

Critique of Wind Turbine Neuro-Acoustical Issues

by Dr. Dora Mills, MPH Maine CDC/DHHS
Published June 2009

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October 2010

Updated 10-10-10, added Berglund comments

Updated 10-17-10, added additional Leventhall reference

Updated 11-3-10, edited summary

Updated 11-4-10, added 2007 Europe Guidelines

In June of 2009 Dr. Mills, the head of Maine's public health department, released her findings that wind turbines created no health effects and that a moratorium was not warranted. These findings came out in two separate reports: the first was a short release, available at: <http://www.maine.gov/dhhs/boh/wind-turbines.shtml> .

backup link: <http://windfarmrealities.org/wfr-docs/maine-wind-turbines-health.pdf>

I posted a critique of that short release at: <http://windfarmrealities.org/?p=633> and promised a second critique of her longer second report, which is entitled "Wind Turbine Neuro-Acoustic Issues", and is available at

<http://www.maine.gov/dhhs/boh/wind-turbines-neuro-acoustical.shtml>

backup link: <http://windfarmrealities.org/wfr-docs/mills-maine-noise-report.pdf>

You are now reading that longer critique.

Prelude

Before I get started let me mention that the Mills report is the fifth health report that I have critiqued. The previous four were: Chatham (Colby), AWEA/CanWEA (Colby et al), CMOH (King) and NHMRC (Australia) and you can find these on my site at: www.windfarmrealities.org . All five of these share several unfortunate common traits. Most glaringly, none of the authors went into the field to interview any victims or their doctors. Additionally, none of the references they used involved doctors out in the field. I really do mean none. All of them sat in their cubicles googling around. Also, there is a depressing similarity in the references they used and how they were too often misused. They even use similar dismissive language, saying something to the effect that there's no scientific evidence from peer-reviewed journals that wind turbines present any direct physiological health effects. That's a lot of qualifiers. One has to wonder if the lawyers got involved. Anyway, crafting such careful phrasing may be fun in the debate club, but this isn't a game. Real people in real neighborhoods are suffering real problems and these reports help continue that suffering.

Introduction

Mills' short release mostly consisted of four questions. The longer report continues that format, now expanded to seven questions that run five pages plus one page of additional references. In my Details section, and at the risk of being tedious, I will go through the release one paragraph at a time, remarking on each of them as appropriate. Everything that is italicized below is from the longer report, and it might be handy to print out or have visible the report itself when going through my material.

There are a total of 24 references and I'll not comment on each of them except where needed. Where necessary I'll try to infer where Mills got her information and present that reference material as well (as she is pretty careless about references). Why the close scrutiny of references? Because, never having seen a victim or any victim's medical records, nor lived among turbines herself, the references presumably form the basis of what she thinks she knows about wind turbines and health issues.

Details

1. What protections are in Maine law regarding excessive noise and vibrations?

She manages to get through the first two paragraphs just fine, but in the third paragraph she starts building the case for dismissing the problems. Here it is, in its entirety.

DEP's ambient, post development monitoring at the Mars Hill wind farm shows dBA levels higher than 45, sometimes exceeding 60 when there are windy conditions both at ground level and at turbine height. This presents an example of how ambient noise from wind at these locations (which is why turbines are placed there) is in excess of the optimal nighttime 45 dBA. The DEP rules and compliance monitoring provide for distinguishing between the ambient contribution to noise and that from turbines at wind farms.

Note that she doesn't include any reference other than "the DEP". As it happens, I went through the Mars Hills monitoring reports back when they were new, and my analysis is posted at: <http://windfarmrealities.org/?p=516>. If you look at the tables there's a column labeled "hourly ambient readings" and sure enough, the highest of those readings is 60dBA. She then leaps to the conclusion that the high readings are due to natural conditions, like wind in the trees. Never mind that there were wind screen problems (note D) or that the highest readings were consistently during the day, when people are about; while the louder turbine noises were at night. She ignores the "Non-Wind Farm Sound Level", which is the consultant's best guess at a representative value. She is also implicitly assuming that natural ambient sounds (mostly higher frequencies) will drown out the very unnatural (and lower frequency) sounds from a wind turbine.

