



Attorneys at Law

Russell F. Hilliard
James F. Raymond
Barton L. Mayer
Charles W. Grau
Heather M. Burns
Lauren Simon Irwin
Justin C. Richardson
Michael S. McGrath*
Peter W. Leberman
Jeanne S. Saffan**
Michael P. Courtney*
Brooke Lovett Shilo

Please respond to the Portsmouth office

November 21, 2016

Of Counsel

Douglas S. Hatfield
Gary B. Richardson
John F. Teague

Via Electronic Mail Only

New Hampshire Site Evaluation Committee
Pamela G. Monroe, Administrator
21 South Fruit Street, Suite 10
Concord, NH 03301

Concord Office
10 Centre Street
PO Box 1090
Concord, NH
03302-1090
603-224-7791
1-800-640-7790
Fax 603-224-0320

Re: Application of Antrim Wind Energy, LLC;
Docket No. 2015-02

Hillsborough Office

8 School Street
PO Box 13
Hillsborough, NH
03244-0013
603-464-5578
1-800-672-1326
Fax 603-464-3269

Dear Ms. Monroe:

Enclosed please find the Town of Antrim's *Post Hearing Memorandum in Support of Issuance of a Certificate Subject to Conditions*.

If you have any questions, please contact me.

Portsmouth Office

159 Middle Street
Portsmouth, NH 03801
603-436-7046
1-877-436-6206
Fax 603-369-4645

Very truly yours,

Justin C. Richardson
jrichardson@uptonhatfield.com

www.uptonhatfield.com
law@uptonhatfield.com

* Also admitted in MA

** Also admitted in MA & NY

JCR/sem

Enclosure

cc: Service List; No. 2015-02

BEFORE THE STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

Application of Antrim Wind, LLC

NHSEC No. 2015-02

**POST HEARING MEMORANDUM IN SUPPORT OF ISSUANCE
OF A CERTIFICATE SUBJECT TO CONDITIONS**

NOW COMES the Town of Antrim (“Antrim”), by and through Upton & Hatfield, LLP, and offers this *Post Hearing Memorandum in Support of Issuance of a Certificate Subject to Conditions* as follows:

I. ANTRIM WIND ENERGY MET ITS BURDEN OF PROOF

Antrim Wind Energy, LLC (“Antrim Wind”) has the burden to demonstrate that its project complies with the provisions of RSA 162-H:16, IV and the Committee’s rules. The evidence supports a finding that Antrim Wind has met its burden.

The evidence presented to the Committee is that the Antrim Wind Project will promote conservation by protecting 908 acres of conservation land. Antrim Wind will also protect additional lands to be acquired by the New England Forestry Foundation using \$100,000 in matching funds provided by Antrim Wind in the vicinity of the Project. The Project’s impacts are temporary and the Project will be fully decommissioned in 50 years. The Project’s conservation benefits are permanent.

The Project will pay over \$8.3M in property taxes to the Town, County and Schools that will benefit Antrim, the region and the State of New Hampshire. These payments will significantly reduce the tax burden that residents pay for town, county and school services. It will also help the Town and school fund improvements to existing facilities and services that will

benefit residents in Antrim, the County and the Cooperative School District. In addition to payments under the PILOT Agreement, the Project will pay State Education property taxes under RSA 83-F. Antrim Wind will provide a scholarship fund. It will pay \$40,000 as compensatory mitigation at Gregg Lake where improvements to Town facilities are needed and, according to DES, water quality problems need to be addressed.¹

The Project will benefit the environment, the economy and help fight climate change. New Hampshire has set a goal of reducing greenhouse gas emissions by 25% by 2025.² That goal is only nine years away. Even more must be done if we are to protect the quality of life that exists today from the effects of pollution and climate change. Even Willard Pond is impaired due to state wide mercury pollution from the use of fossil fuels to generate electricity.³ DES states that the impacts of mercury on wildlife such as “the common loon, bald eagle and belted kingfisher have been well documented” and “include changes in body chemistry, behavior, and decreased reproductive success”.⁴ Four of the State’s eight lakes and ponds that have been identified as having the highest levels of mercury in the State are near the project.⁵ According to DES, women of child bearing age and children should never eat fish from these water bodies.⁶

To be clear, Willard Pond is a special place. However, the Project is not located on protected lands or within the dePierrefeu sanctuary. It is located on private land that, in the absence of the Project, may never be protected at all.⁷ The nearest wind turbine will be located two miles away from the boat launch at Willard Pond. Willard Pond will continue to retain its conservation value after the Project is constructed. In fact, as Wes Enman explained in his

¹ Antrim Exhibit 11.

² Antrim Exhibit 2 (BOS Exhibits 2 & 3).

³ Antrim Exhibits 4 & 5.

⁴ Antrim Exhibit 5.

⁵ Antrim Exhibit 4.

⁶ Antrim Exhibit 4.

⁷ Antrim Exhibit 3.

supplemental testimony, of the 26 visitors to Willard Pond he surveyed, only 3 stated that they would object to the visual aspect of the turbines. Users of Willard Pond know that if we do not reduce pollution and carbon emissions, the conservation values that we all wish to preserve will cease to exist.

Antrim asks the Committee to issue a certificate subject to conditions that the Committee deems reasonable and appropriate. In order to assist the Committee, Antrim addresses each of the statutory and regulatory criteria in this *Memoranda* and includes proposed conditions for the Committee's consideration. On behalf of all of the residents, the Town of Antrim and its Selectmen thank the Committee for its consideration of this matter.

**II. THE ANTRIM WIND PROJECT MEETS THE REQUIREMENTS OF
RSA 162-H:16, IV.**

RSA 162-H:16, IV and the Committee's rules establish the standard the Antrim Wind Project must meet to receive a certificate. RSA 162-H:16, IV provides:

IV. After due consideration of all relevant information regarding the potential siting or routes of a proposed energy facility, including potential significant impacts and benefits, the site evaluation committee shall determine if issuance of a certificate will serve the objectives of this chapter. In order to issue a certificate, the committee shall find that:

(a) The 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) The site and facility 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) The site and facility will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety.

