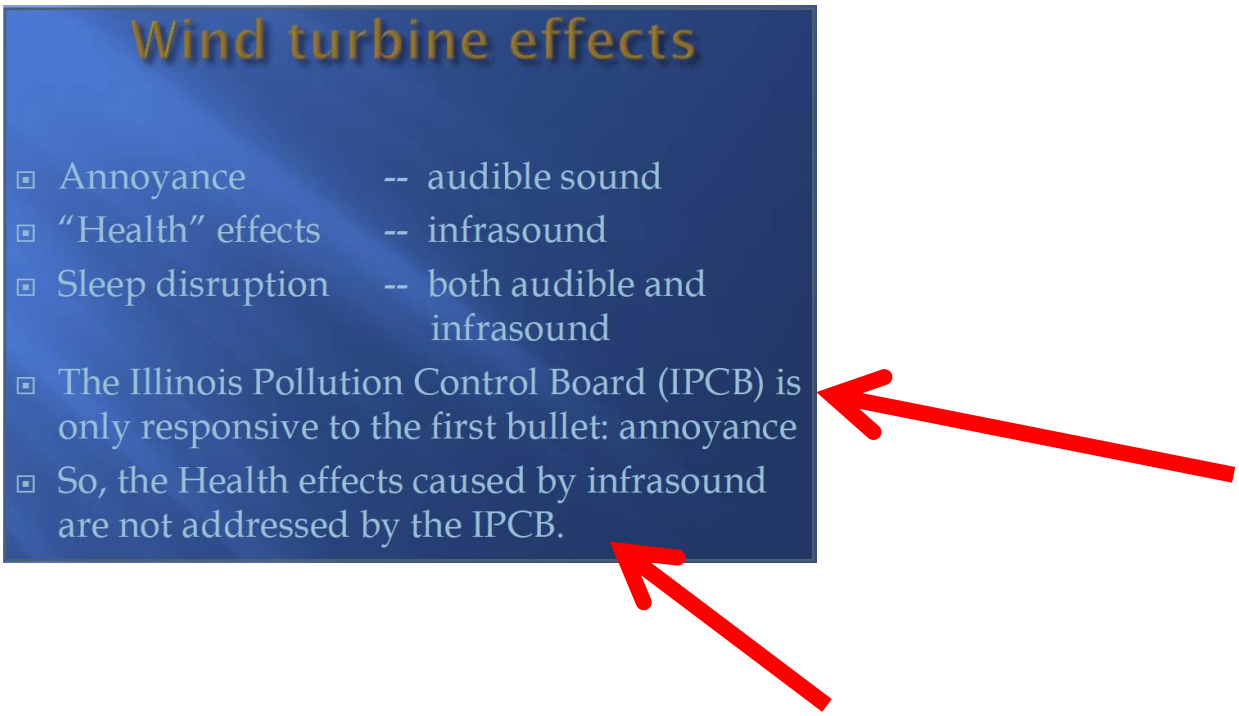
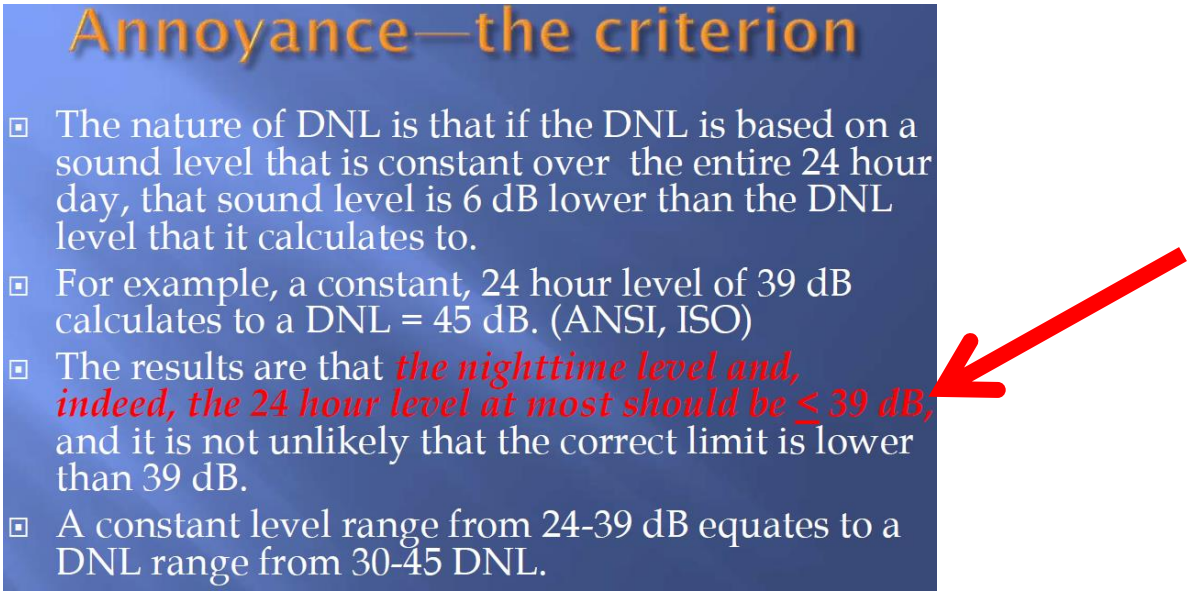
Ford County's "flawed" thinking that IPCB noise regulations will protect citizens:

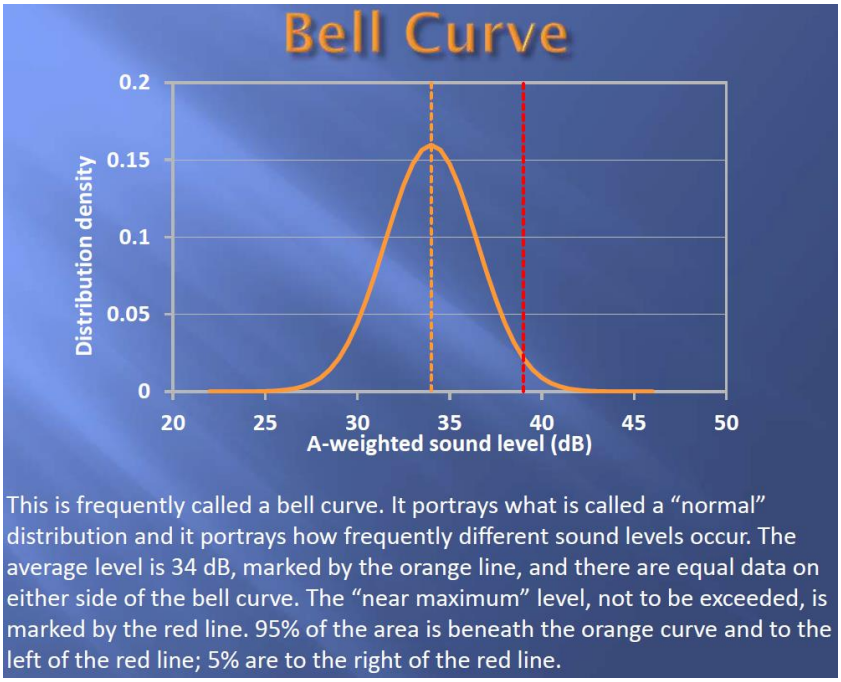
Dr. Paul Schomer authored those standards, measured wind turbine noise inside abandoned homes, and testified under sworn oath June 23, 2015 in Boone County Illinois as follows:



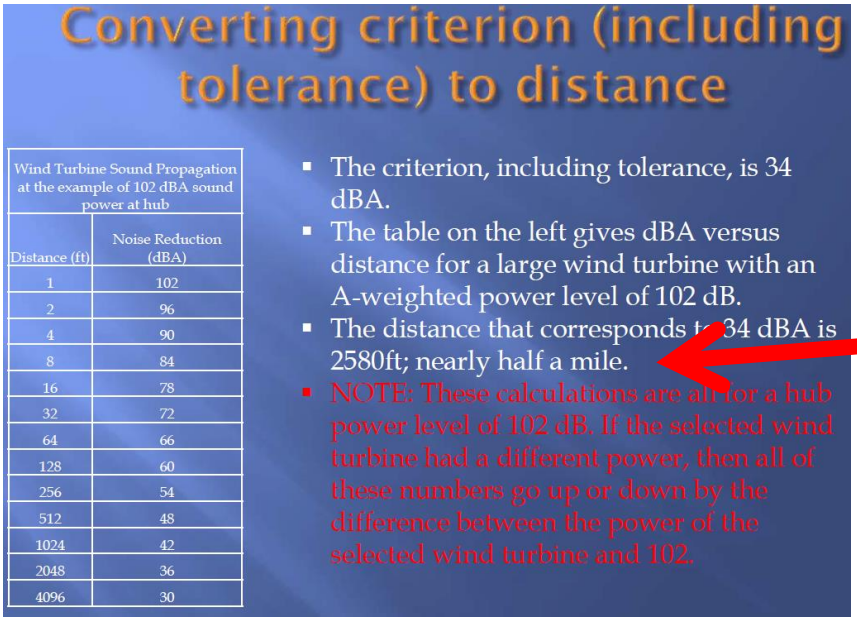
Since IPCB noise levels do not protect health, Schomer says max noise should be 39 dB or less for turbines:



To keep noise MAXIMUM at 39 dBA, then “design” noise level to be 34 dBA:



To achieve “design” noise at 34 dBA as a way to keep MAXIMUM noise at 39 dBA, then here’s the distance conversion which calls for **2580 FEET!**

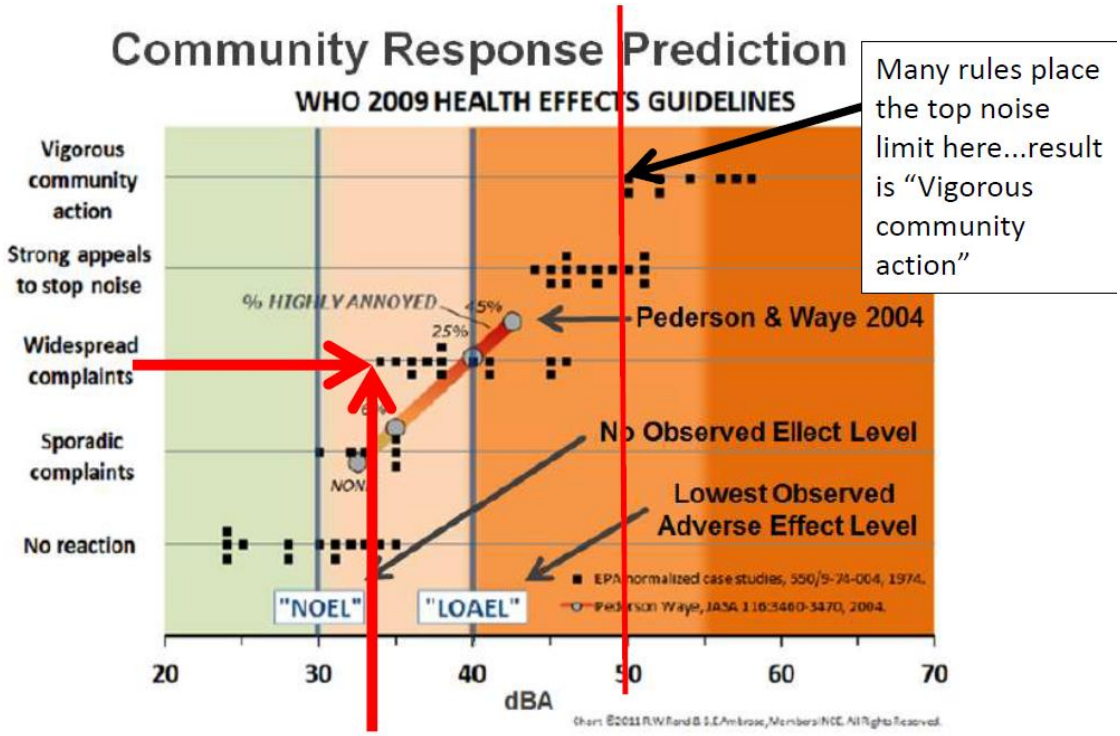


Please note that all of these slides are pulled out of the full submittal which was provided to the Ford County ZBA during Fall, 2018 testimony.

Predicted Community Noise Response Chart and statements prepared by Steven Ambrose, INCE

Neighbors respond to the sound level increase and change frequency content. The public or community reaction is easily determined by locating the turbine noise level (dBA predicted or measured) on the 'x-axis' and the response is on the 'y-axis' when the black squares are intersected. Fifty 50 dBA exceeds and meets the black squares representing "*strong appeals to stop noise*" and "*vigorous community action*". Forty-five dBA has "*widespread complaints*" and "*strong appeals to stop noise*", 35 dBA has "*widespread complaints*" and "*sporadic complaints*". The design goal should be no louder than 32 dBA for "*no reaction*" or "*sporadic complaints*" at the worst.