For a summary of the numbers here's a copy of a table from my posting, sorted by distance to the nearest turbine

Location	Distance(m) to nearest turbine	LAeq average	LA1 average	Comments	Non-farm noise level	Modelled Estimate
MP-1	260	54.3	58.9	Upwind	40	51
MP-8	390	49.4	53.9	Sideways	39	47.5
MP-6A	390	46.2	50.5	Downwind	33	42
MP-7A	800	44.8	46.9	Downwind	32	41
MP-4A	1050	43.6	48.8	Upwind	34	37
MP-2	1900	39.7	47.1	Upwind	30	35

I included the LA1 numbers (a measure of peak noise) since the WHO Guidelines recommend its use as more representative of human disturbance for the type of noise that wind turbines create. Despite Mills' dismissal, the table above provides all you need to know why Mars Hill has been such a problem, and is now in the courts.

Her fourth paragraph for this question is unremarkable. She includes two references, both of them regulatory documents from Maine. Note what she's doing here – ignoring the humans and retreating into the rules. There's an implicit assumption here; the regulations are sufficient to protect the neighbors. The WHO would disagree with that, as I'll get to shortly.

2. What do different noise levels compare to?

This section contains an unremarkable table, from Canada.

3. What kinds of noises are expected from wind turbines?

She simply repeats industry talking points here, like the “*a modern wind farm at a distance of 750 – 1,000’ is no louder than a kitchen refrigerator or a moderately quiet room.*” . It was in a Federal Publication, so it must be true, right? Looking at page 6 (a link is below), the refrigerator reference is there all right, but from where did NREL get its information? There are some general references below that and the refrigerator statement is in both of the two “essential” resource lists. One of the lists is from AWEA, the other from NREL. And where do those lists get their numbers? The trail ends here, no further references. Probably from each other. Almost certainly originally from a computer noise modeling program, using lots of favorable assumptions, run by AWEA or an AWEA member. Clearly not from any real-world measurements.

The green table above, consisting of real measurements, shows just how untrue that statement is. Actual measurements from:

Melancthon: <http://windfarmrealities.org/wfr-docs/ashbee-measurements.pdf>

and Vinalhaven <http://windfarmrealities.org/?p=615>

and YouTube: <http://www.youtube.com/watch?v=XVFzueV5CuE>

also show numbers higher than the proverbial refrigerator. Comparing a 100-meter diameter wind turbine to a refrigerator shows just how dishonest this industry is.

That AWEA, interested party that it is, makes such statements is understandable, in the same sense as lies told by a salesman are. That the government joins in is just reprehensible, a real dereliction of duty.

Here's my notes on the four references she includes for this question.

The first one was from NREL and contains the refrigerator reference. Her link, at <http://www.nrel.gov/wind/pdfs/40403.pdf> is fine and I have a backup link at <http://windfarmrealities.org/wfr-docs/nrel-guide-for-county-commissioners.pdf>.

The second one is a presentation from Anthony Rogers at U Mass. Note that slide 24 contains the sort of idealized noise calculation that makes people say stupid things like wind turbine = refrigerator. Mills' link, at http://www.windpoweringamerica.gov/pdfs/workshops/mwmg_turbine_noise.pdf is fine and I have a backup at <http://windfarmrealities.org/wfr-docs/rogers-noise-presentation.pdf>

The third one is about small residential turbines and I have no idea why it is included here.

The fourth one is a longer white paper by the same Anthony Rogers at U Mass. It's actually a pretty good primer on sound from turbines, albeit short on actual experiences. One curious point, Rogers has now put out three versions of this primer: 2002, 2004 and the latest in 2006. Mills' link is dead, and it took me quite a while to locate the 2004 version, eventually using Wikipedia. One wonders how she found it. The 2006 version is at: http://windfarmrealities.org/wfr-docs/rogers_nrel_paper.pdf.

