

June 23, 2016

Vermont Public Service Board
112 State Street
Montpelier, VT 05620 -2701

Dear Chairman Volz, Board Member Cheney and Board Member Hofmann,

Please accept the following comments and proposals for implementing temporary sound-level standards for wind energy projects.

The 45dBA averaged over an hour now used in Vermont has allowed wind facilities to operate in a manner that causes “a significant impairment of the quality of life for some nearby residents.” This statement from the Department of Public Service was in response to a Motion of Relief from noise filed by the McLanes who live near the Georgia Mountain wind facility.

Three legislators have sent formal letters to the PSB to testify to their experience of loud wind turbine noise while visiting the McLane’s home beside the Georgia Mountain Wind facility.

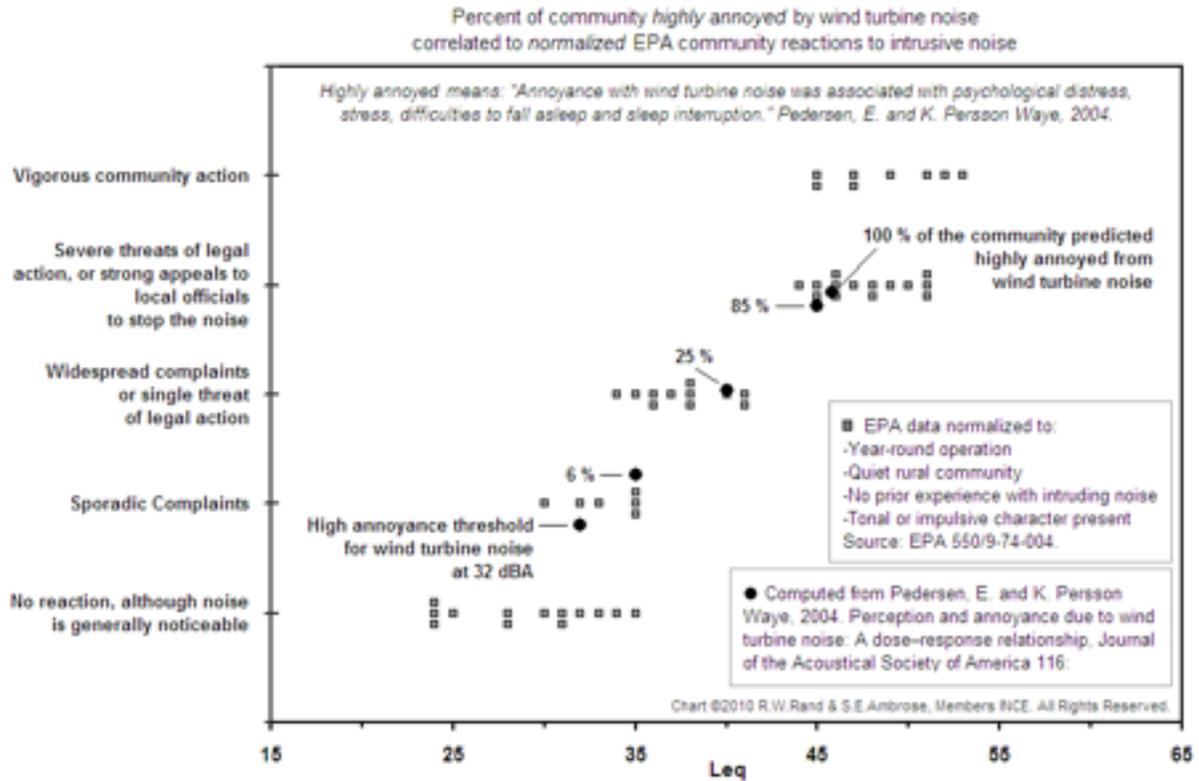
Representative Carolyn Branigan wrote, “The noise emitted from the turbines is very loud. I have visited Georgia Mountain on windy days and on calm days and have observed that even on calm days the turbines can be very loud. Please do something to give them some relief. I suggest to start you could order full-time monitoring. Also lower noise limits should be implemented immediately at night to allow these people to sleep.”
4/14/2016

Representative Curt McCormack wrote, “At the McLane’s house the evening that I was there, standing on their deck, I was surprised at the level of sound coming from the turbines. There was a periodic thrust, a soft bang that added a staccato element to the overall sound. That bang or whack, coming when not expected made the overall sound a little more disruptive.”

Senator Brian Campion, “However, while outside, I have no other way to qualify my experience than sharing that I found the sound made by the turbines as too loud and not likely conducive to my being comfortable outdoors for an extended period of time. I hope you will take my experience into consideration as you move forward with your examination of sound from wind turbines.” March 31, 2016,

Maine acousticians Robert Rand and Stephen Ambrose have shown that wind turbine noise complaints rise dramatically at 35dBA. Please see the following charts by Sound Experts R.W. Rand & S.E. Ambrose.