(d) [Repealed.]

(e) Issuance of a certificate will serve the public interest.

Each of these criteria have been met as follows:

- A. **Antrim Wind “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.” RSA 162-H:16, IV (a).**

The Committee heard testimony that Antrim Wind will receive approximately \$11M in equity from its parent RWE through a partnership with Walden Green Energy. Antrim Wind will be required to provide an irrevocable letter of credit in a form reasonably acceptable to the Town which will include the cost of decommissioning the entire project, prior to construction. As the Committee knows, Antrim negotiated an agreement which provides for Antrim to review Antrim Wind’s Site Specific Decommissioning Estimate (“SSDE”) and the form of Decommissioning Funding Assurance must be “reasonably acceptable” to the Town. Antrim asks that the Committee approve the Agreement with Antrim Wind as a condition of its certificate (**Antrim Condition #1**).

Antrim believes that Reed & Reed’s estimate of decommissioning costs is reasonable and complies with the Committee’s rules. However, the Committee did not hear testimony from an independent engineer as to details and assumptions in the Decommissioning Plan used to estimate the expected costs of decommissioning. Antrim therefore recommends that, in addition to the decommissioning condition proposed by Antrim Wind (**Antrim Condition #2**)⁸ the Committee require that the amount, scope and form of the decommissioning funding assurance be reasonably acceptable to the Town of Antrim (**Antrim Condition #3**). This will enable the Town to hire an independent engineer to ensure that, as construction costs, regulations and other

⁸ Applicant’s Exhibit 39.

conditions change over the 20 to 50 year of the project, the Decommissioning Plan and Decommissioning Funding Assurance will remain adequate to protect the public interest for the life of the Project.

The Committee heard testimony that Antrim Wind will use state of the art Siemen's turbines which will include measures to monitor its turbines to comply with sound and shadow flicker requirements. The project will be constructed by Reed & Reed who have constructed nearly all of the turbines located in New England. The backing of RWE makes substantial financial, technical and managerial capabilities available for the project. While some newspaper articles were provided to suggest that RWE has been impacted by changes to the nuclear industry in Europe, changes in energy markets are normal and there is no reason to believe that Antrim Wind will be unable to construct, operate, maintain and decommission the project in compliance with the terms and conditions of its certificate.

B. Antrim Wind's Project "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." RSA 162-H:16, IV (b).

i. Antrim

The Committee heard from the Antrim Board of Selectmen who support the project and explained that it is consistent with the orderly development of the region. The Antrim Planning Board, an elected body which previously opposed the project in 2011, took no position.⁹ Despite claims by opponents that the public no longer supports the Project, voters in Antrim defeated

⁹ The Chairman of the Antrim Planning Board explained his personal support for the project during the public comment session in his personal capacity.

zoning amendments that would have prohibited the Project by a wide margin.¹⁰ No Town officials in Antrim spoke against the Project.

The Project is consistent with the orderly development of the region. It is located in Antrim's Rural Conservation District and will permanently protect 908 acres adjacent to other protected lands. These are lands that have been identified as having significant wildlife benefits. The Project will not impair those benefits. During operation, only minimal acreage will be occupied by the Project. After decommissioning, the permanent impact of the Project will largely disappear and the conservation lands will be permanently protected by easements held by the Harris Center, who all recognize as a leading conservation organization.

The Project will make significant property tax payments to the Town of Antrim, \$324,000, each year that will reduce the property tax burden on existing taxpayers and help provide Town, School and County services. It may enable the Town, the School, and the County to improve existing facilities and services or construct facilities that they are unable to provide today. The reduction in taxes and/or additional improvements to Town, School and County facilities will directly benefit Antrim and the region's citizens.

The Committee heard testimony of Lempster selectmen Everett Thurber. Mr. Thurber explained that the Lempster Wind project has had a positive impact on orderly development in the Town of Lempster. He explained that the Lempster wind farm "has increased tourism and reduced local taxes which helps local businesses and the local economy. There have been no negative or adverse impacts on the orderly development of the Town."¹¹ This testimony is significant because, while many opponents of the Antrim Wind project claim that it will adversely impact the environment or the orderly development of the region, these claims are not

¹⁰ Antrim Exhibit 3.

¹¹ Antrim Exhibit 1.

supported by the actual experience in Lempster. Lempster is located close to Antrim and is similar to Antrim in many ways. Both are small, rural towns in southwestern New Hampshire that do not have major urban, commercial, or industrial areas. Lempster's Wind Project has significantly reduced Lempster's tax rate. For example, in 2014 Lempster's total tax rate was \$23.27. Without the Lempster Wind project, the tax rate would be approximately \$31.76.

Antrim has negotiated a PILOT Agreement that, admittedly, provides for significantly less up-front money. However, the Antrim PILOT Agreement ensures that the property tax payments are predictable, and increase over the 20-year term of the Agreement. While Lempster chose to assess its project using *ad valorem* taxation, those assessments are under appeal and the subject of litigation. Antrim's PILOT Agreement avoids litigation and provides significant, predictable benefits over a 20-year term.

ii. Charles Levesque.

Charles Levesque argued that the Project was inconsistent with orderly development of the region. His testimony states that he does not believe that he will be able to hear or see the project from his property. He is not a municipal or regional planning official or a member of any town governing body. His testimony and views have not been adopted or endorsed by the Antrim planning board or governing body, nor by any other Town Board.¹²

Mr. Levesque is not a neutral party. He is President of Innovative Natural Resource Solutions, LLC, a firm which provides "advocacy"¹³ services to the biomass energy industry that competes directly against wind energy projects in the markets for energy, capacity and Class I RECs. He has actively opposed the Project. He blocked efforts by the Antrim Planning Board to

¹² RSA 162-H:16, IV requires the Committee to give "due consideration" to the views of planning boards. However, Mr. Levesque's testimony is not adopted or endorsed in any official capacity by any board.

