State of New Hampshire

Site Evaluation Committee

Docket No. 2012-01

Antrim Wind Energy, LLC

Final Memorandum of Lisa Linowes
On behalf of the Industrial Wind Action Group

January 14, 2013

I. INTRODUCTION

Antrim Wind Energy, LLC ("AWE") has petitioned the New Hampshire Site Evaluation Committee ("Committee") for a Certificate of Site and Facility to construct and operate of a 30 megawatt wind energy facility. The proposed wind facility ("Project") consists of ten (10) wind turbines, each with a nameplate capacity of three megawatts, to be situated in Antrim, New Hampshire.

The Industrial Wind Action Group (“Windaction" or "IWA”) respectfully proposes that the Committee find and conclude that the petitioner, AWE, has: 1) failed to provide sufficient evidence to support the issuance of a Certificate and 2) failed to meet the burden of proof with regard to the certain criteria identified in RSA 162H :16. IWA further avers that, based on the record, the Committee does not have sufficient evidence to find, and conclude, that AWE's proposed construction and operation of ten wind turbines on Tuttle Hill and Willard Mountain situated in the Town of Antrim, New Hampshire, with associated transformers, lay down areas, transmission lines, and related construction and development activities, and the operation of said facilities meets of the following criteria as established in RSA 162H :16 IV specifically:

(a) Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in continuing compliance with the terms and conditions of the certificate.

(b) Will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies.

(c) Will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety.

Accordingly, the findings by the Committee shall be based on the record. This post-hearing memorandum examines the criteria based on the record. In the event that the Committee votes to approve the Project, this memo provides recommended actions for the Committee to consider in it deliberation.

II. PROJECT DESCRIPTION

1. Antrim Wind Energy, LLC ("AWE") is a Delaware Limited Liability Company registered to do business in the State of New Hampshire. AWE has two members, Eolian Antrim , LLC, and Westerly Antrim, LLC - which in turn are owned respectively by Eolian Renewable Energy, LLC ("Eolian") and Westerly Wind, LLC ("Westerly"). Eolian, a Delaware limited liability company headquartered in Portsmouth, New Hampshire was formed in 2009 to manage the development, construction, and operation of utility scale wind energy facilities in New England. Westerly Wind, LLC is a Delaware limited liability company based in Braintree, Massachusetts. It was formed in 2009 to provide development capital, management expertise and commercial assistance to independent wind power developers.

2. The project, as proposed, consists of the construction and operation of a 30 MW wind generation facility to be located on private land in Antrim, NH. The ridgelines impacted by the development are known as Tuttle Hill and Willard Mountain. The elevations of the turbines range between 1042 and 1904 feet above mean sea level

3. Access to and between the 10 3.0 MW Acciona AW-116/3000 turbines will be along approximately 4 miles of gravel roads. Construction will involve the erection of 10 Acciona AW-116/3000 turbines, new overhead and underground electric

transmission lines, an Operations and Maintenance Building and other associated facilities. Each turbine will have a total height from foundation to blade tip of approximately 492 feet with a rotor diameter of 381 feet (116 meters).

4. Each turbine will be affixed to a concrete foundation. In addition to the construction activities associated with the concrete foundations, each turbine site will require the construction of a "lay-down" area to unload, store, and assembly the towers and other equipment associated with the turbines.

5. To comply with the US Department of Transportation FAA regulations, the turbine layout will require six (6) of the turbines to be lit with synchronized pulsating lights. AWE has entered into an agreement with the Appalachian Mountain Club relating to the use of a radar activated lighting control system for the project. To date, the FAA has not issued a revised Advisory Circular setting forth accepted standards for radar activated lighting systems and there is no published timetable for when the FAA will approve standards.

6. AWE has asserted an average annual net capacity factor of 37.5 – 40.5%, but actual wind data was not analyzed by a third party to confirm this assertion and what the effective capacity for the facility would be. AWE asserts that the project would offset 60,000 tons of carbon dioxide emissions annually.

