

STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

RE: Application of Antrim Wind, LLC for Certificate of site and)
facility to construct up to 30 MW of wind electric generation in)
the town of Antrim, Hillsborough County, New Hampshire and)
operate the same (SEC Docket 2012-01).)

OBJECTION OF INDUSTRIAL WIND ACTION GROUP TO APPLICANT'S
CONTESTED MOTION FOR REHEARING AND MOTION TO REOPEN THE RECORD

Industrial Wind Action Group ("IWA"), hereby objects to the Applicant's Contested Motions for Rehearing and to Reopen the Record as such applies to the Subcommittee's decision concerning the conditions on noise. The Applicant insists the Subcommittee's noise conditions are "unlawful, unreasonable, and arbitrary and unsupported by record evidence" because the decision is inconsistent with the 2009 World Health Organization Guidelines; the decision departs from SEC precedent without any explanation; and the decision fails to consider the noise restrictions agreed to by the Town of Antrim.

IWA objects because the Applicant's arguments are without merit. Despite the fact that the Application was denied on grounds pertaining to aesthetics, IWA urges the Subcommittee to stand by its decision to impose the conditions about which the Applicant complains because they are more than adequately supported by the evidence in the record.

I. Subcommittee Decision is Consistent With 2009 WHO Night Noise Guidelines

1. The Applicant insists the Subcommittee relied upon the 2009 WHO Guidelines and, in doing so, unlawfully deviated from the guidelines by imposing an absolute threshold for day and night. This claim misrepresents the facts in the record and fails to acknowledge the actual meaning of the WHO Guidelines.

2. The WHO Guidelines establish nighttime noise limits in order to ensure public health.

3. The Guidelines use the $L_{\text{night, outside}}$ indicator as mandated by European Union Environmental Noise Directive ('END') to be consistent with other reporting methods. However, the authors make clear that L_{AMAX} (a not to exceed threshold) *is more appropriate for regulatory purposes since it is easy to explain and enforce.* (emphasis added) Long-term effects such as cardiovascular disorders are more correlated with indicators measured over long periods ($L_{\text{night, outside}}$), but instantaneous effects such as sleep disturbance are better observed when measured as a maximum level per event (L_{AMAX}) i.e. road, air, and rail traffic. (See 2009 WHO Guidelines Executive Summary at X and Section 1.3.7) The L_{AMAX} indicator is more appropriate for measuring wind turbine sound emissions in a community.

4. The Subcommittee members correctly recognized that the $L_{\text{night, outside}}$ indicator is not practical for enforcement purposes. (See TR. 02/07/13 (Deliberations) Day 3, PM at 11:13)

5. The Subcommittee's decision was entirely consistent with the WHO Guidelines.

6. Turbine sound emissions increase with power output and are expected to be greatest at night and during certain periods of the year consistent with the highest wind speeds. (See V-Bar report) Annual average energy production (P50), according to the Applicant, could be around 40% capacity factor, however, production may well exceed this level over many nights in the year. It is not uncommon for wind energy facilities to demonstrate production levels at 80-90% of nameplate capacity during individual hours particularly at night over long periods of time. Given the intermittency of wind production, noise levels may not rise to the level of 40 dBA $L_{\text{night, outside}}$ due to averaging, however the impact on surrounding residences on a nightly basis could still prove severe.

7. If exceedences occur over the course of one night, there is a high likelihood other such events will occur on other nights. If there is an increase in the number of events that disturb sleep as expressed in

sound levels exceeding the L_{AMAX} threshold this "may constitute a subclinical adverse health effect by itself leading to significant clinical health outcomes." (See 2009 WHO Guidelines Executive Summary at XVII)

8. Adopting the absolute threshold is consistent with the WHO Guidelines and consistent with other regulatory venues including the Subcommittee's decisions on Lempster Wind and Groton Wind and ensures the Subcommittee a condition that is enforceable and assures the public the appropriate protections.

9. Gregory Tocci, witness for Counsel for the Public recommended the Committee adopt a noise standard not to exceed 10 db(a) about measured L90 levels with a minimum of 30 dBA. Richard James, witness for the North Branch, recommended an average sound level of 35 dBA or absolute threshold of 40 dBA and the Applicant's witness, Robert O'Neal recommended a minimum of 45 dBA. (See TR. 02/06/13 (Deliberations) Day 2, PM at 30:2-30:6) All three witnesses recommend sound levels within the range considered in the 2009 WHO Guidelines.

10. The 40 dBA absolute threshold is a good surrogate for $L_{night,outside}$ for the purposes of enforcement and ensuring public health.

