I was naïve, and even when the turbines started running, I honestly believed
3 I'd get used to it. I'm an open minded person and I don't blame my problems on
4 an inability to adapt to change. It took me a long time to realize what was going
5 on. I would tell anyone who thinks there are no health effects to put your family
6 in my house for a year and a half, and then tell me how you feel.

7 **Q. Is there anything else you want to add?**

8 A. I am willing to provide access to my and my daughter's medical records, and my
9 family's financial records to anyone who will seriously take the time to study the
10 cause and effect relationship between the Forward Wind turbines and the health
11 and financial effects my family and I suffered. I want to make sure nobody has to
12 go through what I went through.

13 **Q. Is this testimony true and correct to the best of your knowledge?**

14 A. Yes.

15 **Q. Does this conclude your testimony?**

16 A. Yes.

PSC REF#:171131

Docket 2535-CE-100

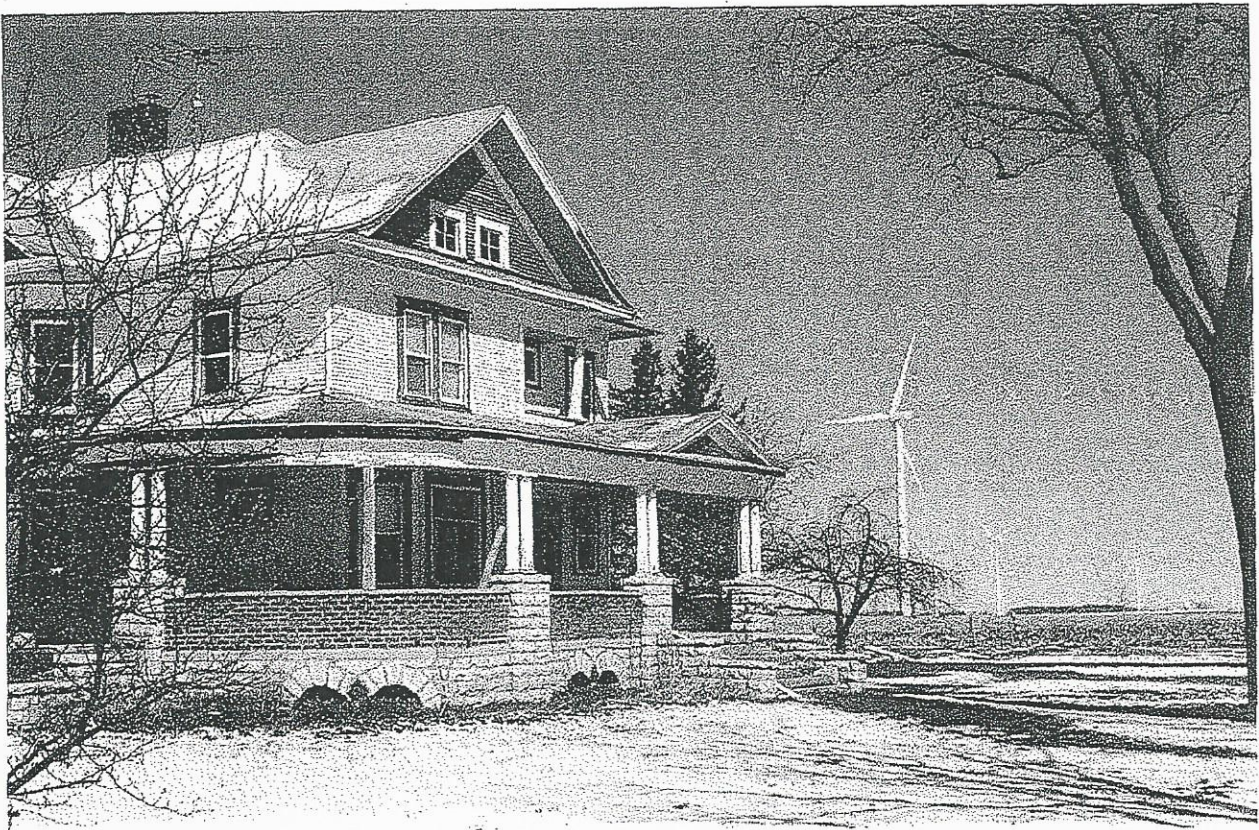
Witness: Ann Wirtz

Public Service Commission of Wisconsin
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**PHOTOGRAPHS SHOWING PROXIMITY OF TURBINES
TO THE WIRTZ RESIDENCE**