III NOISE

A. Preconstruction Noise Survey - Facts In The Record

1. Epsilon Associates, Inc., conducted an ambient sound level survey to "characterize the current acoustical environment under varying wind conditions in the community." Ambient sound levels were collected at five locations during a two-

week period from September 16, 2011 to October 4, 2011. (Exhibit AWE 3 Appendix 13A, pg 4-2)

2. Mr. O'Neal agrees that at 3 of the 5 locations where he collected background noise levels, he did not measure the full-octave band frequency. He admits that without the full-band data it is not possible to mathematically subtract out insect noise from the background sound data nor did he make any corrections for insect noise. (Transcript 11/1pm pg 206, ln 20-23 and pg 207 ln 2-14)

3. Mr. O'Neal agrees that every baseline ambient sound survey seeks to identify the lowest sound level that is consistently present and available to mask project noise. He acknowledges the challenge of determining what sound level "is consistently present unless you measure for a long, long time" but agreed that insects are not part of the long-term background level since "insects are not there all year long." (Transcript 11/1pm pg 208, ln 11-22)

4. Mr. O'Neal agrees with the methodology used by Greg Tocci to mathematically remove the insects from the sound level survey conducted by Mr. Tocci (Transcript 11/2am pg 9, ln 1-7). Mr. O'Neal agrees that without making adjustments to the sound data collected, "you certainly might over-estimate the background level measured." (Transcript 11/1pm pg 207, ln 23-24)

5. Background sound level data collected by Epsilon appear to show insect sound levels especially at Locations 2 and 3. It appears that insects raised background sound levels by at least 15 dBA. (Tocci Sup. Oct 11, pg 18) (E-Coustic Report Jul 30 pg 5) Mr. Tocci agrees with George Hessler's recommendations with regard to how background sound surveys are to be conducted (Transcript 11/28pm pg 138-139) and states that Mr. O'Neal did not follow the recommendations. Mr. Tocci also

acknowledges that Mr. O'Neal may have chosen locations to place his monitors where "there could be sources of sound that may vary through the year" and thus not representative of the lowest sound level that is consistently present. (Transcript 11/28pm pg 141, ln 8-18)

6. "The purpose for determining the background sound level is to set a floor against which the new sounds are judged. When there is a difference between the pre-operational L90 for the quiet times at night and the sounds that would be expected from wind turbine operations of 10 dB or more it should be expected that the community will consider the new noise as "objectionable." Greater differences create higher levels of objection." (Exhibit NB-1 E-Coustic Report Jul 30 pg 6)

7. AWE's V-BAR report states that the highest winds (at turbine height) occur at night. (Exhibit AWE 8 Appendix 21, pg 5)

8. Tocci states that the impact of wind turbine broadband sound is masked when the sound level does not exceed the average lowest daily L90,10min by more than 5 dBA. (Tocci Direct. Jul 31, pg 14) Richard James states that as long as a new noise source does not increase the background sound level by more than 5 decibels, "the community will have no negative reaction to it." (Transcript 11/29am pg 107, ln 8-11)

9. "Epsilon's nighttime background sound levels without correction would overstate background sound levels otherwise occurring during times of year when insect sound is absent. Accordingly, use of Epsilon data would understate AWE sound impact when impact is quantified as an amount that the background sound would be raised during AWE operation." (Tocci Sup. Oct 11, pg 18) "Had background noise been properly measured the conclusion would be that the Project will have a

significant, continuing impact on the adjacent communities and wilderness areas." (Exhibit NB-1 E-Coustic Report Jul 30 pg 5)

10. Mr. O'Neal states that the "sound level measurement program for the Antrim Wind Project was conducted in accordance with ANSI S12.9-1998, 'Quantities and Procedures for Description and Measurement of Environmental Sound. Part 1'" (O'Neal Sup. Oct 11, pg 11), however, Part 1 of the standard refers to the definitions only. Mr. O'Neal did not follow either Part 2 or Part 3 of the standard which detail the methodologies for conducting long-term unobserved monitoring and short term observed monitoring respectively. (Transcript 11/29am pg 99-100)