4. Are there health effects to the levels of sound heard by wind turbines?

Finally we come to the critical question, but notice how the question itself is cleverly posed (not to mention how parsing it is impossible). Mills doesn't ask the obvious question, which would be "Are there health effects to the noise produced by wind turbines?" Instead she refers to the "levels of sound" in place of the sound itself. You may regard this slight-of-hand as trivial, but I can assure you a lawyer would not. From a practical standpoint, it gives proponents an opportunity to game the "levels of sound" – i.e. using different weights or changing the time base.

In three short paragraphs and five references she gives us the basis for her dismissal of the health effects of wind turbines. This is worth quoting her three paragraphs in their entirety, interspersed with my comments. Links to everything are below. Here's the first.

According to a 2003 Swedish EPA review of noise and wind turbines:

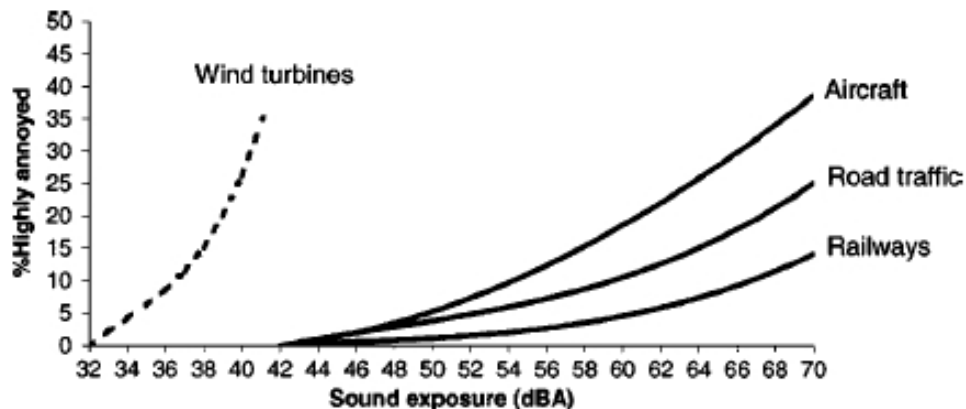
"Interference with communication and noise-induced hearing loss is not an issue when studying effects of noise from wind turbines as the exposure levels are too low."

Mill's link to the 2003 Swedish EPA study is dead, but I found it and an active link is below. The quote is from page 18, section 3.4 of the study. Here is the paragraph from which it is taken, in full. Pedersen (the author) writes:

“According to the definition made by WHO, health is a state of complete physical, mental and social well-being and not merely the absence of infirmity. The WHO Guidelines for Community noise lists specific effects to be considered when setting community noise guidelines: interference with communication; noise-induced hearing loss; sleep disturbance effects; cardiovascular and psycho-physiological effects; performance reduction effects; annoyance responses; and effects on social behaviour [Berglund et al 1999]. Interference with communication and noise-induced hearing loss is not an issue when studying effects of noise from wind turbines as the exposure levels are too low.”

So the WHO lists seven different health effects to be considered when setting noise guidelines, of which Pedersen says two are not an issue when studying wind turbines. What about the other five? Mills apparently doesn't want to talk about those. And with good reason. You can read the study yourself, but keep in mind that when Pedersen wrote this she had finished just the first of her three eventual studies, with this first study coming from five projects with a total of 16 turbines with a total capacity of about 8MW. Laughably small by today's standards.

In spite of the smallness she came to some sobering conclusions. She found that the annoyance from wind turbine noise was much higher than for any other type of noise. Here's her now-classic chart, from her first study, available at: <http://windfarmrealities.org/wfr-docs/pedersen-waye-2003.pdf> .



Given Maine's limit of 45 dBA, is there any wonder so many neighbors are complaining? From Mills' referenced study itself, there's this chart:

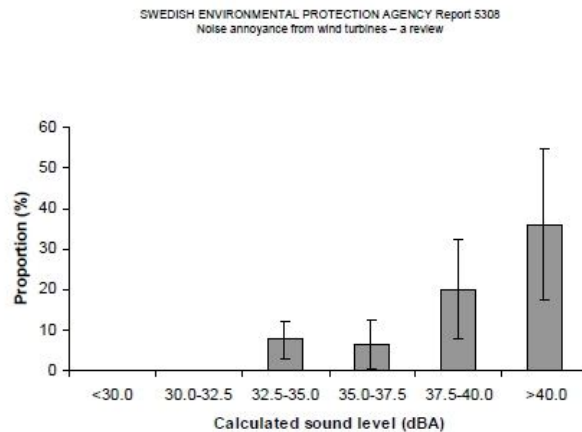


Figure 1. The proportions very annoyed by noise outdoors from wind turbines (95%CI) at different A-weighted sound pressure levels [Pedersen and Persson Waye 2002].

