### **Biemer, Andrew**

From:	drfred@myfairpoint.net
Sent:	Friday, December 8, 2023 12:59 PM
То:	SEC: Admin
Subject:	Re: **SEC Meeting** 12/11/2023 at 1:30PM

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Mr. Biemer,

This is a letter for distribution prior to the 11 December 2023 meeting of the SEC. It should be distributed to members of both the main SEC Committee, and the Evans Subcommittee. Fred Ward

8 December 2023

Mr. Daniel Goldner, Chair NH Site Evaluation Committee 21 South Fruit Street Concord, New Hampshire 03301-2429

Dear Mr. Goldner:

#### Re: SEC 2021-02

I am a meteorologist, and this is a case which is 90+ meteorology!. The production of turbine noise, excessive or otherwise, is completely dependent on the weather. The wind speed at the turbines determines the their sound output, with stronger winds producing louder noises. In addition, the effective transmission of this noise depends on the temperatures in the neighborhood between the turbines and its neighbors. On most nights, the turbine noise is dispersed to the air above and around the turbines, with only a small fraction reaching out and down to its neighbors. On Some nights however, the air temperatures between the turbines and its neighbors changes markedly. Such nights have what is called a "temperature inversion". The turbine noises are trapped in the air below the turbines, and around the neighbors homes. On such nights the turbine sounds can be many times louder than on other nights at the neighbors' homes, and it is mostly/only on these "inverted" nights that complaints will be filed.

This effect on sound generation and travel is well known, not only by Antrim Wind Energy, but by every sound professional, including Mr. Menge. Short of deliberate misdirection, there is no point in wasting time measuring sounds on nights without high winds on the turbines and a temperature inversion. That is why RSA 162-H is written to specify that any test to check a turbine noise complaint must be conducted "under the same meteorological conditions as existed at the time of the complaint". Checking at "other", or "random" meteorological conditions is meaningless. Mr. Menge knows this effect, and it allowed him to select the times for his sound measurements, with relatively "quiet", non-inverted temperatures.

Your Subcommittee would have you believe that Mr. Menge demonstrated that AWE would not (ever?) violate its agreed 40 Db noise limit. Menge was careful NOT to draw such a conclusion, and that key conclusion was notably omitted from the "Conclusions" in his report.

# MENGE DID NOT SO DEMONSTRATE! YOUR SUBCOMMITTEE DID!

The report from your Subcommittee to recommend a solution to the questions surrounding the AWE disputes is a transparent distortion (OR IGNORANCE) of the facts. I strongly advise that it be dismissed, and retained by this SEC Committee for reconsideration.

It is arguable whether your Subcommittee drew this conclusion because of their ignorance of the highly variable sound levels that change drastically as the wind speed and temperature change. MENGE CHOSE HIS TESTING TIMES ONLY WHEN HE KNEW THAT THERE WAS LITTLE OR NO CHANCE OF A LOUD (40+) TURBINE NOISE. His selection defied the instructions in your Work Orders, which required testing in weather which was the same as at the time of the complaint. The logic your Subcommittee CHOSE was similar to TESTING for noise at a rifle range when it was empty! Was this ignorance on the part of your Subcommittee, or worse? This question can be easily and quickly settled by inviting Mr. Menge to your Committee and asking him "COULD THE TURBINE NOISES HAVE EXCEEDED THE 40 dB LIMIT MANY TIMES DURING THE MONTHS YOU WERE WORKING ON YOUR TESTS?"

Since my name and expertise in this matter were referenced a number of times at the hearing on 7 June 2023, I also stand ready to explain the meteorology of sound production by the turbines, and its transmission to the neighborhood.

Sincerely, Dr. Fred Ward

On Fri, 17 Nov 2023 14:09:48 +0000, "SEC: Admin" <admin@sec.nh.gov> wrote:

Please take notice that The Site Evaluation Committee will hold a public meeting on **Monday, December 11, 2023 at 1:30PM.** 

Official notice is attached to this message.

This meeting will be held in person at:

21 South Fruit Street Concord, NH 03301

# Hearing Room A

Agenda items include the following:

- 1. Preliminary and Administrative Matters
- 2. Discussion of Rules
- 3. Annual Review of Application and Filing Fees
- 4. Antrim Wind Energy Facility Investigation including:
  - a. Administrator's report to the SEC found <u>here.</u>
  - b. Correspondence from Attorney Allen Brooks, Counsel for the Public found <u>here.</u>
  - c. Public Comments regarding Docket 2021-02.
- 5. Any other business lawfully before the Committee.

Thank you and please contact me with any questions.

#### **Andrew Biemer**

Administrator

NH Site Evaluation Committee

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