¹³ Antrim Exhibit 7.

make the Project an allowed use due to a notice defect in 2011.¹⁴ Once elected to the Planning Board in 2011, he helped organize a Planning Board vote to reconsider the special Town meeting to make the Project an allowed use. He then opposed efforts to have the Committee review the Project under RSA 162-H. He helped the Planning Board prepare amendments to the Zoning Ordinance that would prohibit the Project entirely in the Town's Rural Conservation District,¹⁵ which voters rejected. When the Committee voted to take jurisdiction over the Project in 2011, he prepared a memo advocating for the Planning Board to appeal the Committee's decision. He voted against motions to show on the Town's warrants that the Planning Board's votes (4-3) on the Project were divided.¹⁶

Charles Levesque argues that the Project is contrary to orderly development because it does not comply with local zoning. However, whether or not the Project complies with local zoning or Town votes is not relevant. Under RSA 162-H:16, IV(b), the issue before the Committee is whether the Project "unduly interferes" with the orderly development of the region. The evidence does not support a conclusion that the Project will unduly interfere with orderly development in any real sense. The Project will have temporary impacts but protect 908 acres in an area intended for conservation. It is a wind-energy project that may be visible, but it will not result in pollution or adverse effects. In Lempster, where the closest turbine is located 300 to 500 feet from existing residences, the project has had an overall positive impact on orderly development.¹⁷ In Antrim, the closest residence is 2,800 feet away from the closest turbine, subject to even more stringent requirements, and will provide extensive permanent conservation

¹⁴ Antrim Exhibit 3 (BOS Attachment 2).

¹⁵ Antrim Exhibit 3 (BOS Attachment 3, Article #2).

¹⁶ Antrim Exhibit 8.

¹⁷ Antrim Exhibit 1 (Testimony of Lempster Selectmen Everett Thurber)

benefits. There is no evidence that this Project will interfere with orderly development of the region in any way.

At the end of the day, Mr. Levesque is not a member of a municipal planning board or a governing body. His conclusion that the project unduly interferes with orderly development is simply his personal belief, influenced by his role as an advocate for the biomass industry, based on his interpretation of the outcome of Town votes that are not binding on or relevant to the Committee's determinations.

iii. The Stoddard Conservation Commission.

The Committee heard testimony from Geoffrey Jones who is a personal friend and a former colleague of Charles Levesque and the Chairman of the Stoddard Conservation Commission. While Mr. Jones felt the Project would fragment wildlife habitat, he admitted that invasive species and habitat fragmentation were already taking place in the Project area and the existing forestry practices would likely contribute to further degradation. He agreed or did not dispute that, in the absence of the Project, there would be no protection of the 908 acres where cell phone towers, access roads, kennels and residences could be constructed that would fragment wildlife habitat. Mr. Jones admitted that fragmentation would or could occur even if the Project were never built.

Mr. Jones' connection to Charlie Levesque and opponents of the Project influenced his testimony. When the Town of Stoddard met to consider the Project, he failed to invite the Antrim Selectmen and Antrim Wind, despite: (1) his agreeing to do so during this Committee's technical session; (2) a written request to him after the technical session which he ignored; and (3) a written request to the Stoddard Selectmen.¹⁸ When asked about this, he claimed to be "too busy" and that the Town never followed up. His testimony is not correct. Antrim Exhibit 6

¹⁸ Antrim Exhibit 6.

shows that he had agreed to notify the Town and simply chose not to do so. Tellingly, however, he specifically invited Mr. Levesque to attend the meeting of the Stoddard Selectmen. His decision to not inform the Town of Antrim, after agreeing to do so during a technical session, appears to be calculated to ensure that the Stoddard Selectmen did not hear the views of the Antrim Selectmen, Antrim Wind, or supporters of the Project.

RSA 162-H:16, IV requires the Committee to give “due consideration” to the views of municipal governing bodies. However, the views of the Stoddard Selectmen were unduly influenced by Project opponents with close ties to the biomass industry. The Project is not located in Stoddard and no impacts on the orderly development of the Town of Stoddard have been identified, beyond a vague claim that habitat fragmentation from construction of the Project in Antrim would somehow effect the conservation of land in the Town of Stoddard. Even if “habitat fragmentation” were proven to be an impact of the Project, which was not proven, it is not something that has anything to do with orderly development of the region. Under these circumstances, the views of Stoddard Selectmen and its Conservation Commission simply do not demonstrate that the Project would “unduly interfere” with the orderly development of the region.

C. The Project will not have an unreasonable adverse effect on aesthetics.

The topic of aesthetics was the subject of many days of testimony and cross examination. This emphasis may likely be a result of the sub-Committee’s prior decision (4 to 3) in 2012. Aesthetics became a focal point for opponents who have asked the Committee to reach the same conclusion, despite changes to the Project and review under rules which established criteria for aesthetic impacts that did not exist in 2012. Emphasis on aesthetics is misplaced for several reasons:

First, this Project is not the same one that the Committee denied. The most prominent turbine (#10) near Willard Pond was entirely removed. A second turbine (#9) was reduced in height. The closest turbine to the boat launch at Willard Pond is now two miles away and, in many or even a majority of areas on Willard Pond and the trails on Bald Mountain, the Project cannot even be seen. The Project will preserve 908 acres along the entire ridgeline. Clearing of roadway leading to the former turbine #10, which was the most visible, has been entirely eliminated from the Project. As the Committee noted in Docket No. 2014-05, these are material changes to the Project which means this Project is to be reviewed under the RSA 162-H:6, IV and the Committee's rules *de novo*.