11. There are many hours during the two-week period when pre-construction sound levels were measured by Epsilon where the sound levels were below 30 dBA even without correcting for insects. (Exhibit AWE 3 Appendix 13A, Figure A-3) The Minimum L90 (dBA) shown in Table 6-2 (Exhibit AWE 3 Appendix 13A, Figure A-3) is a good characterization of the L90 background sound levels for the community. (Transcript 11/29am pg 177, ln 14-21)

12. The Epsilon sound survey was unattended. Precipitation events were not observed directly. Mr. O'Neal relied on weather data collected at the Jaffery Muni Airport located 15- 20 miles from the project site. (Exhibit AWE 3 Appendix 13A, pg 5-2) Rain events vary in the State of New Hampshire across short distance. Since the weather data was not recorded at the project site and contemporaneous with background sound levels, it is not possible to determine whether there was precipitation during any 10-minute interval even if the Jaffery Muni Airport was experiencing no precipitation.

B. Predictive Noise Modeling - Facts In The Record

13. Noise impacts of the project were predicted using DataKustik's Cadna/A noise calculation software. (Exhibit AWE 3 Appendix 13A, p 7-1) The Cadna/A modeling software follows the international standard ISO 9613-2 which is applicable for many ground based noise sources (below 30 meters). (Exhibit IWAG-N1)

14. Mr. O'Neal states that he modeled sound propagation using the meteorological condition of "moderate downwind conditions" which covers wind conditions of 1 to 5 meters per second measured at a height of 3 to 10 meters above the ground. (Transcript 11/01pm pg 239-240) 7. This "assumes a moderate ground-based temperature inversion for propagation purposes" (Transcript 11/01pm pg 132, ln18-23), or an average atmospheric stability.

15. Mr. James concurs with Mr. O'Neal's definition of moderate downwind conditions (Transcript 11/29am pg 181 ln2-10) and further states that there is no method within the modeling software to alter the meteorological conditions. (Transcript 11/29am pg 181 ln 2-10)

16. The model for predicting noise cannot reliably prediction noise propagation when the noise source is well above 30 meters from the ground with wind speeds at the hub height of 10 meters-per-second (20 mph) meters while wind speeds 3-10 meters above the ground are 1 to 5 meters per second (2-10 mph). (Transcript 11/29am pg 182 ln 8-24)

17. Mr. O'Neal insists that he has attended training classes put on by DataKustik personnel, where "they go through some exercises of showing how to model wind turbines." (Transcript 11/01pm pg 246 ln 18-24) Mr. O'Neal makes no statement as to what corrections DataKustik recommends to account for turbine noise being

outside the parameters of the ISO standard. Mr. O'Neal agrees the ISO standard does not provide a plus or minus estimated accuracy for noise sources outside the limits of the model but insists from experience that the predictive models still produce levels within plus or minus 3 decibels of actual noise levels. measured. (Transcript 11/01pm pg 237 ln 12-22) "ISO algorithms have not been validated by any independent peer-reviewed process for use in siting wind turbines." (Exhibit NB-1 E-Coustic Report Jul 30 pg 6)

18. The higher the wind speed at the noise source (hub height), the further sounds can propagate resulting in the model underestimating what the real-world sound levels will be.(Transcript 11/29pm pg 185 ln 6-19)

19. The Project will produce a maximum noise at location L3 of 41 dBA, which is 10-15 decibels above the quietest time of day measured by Mr. O'Neal at that location. (Transcript 11/01pm pg 90 ln 15-24)

20. Table 7-2 of Epsilon's noise assessment report lists average predicted sound levels and not maximum sound levels at receptor locations listed. (Transcript 11/29am pg 186 ln 17-24) It is appropriate to add 5-10 dBA to each of the listed predicted sound levels to account for turbine noise emissions during periods when weather conditions are outside "moderate downwind conditions" used in the model. (Transcript 11/29am pg 188 ln 15-19)

21. Forty-five dBA is becoming a more common limit than 50 dBA. (Transcript 11/01pm pg 190 ln 18-24) Introducing noise sources into a community which increase the background noise level by 10 decibels will cause people to react adversely. (Transcript 11/01pm pg 197 ln 4-12)

