The State of New Hampshire Site Evaluation Committee

In regard to Antrim Wind Energy Docket 2015-02 Post Hearing Brief of Bruce Berwick, abutter

The applicant should be denied permission to construct an industrial wind turbine on land zoned rural conservation by the citizens of Antrim. Please consider the following:

Visual impact assessment:

Mr. Raphael states, that the mitigation measures will "now" conserve 100% of the ridgeline. This is quite a statement to make when allowing a permanent driveway, which AWE will not just allow, but create; two cell towers and buildings on the ridge. The terrain of Tuttle Mt. is one of the most difficult and expensive types of land to develop. It is without question that by putting in this project, the end result will be more permanent destruction and change than would ever happen without this project. The dynamics of economics would prevent almost all construction except for entities with unlimited incomes such as AWE. Certainly it is not within the financial scope of the normal homeowner to be able to put a driveway into such terrain. Also, what is the point of taking land that is already in a form of conservation by way of zoning and destroying it, then giving it back to the town of Antrim with riprap, culverts, crushed granite, etc. and calling it a wonderful step of permanent conservation. Is conservation land really conservation land, or is it only conservation land until needed by foreign big businesses?

From page 6 paper copy, or PDF pg. 12 of appendix 9a- lw-VA final, of Mr. Raphael's visual assessment, "for purposes of this VA, historic sites and resources are also NOT analyzed, with the exception of National Historic Landmarks." This is very convenient for Mr. Raphael! Not so convenient for the people of White Birch Point!

On page 10 of the paper copy, or page 16 of the PDF copy, Mr Raphael identifies the 4 exhibits of viewshed maps, He states for number 4. "Exhibit 4 viewshed map (topography and vegetation/from the turbine hub.) This map identifies potential visibility from the turbine hub (92.5 m for turbines 1-8 and 79.5 m for turbine 9) and accounts for the screening effects of three types of vegetation. This map represents the most reasonable approach to potential visibility. It is agreed by most experts that viewsheds generated from the hub provide a more realistic representation of potential visibility, since the view of a hub and rotor has a greater effect than turbine blades because turbine blades that rise above the treeline are not typically visible or dominant and the difference in overall percent of visibility between hub and tip of the blade is usually insignificant. as such, the numbers of turbines visible and percent of visibility represented in this analysis are taken from this viewshed map." To put it bluntly, Mr. Raphael determined to choose the viewshed map with the absolute LEAST amount of visibility - using a visual height of only 92.5 m for turbine 1-8 and 79.5 for turbine 9 instead of the actual viewing height of 149 m for turbine 1-8 and 136 m for turbine 9. To state that the blades are not part of the viewshed and that blades coming up over the treetops are insignificant is disingenuous. 57 ft, or 38% of the height is missing from Mr. Raphael's assessment! I would hardly think that 38% is an insignificant amount. We frequently drive up to Washington, NH, a beautiful little town. There are times when a HUGE blade comes right over the top of the town and it definitely

is startling. Much more startling than if the whole turbine was visible. Using this viewshed map, as he states he has done, is obvious an attempt to doctor visual assessment in a way to provide a favorable report for AWE. Perhaps it was a viewshed map such as this that was responsible in the 2012 report for documenting that our house would have NO VIEW of the turbines, obviously something that is not true!

Mr. Raphael on page 13 paper copy, or pdf pg 19, gives his rating for cultural designation. Here is his rating description for:

Low: "Local, quasi-public and private conserved or designated resources that are identified primarily for values other than purely scenic (e.g forest or wildlife management). Examples include town greens, town/community forests, playgrounds and recreational fields, public waters with locally maintained access (i.e. town beach) or public lands (other than state or national) or as locally identified. The rating for a trail or other local resource can be elevated to moderate if it is found on regional or state websites, or local/town websites for their local interest or recreational value, but not typically found in guidebooks appealing to or used by wider potential user or interest group." So NO public waters, town greens, or ANY designation that is identified for values other than PURELY SCENIC. That certainly helped Mr. Raphael give low cultural values to most everything. Let's take a look to see what it would take to qualify as a High cultural value.

High-"Resources that have been conserved or designated because scenery and scenic quality are primary to their value. National parks, National trails (e.g. Appalachian Trail, state scenic byways, state parks, and scenic easements are examples of resources with a high cultural value rating. Also includes non motorized trails in National Parks and Forests or other National Park System areas. Local community resources (e.g. scenic roads, scenic vistas) that are specifically identified in a comprehensive plan or other regulatory document because of their scenic value would warrant a high rating as would a resource that is highly advertised in numerous guidebooks, websites and brochures for its scenic value." This very high bar to be considered of high cultural value would eliminate almost the entire state!

Now looking at his rating for scenic quality, Let's score **Mt. Monadnock**- it would score either a 5 or 3 for landform (most likely a 3), 1 for vegetation, 0 for water, 3 or 1 for color, 0 for influence of adjacent scenery, 3 for scarcity and 0 for cultural modification. Score 12-8. So the 8 would score it as low (11 points or less) and if we gave it a 12 it would score as a moderate (12-18 points). Again, using this system it would almost impossible for any place to score a high for scenic quality.

