

MICHIGAN STATE **U N I V E R S I T Y**

July 6, 2020

Zoning Board of Appeals
Christian County, Illinois
101 South Main Street
Taylorville, IL 62568

To Whom It May Concern:

During the ZBA's June 30th text amendment hearing, I was given an opportunity to respond to some of the issues raised in my presentation of June 24th. I am writing this letter to respond primarily to a question raised by one of the Board members, to which I gave only a cursory answer. The question was essentially whether I was aware of any medical doctors who support the view that industrial wind turbines are responsible for adverse health effects of the type I discussed in my presentation. I offered what was a rather hastily delivered response to that question, given the limited time available. I stated, in effect, that physicians have testified on behalf of families living in proximity to wind turbines, but their testimony has sometimes been ignored or rejected when it reflected the belief that there is a general causal link between wind turbine noise and adverse health effects. I noted that even the testimony of Dr. Nina Pierpont, who sounded an early warning regarding the potential existence of such effects, was dismissed in a Canadian hearing. Here, I'd like to offer a more complete response to that question asked by a ZBA member, although I will try again to be as brief as possible.



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In our 2016 Punch and James article, which I highlighted in my presentation, we stated the following:

Dr. Steven Rauch, an otolaryngologist at the Massachusetts Eye and Ear Infirmary and a professor at Harvard Medical School, recently declared that he believes Wind Turbine Syndrome to be a real phenomenon. As reported by numerous websites and newspapers, multiple patients have sought treatment from him for AHEs (adverse health effects) stemming from consistent exposure to IWTs (industrial wind turbines). Rauch compares the syndrome to migraine headaches and believes that people who suffer from migraines are among the most sensitive to the effects of WTN (wind turbine noise), and he has stated that the wind industry aims to suppress the notion of Wind Turbine Syndrome by blaming the victim. (p. 37)

Dr. Robert McMurtry, preeminent orthopedic surgeon in Ontario, Canada, has devoted much of the past 13 years studying the topic of wind turbines' effects on human health. Dr. McMurtry had held advisory positions to the Minister of Health for Canada and other public health arms of the Canadian government. He has stated that he believes as a

doctor that a linkage of wind turbines and people's health problems is "highly probable," as wind turbines emit pulsations that lead to chest vibrations and that the inner ear is more sensitive to these vibrations than to other types of environmental noise. One of the several articles he has published proposes a set of diagnostic criteria for use by physicians in determining whether a causal link exists between turbine exposure and adverse health effects for individual patients. Dr. McMurtry has called on the Ontario government to place a moratorium on further wind development until evidence is available to indicate that siting wind turbines near people's homes doesn't adversely impact their health.

Dr. Jay Tibbetts, who passed away several years ago, was a long-time physician, a member of the Brown County, Wisconsin Board of Health, and Medical Adviser to the Brown County Health Department. He has been described as a "rare public official with the willingness to listen to his constituents regarding the health impacts of wind turbine noise and the courage to put their human health risks ahead of the county's financial interests." In 2014, Dr. Tibbetts was instrumental in the Board of Health's decision to declare the Shirley Wind project a human health hazard.

Similarly, Dr. Herbert Coussons, also a Wisconsin physician and one who has seen at least six residents of the Shirley Wind project as patients, has testified that he considers vibroacoustic disease a potentially serious disease. He indicates that it causes thickening of cardiovascular structures, chromosomal damage, and increased malignancies in humans and lower animals exposed to long-term infrasound from any source, including wind turbines. Despite the need for more research, he concludes that "vibroacoustic disease is now a proven entity, and over 90 worldwide professionals and medical researchers that aren't linked to any type of industry conflict would agree to that and have signed onto that statement."

As I also mentioned in my testimony to the ZBA, a leading British sleep specialist, Dr. Christopher Hanning, has sharply criticized the Massachusetts Report, which Dr. Jeffrey Ellenbogen co-authored. In 2009, he stated, "The only mitigation of sleep disturbance from industrial wind turbine noise is a setback of at least 1.5km, and probably greater." (I would note that 1.5km is equivalent to a distance of 0.93 mile.)

I also reported in my presentation to the ZBA that Dr. Ben Johnson, a cardiologist, was able to convince the Madison County, Iowa, Board of Health to recommend that wind turbine setbacks be at least 1.5 miles. Dr. Johnson believes that wind turbine noise is a primary factor that leads directly to sleep disturbance and indirectly to risk factors that promote cardiovascular disease.

Two physicians, radiologist Dr. Michael Nissenbaum and sleep specialist Dr. Christopher Hanning (along with epidemiologist Dr. Jeffery Aramini), conducted a cross-sectional study of the adverse effects of wind turbine noise on persons living within 4.1 miles of two wind projects in Maine. Participants living within 0.87 miles of an industrial wind turbine had worse sleep, were sleepier during the day, and had worse general health scores than those living further away. Results of their study supports adverse event reports of sleep disturbance and ill health by those living close to industrial wind turbines.

Finally, two of these physicians, Drs. McMurtry and Johnson, are co-authors of a just-published peer-reviewed article, on which I am also a co-author. The lead author is Carmen Krogh, who has published

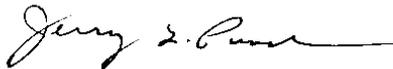
numerous papers on wind turbines. The title of the article is: *Wind Turbines: Why Some Families Living in Proximity to Wind Energy Facilities Contemplate Vacating Their Homes*. The preliminary data, consisting of example reports, indicate that all 67 participants associated occurrences of adverse health effects, or the potential for such effects, with living in proximity to a wind energy facility. Some residents temporarily left their homes during the day and/or night to alleviate effects. More-detailed analyses and reporting of the data are planned.

No doubt I've left out a number of physicians who have expressed the view that wind turbine noise leads, directly or indirectly, to significant negative impacts on human health. The eight names I've mentioned are simply those whose work is most familiar to me. Again, they include **Drs. Pierpont, Rauch, McMurtry, Tibbetts, Coussons, Hanning, Nissenbaum, and Johnson**.

In my presentation, I drew a distinction between specific and general causation. Whether one is a physician seeking to determine a specific causal link between wind turbine noise and health in a particular patient or a non-physician seeking to determine a general causal link in the population, that individual should have more than a superficial understanding of how audible and inaudible sound emissions from wind turbines interact with the physical and biological systems of the body to produce adverse health effects in exposed residents. These eight physicians have demonstrated that they understand that relationship.

I greatly appreciate the opportunity to provide this additional information in response to the question raised by a ZBA member.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jerry L. Punch".

Jerry L. Punch, Ph.D.
Professor Emeritus