C. Noise - Discussion

AWE has asserted that the Project will meet the daytime and nighttime noise conditions imposed by the Committee for the Lempster and Groton wind energy facilities.[1] The Committee's standard is grossly inadequate since there is no maximum cap on turbine noise emissions. The limit is also dated given the numerous reported complaints of wind turbine noise throughout the Northeast and Nationwide where similar, and lower noise standards are imposed. The Committee should take no comfort in the claim that noise complaints are minimal at the Lempster wind facility. As of this writing, the Groton wind facility is not fully commissioned so the full impact of the turbines is not known yet. Mr. O'Neal advises his clients that a limit of 45 dBA is more common. In any event, there is undeniable evidence in the record that the Project's noise emissions will cause an unreasonable adverse effect on the aesthetics and public health of the community.

To begin, there is no dispute that the minimum L90 noise levels surveyed at locations in proximity to the Project site and shown in Table 6-2 are a good characterization of the L90 background sound levels for the community. O'Neal, Tocci and James all agree that the background sound survey is intended to identify the lowest sound level that is consistently present and available to mask project noise. The purpose for determining the background sound level is to set a floor against which the new sounds are judged.

O'Neal admits that his background sound data includes insect noise and possibly other sounds which artificially inflated the L90 sound levels he collected. Despite any contamination from insects, the L90 sound levels were still below 30 dBA which is a strong indicator of how quiet the community is near the Project site.

[1] 50 dBA in the day or 5 decibels above background whichever is greater; 45 dBA at night or 5 decibels above background whichever is greater.

The V-Bar report states that the highest wind speeds occur at night. The nighttime hours are the quietest time of the day and it will also be the time of day when the turbines will be producing the most noise.

Since O'Neal's predictive modeling assumed a moderate ground-based temperature inversion for propagation purposes and thus his model cannot account for more extreme weather conditions. The predicted sound levels represented average noise levels at various receptor locations. These sound levels do not represent maximum levels. Noise emissions from the turbines will likely exceed the predicted sound levels by 5 to 10 decibels on many occasions depending on weather conditions.

The Project will increase the background L90 sound level for many locations by more than 10 decibels and in many cases the sound level will increase by 18-20 decibels. This increase is certain to create highly objectionable noise levels and potential home abandonments.

D. Noise - Recommendations

Increases over existing background noise (L90) levels that are produced by a facility should not exceed 5 dBA beyond the boundaries of the Project site in order to avoid an unreasonable adverse effect for residents living near the Project site and those who visit in area. Adopting a noise standard which is based on a relative measure of background (L90) level grants the Committee the greatest flexibility in the future as background noise levels change, as well as sufficient assurances to the nearby residents that noise levels in the area will be kept under control regardless of whether background noise levels increase over time for reasons other than the wind project or remain static or are reduced.

If the Committee prefers an absolute number, that sound level should be set low enough to ensure nearby residents can still live and enjoy their property, An appropriate level would be a limit of 35 dB(A).

In order to avoid problems of noise and potential harm to residents in the area, we think it prudent and reasonable for noise limits to be set at the property lines of abutting properties or some distance near the property line. Residents living within the area of the project site should have some expectation that any noise increases introduced into the area due to the wind turbines should not unduly harm their enjoyment of their property – both inside and outside their home.

IV. EMISSIONS OFFSET

A. Emissions Offset - Facts In The Record

1. New England's electricity sector is cleaner in 2011 then from 2009. Coal use decreased by 50% as was the use of oil in that same period. (Transcript 11/27pm pg 19 ln 14-24)

2. The emissions offset modeling was based on EPA data from 2007 and run again on data from 2009. Emission levels in New England are trending downward. (Transcript 11/27pm pg 20 ln 2-10)

3. Wind energy in 2011 contributed 0.6% of the energy to the New England Pool and 0.1% of the wind resource contributed to the capacity in the region. (Transcript 11/27pm pg 24 and Exhibit IWAG-EM3 pg 17)

4. The emissions offsets modeled for AWE are based on a level of yearly generation derived from the Project's average annual capacity factor developed by V-Bar.