Having used the above system to rule out just about every place possible, Mr. Raphael then moves to determine the visual effect of places that made it through that process with a moderate-high or high. Truly, it's amazing that any place made it to this point. He now, though, can use another scale to rule out every other place. He calls it determining visual effect and for one criteria he uses the number of turbine **HUBS** present 1-7 hubs is rated Low; 8-15 moderate; 16+high . Raphael called this scale a reasonable objective standard for visible turbine thresholds. This scale is the very reason he would not answer the SEC committee's very direct questions related to the visual effect of different known turbines. If there are less than 16 turbines the effect cannot be high. Again, he also refuses to acknowledge the effect of the blades, and only considers hubs.

Next he uses a method called, "Percent of visibility"- what percent of a scenic resource has potential visibility of a turbine HUB. This method allows Mr Raphael, to include the

bathrooms, bathhouses, areas never used and of course this reduces the "percent of visibility" greatly!

In the interest of keeping this brief I will not go through each and every method used by Mr. Raphael. I would like to look at just one more point, in Mr. Raphael's prefiled testimony page 14, line 3; in regard to Willard Pond, "Based on my circumnavigation of the pond I came to the distinct conclusion that the visibility of the project and/or exposure to that visibility would be limited. As one follows the pond shoreline in a boat in a clockwise direction, it is possible that one would not even notice or even see the project. Where it is most visible on the pond would be in a location that is behind the paddler's or boater's back and over their shoulder, not in the direction they would typically be looking." Does this not make it obvious that Mr. Raphael is going to extreme, absurd measures to provide a favorable report for AWE and not a professional unbiased report? In every method of evaluation he is "stacking the deck" to provide a low impact. I challenge the committee to take any place that you think is significant and use Mr. Raphael's numbers to determine what 9 turbines would do to that place? I can guarantee that short of the Grand Canyon it would not cause a significant impact, and maybe not even the Grand Canyon! After all if you include the total amount of area, "exposure to visibility", and if you turn to the left, counterclockwise, you might be able to go the Grand Canyon and not see them at all!

Both Ms. Vissering and Ms. Connelly found significant adverse visual impact. Both of these ladies performed their visual assessment without bias.

An oral survey conducted by two very pro-wind individuals- Wes Enman and Ben Pratt means as much as the oral survey my wife conducted. My wife's survey showed 100% opposition to the project. To even present such an unscientific survey as any type of evidence is insulting to the intelligence of all.

Sound and flicker-just two points:

We heard from Mr. James how turbine noise is calculated and just like a car's mpg is meant as a measure of comparison not an absolute value that will never be exceeded. Does your car get exactly the mpg that was on the car's sticker?

We have constructed a hunters/hikers/family camp a half mile from our house at the very back of our property, a little over 50 feet from the abutting property line. Construction was finished on Nov 17, 2016 and my wife has already camped out overnight there. This is located on the AWE site plan map between the yellow ringed area (45dB) and pink ringed area (50 dB). It is our expectation that AWE will be required to meet the noise and flicker standard at this location. My wife has given the GPS coordinates, based on a GPS phone app. Our land is posted NO TRESPASSING. We do allow neighbors, friends, family, on our property and my wife will gladly escort the building inspector or any member of the SEC out to the building if needed to confirm the existence of this building.

Water, erosion and destruction of private property

How it is possible to build an elevated road only feet from other people's property and not cause erosion on their property. This is, of course, including every abutter's property including our own

property and the Morrison's property (neighbor's a few houses down). According to the maps given to us, the road appears to actually touch the corner of their property. They own lot 212-29. How can a road be elevated so much above the surrounding land and not have run off during rain on both sides. Even more, how can land be elevated up to 16-17 feet above the surrounding terrain and not impact abutter's land? Is the plan to build a retention wall?

Orderly development - same project

Despite the assurances that this project is significantly different, there really is very little difference between this project and the one that the SEC rightfully rejected in 2012. The project also unduly interferes with orderly development of the area in the fact that none of the neighboring towns were notified or have had any opportunity for input into the development of this project, which will be impacting their towns as well. Note, that the SEC has received public input from **both** the Deering Selectmen and the Stoddard selectmen against this project. Mr. Richardson states that the town of Stoddard was unduly influenced and never was able to hear from the views of the Antrim Selectmen during a meeting after the technical sessions. Antrim Selectmen had a responsibility to contact the Stoddard selectmen way before that time. That is part of their responsibility, especially since the project is located so close to the Stoddard line. They also had a responsibility to notify all other nearby towns and did not do so. The Antrim selectmen have stated during questioning that they do not plan to "reduce" taxes with the money they receive from this project since that would result in having a significant tax hike when the project is decommissioned. Yes, the town will receive. What will be the effect when this money is gone? One can only foresee disaster ahead.

We appreciate your service and trust that you will make the correct decision to NOT approve this project.

Sincerely,

In the words of the petitions of the citizens of Sudbury, Massachusetts Bay Colony on 11 October 1676, in *Soldiers in King Philip's War*, of the United Colonies page 224:

"To which humble and equitable motions if our" Site Evaluation Committee "shall benignely condescend, You will deeply oblidge your humble petitioner not only to pray for the presence of the Lord to be with you in all your arduous affaires with blessing of The Almighty upon all your undertakings but shall for ever remaine

Your humble servant",

Bruce E. Berwick