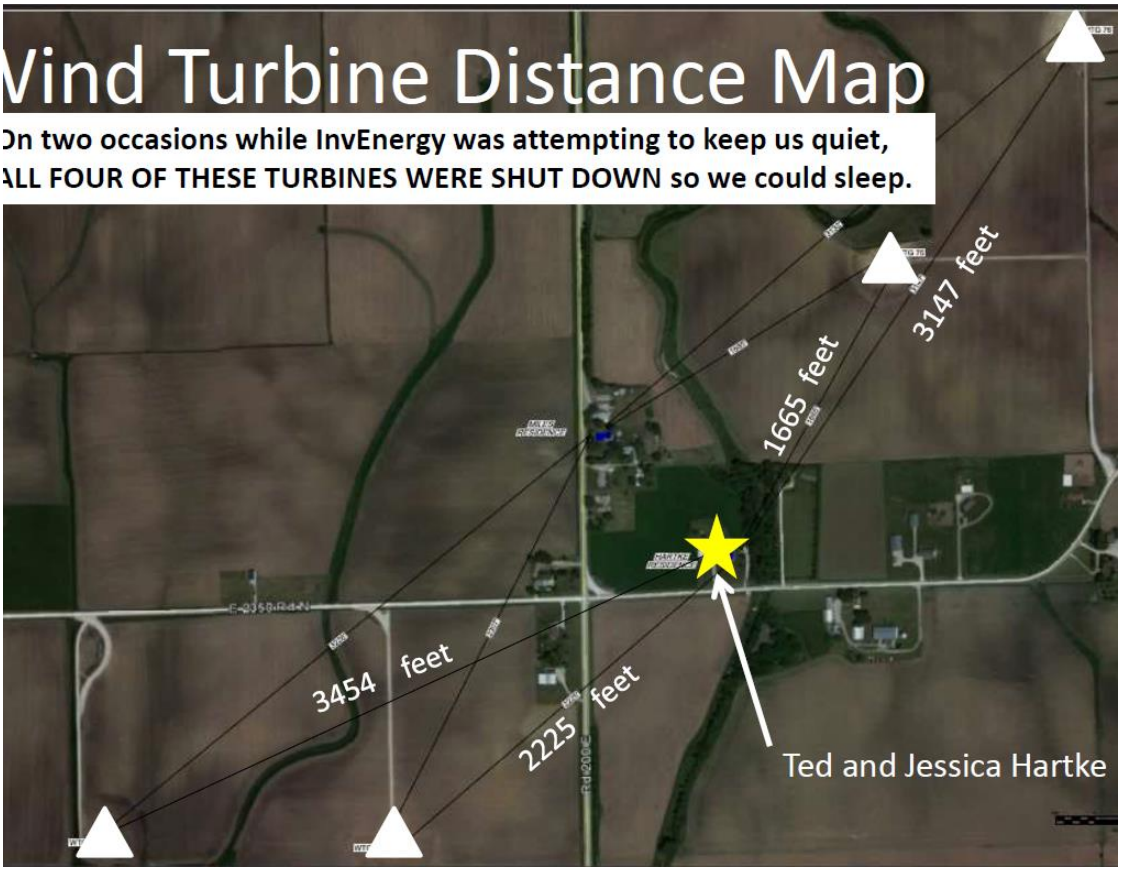
This chart clearly shows that your family is being exposed to excessive noise and adverse health impacts.



Widespread Complaints Start at 33.5 dBA !!

ADVERSE HEALTH EFFECTS BEGIN AT 40 dBA

Hartke house vs turbine distances:



Safe level for sleep per InvEnergy Wind Farm Application by HDR Engineering:

HDR CLAIMS (Continued)

California Ridge Wind Energy Project *Sound Analysis Report*

With the conservative additions, the analysis indicates that the majority of locations would experience turbine sound levels of less than 40 dBA (outdoors). This level is sufficiently low to minimize or eliminate any potential for sleep interference or indoor/outdoor speech interference, as defined by the US Environmental Protection Agency (EPA). Furthermore, these average hourly levels are compatible with parameters for acceptable levels of noise within residential land uses established by the EPA guidelines and the State of Illinois' requirements – per Title 35, Chapter I, Part 901.

InvEnergy Vermilion County Application has PROBLEMS!!!!

Sound Analysis Report (HDR Engineering) Page 9 June 2011

Majority of locations would experience sound levels of less than 40 dBA. This level is sufficiently low to minimize or eliminate any potential for sleep interference? If true, then why Hartke Home Abandonment after **SLEEP DEPRIVATION ISSUES PERSISTED ???**

Per HDR, the predicted level at Hartke's home: 43 dBA

Noise level at times of our complaints: (please note the midnight, 3 AM, 4 AM complaint times)