Second, the Committee has adopted rules which specify the criteria to be considered in determining whether the Project has an unreasonable adverse effect on aesthetics. Opponents mistakenly assume that high visibility of the Project from six potential locations means that its effects are therefore unreasonably adverse. Even Counsel for the Public's expert, Kellie Connelly, found all wind turbines in the mountains to be "troublesome" – and failed to include any discussion of the criteria under Site 301.14 for determining whether an impact is an unreasonable one. She simply assumed that a high degree of visibility from any resource she determined to be sensitive automatically resulted in a conclusion that the impact was unreasonably adverse.

The Project is a wind turbine, not an oil refinery or coal plant. It will not emit smoke, fumes, foul odors, particulates or any emissions whatsoever. The law, *i.e.* RSA 162-H:16, and the Committee's rules, do not justify the conclusion that a wind turbine has an unreasonable adverse effect on aesthetics simply because it can be seen by some viewers who may (or may not as Wes Enman observed) find wind turbines to be "troublesome in the mountains." Rather, the

law allows turbines constructed on private property to be visible, as long as that visibility does not have an unreasonable adverse effect as specified in the Committee's rules.

i. The Committee's Rules on Aesthetics, Site 301.14 (a).

The Committee's Rules provide for the Committee to consider the following criteria when determining whether a Project will have an unreasonable adverse effect on aesthetics:

Site 301.14 Criteria Relative to Findings of Unreasonable Adverse Effects.

(a) In determining whether a proposed energy facility will have an unreasonable adverse effect on aesthetics, the committee shall consider:

(1) The existing character of the area of potential visual impact;

(2) The significance of affected scenic resources and their distance from the proposed facility;

(3) The extent, nature, and duration of public uses of affected scenic resources;

(4) The scope and scale of the change in the landscape visible from affected scenic resources;

(5) The evaluation of the overall daytime and nighttime visual impacts of the facility as described in the visual impact assessment submitted by the applicant and other relevant evidence submitted pursuant to Site 202.24;

(6) The extent to which the proposed facility would be a dominant and prominent feature within a natural or cultural landscape of high scenic quality or as viewed from scenic resources of high value or sensitivity; and

(7) The effectiveness of the measures proposed by the applicant to avoid, minimize, or mitigate unreasonable adverse effects on aesthetics, and the extent to which such measures represent best practical measures.

(emphasis added).

The criteria in Site 301.14 (a) (2) & (3) are highlighted above because they were entirely ignored by Counsel for the Public's expert, Kellie Connelly, and by opponents of the Project, who focused only on what could be seen from Willard Pond, Meadow Marsh, or other scenic

resources in the Project vicinity. While it is true that Willard Pond and other areas are scenic resources that have value, these resources are not of such statewide or even regional significance and public use that the mere fact that a wind turbine can be seen mandates the conclusion that its impact is an unreasonable one. To the contrary, the Project is not located on Mount Monadnock, Lake Sunapee or other similar areas that have both a high significance, Site 301.14 (a)(2), and a high extent of public use, Site 301.14 (a)(3).

ii. David Raphael.

David Raphael explained in detail why the Antrim Wind Project will not have an adverse impact on aesthetics. He used generally accepted practices to evaluate impacts to scenic resources. He used a methodology which complies with Committee's rules to evaluate whether or not those impacts were reasonable. For example, he considered the "Project Area and Landscape Character"¹⁹ and prepared an extensive Inventory of Scenic Resources in order to evaluate the "existing character of the area of potential visual impact" as required by Site 301.14 (a)(1). He spent hours visiting each of the locations where the Project was visible. He conducted extensive research in order to evaluate the "significance of affected scenic resources and their distance from the proposed facility" as required by Site 301.14 (a)(2). He specifically examined the Activity, the Extent of Use, the Duration of View, the Remoteness, and the Overall Viewer Effect in order to determine the "extent, nature, and duration of public uses of affected scenic resources" as required by Site 301.14 (a)(3). He evaluated criteria including the Number of turbines visible, the Percent of visibility, the Proximity or distance, the Angle of view, the Visual dominance, and the Visual clutter/landscape coherence, at each resource in order to determine the "scope and scale of the change in the landscape visible from affected scenic

¹⁹ Landworks VIA, Pages 37 to 41.

resources” as required by Site 301.14 (a)(4).²⁰ He examined both daytime and night-time conditions as required by Site 301.14 (a)(5).²¹ He conducted a thorough evaluation demonstrating that the Project would not be a “dominant and prominent feature within a natural or cultural landscape of high scenic quality or as viewed from scenic resources of high value or sensitivity” as required by Site 301.14 (a)(6).²² He further explained how mitigation measures proposed by Antrim Wind, including elimination of one turbine, reduction in the height of turbine 9, the permanent conservation of 908 acres, plus other measures will “avoid, minimize, or mitigate unreasonable adverse effects on aesthetics” as required by Site 301.14 (a)(7).²³ David Raphael used recognized, accepted standards to evaluate the potential visual impacts. He used accepted methodologies to determine that the aesthetic impacts of the Project were not unreasonable.

David Raphael was criticized by opponents of the Project, who claimed that his visual simulations were not sufficiently clear, or the color schemes used in his map of project visibility should have been arranged differently. These criticisms all share the same fundamental flaw: David Raphael’s conclusions are not based on his visual simulations. They are based on his extensive field work by visiting each site as it exists today, applying the accepted criteria in the field, and reaching a conclusion based on the application of that criteria. The visual simulations are intended to show how the Project would appear under typical, reasonably clear conditions. The visual simulations are not intended to measure or capture actual user experience, which would be impossible and contrary to accepted methodologies, such as required by the BLM, which provides that measurements are to be taken in the field, not based on a desktop review.

²⁰ Landworks VIA, Pages 77 to 89.

²¹ Landworks VIA, Pages 36 to 37 and 93.

²² Landworks VIA, Pages 77 to 89.

²³ Landworks VIA, Pages 125 to 126.

iii. Kellie Connelly.