(Exhibit AWE 3 Appendix 10, pg 6) The model assumes 102,725 MWhs of generation. If the average annual capacity factor for the Project is in error, the emissions benefit would be in error.

5. The 9 RGGI states have already met the RGGI carbon caps and are well below the 2018 cap. (Transcript 11/27am pg 83 ln 16-24) (Exhibit IWAG-EM2)

6. AWE asserts the Project will reduce the occurrence of high ozone days in New England. (AWE 3 Appendix 10, pg 8) Most of New England is in compliance with EPA's National Ambient Air-Quality Standards (Exhibit IWAG-EM, pg 17) High ozone levels within the region are concentrated in the Connecticut, New York and New Jersey area (Exhibit IWAG-EM, pg 16) Ozone can be caused by pollution from cars, trucks (transportation), paint, hairspray and factors other than electricity production. (Transcript 11/27pm pg 29, ln 18-22)

7. V-Bar relied on the National Weather Service stations at Concord and Manchester airports as "long-term reference points" for wind data. V-Bar states in its report that these station "must have suitable correlation to the winds at the site in question". The Concord airport is at 339' above sea level, the Manchester airport is even further down river, and about 100' lower in elevation. Both are in the Merrimack River Valley. The project site is on an exposed ridge, with the turbine heights above 2000'. (Exhibit AWE 3 Appendix 10, pg 2)

B. Emissions Offset - Discussion

The Committee must weigh whether the emission-free energy produced from the project outweighs the impacts of building and operating the project. The Committee must also find that the project addresses the State's need for an adequate and

reliable supply of energy. The nine RGGI states have already met the carbon reductions through to 2018.

New England's electricity resources are becoming progressively cleaner with very little wind in the system. Wind energy produces a small contribution to the region's energy needs and even less to our capacity needs within the region. Since wind is a variable resource it does not participate in the bid stack process (day-ahead auction) which is dominated by reliable generation including fossil, hydro, and nuclear. Dr. High's statement that wind will take precedence over other, more expensive, resources is not accurate since he wrongly assumes wind energy participates in the day-ahead auction. With the possible exception of Kibby Mountain (132 MW in Maine) where a small portion Kibby's wind generation operates in the day-ahead market, wind in the region is limited to the real-time market in order to avoid penalties in the event the wind does not show up as forecasted. Despite Dr. High's claims otherwise, there is no certainty wind will get on the grid particularly in situations where transmission is constrained. (Transcript 11/27pm pg 50)

AWE's emissions model relies on EPA data from 2009 which show New England power plants as dirtier than they are today. The amount of emissions benefit is exaggerated in the AWE's report. There are also many factors other than electricity production that cause ozone in the air. Building this project will have no material impact on these factors including hairspray use and manufacturing.

There are also flaws in the V-Bar study which potentially result in the average annual capacity factor for the Project being inflated. Using an inflated average capacity factor would result in inflating the amount of emissions the Project can offset.

In using the Concord and Manchester airports as "long-term reference points" for wind data, V-Bar has assumed that the prevailing winds will be from the northwest, and perpendicular to the Tuttle Hill ridge line. Since the Concord and Manchester airports are in the Merrimack River valley, it is likely their weather data are less representative of weather events at the elevation of Tuttle Hill. Mr. O'Neal relied on weather data at Jaffery Muni Airport when collecting background sound data.

C. Emissions Offset - Recommendations

AWE has not demonstrated that building this project will result in emission reduction benefits sufficient to justify the other impacts of the project. AWE has used EPA data that is dated and not reflective of New England emissions in 2012 and beyond. It appears there may be fundamental flaws in how V-Bar determined the long-term wind resource for the Project site, thus overstating the Project's annual average capacity factor. In addition, it appears from Dr. High's statements that he does not understand how the power market in New England operates. His failure to recognize that simple difference between the day-ahead market and the real-time market will result in his overstating wind's ability to get on the grid particularly in instances where transmission is constrained. Transmission constraints are much more likely to occur with projects built long distances from load. Since AWE has not made any of the ISO-NE documents available to the Committee or the parties to the proceeding, including the Feasibility Study and System Impact Study, there is no meaningful way for the SEC process to explore potential transmission limitations.