II. The Subcommittee's Decision Does Not Depart From Any SEC Precedent

11. The Subcommittee is authorized by statute to include "such reasonable terms and conditions as the committee deems necessary" within the certificate (RSA 162-H:16, VI) and has the discretion to do so even if no party suggests such conditions and/or if the Applicant opposes them.

12. The Subcommittee could not conceivably depart from any SEC precedent regarding noise standards since no such standard exists. There is no consistency in the Subcommittee's rulings pertaining to Lempster Wind LLC, Granite Reliable Wind LLC and Groton Wind LLC. Any such consistency the Applicant alleges is self-serving and not supported by the record dating back to 2007.

13. In the Lempster Wind LLC docket, the Subcommittee adopted an absolute threshold as the greater of 45 dBA or 5dBA above the ambient¹ sound level. If sound levels at the exterior facade of non-participating residences exceeded the threshold, the Subcommittee mandated that Lempster Wind implement mitigation measures including the possibility of operational adjustments that curtailed production to bring the project into compliance. (SEC Docket 2006-01 Lempster Wind LLC decision)

14. In the Granite Reliable Wind Park, Docket 2008-04, the Subcommittee establish no conditions pertaining to sound. (SEC Docket 2008-04 Granite Reliable Wind LLC decision)

15. The Groton Wind LLC Docket, included an entirely different condition on noise where the project at the outside facades of homes should not exceed 55 dBA or 5 dBA greater than ambient, whichever is greater, in day time and 45 dBA or 5 dBA greater than ambient, whichever is greater, at night. The approval further ordered that sound levels generated by the Project shall not exceed 40 dBA or 5 dBA greater than ambient, whichever is greater as measured within current boundaries of the Baker River Campground. The Subcommittee did not include any conditions regarding mitigation measures. (SEC Docket 2010-01 Groton Wind LLC decision)

16. The Applicant's claim that the noise standards at Lempster/Groton are reasonable because, according to the Applicant, only two complaints about noise were filed at the Lempster site assumes facts not in the record. We do not know how many non-participating property owners have signed good neighbor agreements with Lempster Wind. Such agreements would be "a tremendous incentive for people not to file complaints." (*See* TR. 11/29/12 PM at 116:12-14) In addition, the Groton Wind project did not go into

¹ The decision in the Lempster docket defined ambient sound level as the "background sound level measured with wind turbine blades locked and not operating". Industry definition of background sound levels is the lowest sound level consistently present and available to mask project noise. Insect sounds and other noises, including leaf rustle and water should be removed.

service until after the evidentiary hearings were ended. Any record of noise complaints would have occurred after this docket record was closed.

17. Contrary to the Applicant's claim, the Subcommittee conducted a detailed examination of the noise limits during the deliberations. We would agree that the decision taken by the Subcommittee in this docket differs from prior decisions. However, the Applicant's claim of any prior consistency across dockets relative to noise conditions is baseless.

III. The Subcommittee Has The Discretion to Accept/Amend/Ignore Host Town Agreements

18. As cited in paragraph 11 above, the Subcommittee has the authority to include "such reasonable terms and conditions as the committee deems necessary" within the certificate (RSA 162-H:16, VI) and the discretion to do so even if no party suggests such conditions and/or if the Applicant opposes them.

19. While the Subcommittee has the discretion to incorporate agreements between the host community and the Applicant into the final decision, this is not a requirement. In addition, even if the Subcommittee acknowledges and agrees to include any such agreement in the final order, the Subcommittee is at liberty to amend the agreement as it sees fit.

20. In the Lempster Wind LLC docket the Subcommittee was not satisfied with the noise restrictions agreed to between Lempster Wind and the town and thus amended the agreement. In the case of Granite Reliable Wind LLC, the Subcommittee had concerns with the Coos County agreement and imposed three additional provisions pertaining to decommissioning of the project.

21. Any claim that the Subcommittee was unaware of or ignored the agreement between the Applicant and the Town of Antrim is not supported by the record. Reference to the agreement was made several times throughout the proceedings including when the Applicant's noise expert, Mr. O'Neal, was on

the witness stand. The Applicant may have hoped for the Subcommittee to adopt the noise limits detailed in the Agreement but there was no assumption by the Applicant that the Subcommittee would do so. (*See* TR. 11/01/12 PM at 142:8-15) To assert that the Subcommittee was unlawful in not referencing the Agreement presumes that the Agreement carries substantial weight not prescribed by statute.

WHEREFORE, IWA respectfully requests that the Subcommittee deny the Applicant's Motion for Rehearing and to Reopen the Record, and grant IWA such other and further relief as may be just.

Dated this day of June 13, 2013

INDUSTRIAL WIND ACTION GROUP

By:



Lisa Linowes

cc: Parties to Docket 2012-01