

Wind Turbine Meeting Notes.....May 28, 2013 Boone County Zoning Meeting

My name is Ted Hartke. I am a professional engineer and professional land surveyor, and I own Hartke Engineering and Surveying, Inc. My dad, Phil, and my brother, Dave, are both farmers. As a land surveyor, I know how emotional and protective people are about their land and the rights they have to get the most out of their property. This wind farm issue is very difficult to deal with, and I have an important story to tell you.

I live in the center of the InvEnergy California Ridge wind farm located in Vermilion County, Illinois, consisting of 138 turbines rated at 1.6 megawatts each and being 495 feet tall.

Before our project started, and throughout its construction, I had no issues with my county's decision to create our existing wind industry ordinance including all of the details within it regarding setbacks or other matters. I did not know or worry about noise pollution. There had been some negativity about noise, so during the summer of 2011, I parked under a wind turbine near Bloomington Illinois on our way to Phillip's church camp. I turned off the car, and myself, my wife, and my kids all got out to walk around and look at things. I could hear light wispy air "whooshing" sounds. I could hear a tractor in a field a mile away and also birds chirping about as loud as the blades' air disturbance. I thought I had very little to worry about the noise from turbines about to be constructed near my home in Vermilion County.

We managed to get through the dust, traffic, construction noise while our road was reconstructed in front of our property. It was exciting to see the huge turbine components hauled past our house. For me, things were friendly between me, the construction crews, and the wind farm representatives. Everything was "just fine." We thought we had lived through the worst part of the project.

In January, our noise problem began. We had a couple bad nights of engine whining noise. We thought we might get used to it....sort of like people become accustomed to living near busy highways or train tracks. However, our noise was lasting all night long, kids were waking up numerous times every night. It was totally unexpected....a complete shock. We were unaware of how the noise was going to change our lives.

I have personal first-hand knowledge of and expert witness testimony as follows:

- 1.) Wind turbines will wake you up at various times. It is impossible to get healthy sleep.
- 2.) The engine "whining" or "humming" noise is very disturbing and stressful. This low frequency noise penetrates your house, and there is no place where you can go inside your house to escape it. (OUTSIDE your house, the noise doesn't seem so bad. INSIDE your house, the noise is unbelievable.)
- 3.) There were mornings when I put clothes on my kids and shoved them out the front door when they were sleep deprived and not ready for a full day of school. Wind turbines are hard on your children.
- 4.) Our son already had a pre-existing sleep problem and we have been seeing a specialist for ~ 2 years now. Up until the turbines went live, Phillip's symptoms had been improving dramatically and in early January at his last check up with the specialist we had discussed weaning him off his sleep meds. Since the turbines turned on in January, Phillip's symptoms have been gradually returning/becoming worse. Since the developer will not turn the turbines off at night anymore,

we had a very bad noise event at our home on May 11. This was the first time Phillip complained of dizziness from the noise. Later in the evening he started vomiting. It was a really miserable night for the entire family.

The Dr. made some suggestions to help cut down on the noise (special ear plugs) and to cut down on the vibrations caused by low-frequency sound (shock absorbers under the legs of his bed). He also increased the dosage of a medication our son was already taking due to his sleep disorder in the hopes that this would allow Phillip to have greater periods of uninterrupted sleep.

- 5.) I have argued with my wife at 2:30, 3:30, 4:30, and 5:30 in the morning. Wind turbines are hard on your marriage.
- 6.) Being exhausted severely impacts your work performance and stresses relationships with employees and co-workers. Wind turbines are hard on your careers.
- 7.) I have embarrassed myself and have cried in front of my peers while describing the insurmountable problem my family is experiencing with this noise. Wind turbines are hard on your public image.
- 8.) Standing up and requesting assistance to solve this problem required me to put pressure on my county board representatives. My ties with community leaders have been severed....hurting my small business. Just like any other person, I had to put my family first, and I put my business at great risk while going up against neighbors, public officials, fellow citizens, and construction companies who hire my firm to do engineering and survey work. I decided to come up to your community tonight because I feel a heavy burden and responsibility to other men, women, and children who will suffer from future wind turbine placement.
- 9.) Between January and May, I was able to convince InvEnergy to shut down turbines approximately 50 times during nighttime noise events. During that time, I contacted contractors and researched ways to soundproof my home. I was rejected by several contractors who did not believe they could fix my problem. Soundproofing against low frequency noise is extremely difficult. My home had too many large windows, a fireplace flue, 5 dormers, vaulted ceilings in the living room and upstairs bedrooms. On Saturday, May 11th, my request to turn off one of these turbines was declined. We were awake all night with high levels of wind turbine noise. We cannot live this way. This wind turbine noise is torture.....torture is what you do to terrorists, not my children!
- 10.)I have researched and studied soundproofing improvements to my home. To get some relief from soundproofing, it will require new windows, doors, exterior sheeting, wall insulation, and roofing insulation. To get the insulation completed will require removal of existing windows, siding, sheeting, and a build-up of roofing materials. The approximate cost to soundproof my home in this manner is \$150,000.
- 11.)My wife and I were very stressed and needed help....we decided that this horrible noise should be documented and reported because of the upcoming discussions for the county board and also to build records to justify our soundproofing repairs with InvEnergy. A Vermilion County Sheriff's Deputy was at my house, in my bedroom, to listen to the noise at 2 AM. Our Mother's Day holiday was ruined.
- 12.)I emailed the entire county board an open invitation to come to my home, spend time inside my bedroom where I sleep. They have declined to address my problem. Unfortunately, this noise problem will grow and affect more Vermilion County citizens as more turbines are constructed. For

as long as you allow wind turbines to be constructed within 2,500 feet of homes, you will have noise complaints from neighbors. You will become a target of controversy, complaints, political challenges, hatred, and lawsuits.

13.)It is not too late for your community to create an ordinance that protects you from the trouble I am living through.

In conclusion:

I am requesting that, before you vote on this, think about the resident like me who will invite you to stand in their bedroom to listen to the noise. While you are there, he or she will introduce you to their precious children. You will have the opportunity to sit down and discuss with the kids about how it makes them feel. While there are few things worse than a sick or injured child, I believe that hurting them by allowing wind turbines to be constructed too close to their homes is unforgivable.

If you still want to proceed with allowing wind farm development under this weak ordinance, then maybe you should think about how stressed you will be when your names are listed on the lawsuit for voting in support of the inadequate setbacks and no way to enforce noise violations. Now is your opportunity to stop and think about it. If a wind farm chooses not to enter your county based on noise restrictions, then you know that they do not have the capability to fulfill their "good neighbor" promise. Put your noise restriction in writing and include a corrective action to address it such as night-time turbine shutdown upon a legit noise complaint.

Don't be afraid to change your mind. When I have said "no" to my kids, my employees, my clients, and my family, they went through a short period of unhappiness, but I always wanted to do what was fair to everyone involved and still be able to provide for them. You will earn my respect and the respect of wind company representatives.....they may not like it, but they will respect it. It is OK to change your mind in the course of exploring all of the avenues and throughout the presentation of facts. Opening the door to the first wind farm development is like selling the business or the home farm.....you only get one chance at doing it right. Try to learn from other's mistakes and make adjustments accordingly. Learning from your own mistakes is a harder way to go about it.

When you became a board member, I hope it was to serve your community. If you are seated at this table, and your interests are about self-preservation for you and your friends, then you are in the wrong room.

Although my five minute time allowance is up, I would be pleased to give you more detailed feedback and information so that you may make the best possible decisions.

Thank you for allowing me to speak to you tonight. I hope that sharing my experience helps your community.