If the Committee decides to approve the Certificate, we recommend a condition be placed that requires AWE to further validate the annual average capacity factor using long-term weather data that more accurately reflects the Project

site. In addition, AWE should be required to make the ISO-NE Feasibility and System Impact Study available to the parties and reviewed for comment before construction can commence. Finally, AWE should be required to report annual production figures to the Committee as a means of validating the environment benefit.

V. ECONOMIC IMPACT

A. Economic Impact - Facts In The Record

1. The Project is expected to create benefits that exceed its costs. (Transcript 11/27am pg 86 ln 16-21)

2. The Energy Information Administration (EIA) Energy Outlook reference case states that natural gas production will exceed consumption early into the next decade. (Transcript 10/31am pg 66 ln 17-23)

3. EIA is forecasting the price of natural gas for the purposes of generating wholesale electricity is $4.62 in 2015, about what the price is today. (Transcript 10/31am pg 71 ln 2-10)

4. The Project is expected to deliver $55.7 million in economic benefits over 20 years. AWE did not account for the Project selling its energy at above-market prices when it examined economic benefits. (Transcript 11/27am pg 89 ln 5-10 and pg 90 ln 1-2)

5. AWE relied on National Renewable Energy Lab's JEDI model ("Jobs and Economic Development Impacts") to estimate jobs, earnings, and economic output supported through the construction and operation of the Project.

6. Mr. Magnusson and Professor Gittell prepared economic models for GRP and Groton Wind but they did not return to the projects to validate their models against the completed project. (Transcript 11/27am pg 93 ln 12-14)

7. The results of AWE's economic analysis based on JEDI only examines gross impacts of a Project and does not determine any costs associated with constructing and operating the Project. (Transcript 11/27am pg 95 ln 1-9 and pg 97 ln 4-9)

8. AWE's economic model measures work created, and not jobs created. Job creation may or may not occur and jobs at the Project site may be filled by people who are already employed. (Transcript 11/27am pg 98-99)

B. Economic Impact - Discussion

The JEDI models purport to enable calculating the state or local economic impacts resulting from building a potential wind energy facility. However, JEDI only looks at the positive impacts of a project and assumes that money spent is always beneficial. AWE's analysis concluded that there were no costs to the project so only benefit will be derived by the construction and operation of the facility. The analysis assumed there would be no increase in energy costs associated with the Project.

AWE and the Committee have refused all parties to the proceeding, with the exception of Counsel for the Public, any access to information that reveals the price AWE will need to sell its energy, including renewable energy credits, in order for the project to be financially viable. The economic analysis does not attempt to look at power purchase agreements with in-region utilities to determine the above market rates for wholesale electricity demanded by onshore wind energy. Antrim Wind has made it clear it is also seeking a long-term purchase agreement which is required to obtain financing. We know from the V-Bar report that the project will largely

produce during off-peak hours, when market prices are even lower, so the delta between the contract price and the market price for the energy will be even more pronounced. IWA supplemental testimony from Oct 11 (Exhibit IWAG-2, pg 5) looked at one example of above-market pricing where the Project's costs would be significantly above the $55.7 million AWE claims the project would produce for the region.

Mr. Magnusson and AWE insist that wind provides a hedge against fluctuating energy prices. This may be true in some regions of the country but not in New England, where 90+% of the generation operates in the day-ahead market. Wind could have a marginal impact on prices in the real-time market but any benefit is entirely erased by the high-priced power contracts.

The likely cost of AWE's wind power contract will exceed the economic benefits touted by Magnusson and will serve as a drain on New England's regional economy. The simplistic conclusion that the benefits of the operating projects will enrich the host communities and surrounding areas disregards the fact New Hampshire residents do not live in isolation. Many work, shop, and recreate in neighboring states and will be impacted by the high cost of this and other wind projects.