Table 7-5: Analysis of Complaint Times During Noise Study

Date and Hour of Complaint	Turbine 57 Speed (rpm)	Turbine 75 Speed (rpm)	Site Power (% full)	P2 500 Hz Noise Level (dB)	P2 1k Hz Noise Level (dB)	Notes
8/24/2013 6:55	13	12	68	36	33	Relatively low turbine operations
8/26/2013 4:00	14	0	76	38	29	Relatively low turbine operations
8/27/2013 7:00	8	13	50	41	36	Relatively low turbine operations
8/28/2013 3:00	0	15	77	43	33	Moderate turbine operations
9/2/2013 6:50	11	12	48	37	30	Relatively low turbine operations
9/7/2013 4:00	0	0	40	31	23	Turbine 56 only was on, as noted by resident
9/19/2013 0:00	0	0	48	37	28	Turbine 56 only was on, as noted by resident
9/19/2013 23:00	15	15	99	46	41	Near maximum turbine operati
9/22/2013 23:00	0	0	37	36	30	Turbine 76 only was on, by resident
9/24/2013 1:00	14	15	69	38	31	Mod urbine operations
9/28/2013 23:00	14	14	75	44	38	Maximum turbine operations
10/26/2013 20:00	13	13	81	40		Moderate turbine operations
10/30/2013 21:00	15	15	99	47	43	Ground wind 8 m/s
10/31/2013 21:00	13	12	71	42		Moderate turbine operations
11/1/2013 21:00	13	13	70	43	37	Moderate turbine operations
11/4/2013 5:00	14	15	99	44	38	Near maximum turbine operations
11/4/2013 21:00	15	15	99	46.5	41.2	Near maximum turbine operations
11/4/2013 22:00	15	15	99	46.5	41.2	Near maximum turbine operations
11/7/2013 17:00	15	15	99	---		No noise data at Prime 2
11/8/2013 0:00	13	14	86	---	---	No noise data at Prime 2
11/9/2013 3:00	15	15	99	49	45	Ground wind 7 m/s
11/9/2013 22:00	15	15	99	46.9	41.8	ed in Section 7.1
11/15/2013 4:00	13	14	89	43	37	Near maximu ine operations

Table 7-6: Comparison of Complaint Times Prior to Noise Study

Date and Hour of Complaint	Turbine 57 Speed (rpm)	Turbine 75 Speed (rpm)	Site Power (% full)	Notes
5/9/2013 21:00	15	15	87	Near maximum turbine operations
5/11/2013 23:00	15	15	98	Near maximum turbine operations
5/12/2013 2:00	14	15	94	Near maximum turbine operations
5/19/2013 23:00	15	15	99	Near maximum turbine operations
5/20/2013 22:00	15	15	95	Near maximum turbine operations
5/23/2013 2:00	10	13	53	Moderate turbine operations
5/26/2013 23:00	15	15	99	Near maximum turbine operations
5/27/2013 3:00	13	13	70	Moderate turbine operations
5/27/2013 4:00	14	14	96	Near maximum turbine operations
5/27/2013 5:00	14	13	85	Near maximum turbine operations
5/27/2013 6:00	15	15	96	Near maximum turbine operations
6/16/2013 4:00	12	13	80	Moderate turbine operations
6/19/2013 1:00	12	11	49	Moderate turbine operations
6/19/2013 23:00	12	11	63	Moderate turbine operations
6/21/2013 1:00	14	14	84	Near maximum turbine operations
6/24/2013 23:00	14	14	84	Near maximum turbine operations
6/25/2013 0:00	14	14	81	Near maximum turbine operations
6/25/2013 22:00	12	12	77	Moderate turbine operations
6/25/2013 23:00	14	13	89	Near maximum turbine operations
6/26/2013 5:00	14	14	90	Near maximum turbine operations
7/1/2013 23:00	13	12	85	Near maximum turbine operations
8/2/2013 7:00	11	13	85	Near maximum turbine operations

Maximum allowable per IPCB:

Table 3-1: Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to Any Receiving Class A Land from Any Class C Land

Octave Band Center Frequency (Hz)	*Nighttime Noise Level Limit (dB)*
31.5	69
63	67
125	62
250	54
500	47
1,000	41
2,000	36
4,000	32
8,000	32

Source: Amended at 30 Ill. Reg.5533, effective March 10, 2006

THIS BRINGS THE CONCLUSION THAT IPCB LIMITS FAIL TO PROTECT HEALTH IN REGARDS TO WIND TURBINE NOISE SLEEP DISTURBANCE.

Please note the MOST RECENT presentation by Dr. Paul Schomer includes this slide which has been used by two or more Illinois counties to establish setback distances:

Livingston County Illinois put in place 3250' setback based upon Dr. Schomer's testimony on July 12, 2016 at the 1:53:35 timestamp in this video:
https://www.youtube.com/watch?v=nByxjMI3AJs&t=7210s