Ex.-Forest-Wirtz-1

Docket 2535-CE-100
Ex.-Forest-Wirtz-1



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Public Service Commission of Wisconsin
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DIRECT TESTIMONY OF LARRY WUNSCH

1 **Q. Please state your full name and address.**

2 A. My name is Larry Wunsch. I live at W7037 Fox Dr., Fond du Lac, Wisconsin
3 54937.

4 **Q. What is the purpose of your testimony?**

5 A. I want to explain what it was like to live in the shadows of a wind farm. My wife
6 and I owned a house in Brownsville, Wisconsin when the Forward Wind Energy
7 Center was constructed. We had to abandon our home as a result of the wind farm
8 and would like the Public Service Commission to consider this harm when it
9 determines whether the Highland Wind Farm should be constructed as proposed.

10 **Q. Please explain what your Brownsville home meant to you.**

11 A. My wife and I had gathered our savings to buy the land and build the house that
12 we lived in. I basically built the house myself with the help of two other
13 firefighters. It was going to be our dream home in the country.

1 **Q. After the turbines were constructed, how close were they to your home?**

2 A. I could see almost all 83 turbines from my home. The closest three turbines were
3 just 1,100 feet, 1,500, and 1,800 feet from our residence respectively. Each turbine
4 was a GE 1.5 megawatt turbine, which had a height just shy of 400 feet.

5 **Q. How did the wind farm change your countryside residence?**

6 A. The wind farm changed the feeling at our house from the countryside setting to an
7 industrial park atmosphere. I couldn't get away from it. If it wasn't the sound, it was the
8 sight. At night when I couldn't see the turbines, I saw the flashing red lights that
9 reminded me that they were there. We called it the Pinwheel Junkyard.

10 **Q. Please explain how the noise from the turbines impacted you.**

11 A. I had purposely built our home 1,000 feet off of the road to escape the noise from
12 traffic and other sounds. When the turbines were constructed, it became obvious
13 that the peace and quiet I had worked for were lost. Worst of all, the noise from
14 the turbines prevented me from being able to sleep. I would wake up in the middle
15 of the night or early morning and would hear the sound of the turbines, and then
16 never be able to get back to sleep. I couldn't sleep with the windows open for the
17 two years that I lived there while the wind farm was in operation. Even with the
18 windows closed, I could hear the annoying noise through the walls and windows
19 on windy nights. Without getting the proper rest, it was nearly impossible to
20 perform a good day's work.

1 **Q. How were you influenced by shadow flicker from the turbines?**

2 A. The shadow flicker was largely a nuisance during the spring and the fall. The
3 longest time that a turbine shadowed my home was fifty minutes. The flicker came
4 and went with the setting position of the sun. I had solar tubes which gave light to
5 many of the rooms in the house. When the shadow flicker came, the whole inside
6 of the house experienced a strobe effect.

7 **Q. What did you do as a result of the wind farm and why?**

8 A. I left my home. I had to. It just wasn't the same anymore. The quiet nights on the
9 front porch were gone. Since leaving, I really miss that place in the country that
10 my wife and I built. It leaves a punch in the stomach every time I go by it. But I
11 knew that I would not have been happy living there with the wind turbines so
12 close.

13 **Q. Were you able to sell your home?**

14 A. I know I was lucky to be able to sell my home at all; but unfortunately it sold at a
15 heavy loss. My home and land was appraised at \$635,000. After two years of
16 listing it, we sold it for \$570,000 – which included with it a tractor (worth
17 \$15,000), new stainless steel appliances (worth \$7,000), two flat screen televisions
18 (worth \$3,000), and two entertainment centers (worth 4,000). According to my
19 calculations we lost close to \$100,000 on the property.