C. Economic Impact - Recommendations

The economic analysis was, at best, a simplistic model aimed at touting the Project's benefits while ignoring all impacts resulting from the construction and operation of the facility. There are more thorough input/output models that can be performed on the data that would provide a more meaningful understanding of how the Project will benefit (or cost) the region. Additionally, the fact that all financial information related to the Project has been withheld from all parties with the exception of Counsel for the Public, there was no opportunity to vet the financial information

before the Committee. We believe the failure to release this information, even under a protective order, is a violation of New Hampshire's right to know law and IWA's due process rights. But more importantly, failure to release this information has deprived the Committee, and thus the Public from any assurance that the Project's economic benefits has been thoroughly examined. The limitations of the economic study make clear AWE has not met the burden on whether the project will unduly interfere with the orderly development of the region.

If the Committee is inclined to certificate the Project, we recommend that AWE be required to run the models for the project again but also include details pertaining to long-term power purchase contract.

VI. PROPERTY VALUE ANALYSIS

A. Property Value Analysis - Facts In The Record

1. Mr. Magnusson is not a real estate appraiser nor is he licensed by any state or professional trade organization to conduct property appraisals, property valuations or tax abatement recommendations. (Transcript 11/27am pg 95-100)

2. Mr. Magnusson's report (Exhibit AWE-3 Appendix 14B, pg 10) cites six studies which purport to analyze property value impacts due to wind turbines projects. All of the studies cited have limitations, and in some cases fatal flaws which render their results misleading and likely invalid. Magnusson appears to have no knowledge of these limitations even after the limitations were pointed out to him during cross-examination. (Transcript 11/27am pg 102-106)

3. Mr. Magnusson displays limited knowledge of terms used in real estate appraising including "substantive significant", "paired sales analysis", and "resale analysis". (Transcript 11/27am pg 119-120)

4. Mr. Magnusson has refused to provide actual sales data so that others can validate the findings in the report. Mr. Magnusson did not conduct any analysis of marketing times, or sale price as a percent of list price. Mr. Magnusson acknowledge that a real estate appraiser would not be able to recreate his study or his conclusions without access to the sales data. Mr. Magnusson agrees that the Committee and the parties to the proceeding are to 'trust' his conclusions of no property impact with no access to the data. (Transcript 11/27am pg 116 ln 9-18)

5. Several locations in the Lempster property value assessment, Mr. Magnusson urges readers that caution must be used in interpreting these results due to the small sample size of property near the turbines. (Exhibit AWE 3 Appendix 14A, pg 23, 25, 28)

6. Mr. Magnusson's report and at least 5 other reports he referenced (although Mr. Magnusson's study did not adhere to the same methodology used in the most of the studies) use a dataset of sales transactions that are dominated by properties that are nowhere near turbines.

B. Property Value Analysis - Discussion

Despite Mr. Magnusson being presented as a expert witness on the subject matter of property values, he did not exhibit expert knowledge of the field of real estate appraising. His study on property value impacts at Lempster was little more than a simplistic statistical review of housing transactions. This is the type of review an

appraiser might undertake in order to obtain a quick understanding of the housing market before delving into a more detailed analysis.

There is insufficient information in the record for the Committee to conclude that property values in Lempster were NOT impacted by the turbines. Further, it is not possible from the information provided in the report to draw any conclusions about the impact of turbines which stand 100 feet taller on property values in Antrim, NH.

C. Property Value Analysis - Recommendations

The Committee should not place much weight given the lack of expert knowledge Mr. Magnusson exhibited on the witness stand. Also, the simplistic methodology utilized in the study and the lack of transparency of the data leaves readers with little confidence the conclusions are meaningful.

If the Committee is inclined to certificate the Project, we recommend that an independent real estate appraiser be hired by Counsel for the Public at AWE's expense, in order to validate if methodology followed and the conclusions drawn would pass industry standards. If not, we strongly encourage the Committee to re-open the order property value guarantees that property owners living near the project site are assured they will be made whole should the project cause damages to property values. If AWE is convinced properties will not be devalued, such a guarantee should not pose a financial risk to the Project.

VII. Financial, Technical, and Managerial capability

A. Financial, Technical, and Managerial capability - Facts In The Record

1. AWE is a newly formed entity. The company has not constructed any commercial scale wind energy projects. Assertions by AWE that it has a project portfolio that

includes projects in Maine, Vermont, and Pennsylvania is not proof that the company is capable of building and managing a wind energy facility.