Kellie Connelly used a flawed methodology to evaluate the impacts of the Project on aesthetics. Her reviewing panel members never saw the locations they evaluated. Her report and testimony made no reference to the criteria for determining whether an aesthetic impact is unreasonable under Site 301.14 (a), which requires consideration of the significance of the aesthetic resources and the extent of use by the public. She did not consider or advise her rating panel members that the Project's impacts were temporary. She was likely unaware of these and other flaws because, when asked by Committee member Weathersby, she confessed her personal view of wind projects to be: "I find them troubling in the mountains." Kellie Connelly's admission that she finds all wind projects in the mountains of New Hampshire to be "troubling" and "troublesome" is significant. It explains why she overlooked flaws in the methodology she used. Because she believes all wind projects in mountain areas to be troublesome, she failed to see flaws in the methodologies she used.

Kellie Connelly's report states that she used "the Bureau of Land Management (BLM) and other accepted visual impact methodologies as a basis for examination and study of the proposed project."²⁴ However, the BLM methodology requires that a rating panel complete its evaluation in the field, at the resources being evaluated. Her rating panel never visited any of the resources and only looked at pictures she provided. The Site Evaluation Committee rules require that the methodologies employed be "consistent with generally accepted professional standards". Site 301.05. It is not permissible under Site 301.05 on one hand to acknowledge that the BLM methodology is the generally accepted professional standard, but on the other to disregard the BLM's recommendations for the sake of cost, convenience or because of personal practice or preference.

²⁴ Report, Page 7.

Kellie Connelly's use of rating panel members who never visited the sites they evaluated, contrary to the generally accepted BLM methodology, is a material error. Her rating panel had no independent information about the locations that reviewed. They could only look at the photographs provided. The rating panel members had no idea that the Project's impacts were temporary. The views of the project that Kellie Connelly provided the panel members were "worst case" views, and did not represent typical views from those locations. Rating panel members were therefore unable to evaluate what a typical user would see (or not see). For example, members of the reviewing panel saw the simulation that Kellie Connelly provided on Bald Mountain but had no idea that the entire hiking path on Bald Mountain had no views of the Project. Kellie Connelly provided simulations showing views of turbines from Willard Pond but were unaware that extensive areas of Willard Pond would have no visibility of the Project. Members were unaware that the simulations showing the view from the White Birch Historic District was not taken within the District which had little or no view of the Project. Members of the reviewing panel rated the impact at Willard Pond on residential users as a "5" – the highest level of impact, but there are no residences, houses or residential users at Willard Pond. By basing her report on the opinions of reviewers who have never even seen the locations, Kellie Connelly failed to provide reliable evidence based on generally accepted professional standards.

Kellie Connelly's report and testimony had other significant flaws. For example, in determining the sensitivity of Willard Pond and other visual resources, she required her reviewing panel members to score three different categories of users: Residential Users; Commuters and Recreational Users. She then added (rather than averaging) the effect on each of these categories. This resulted in an overstatement of impacts on aesthetic resources. One rating panel member assigned an impact to commuters on the summit of Bald Mountain where there

are no commuters (nor is the area visible to commuters). In the case of Willard Pond, she added the impact to both Residential Users and Recreational Users in her assessment of resource sensitivity. Yet, there are no residential users of Willard Pond which her report (using the BLM definitions) identifies as impacts that occur when residential users “routinely pass through [the area] while driving, shopping, working, and recreating, as well as from more stationary activities that take place in their neighborhood, property, and from within their homes”.²⁵ The clear meaning of this accepted definition, again taken directly from the BLM, is that residential users are those who experience visual impacts “while driving, shopping, working, and recreating” – “in their neighborhood, property, and from within their homes.”²⁶ Willard Pond is in a conservation area that is completely isolated from residential uses. There are no homes, commuters, shoppers, workers, neighborhoods or homes at Willard Pond. Yet, all of the rating panel members selected by Ms. Connelly assigned a maximum sensitivity impact of “5” to Willard Pond for residential users. They did so, apparently without having visited the site and therefore realizing that the only users of Willard Pond were recreational ones.

Kellie Connelly also rejected all forms of mitigation, contrary to Rule 301.14 which requires that the Committee “shall consider” the “effectiveness of the measures proposed by the applicant to avoid, minimize, or mitigate unreasonable adverse effects on aesthetics, and the extent to which such measures represent best practical measures.” Her discussion of mitigation options dismisses all forms of mitigation because of her bias that all wind turbines are “troublesome in the mountains” and therefore cannot be mitigated at all.

She also failed to consider that the Committee’s rules, Site 301.14 (a), require that the “significance” of each resource be considered by the Committee. She ranked resources such as

²⁵ Report, PDF Page 126 of 282.

²⁶ *Id.*

Willard Pond, Meadow's Marsh and others as having the highest score for Sensitivity. However, she admitted on cross examination that these resources do not have the same level of resources as Mount Monadnock, Mount Washington, Lake Sunapee, Lake Winnepesaukee, Franconia Notch, or Crawford Notch. She testified that she did not consider the significance of these resources relative to the state or the region because her review was limited to resources located within 10 miles of Project!

Under the SEC rules, areas like Willard Pond, Meadow Marsh, the White Birch Historic District, simply do not have the level of "significance" under Site 301.14 (a) that would be required to find that a wind project, located miles away from these resources, has an unreasonable adverse impact. In fact, Willard Pond, Meadow Marsh and the White Birch Historic District will continue to possess the same or similar conservation, natural and other qualities after the project is constructed. Even so, their significance is not so high that the mere presence of a wind turbine which emits no pollutants, causes no plumes, and is located miles in the distance, is *per se* unreasonable as Kellie Connelly concluded.

The same is true of Kellie Connelly's failure to consider the "extent of public use" as required by Site 301.14 (a) (3). Willard Pond, Meadow's Marsh or the White Birch Historic District and other resources that Kellie Connelly found to have the highest level of sensitivity are not resources that experience significant public use. When asked about this on cross examination, she agreed that these resources were used by the public far less than significant visual resources such as Mount Monadnock (as many as 100,000 hikers per year), Lake Sunapee, Lake Winnepesaukee, Mount Washington or the White Mountains. Yet her report assigned a high sensitivity to Willard Pond, Meadow's Marsh and the White Birch Historic District as if these resources had extensive public use when they do not.