1 **Q. How have you felt since leaving your home?**

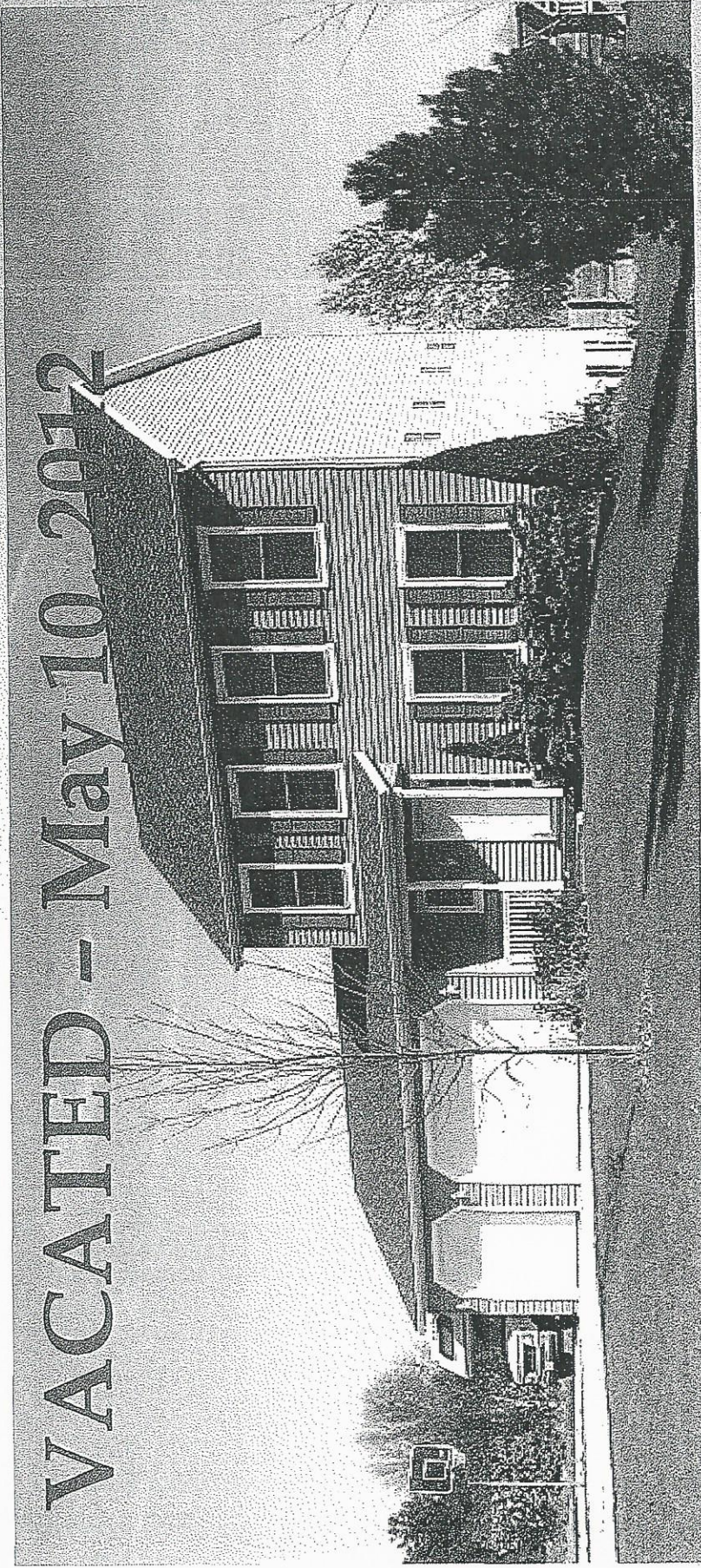
2 A. I have now been away from the turbines for over a year. I have finally been able
3 to catch up on sleep, and I feel renewed. I would never live in or near a wind farm
4 again. I would tell this to anybody who is thinking about living in a wind farm..