2. AWE has encountered significant opposition to its projects in Antrim, NH, Frankfort ME and Newark, VT. Several lawsuits have been filed in these communities in reaction to AWE's proposals.

3. Mr. McCabe and Ms. Crivella agreed in their January 31 (Exhibit AWE 1) testimony that AWE possessed the technical and managerial capabilities to construct and operate the proposed Project in continuing compliance of the terms and conditions of the certificate. Mr. McCabe and Ms. Crivella were both working for Westerly Wind when the testimony was filed. (Transcript 10/30 pg 189-190)

4. Mr. Segura-Coto asserted AWE possessed the technical and managerial capabilities to construct and operate the proposed Project in continuing compliance of the terms and conditions of the certificate as well. He further amended the statement by claiming that Acciona would be performing the services and, thus, AWE would have the ability because of the contractual agreement with Acciona. (Transcript 10/30 pg 191 Ln 17-24)

5. Mr. Sequra-Coto admitted he only met Mr. Kenworthy and the other members of Westerly Wind one day before taking the witness stand. Mr. Sequra-Coto's testimony was submitted before he met any of the management team at AWE. Mr. Sequra-Coto had no knowledge of AWE's managerial and technical abilities. (Transcript 10/30 pg 193)

6. Mr. Sequra-Coto asserts that it is Acciona that has the technical and managerial capabilities to construct and operate the Project. Project responsibilities will be delegated to Acciona. (Transcript 10/30 pg 194-195)

7. No contract exist between Acciona and AWE to purchase, erect and managed the Project nor is there any information in the record that details the warranty or maintenance agreement. that will govern the responsibilities of AWE and Acciona in managing the Project.

8. It is possible that after the initial warranty is over, AWE could contract with another party other than Acciona to manage the turbines. (Transcript 10/30 pg 195 Ln 16-24)

B. Financial, Technical, and Managerial capability - Discussion

Testimony and cross-examination of Mr. McCabe, Mr. Segura-Coto and Ms. Wright did little to demonstrate that AWE has the technical and managerial ability to construct and operate the project. Since no certificate has been granted, we cannot know the conditions that will be imposed on the Project to statements that the Project will operate in compliance with the certificate are premature.

Since Mr. McCabe and Ms. Wright were receiving payment from AWE and/or Westerly Wind to testify before the Committee and Mr. McCabe is part of the management team at Westerly Wind, their statements are self-serving and do nothing more but self-certify their own abilities. Mr. Sequra-Coto admitted he was endorsing Acciona's technical and managerial abilities and could say nothing about AWE's abilities except to the extent Project management would be delegated to Acciona.

There is more to operating a wind project beyond ensuring the turbines are operational and the State of New Hampshire, and perhaps more importantly, the property owners and the Town of Antrim deserve to know who is in charge of the operation and whether the people they will be contacting in the event of a problem with the project are equipped to satisfy their concerns.

Since the management of the Project is to be memorialized within a contract between Acciona and AWE, a contract that does not exist, there is no meaningful way for the Committee or the parties to evaluate the delegation of responsibilities and whether the respective parties to the contract have the ability to carry out the terms of the contract.

Since the Committee has refused to release financial information pertaining to AWE, IWA is prohibited from commenting on the financial viability of the project. This action, we believe, is in violation of New Hampshire's right to know law and IWA due process rights.

C. Financial, Technical, and Managerial capability - Recommendations

AWE has failed to meet the burden of proof that the company has the managerial and technical ability to construct and operate the Project. Assertions in testimony and cross-examination mainly showed that Acciona might have the requisite ability but absent the contract, the Committee and the parties cannot know the delegation of responsibilities.

If the Committee decides to certificate the Project, conditions must be imposed on the project that ensure no construction can commence until the parties have had an opportunity examine the contract between Acciona and AWE.

Date at Lyman, New Hampshire, this _14_ day of January, 2013.

INDUSTRIAL WIND ACTION GROUP, INC.

By,

Lisa Linowes
286 Parker Hill Road
Lyman, NH 03535
603-838-6588

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