Apparently Mills thinks it is ok to highly annoy 40+% of the neighbors.

In her conclusions, Pedersen has this to say about wind turbine noise:

“Wind turbine noise...Does not directly cause any physical health problems. There is not enough data to conclude if wind turbine noise could induce sleep disturbance or stress-related symptoms.”

But since Mills apparently doesn't consider stress or sleep disturbance to be health problems she felt free to ignore the second sentence while seizing onto the first.

Back to Mills' words, the second of the three paragraphs.

In my review I found no evidence in peer-reviewed medical and public health literature of adverse health effects from the kinds of noise and vibrations heard by wind turbines other than occasional reports of annoyances, and these are mitigated or disappear with proper placement of the turbines from nearby residences. Most studies showing some health effects of noise have been done using thresholds of 70 dBA or higher outdoors, much higher than what is seen in wind turbines.

Notice again how carefully crafted the first sentence is. Even then she mentions “occasional reports of annoyances.” Pedersen reports that Maine's 45 dBA will produce something in excess of 40% (and maybe well in excess) of the neighbors would be annoyed. Most people would not consider 40% to be “occasional”. Of course these effects can be mitigated with proper setbacks; but unfortunately Mills doesn't want to put the proper setbacks (most disinterested health professionals say one mile would be sufficient in most cases) in place. The statement about some health effects showing up at

thresholds of 70 dBA or higher (typically occupational studies) says nothing about the long-term effects of lower levels.

Finally we come to Mills' third paragraph.

Sleep disturbance is another commonly raised concern, and the WHO guidelines for community noise recommend that nighttime outdoor noise levels in residential areas not exceed 45 dBA, which is consistent with Maine law.

If you are going to quote someone, you at least ought to quote their latest findings. In the case of the WHO, their latest statement on nighttime outdoor noise levels was in their "Night Noise Guidelines for Europe", first published in 2007 (compared with her 2002 reference). From the abstract of the later 2009 report: "Considering the scientific evidence on the thresholds of night noise exposure indicated by L_{night,outside} as defined in the Environmental Noise Directive (2002/49/EC), an L_{night,outside} of 40 dB should be the target of the night noise guideline (NNG) to protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly."

http://ec.europa.eu/health/ph_projects/2003/action3/docs/2003_08_frep_en.pdf (2007)

<http://windfarmrealities.org/wfr-docs/who-night-guidelines-europe-2007.pdf> (backup)

<http://windfarmrealities.org/wfr-docs/who-noise-guidelines-europe.pdf> (2009)

And that, ladies and gentlemen, is the total "evidence" Mills has produced to support her dismissal of health effects. Even a casual look at what she actually wrote and the references she used show that she didn't give the issue much thought, or more damningly she knew she had to dismiss the concerns to please her boss and she had to write something that sounded good, at least to superficial readers.

Again at the risk of being tedious, here are my comments on and links to the five references she used in this section.

#1 - Pedersen, *Noise Annoyance from Wind Turbines – A Review*

Mills' link is dead. You can find a copy at:

http://windfarmrealities.org/wfr-docs/pedersen_noise_annoyance.pdf. I quoted from this review earlier. Pedersen is a medical researcher, not a doctor. This review was just that – it was not a health study. Pedersen is, by her own admission, not qualified to do health studies, and has always said that it is inappropriate to extend her limited findings (including the next reference below) to dismiss all health effects.