5 **Q. Does this conclude your testimony?**

6 A. Yes.

House Exhibit #1 – Darren & Sue Ashley

VACATED – May 10 2012



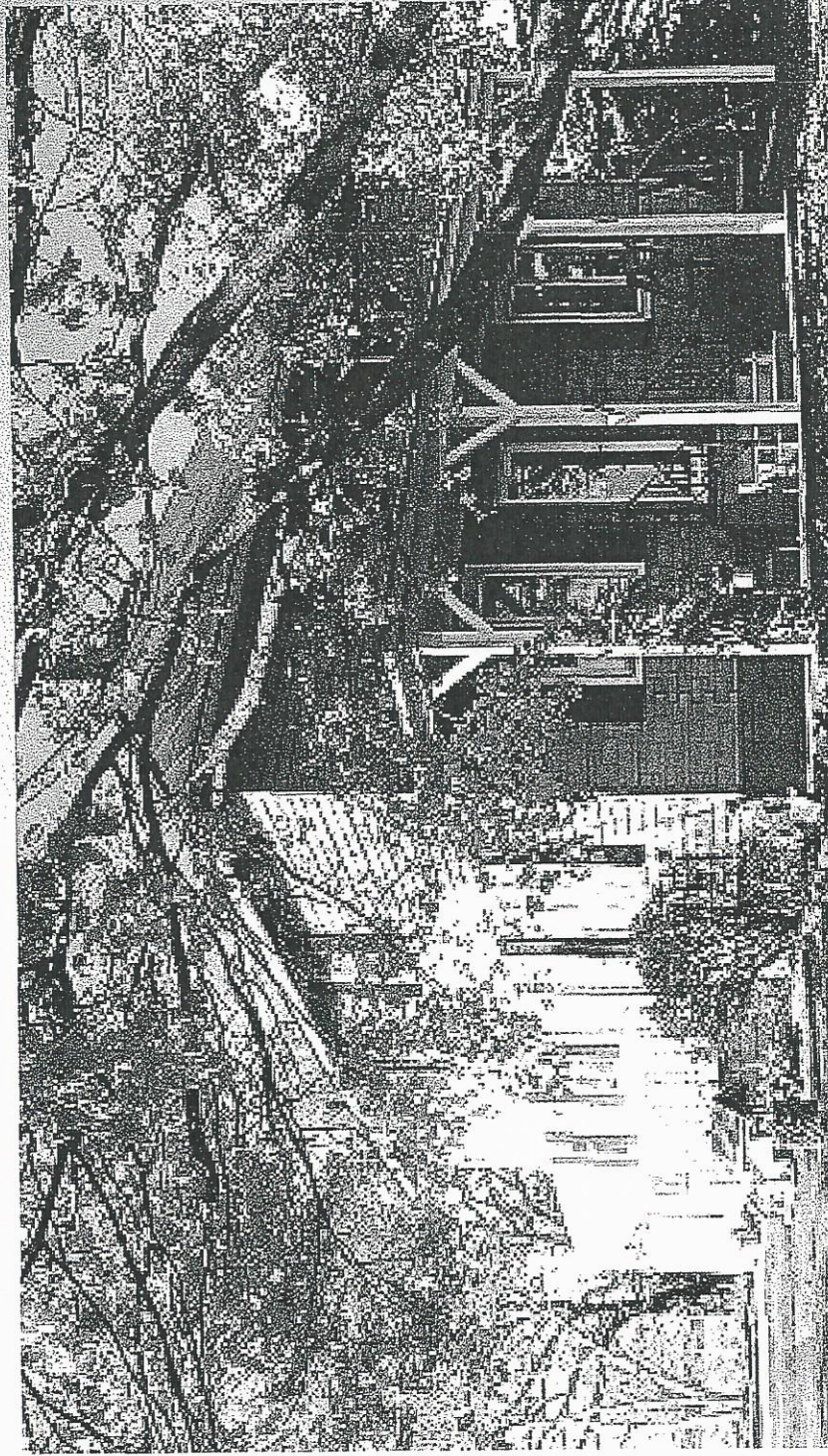
Direct Testimony of Darren Ashely – State Public Service Commission of WI – 8/30/12

Q. Did anyone else in your family have symptoms?

A. My sixteen year old daughter couldn't sleep at night; she experienced ear pain, and my ten year old son would get dizzy when playing in the backyard. My daughter and I tell when the turbine are turning on and off without looking at them.

House Exhibit #2 – Darrel & Sarah Cappelle

VACATED – May 2012



Direct Testimony of Sarah Cappelle – Before Public Service Commission of WI – 8/30/12

- Q. Did you have your health symptoms all the time?
- A. When my family and I moved from our house... my symptoms went away within a week. Within a week my youngest son was sleeping through the night and started to wake up happy.