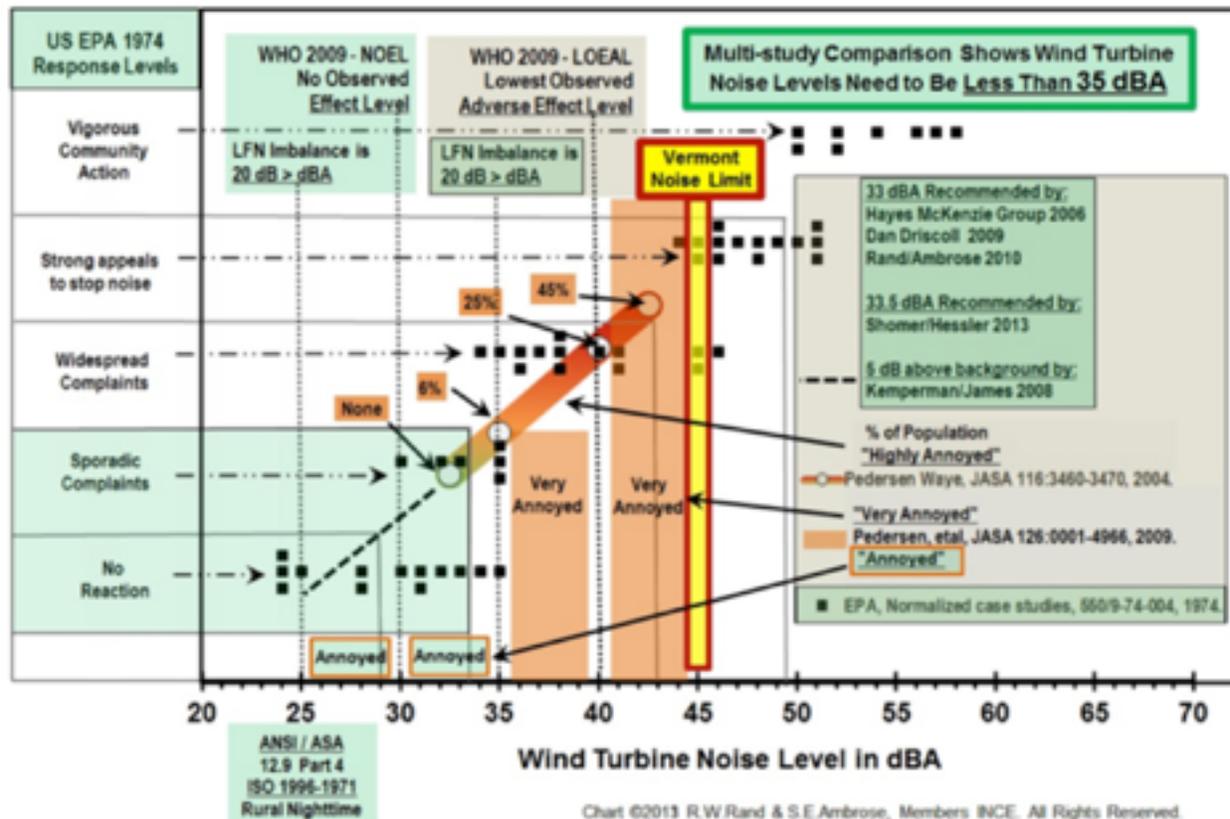
Health Canada data show a huge jump in highly annoyed by wind turbine noise, by a factor of Ten increase at 35dBA.



1. Information On Levels Of Environmental Noise Requisite To Protect Public Health And Welfare With An Adequate Margin Of Safety, 550/9-74-004, March 1974.
2. Pedersen, E. and K. Persson Waye, Perception and annoyance due to wind turbine noise: A dose-response relationship, Journal of the Acoustical Society of America 116, 2004.

Below please see another chart by Steve Ambrose and Robert Rand showing that wind turbine noise complaints rise significantly at 35dBA. Notice the yellow bar showing Vermont's standard receiving strong negative reactions.

Predicted Community Reaction for Wind Turbine Noise in Quiet Areas



The Comprehensive Energy Plan calls for us to learn from existing wind projects to inform future recommendations for sound standards and to adopt sound standards that are clear, readily enforceable and protective of public health. Averaging sound over an hour is a standard that is hard to enforce.

-The Comprehensive Energy Plan 2016 lists a few strategies and recommendations regarding wind energy development. Please see page 322 of the final CEP 2016.

Strategy 2: Learn from existing in-state wind projects to improve the siting and review requirements and processes for future wind development.

(1) The DPS, ANR, and Department of Health should continue to **learn from the operation of existing wind projects to inform any future recommendations for sound**, aesthetic, health, environmental, and public engagement guidelines or standards.

(3) In Public Service Board proceedings related to the siting of proposed wind generation projects, the Department should advocate for adoption of **sound standards that are clear, readily enforceable, and protective of public health.**

We need to set a standard of not to exceed 35dBA so neighbors can enjoy full use of their property and can sleep at night.

Measurement of sound standards need to be taken at property lines. This allows wind turbine neighbors to have the full use and peaceful enjoyment of their property. Sound measurement taken outside the home allows an uncompensated taking. This essentially awards wind developers uncompensated easement across private property.

A sound standard without enforcement is useless. We need independent third party sound monitoring for compliance. Neighbors should not have to be compliance officers. The wind facility is responsible for paying for this monitoring to show compliance with their CPG. For transparency, all sound data needs to be accessible to the public.

It is important for the PSB to establish protective temporary sound standards to make sure all potential industrial wind projects permitted over the next year will not victimize more Vermonters.

Please consider the authors of these comment letters and their motives. Are they acoustic specialists being paid by the wind industry? Are they industry lobbyist groups depending on the wind industry for financial support? Are they wind developers trying to protect their financial interests?

I am a neighbor of a potential project and want to protect my neighbors and community from the negative impacts of a poorly sited wind project.

Thank you for your consideration.

Sincerely,

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