

LETTER TO THE EDITOR

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WIND TURBINE SOUNDS POSE NO THREAT TO HUMAN HEALTH

TO THE EDITOR:

In a recent letter to the editor (“Industrial wind power in Maine’s mountains is bad policy”, November 18, 2009), the Citizens’ Task Force on Wind Power aimed to discredit the idea of wind farms in Maine. Their assertions were many. I would like to address all of them in a series of factual counterpoints, but I will start with their allegation that “people living within range of turbine noise around the world” are experiencing negative health impacts as a result.

I understand completely how such talk might alarm area homeowners near existing or proposed wind projects. But I also am convinced that claims of sound-induced health issues being circulated by anti-wind groups are without scientific basis. An international panel of scientists agrees, and I would like to share their findings with you.

Commissioned by the American Wind Energy Association (AWEA) and the Canadian Wind Energy Association (CanWEA), the multidisciplinary panel of medical doctors, audiologists and acoustical professionals from the United States, Canada, Denmark and the United Kingdom undertook an extensive review, analysis and discussion of a large body of peer-reviewed literature focusing on wind turbine sound. The goal was to “provide an authoritative document for those making legislative and regulatory decisions about wind turbine developments,” according to AWEA CEO Denise Bode. The report, “Wind Turbine Sounds and Health Effects”, was released on December 15, 2009. The panel members’ names, current positions, and their complete report can be accessed by going to the following web link: http://www.awea.org/newsroom/releases/AWEA_CanWEA_SoundWhitePaper_12-11-09.pdf

Overall, the report draws the following conclusions:

- “The sounds emitted by wind turbines are not unique. There is no reason to believe, based on the levels and frequencies of the sounds, that they could plausibly have direct adverse physiological effects.”
- If sound levels from wind turbines were harmful, it would be impossible to live in a city given the sound levels normally present in urban environments.
- “Sub-audible, low frequency sound and infrasound from wind turbines do not present a risk to human health.”
- “Some people may be annoyed at the presence of sound from wind turbines. Annoyance is not a pathological entity.”

One of the study's authors, Robert J. McCunney, MD, is both physician of occupational/environmental medicine at the Massachusetts Institute of Technology (MIT) and on the pulmonary staff of Massachusetts General Hospital and Harvard Medical School. Dr. McCunney states unequivocally that "there is no evidence that the sounds, or the sub-audible vibrations emitted by wind turbines have any direct adverse physiological effects on humans."

In the course of its review, the panel of experts responded to the hypothesis of the so-called *wind turbine syndrome* put forward in a recently published book of the same name by Dr. Nina Pierpont. Dr. Pierpont contends that low vibration noise from wind turbines creates adverse impacts in humans ranging from dizziness, nausea and sleeplessness to muscle spasm, distraction and depression – and even a condition known as visceral vibratory vestibular disturbance (VVVD). Citing significant flaws in her research model, and her misreading of existing scientific research data, the panel concluded that wind turbine syndrome and VVVD are "unproven hypotheses (essentially unproven ideas) that have not been confirmed by appropriate research studies, most notably cohort and case control studies" – and can hardly be considered a bona fide medical syndrome.

Also reviewed by the panel were the conclusions of a 2007 study done in Portugal in which researchers claim, on the strength of investigating only two families living near a wind plant, that infrasound from turbines leads to a cardiac muscle-thickening disorder called Vibroacoustic Disease (VAD). The panel points out that the Portuguese researchers Alves-Pereira and Castelo Branco had extrapolated data from an earlier study of the effect of jet aircraft noise on mechanics working on the ground beside them. Since the level of low frequency sound generated by wind turbines is so much lower than the noise level the aircraft technicians were subjected to, the panel calculated that it would take 100,000 years of exposure to a wind turbine to equal one year of exposure to the higher sound level.

There are some who want to make wind power controversial. In some cases, towns that could use the income generated from wind farms have become needlessly worried by unsupported contentions and misinformation about wind. I like to remind my opponent friends that 90% of respondents in an October poll of Maine residents conducted by Portland-based Critical Insights said *they support the development of wind power as a source of electricity for Maine, with 66% (two out of three) saying they "strongly support" it* (italics mine). Only 6% of Mainers oppose wind power, with 2.5% saying that they "strongly oppose."

Of course we can disagree. But let's have our differences about the merits of wind in Maine be based on fact and science, not on fear-based allegations of adverse health effects, or of wildly exaggerated claims about the number of turbines planned for Maine ridgelines, or of the incapacity of modern wind turbines to produce significant amounts of electricity. Clean electricity from wind can make a great contribution to the energy needs of New England and help to reduce greenhouse gas emissions and their harmful effects on the environment. Every megawatt of power generated by a wind turbine displaces the need to produce a megawatt of power at a fossil fuel (usually natural gas) burning power plant, and the needless emission of carbon dioxide and other pollutants. These are facts. So when you hear assertions made from either side of the wind debate, please ask for the facts.

I invite any resident in the area who has concerns about Patriot Renewables' proposed wind project in Dixfield or who would like more information on wind energy to please contact me. I am available at the Old Holmes Market 29 Main St. Dixfield, and you can reach me at my email address below any time.

Sincerely, Tom Carroll

Tom Carroll is on the Patriot Renewables development team proposing a wind farm in the Town of Dixfield. He can be reached at TCarroll@Patriotrenewables.com.