The evidence supports the conclusion that the extent of public use of all of the resources that Kellie Connelly found to be sensitive was low. Wes Enman testified concerning his survey of visitors to Willard Pond on July 4, 2016 and on July 11, 2016. He did not count all visitors, but the fact that there were only 26 users during one of the busiest periods of the year shows that the extent of public use is low. For Meadow's Marsh or White Birch Historic District, it is likely even lower. When asked to explain how the Committee should understand her rating these areas in light of the low extent of public use, she stated that her mandate was to consider only resources within 10 miles of the Project. She did not consider whether the use of these resources should be considered high or low when compared to other aesthetic resources in New Hampshire.

In doing so, Kellie Connelly failed to provide meaningful testimony on the very question the Committee's rules require it to consider under Site 301.14 (a)(3) when deciding whether or not a visual impact is an unreasonable one. This is critical because what this means is that Kellie Connelly's opinion is not based on the criteria which the rules require to be considered. She simply jumped from her conclusion of high visibility from any resource she considered to be sensitive to a conclusion of unreasonable adverse effect on aesthetics without applying the criteria required by Site 301.14 (a)(2) & (3).

iv. Conclusion on Aesthetic Impacts.

David Raphael explained in detail why the Antrim Wind Project will not have an adverse impact on aesthetics. He used generally accepted practices to evaluate aesthetic impacts to scenic resources and determined that the Project would not have an unreasonable adverse effect on aesthetics.

In comparison, Kellie Connelly used a flawed methodology which conflicts with the generally accepted methods used by the BLM and other agencies. She failed to consider or apply key criteria required by Site 301.14 such as the significance of the resources and the extent of the public use which the Committee's rules require. She dismissed all forms of mitigation which the Committee is required to consider. Her reviewing panel members never even saw the resources they rated. The reviewing panel members had no idea that the Project impacts were temporary or that the simulations they considered did not reflect the actual or typical views of users. As a result, her conclusions and opinions reflect her personal bias against wind project in mountain areas and is inconsistent with the criteria required by Site 301.14 (a).

D. The Project will not have an unreasonable adverse effect on the natural environment.

Site 301.14 provides that:

In determining whether construction and operation of a proposed energy facility will have an unreasonable adverse effect on the natural environment, including wildlife species, rare plants, rare natural communities, and other exemplary natural communities, the committee shall consider:

- (1) The significance of the affected resident and migratory fish and wildlife species, rare plants, rare natural communities, and other exemplary natural communities, including the size, prevalence, dispersal, migration, and viability of the populations in or using the area;
- (2) The nature, extent, and duration of the potential effects on the affected resident and migratory fish and wildlife species, rare plants, rare natural communities, and other exemplary natural communities;
- (3) The nature, extent, and duration of the potential fragmentation or other alteration of terrestrial or aquatic significant habitat resources or migration corridors;
- (4) The analyses and recommendations, if any, of the department of fish and game, the natural heritage bureau, the United States Fish and Wildlife Service, and other agencies authorized to identify and manage significant

wildlife species, rare plants, rare natural communities, and other exemplary natural communities;

- (5) The effectiveness of measures undertaken or planned to avoid, minimize, or mitigate potential adverse effects on the affected wildlife species, rare plants, rare natural communities, and other exemplary natural communities, and the extent to which such measures represent best practical measures;
- (6) The effectiveness of measures undertaken or planned to avoid, minimize, or mitigate potential adverse effects on terrestrial or aquatic significant habitat resources, and the extent to which such measures represent best practical measures; and
- (7) Whether conditions should be included in the certificate for post-construction monitoring and reporting and for adaptive management to address potential adverse effects that cannot reliably be predicted at the time of application.

There is no credible evidence that indicates that the Project will have an adverse effect on the natural environment. The Project's impacts are temporary but the Project will protect over 908 acres of land for forestry and wildlife.

E. The Project will not have an unreasonable adverse effect on public health and safety.

i. The Committee's Rules.

Site 301.14 provides that:

In determining whether a proposed energy facility will have an unreasonable adverse effect on public health and safety, the committee shall:

- (1) For all energy facilities, consider the information submitted pursuant to Site 301.08 and other relevant evidence submitted pursuant to Site 202.24, the potential adverse effects of construction and operation of the proposed facility on public health and safety, the effectiveness of measures undertaken or planned to avoid, minimize, or mitigate such potential adverse effects, and the extent to which such measures represent best practical measures;

- (2) For wind energy systems, apply the following standards:
 - a. With respect to sound standards, the A-weighted equivalent sound levels produced by the applicant's energy facility during operations shall not exceed the greater of 45 dBA or 5 dBA above background levels, measured at the L-90 sound level, between the hours of 8:00 a.m. and 8:00 p.m. each day, and the greater of 40 dBA or 5 dBA above background levels, measured at the L-90 sound level, at all other times during each day, as measured using microphone placement at least 7.5 meters from any surface where reflections may influence measured sound pressure levels, on property that is used in whole or in part for permanent or temporary residential purposes, at a location between the nearest building on the property used for such purposes and the closest wind turbine; and
 - b. With respect to shadow flicker, the shadow flicker created by the applicant's energy facility during operations shall not occur more than 8 hours per year at or within any residence, learning space, workplace, health care setting, outdoor or indoor public gathering area, or other occupied building;
- (3) For wind energy systems, consider the proximity and use of buildings, property lines, public roads, and overhead and underground energy infrastructure and energy transmission pipelines, the risks of ice throw, blade shear, tower collapse, and other potential adverse effects of facility operation, and the effectiveness of measures undertaken or planned to avoid, minimize, or mitigate such potential adverse effects, and the extent to which such measures represent best practical measures;

ii. The Project Complies with the Sound Levels in the Committee's Rules.

