

The Secret, Silent Wind Power Peril (Part I: The General Problem)

“From a distance, many view the massive turbines as majestic – as a clean, seemingly quiet and free source of endless energy. To numerous residents clustered within 2km (1.25 miles) or more of the pulsing machines, however, the Industrial-scale Wind Turbines (IWT) bring strangely debilitating illness – incapacitating for some, yet scoffed at by the Big Wind industry.”

“Common sense tells us that a forty-story-tall metal structure with blades as long as football fields moving at 180 mph at their tips would negatively impact quiet neighborhoods, pastoral and wilderness areas. But the extent and severity of the IWT’s effect on body, mind and spirit comes as a surprise to most people.”

Schools and airlines have become highly responsive to people with peanut sensitivities – going so far as to ban peanuts, peanut butter, peanut oil and related items. The U.S. Environmental Protection Agency and many state agencies have implemented regulations that set allowable power plant, factory, vehicle and other emissions as close to zero as possible, hoping to prevent any potential adverse effects on people thought to be the most sensitive to air and water pollutants.

But with wind power, nearly all federal, state and local authorities gloss over, ignore or bury increasing evidence that wind turbines affect numerous people living in proximity to them.

Legislators and regulators appear unwilling even to consider the possibility that some segments of our population might be extremely sensitive to infrasound, flicker, and other “emissions” from these turbines – and wind energy companies and advocates are working hard to ensure that this approach remains in effect.

Indeed, even those who seek increasing scrutiny of the wind industry generally speak of mandates, subsidies, bird and bat deaths, and impacts on wildlife habitats. Few pay attention to, or even acknowledge, the often devastating and long-lasting health impacts suffered by human wind turbine neighbors, even though clear evidence of the hazard has been available for decades.

Proper attention to this serious and widespread problem is long overdue. It is hoped that this review of available knowledge will accelerate that process.

Disregard for Turbine Health Impacts: A Longstanding Problem

Neil Kelley was principal scientist at the National Renewable Energy Laboratory Wind Technology Center from 1980 until 2011. During the Windpower '87 Conference, he presented one of many similar studies published in this decade by acousticians working under grants from the Department of Energy (DOE), Department of Defense (DOD), and National Aeronautics and Space Administration (NASA).

Their findings quickly became a hot topic. Infrasound (inaudible) and low-frequency (audible) noise (collectively referred to as ILFN) produced by Industrial-scale Wind Turbines (IWTs) directly causes [adverse health effects](#), experts stated. The disturbance from the turbines is often worse indoors than outside. “Far from becoming inured to the disturbance, people become increasingly sensitive to it over time,” they noted.

The wind industry response was immediate. Any regulatory standards will reference only A-weighted measurements, they insisted, which exclude the ILFN that are known to cause problems. We will measure only outside, not inside dwellings, insist that neighbors “will get used to it,” and deny that the victims’ suffering has any

basis in reality, let alone science.

NOTE: A-weighted noise measurements reflect the relative loudness perceived by the human ear, but drastically reduce sound-level readings in the lower frequencies: the slow periodic vibrations that were found to directly impact human health and wellbeing. Noise meters in common use can present measurements in both A- and C-weighted figures, using built-in electronic filters to adjust the way in which the instruments measure noise. Clearly, the C-weighted measurement, which more fairly represents the low frequencies, must be included in any regulatory standards that address the impact of sound from wind turbines.

With billions of dollars at stake, the wind lobby overpowered any community or organization that tried to raise concerns or slow its advance. Big Wind expanded rapidly around the globe, devastating wilderness areas and agrarian and shoreside communities, while forming fraternities with other powerful interests to advance and protect its agenda.

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“When I’m at home I’m usually sick with headaches, nausea, vertigo, tinnitus, anxiety, hopelessness, depression. My ears pop a lot and I hardly ever sleep.... My husband and I are trying desperately to find a cheap little house we can afford away from here.... We own six acres and a beautiful home, but it’s now toxic and unsellable.... Suicide looks to be my only relief. Land of the FREE Home of the BULLSHIT! ... Million to one odds anybody contacts me back.”

The Surprising Extent and Severity of Problems

Common sense tells us that a forty-story-tall metal structure with blades as long as football fields moving at 180 mph at their tips would negatively impact quiet neighborhoods, pastoral and wilderness areas. But the extent and severity of the IWT’s effect on body, mind and spirit comes as a surprise to most people:

“We reside in what used to be a wonderful home. After just two weeks of this machine running full tilt, I was a physical and emotional wreck! So tired. Headaches that do not go away. Dizzy and nauseous. Body functions go haywire – I start dropping things (can’t seem to make my hand close all the way) and fall down basement stairs. Heart palpitations. Go to ear specialist: along with Vertigo, Anger, Teeth grinding – break a tooth. Crying – no more sanctuary of home. Depression. Suicide plans. Call suicide hotline. How do you explain that you are being abused every day by a wind turbine!”

The primary pathway of turbine assault on human health and wellbeing is no mystery. The Israeli army has used low-frequency sound pulse as high-tech crowd control for years. Low-frequency noise at high intensities creates discrepancies in the brain, producing disorientation in the body: “The knees buckle, [the brain aches](#), the stomach turns. And suddenly, nobody feels like protesting anymore.... It has no adverse effects, unless someone is exposed to the sound for hours and hours.”

But indeed, thousands of IWT neighbors around the world are subjected night and day, some now for decades, to these sub-audible (slowly vibrating) sound waves sent out as turbine blades spin past the shaft, setting up vibrations within body cavities: ears, eye sockets, skull, lungs, and belly.

People are made nauseous and confused, with blurred vision, vertigo, headaches, tachycardia, heightened blood pressure, pain and ringing in the ears, difficulties with memory and concentration, anxiety, depression, irritability, and panic attacks arising when awake or asleep.

“The effects of the turbines run from annoyance with the audible sound and shadow flicker to downright anguish from panic attacks which can feel like a death/dying episode of extreme pain. These are brought on by first a bit of nausea and upset stomach, extreme light headedness, and then the bad part: constriction and wringing of my insides. Sometimes I try to hang by a doorframe, other times I just lie on the ground if I can’t make it to the house. It is truly an inner body disturbance.”

Helen Schwiesow Parker, PhD, is a Licensed Clinical Psychologist and a Past Clinical Supervisory Faculty member at the University of Virginia Medical School. Her career includes practical experience in the fields of autism, sensory perception, memory and learning, attention deficit and anxiety disorders, including panic disorder and PTSD. This is Part I of a three-part series. [Part II](#) will be posted tomorrow, February 8; [Part III](#) will be posted on February 9