#2 - Pedersen, *Wind Turbine Noise, annoyance and self-reported health and well-being in different living conditions*. [What Mills calls the BMJ 2007 study]

Mills' link only gets you the abstract. I have a copyrighted hard copy, but the only soft copy I could find is an earlier version, at

<http://windfarmrealities.org/wfr-docs/pedersen-different-2006.pdf>. Unfortunately they are quite a bit different, although the conclusions are similar. Pedersen was looking for

annoyance and found a surprisingly large amount of it. Like reference #1 above it was not a health study. I cover this report in more detail in my King critique, page 9.

<http://windfarmrealities.org/wfr-docs/king-journal-references.pdf> .

#3 – Stansfeld, *Noise Pollution: Non-Auditory Effects on Health*, 2003.

<http://bmb.oxfordjournals.org/content/68/1/243.full> with a backup at <http://windfarmrealities.org/wfr-docs/stansfeld-noise-pollution.pdf> . This is a literature review, not a health study. I'd urge you to read through it, as it contains details of the witch's brew of problems caused by noise in the environment. How Mills uses this review to dismiss health concerns is not apparent. Here are the first two sentences from Stanfeld's conclusion. "The evidence for effects of environmental noise on health is strongest for annoyance, sleep and cognitive performance in adults and children. Occupational noise exposure also shows some association with raised blood pressure." In any event, there was no mention of wind turbines.

#4 – *WHO Community and Occupational Noise*

Mills' link is dead, you can use:

http://www.who.int/peh/Occupational_health/OCHweb/OSHpages/OSHDdocuments/Factsheets/noise.pdf

or a backup link:

<http://windfarmrealities.org/wfr-docs/who-community-occupational-noise.pdf> . I invite you to read this six-page fact sheet. It was not a health study, and said nothing about exposure to wind turbine noise.

#5 – *WHO 2002 Technical Meeting on Relationship Between Noise and Health*

Mills' link is dead (she seems to have a lot of these), you can use:

<http://test.cp.euro.who.int/document/NOH/exposerespnoise.pdf>

or a backup link:

<http://windfarmrealities.org/wfr-docs/who-technical-meeting-noise-health-2002.pdf> .

This Meeting Report contains several papers, one of which is *Noise Exposure From Various Sources Sleep Disturbance, Dose-Effect Relationships On Adults* by Alain Muzet, starting on page 45. It is from this paper that the 45 dBA reference is obtained. Where did Muzet get his reference? He doesn't say, but almost certainly it was the *WHO Guidelines for Community Noise, 1999*, where in section 4.3.1, page 43 that value is presented. The Guidelines can be obtained at

<http://www.who.int/docstore/peh/noise/guidelines2.html>

or a complete backup copy (its 10MB!) at

<http://windfarmrealities.org/wfr-docs/who-community-noise-guidelines-1999.pdf> . One

has to wonder why Mills didn't use the original source. The Guidelines are still in common use, although slowly being updated by newer research (i.e. the *Night Noise Guidelines for Europe*). These references are all chock-full of the dangers of excessive noise in our environment, dangers which Mills ignores in her quest to find the perfect sentence to meet her needs. In any event, wind turbines are mentioned in none of them.

So out of these five references what do we have? The first two concerned wind turbines, but were annoyance studies and had little to say about health. The last three had a lot to say about noise and health, but nothing to say about wind turbines. The line of reasoning that Mills used to get from these references to her blanket dismissal of health effects is not apparent.

5. What about low frequency noises (LFN)?

The answer to this question takes four paragraphs during which Mills doesn't seem able to come to an explicit conclusion. I won't, thankfully, go through this section as carefully as I did the previous one, although I will take some more time for the references.

The first paragraph gives some details why "some" (although she doesn't bother identifying who the "some" are) have pointed to LFN as a problem, All of what she says in here is true.

The second paragraph mentions that LFN is very common in our environment, and that the levels of LFN from wind turbines "appear" to be insufficient to cause health problems. What evidence does she use to support this conclusion? There are five references to this section. Of the five only three have any hope of providing an answer – what small appliances and magnetic emissions have to do with LFN from wind turbines is a mystery to me. I'll discuss the remaining three in order.

#1 - Leventhall, *Infrasound from Wind Turbines: Fact, Fiction, or Deception?*

Mills' link,

<http://www.wind.appstate.edu/reports/06-06Leventhall-Infras-WT-CanAcoustics2.pdf>

seems to be ok, with a backup of

<http://windfarmrealities.org/wfr-docs/leventhall-canacoustics.pdf> .