House Exhibit #3 – Dave & Rose Enz

VACATED – February 2011

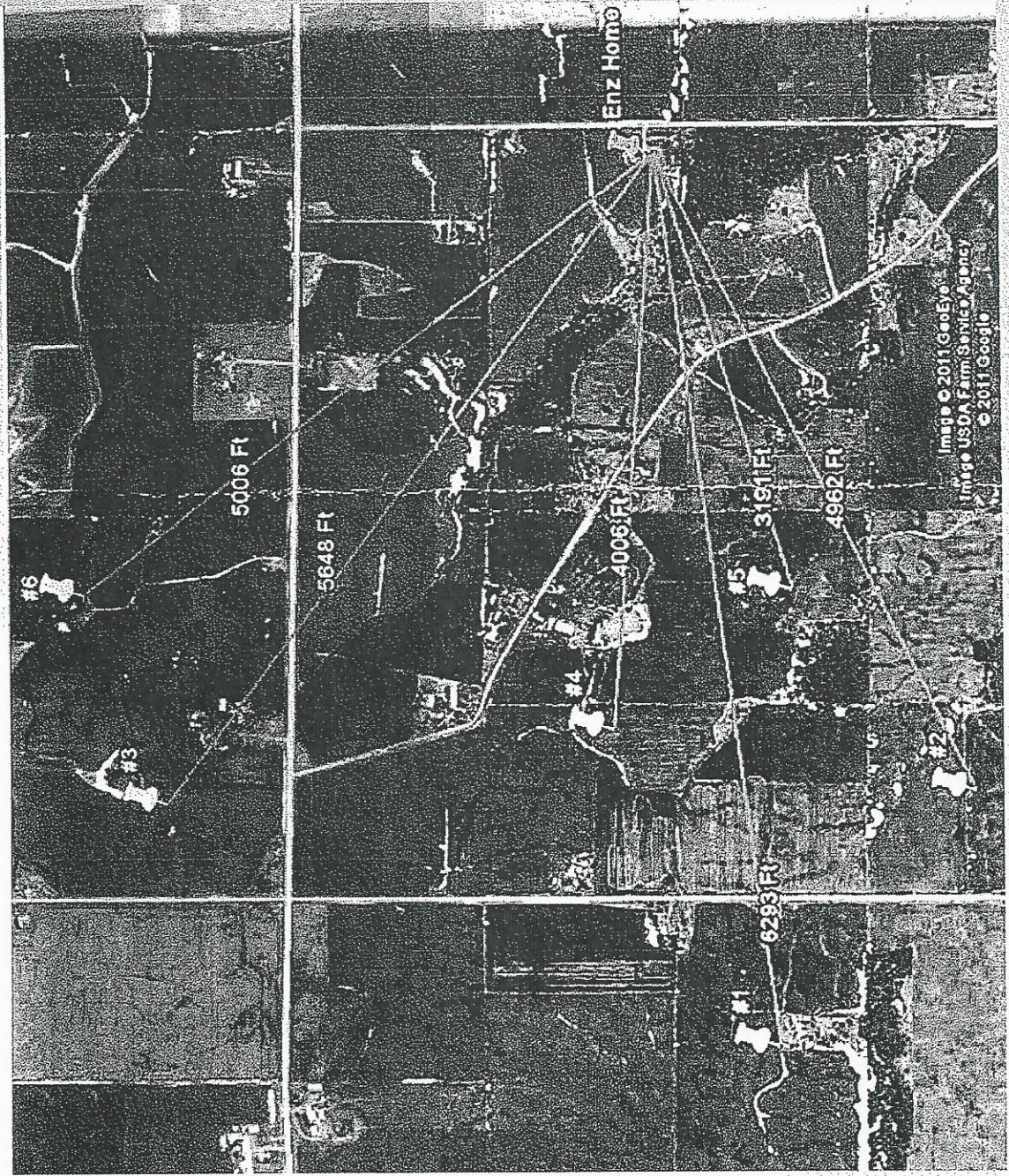


Direct Testimony of Dave Enz – Before Public Service Commission of WI – 8/30/12

Q. Did you notice any changes when the turbines became operational?

A. At first, I noticed I was feeling unsteady and unstable. I was feeling head pleasure and having acid reflux. I also was experiencing blurred vision and could not read without eye strain. My wife Rose experiences terrible ear pain.

House Exhibit #3 – Dave & Rose Enz



Shirley Wind Story – Glenmore, WI

Tests Performed - Preliminary Noise study

- ▣ Preliminary Noise study of Enz Family Farm Located in the Footprint of Shirley WindPower Project
 - E-Coustic Solutions – Richard R. James, INCE
 - Locations – Enz & Ashley residence
 - ▣ This report shows that both homes are subjected to infra and low frequency sound that is not from activities of people inside the homes or the appliances and other equipment. Based on these findings the complaints of both families should be considered valid and a result of the intrusion of acoustic energy from the Shirley Wind Project turbines.

Shirley Wind Story – Glenmore, WI

Tests Performed - Ground (Contact) Current

- ▣ Ground (Contact) Current Investigation at Demark, WI Residences
 - Stetzer Consulting LLC – David Stetzer
 - Locations – Ashley, Ashenbrenner, Enz, Brantmeier, Tenor, & Cappelle residence
 - ▣ All 6 homes tested above the National Institute of Environmental Health Sciences (NIEHS) Guidelines of 18 micro amps. (16x to 291x)
 - ▣ At or above 18 micro amps, biological effects relevant to cancer have been reported.
 - ▣ The test shows that the further one lives away from the turbine the less contact voltage and the less contact current you will have in your home.
 - ▣ Setbacks are the key