The evidence presented to the Committee is that the Project will comply with the requirements in the Committee's rules. Antrim Wind's expert Robert O'Neal has experience modelling sound pressure levels at all or nearly all of the wind energy systems in New Hampshire and explained that he used a conservative sound model that predicted that the maximum sound level for the Project will be 38 dBA. In addition, he testified that because the model is conservative and assumes 'worst case' atmospheric and environmental conditions, the sound levels predicted by the model are likely 1 to 3 dBA higher than the actual post-

construction sound levels. This was consistent with his experience with other projects in New England. Furthermore, he and Jack Kenworthy testified that the Siemen's turbines used for the Project can be operated in different operating modes which can reduce the Project sound levels by an additional 1 to 5 dBA.

iii. The Project complies with the requirements for shadow flicker.

The requirements for shadow flicker are contained in Site 301.14 (f)(2)(b) which states that: "With respect to shadow flicker, the shadow flicker created by the applicant's energy facility during operations shall not occur more than 8 hours per year at or within any residence, learning space, workplace, health care setting, outdoor or indoor public gathering area, or other occupied building".

Robert O'Neal testified that the Project used a conservative model to calculate both the solar maximum for shadow flicker at existing residences as well as the predicted levels taking into account cloud cover. The model is also conservative because it does not account for vegetation.²⁷ Mr. O'Neal, Jack Kenworthy and others testified that the Project will employ a system developed by Siemen's which will monitor meteorological conditions and, if shadow flicker reaches the 8 hour per year limit, the operation of individual turbines will be curtailed to avoid exceeding the 8 hour limit imposed by Site 301.14 (f)(2)(b).²⁸ The system will produce a report which demonstrates compliance with the rule.²⁹

²⁷ Transcript, September 15, 2016 (PM), Page 53.

²⁸ Transcript, September 15, 2016 (PM), Page 51 ("MR. MARCUCCI: Basically, there's a system composed of software and hardware and sensors that is in place on the turbines that can shut those turbines down in the event there's any chance that the shadow flicker caused by those turbines would get close to exceeding the 8 hours. They would shut the turbines down before that happened. It's just a system composed of pieces of hardware and software and light sensors and that that would automatically shut the turbines down. Measures the amount of flicker and then doesn't let it exceed the limit. Exactly how that works is a little bit beyond me, but we have experts who could talk about that if we had to.").

²⁹ Transcript, September 15, 2016 (PM), Page 54 ("we will be able to produce a report each year that demonstrates the compliance."); Page 71 ("it will be able to show, again, for each of those 24 locations that have the kind of

The limit imposed by the rule of a maximum of 8 hours per year represents 240 minutes per year which is an average of 1.3 minutes (79 seconds) per day. There are only 24 locations where it is theoretically possible to exceed this level and Antrim Wind will monitor and curtail operation to comply with the rule. As a result, the evidence does not support a finding that the Project would have an unreasonable adverse effect on public health and safety due to shadow flicker.

iv. Ice throw will not impact non-participating land owners.

For ice throw, Site 301.14 (f)(3) provides that the Committee shall consider the “risks of ice throw” and “the effectiveness of measures undertaken or planned to avoid, minimize, or mitigate such potential adverse effects, and the extent to which such measures represent best practical measures”.

The Antrim Wind Project is over 1.2 times the turbine height to the closest non-participating land owner. As Jack Kenworthy explained in his testimony: “Turbine #4 is located 589 feet from the nearest non-participating property line, or slightly over 1.2 times the maximum tip height”.³⁰ This is 179.5 meters. The Project will employ a turbine monitoring system which will detect the weight of ice formation on the turbine blades and shut down the turbines whenever it occurs.

Even without such a system, the risk of ice throw is incredibly remote. For example, Lisa Linowes argued for a 400 meter safety zone based on a study conducted in Norway. However, on cross examination, she acknowledged that the Norwegian study showed a predicted frequency

theoretical possibility of exceeding 8 hours per year, it would show for each hour of the year whether there was or was not shadow flicker, and it would also show any time during which turbines were shut down to prevent shadow flicker from exceeding that 8 hours per year. Ultimately, this would all be summarized in a very nice neat little table that contains the 24 receptors, how many hours of shadow flicker they experienced in that year, and how many hours turbines were curtailed in order to avoid exceeding the maximum amount of shadow flicker allowed under the rules”).

³⁰ Supplemental Testimony of Jack Kenworthy, Page 28.

of ice throw at 150 meters from the turbine was once every thousand years per square meter (1/1,000). The odds reduced logarithmically with distance, and, at 175 meters, ice throw would occur only once every 10,000 years per square meter. Because the Project maintains a separation of 179.5 meters from the nearest property line and 804.7 meters from the closest road or residence, the risk of ice throw is *less than* once every 10,000 years at the one location closest to the Project and decreasing logarithmically with distance at all other locations.

A chance that ice throw could reach a property line at an occurrence interval of once every 1,000 or 10,000 years or similarly remote interval is not unreasonable. For comparison, coal and oil fired generating stations in New Hampshire and elsewhere, routinely emit particulates from the combustion of fossil fuels (including potential contaminants like mercury) that are deposited on the property of non-participating and non-consenting land owners. By comparison, the risk of a wind turbine that may throw ice at a recurrence interval of less than once every 1,000 or 10,000 years, is simply not an unreasonable risk.

F. Issuance of a certificate will serve the public interest.

For the reasons stated herein and in the evidence presented to the Committee, the Project will serve the public interest. It will reduce harmful pollution. It will result in substantial property tax payments to the Town, County and School District. It will result in substantial utility tax payments to fund education under RSA 83-F. It will benefit the economy. It will help conserve 908 acres in Antrim and other land in the vicinity of the Project, as well as provide other benefits to the public. A certificate, subject to reasonable conditions as proposed by the Town of Antrim and such others as the Committee may deem appropriate, will therefore serve the public interest.