It seems that every one of these health reviews uses this article, I guess because of the sentence that reads "Infrasound from wind turbines is below the audible threshold and of no consequence." But the gist of this article has nothing to do with health, rather it is about Leventhall's charge that anti-wind people (specifically Pierpont) are trying to scare the general population with the bogeyman of "infrasound" and they should stop doing it. Leventhall is not a medical person at all, let alone a doctor who has attended a victim.

I go into more details about this article in my King critique on page 5:

<http://windfarmrealities.org/wfr-docs/king-journal-references.pdf> .

I also go into some more detail on Leventhall himself at

<http://windfarmrealities.org/?p=93> .

For a nice summary of this article's deficiencies, go to

<http://www.algonquinadventures.com/waywardwind/misreps.htm> .

#2 - Berglund, *Sources and effects of low-frequency noise*

Mills' link seems to be ok, but leads to just the abstract, and the link itself is too long for here. Just looking at the abstract you find this: "Although the effects of lower intensities of low-frequency noise are difficult to establish for methodological reasons, evidence suggests that a number of adverse effects of noise in general arise from exposure to low-frequency noise: Loudness judgments and annoyance reactions are sometimes reported to be greater for low-frequency noise than other noises for equal sound-pressure level; annoyance is exacerbated by rattle or vibration induced by low-frequency noise; speech intelligibility may be reduced more by low-frequency noise than other noises except those in the frequency range of speech itself, because of the upward spread of masking."

Thanks to a reader, I now have the full report. Like the subsequent *WHO Guidelines for Community Noise, 1999* (which Berglund edited) it is chock-full of warnings about the effects of LFN on humans. Wind turbines were mentioned in the body of the report: "Finally, the data on wind turbines indicate that the predominance of low-frequency noise is of particular concern for communities living close to wind turbines (Fig. 5). However, at distances of a few hundred meters the low-frequency noise is theoretically below hearing threshold." Mills certainly made use of this, but forgot to mention that in 1996 the turbines Berglund was talking about were a small fraction of the size of modern ones. Also note the use of "theoretically".

Mills also forgot to discuss other aspects of Berglund's report. Like the problems with the A scale and LFN. Here's some of Berglund's words relating to the A scale.

"Even though the A filter has proven itself useful as an approximate estimation of annoyance for mid- to high-frequency stationary noise, it severely underestimates annoyance as well as (perceived) loudness when the noise contains low-frequency components."

"The inability of A weightings to handle low frequency noise is perhaps not surprising given that the isoloudness functions employed in the weighting were hand extrapolations into the lower frequencies rather than being based on empirical low-frequency data."

Or the lack of attenuation for LFN.

"The sound insulation ability of "soundproof" cabins averages typically 30–50 dB for frequencies above 500 Hz, but only 0–19 dB for frequencies below 500 Hz"

"Likewise, the use of personal hearing protectors is less effective in the low-frequency range."

Or on building rattling, which has been widely reported around wind projects.

"It is apparent that low-frequency noise disturbs sleep, and when it produces rattle it is likely to be more disturbing than higher frequency noise."

#3 - Van den Berg, *Low Frequency Noise and Vibration and its Control*

Mills' link,

http://www.viewsofscotland.org/library/docs/LF_turbine_sound_Van_Den_Berg_Sep04.pdf

seems to be ok, and I have a backup at:

<http://windfarmrealities.org/wfr-docs/van-den-berg-low-freq-noise-vib-2004.pdf>

Van den Berg went on to write some ground-breaking studies that helped explain why wind turbine noise was more annoying than just about any other noise. This is an earlier paper that reported the results of measurements he made of the noise produced by a wind project on the German/Netherlands border. Van den Berg, like Pedersen, always studied annoyance and by his own admission was not qualified to study health issues. And like she did in her use of Bergland, Mills forgot to mention some of the cautionary words in Van den Berg.

