Health risks from turbines downplayed

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July 16, 2010

BOURNE — The swish, swish sound of the turning blades on a wind turbine can mean very different things to different people.

To some, it is the sound of renewable energy and an alternative to electricity generated.

To others, including some of those who live closest to turbines, the sound is at its least an annoyance and at its most the source of potential health problems.

About 75 people representing both camps were at Upper Cape Cod Regional Technical School last night for a presentation on the health effects of noise from wind turbines by Dr. Robert McCunney.

"Ideally, wind turbine development should be such that people don't suffer adverse health effects," he said.

McCunney is a research scientist at the Massachusetts Institute of Technology Department of Biological Engineering and a staff physician at Massachusetts General Hospital. He served on an expert panel that reviewed the health effects from the sound of wind turbines for the American and Canadian wind energy associations.

Last night's forum, which ran for almost two hours, was hosted by the Cape and Islands Renewable Energy Collaborative.

Opponents of siting wind turbines near residential neighborhoods questioned McCunney's impartiality.

He said he was paid, through a grant, for participating on the expert panel, but he was not on retainer by either of the wind energy associations. He was not paid to participate in last night's forum.

"Fundamentally, I think people need to be listened to and make sure their concerns are addressed," he said.

Before listening to the crowd, McCunney explained the expert panel's findings.

Peer-reviewed literature on the health effects from wind
turbines and three studies of people who lived near wind turbines indicated that as noise levels from turbines increased so did the percentage of people who reported being annoyed, McCunney said.

According to the studies, he said, attitudes toward wind turbines played a large role in the level of annoyance caused by their operation.

The studies did not show a link between low-frequency sound or infrasound from turbines and health effects, he said. Infrasound is sound below the audible range of the human ear.

Instead, the fluctuating and audible "swish, swish" of the blades rotating through the air caused the greatest levels of annoyance among people who live near turbines, he said.

McCunney also addressed "Wind Turbine Syndrome," a term coined by Dr. Nina Pierpont for symptoms experienced by people who live near wind turbines. Pierpont is a New York-based pediatrician who specializes in behavioral medicine and behavioral ecology and has written a book on the subject that opponents of turbines near residential neighborhoods regularly cite in their arguments.

Pierpont's research, while not invalid, is based on the weakest type of evidence known as a case series, McCunney said. Case series track patients with a known exposure but cannot be used to draw causality between noise from turbines and health problems, he said.

McCunney said he has written case series and the technique is an appropriate way to generate a hypothesis that could lead to further research on a subject.

Audience questions last night ranged from those who asked whether noise from traffic is greater than from turbines to how close McCunney would feel comfortable having a turbine near his home.

The answer, he said, would be based on the sound level of the turbine, which can vary depending on its size and power, among other factors.

"How are we to get a sound sleep when living within a half mile from a turbine?" another audience member asked.

People who live close to a turbine could close their windows or beef up their insulation, McCunney said, adding he understood that such measures may not be an option for some people.

Colin Murphy, who lives on Blacksmith Shop Road in Falmouth near a 400-foot-tall turbine at the town's wastewater treatment facility, was not impressed.
"All his studies are a mile or a mile and a half away," Murphy said. "We're a quarter-mile away."

Closing windows will not help when he is in his yard or if he tries to sell his home, Murphy said.

"All (McCunney's) studies, they're not relevant to me," he said.

Falmouth officials are surveying residents near the wastewater treatment facility turbine on their experience and have reduced operations of the turbine because of the number of complaints from neighbors.