Respectfully submitted,

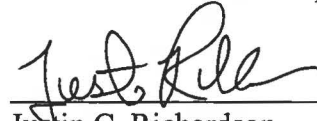
Town of Antrim

By Its Counsel,

UPTON & HATFIELD, LLP

Date: November 21, 2016

By:



Justin C. Richardson

NHBA #12148

159 Middle Street

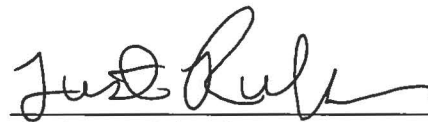
Portsmouth, New Hampshire 03801

(603) 436-7046

jrichardson@uptonhatfield.com

CERTIFICATION

I hereby certify that a copy of the foregoing was this day forwarded to all parties in this proceeding by electronic mail.



Justin C. Richardson

APPENDIX A: CERTIFICATE CONDITIONS PROPOSED BY THE TOWN OF ANTRIM

Antrim Condition #1: Compliance with Town of Antrim Agreement.

Antrim Wind shall comply with the terms and conditions of the Agreement Between Town of Antrim New Hampshire and Antrim Wind Energy, LLC dated March 8, 2012 (Application Exhibit 17a) (“Agreement”). The Town and Antrim Wind may amend the Agreement consistent with the terms and conditions the certificate of energy facility issued by the Committee. In the event of a conflict between the requirements of the Agreement, as amended, and the requirements of a certificate, the certificate shall control.

Antrim Condition #2 (Applicant Exhibit 39): Decommissioning Funding Assurance.

A) Before commencement of construction on the Wind Farm, Antrim Wind Energy LLC (“Owner”) shall provide Decommissioning Funding Assurance in an amount equal to \$2,775,000 (two million seven hundred seventy five thousand dollars) unless otherwise determined by the New Hampshire Site Evaluation Committee (“SEC”). The Owner shall not cause the Decommissioning Funding Assurance amount to become less than \$2,775,000 (two million seven hundred seventy five thousand dollars) at any time throughout the term of the Agreement with the Town of Antrim, dated March 8th, 2012 (“Agreement”). The Owner shall increase the amount of Decommissioning Funding Assurance, as appropriate, to reflect the updated decommissioning estimate, in accordance with Section 14.1.1 of the Agreement.

B) Decommissioning Funding Assurance shall be in the form of an Irrevocable Letter of Credit (“ILOC”) issued by a major financial institution with a credit rating of “BBB” from Standard and Poor’s or a “Baa2” rating from Moody’s, each as defined on the Effective Date. The ILOC shall be in a form acceptable to the Antrim Select Board as provided by Section 14.2 of the Agreement. The ILOC shall be extended without amendment for successive periods of one (1) year. Forty-five days prior to the extension of the ILOC Owner shall provide documentation to the Town demonstrating that the extension of the ILOC complies with the decommissioning requirements of the Agreement and the SEC for the following annual period. Owner shall provide this documentation to the Town annually, until the Owner has completed its decommissioning obligations in accordance with this Agreement, the Decommissioning Plan as approved by the SEC and any other requirements specified by the Certificate of Site and Facility from the SEC.

Antrim Condition #3: Decommissioning Plan and Decommissioning Cost Estimate to be Reasonably Acceptable to the Town of Antrim.

Prior to commencement of construction activities in the Town of Antrim, the Antrim Board of Selectmen shall retain an independent engineer to review the specifications and assumptions in the Decommissioning Plan approved by the Committee and used to determine amount of the Decommissioning Cost Estimate. The specifications and assumptions in the Decommissioning Plan used to determine the Decommissioning Cost Estimate shall be reasonably acceptable to the Antrim Board of Selectmen, subject to review under the provisions of RSA 162-H. The Antrim Board of Selectmen’s review shall be completed, within sixty (60) days of submission to the

Board or as otherwise agreed in writing. In addition, any changes to the form or amount of the Decommissioning Funding Assurance shall be reasonably acceptable to the Antrim Board of Selectmen, subject to review under the provisions of RSA 162-H. Failure to come to a decision within sixty (60) days or as otherwise agreed in writing shall be deemed approval by the Antrim Board of Selectmen. The Decommissioning Plan, Decommissioning Cost Estimate and the Decommissioning Funding Assurance shall comply with the terms and conditions of the certificate issued by the Committee.

Antrim Condition #4: Construction Meetings.

Antrim Wind Energy, LLC shall participate in meetings to be scheduled jointly by the Antrim Board of Selectmen and Antrim Wind Energy to review and provide information to the public concerning construction activities, construction schedule, use of public highways, blasting and other construction activities. The meetings shall be attended by persons knowledgeable with Antrim Wind Energy, LLC's construction plans and responsible for managing construction activities. The meetings shall be public meetings under RSA 91-A moderated by the Antrim Board of Selectmen, except as provided by RSA 91-A:3.

Antrim Wind Energy, LLC wind energy shall provide the Town with copies of its proposed construction plans, schedule, blasting and other public information (Ref. RSA 91-A:5) to be made available to the public. The construction plans, schedule and other information provided to the Town shall be updated to reflect changes in the project schedule or other changes during construction. Antrim Wind Energy, LLC, shall provide information concerning complaints during construction, if any, and their resolution, except that confidential, personal or financial information (Ref. RSA 91-A:5) regarding the complaint may be redacted.

In the event of significant unanticipated changes or events during construction that may impact the public, the environment, compliance with the terms and conditions of a certificate, public transportation or public safety, Antrim Wind Energy, LLC shall notify the Town of Antrim Board of Selectmen or its designee in writing as soon as possible but in no later than 7 days after the occurrence. In the event of emergency conditions which may impact public safety, Antrim Wind Energy, LLC shall notify the Town and appropriate officials immediately. In addition during Construction AWE shall copy the Town on any notices provided to the SEC, NH DES or other applicable regulatory agency pursuant to the Certificate or any other permit for the Project.