He starts out with words that are music to Mill's ears, "Wind turbines produce low frequency sounds, but it has not been shown this is a major factor contributing to annoyance." What Mills didn't mention that the rest of this paper was devoted to showing how LFN could be.

Like impulsiveness. "However, in a stable atmosphere the periodic swishes are louder than in daytime and residents use words like clapping, beating or thumping to describe the character or the sound. In the case of the Rhede wind park, the beating can be heard clearly at distances of at least up to 1 km and at night one can use it to determine the rotational speed of the turbine." How many refrigerators can you hear at 1km?

Or window rattling. "Although infrasound levels from large turbines at frequencies below 20 Hz are too low to be audible, they may cause structural elements of buildings to vibrate. The vibrations may produce higher frequency, audible sound."

Or Van den Berg's last words: "In a wind park these pulses can synchronize, leading to still higher pulse levels for an observer outside the park. The resulting repetitive pulses change the character of the wind park sound and must be expected to cause added annoyance."

Mills' third paragraph deals with the A scale (as in dB_A) compared with the C scale. She seems to recognize, maybe due to Bergland, that Maine's reliance on the A scale (which deemphasizes low frequency noise) may not be appropriate for wind turbines. She mentions that Maine is evaluating noise models and may be thinking about a handicapping system to account for the large low frequency noise generated by wind turbines. That's all fine and dandy, but promises are cheap. If she was serious, why would she continue to recommend placing wind turbines close to homes when there's some doubt about the validity of the current rules? Precautionary rule be damned!

Mills' fourth paragraph mentions the study by Todd where he demonstrated that humans respond to surprisingly small amounts of low frequency vibration, below the threshold of audibility. While she is correct in saying that a physiological response does not automatically mean there are adverse health effects, it also raises the possibility that low frequency noise, even if inaudible, can have direct health effects. We know we have complaints, we know we have people abandoning their homes, we know we have people going to the doctors for symptoms that seem directly related to the presence of wind turbines, and now we have a plausible mechanism in addition to annoyance/stress/sleep disturbance. And still Mills shows no caution.

6. What are the health benefits to wind turbines?

Here Mills repeats the CO2 savings numbers that she did in her shorter release, again without attribution. These numbers are almost certainly illusory. If you want actual numbers please see my posting at <http://windfarmrealities.org/?p=264>

7. What about a moratorium on wind turbine projects?

Here is her statement in full.

- *I do not find evidence to support a moratorium on wind turbine projects at this time. The articles cited by those who are in favor of a moratorium are either from non-peer reviewed journals (though some are labeled as “peer reviewed”) or are misinterpreted analyses from peer reviewed journals.*
- *If there is any evidence for a moratorium, it is most likely on further use of fossil fuels, given their known and common effects on the health of our population.*

Notice how she dismisses any contrary evidence as being from “non-peer reviewed journals” or was “misinterpreted”. Of her 25 references, how many were from “peer reviewed” journals? I count eight, of which two involved nonsense about small appliances and magnetic emissions. Notice that she doesn’t mention where the opponents misinterpreted the journals, only that they did. How convenient. Sorry, Dr. Mills, after all of your own misinterpretations, documented here, I’d like to be shown where others have misinterpreted anything.

The remainder of her report consists of miscellaneous references, not remarkable enough to bother with.

Conclusion

I hope I’ve accurately conveyed just how weak the foundation of Mills’ dismissal of the health effects of wind turbines was. Not only did she not go into the field to interview any victims or doctors, she didn’t even bother trying to find any studies that went into the field and interviewed any victims or doctors. How in the world someone can not even look for something and then in good conscience declare they didn’t find it? This study will end up causing harm to Maine’s citizens as it will allow developers to continue placing projects too close to people’s homes. It appears that Dr. Mills values her job over her professional obligations, and that is shameful, simply shameful.

Update, November 3, 2010. I’ve heard several reports that Mills was a caring and competent physician in her earlier career. Her health report is not indicative of that, and I have to wonder when and why she went over to the Dark Side. You might wonder that maybe it is I who have gone over (I sometimes do too) but then I compare the nature of her “evidence” with all the evidence from the field and I feel confident in my judgments. As I am able I plan on nosing around to see if I can make any sense of it.

