

THE STATE OF NEW HAMPSHIRE

BEFORE THE

SITE EVALUATION COMMITTEE

DOCKET NO. 2012-01

**APPLICATION OF ANTRIM WIND ENERGY, LLC
FOR A CERTIFICATE OF SITE AND FACILITY**

FIRST SUPPLEMENTAL PREFILED TESTIMONY OF

JACK KENWORTHY

ON BEHALF OF

ANTRIM WIND ENERGY, LLC

October 11, 2012

1 **Background and Qualifications**

2 **Q. Please state your name, business address and qualifications.**

3 A. My name is Jack Kenworthy and my business address is 155 Fleet Street,
4 Portsmouth, NH 03801. My qualifications remain the same as those presented in
5 my prefiled direct testimony submitted on January 31, 2012.

6 **Q. Who is your current employer and what position do you hold?**

7 A. I am employed by Eolian Renewable Energy, LLC ("Eolian") where I am the
8 Chief Executive Officer. I am also an Executive Officer of Antrim Wind Energy
9 LLC ("AWE").

10 **Purpose of Testimony**

11 **Q. What is the purpose of this testimony?**

1 A. The purpose of this testimony is to supplement my prefiled direct testimony with
2 additional Project information that has been developed subsequent to the filing of Antrim
3 Wind Energy's Application. Specifically, my testimony relates to: an update on the
4 status of AWE's interconnection request with ISO-NE; the addition of a new temporary
5 staging/laydown yard to be used during the construction phase of the Project; the
6 inclusion of two temporary meteorological towers that AWE requests be certificated; the
7 payment in lieu of taxes ("PILOT") agreement entered into between the Town of Antrim
8 and AWE; the Agreement entered into between the Appalachian Mountain Club
9 ("AMC") and AWE relating to the use of a radar activated lighting control system for
10 Federal Aviation Administration ("FAA") obstruction lighting; resolution of previously
11 pending litigation by the Hillsborough County Superior Court Northern District of the
12 Project's meteorological tower as a permitted use within the Town of Antrim's Rural
13 Conservation District; additional wind resource and energy yield information ordered by
14 the Site Evaluation Committee ("SEC" or "Committee"); and to rebut certain points
15 raised in testimony or filings by other parties to this docket.

16 **Q. Are you familiar with the Project that is the subject of this proceeding?**

17 A. Yes. Eolian was the original developer of the Antrim Wind Project and I have
18 been closely involved with the development of the Project since April 2009 when Eolian
19 first made an introductory presentation to the Town of Antrim.

20 **ISO-NE Interconnection Study**

21 **Q. Has the Antrim Wind Project submitted an interconnection request to ISO-NE**
22 **for the Project?**

1 A. Yes. AWE submitted a Large Generator Interconnection Request (“LGIR”) to
2 ISO-NE on August 3, 2011. After an initial scoping meeting with ISO-NE and the
3 transmission owner, Northeast Utilities/Public Service of New Hampshire, AWE entered
4 into a System Impact Study (“SIS”) Agreement with ISO-NE and Northeast
5 Utilities/PSNH on September 23, 2011.

6 **Q. What is the current status of that study?**

7 A. The SIS Agreement calls for the study to be completed in two phases: a
8 feasibility study, which evaluates steady state (thermal and voltage) impacts and a
9 stability study component. AWE received a draft steady state report from ISO-NE on
10 May 18, 2012. This first phase draft report was delayed by several months due to
11 unrelated delays in the study process caused by higher queued projects. In June 2012, the
12 stability component of the study commenced and this study is ongoing. AWE expects a
13 complete draft report in October 2012. AWE requested the ability to release the draft
14 steady state report to the SEC and the Parties in this docket, but ISO has declined that
15 request, citing the draft status of the report. In summary, the draft report found that
16 interconnecting the Project will not have a steady state adverse impact on the reliability
17 or operating characteristics of the New England bulk power system.

18 **Q. Based on the information that ISO has provided AWE to date, is it your belief**
19 **that the Antrim Project can interconnect to the grid safely without compromising**
20 **reliability?**

21 A. Yes. Based on the draft feasibility study and several conversations with ISO-NE
22 and AWE engineers, AWE believes the Antrim Project can interconnect to the grid safely

1 without jeopardizing system stability/reliability and meet the targeted 2014 in-service
2 date. Prior to actually interconnecting and energizing the wind plant, AWE will need to
3 complete all final interconnection studies and enter into a Large Generator
4 Interconnection Agreement (“LGIA”) with the ISO and transmission owner that will
5 detail all interconnection requirements. AWE will submit a copy of its final SIS to the
6 SEC as soon as the SIS becomes available.

7 **Additional Laydown/Staging Area:**

8 **Q. Please describe the additional laydown area that has been included as part of**
9 **Antrim Wind’s First Supplement to its Application.**

10 A. AWE has leased additional property approximately 1/2 mile southwest of the
11 main project entrance, which it plans to utilize as an additional laydown yard during the
12 construction period. This property is directly adjacent to NH Rte 9 and consists of an
13 existing clearing that was previously a log-landing yard. The location of this property, as
14 well as other Project property, is identified in Figure C.4 submitted with the First
15 Supplement to AWE’s Application on August 10, 2012. Utilizing this new laydown area
16 will allow for additional space during the construction process. AWE anticipates that this
17 location will be the primary staging area for construction equipment during the
18 construction process and will also host the temporary construction trailers and offices.
19 After construction is complete, the site will be restored.

20 **Q. Why did AWE elect to add this new staging/laydown yard to its**
21 **application?**

1 A. AWE has had an interest in this property for some time due to its characteristics
2 (cleared, level, accessible to NH Route 9 and close to the Project site), but only recently
3 was AWE able to obtain a lease on the property. AWE's original Application allowed for
4 sufficient space to stage equipment during the construction phase, but the addition of the
5 new laydown area allows greater flexibility for equipment delivery, staging and storage.
6 This flexibility, AWE believes, can provide for a more economical and efficient
7 construction process with correspondingly lower impacts - the additional laydown yard
8 is already cleared and may reduce the amount of clearing necessary on Mr. Ott's land (the
9 location of the other laydown yard). Nevertheless, AWE is reserving the ability to use
10 both full laydown and staging areas during construction, both of which will be restored
11 after the construction period.

12 **Two temporary meteorological towers**

13 **Q. Why has AWE included two meteorological towers to be certificated as part**
14 **of the Project?**

15 A. AWE installed a temporary meteorological ("met") tower on Tuttle Hill in
16 November 2009 and has been collecting data from that tower continuously since that
17 time. The local permits that AWE obtained to allow the installation of that met tower
18 were appealed in a variety of manners through the Antrim Zoning Board of Adjustment
19 and ultimately to Hillsborough County Superior Court. As explained below, the Court
20 issued a definitive decision in July of 2012 upholding AWE's right to have the tower
21 installed through the original permit period, which ends on November 30, 2012. The first

1 (existing) met tower is one of the two temporary met towers AWE is seeking to have
2 certificated.

3 For projects of the size of the Antrim Project sited in complex terrain, a second met tower
4 or other measuring wind equipment can help to verify the long-term energy yield
5 estimates. Therefore, upon the recommendation of V-Bar, LLC, AWE obtained a LiDAR
6 machine (light detection and ranging) and implemented a measurement campaign in
7 January 2012 to supplement data from the existing met tower. As V-Bar, LLC notes in its
8 summary report to the SEC dated September 4, 2012, AWE's current wind measurement
9 campaign consisting of a met tower and a lidar machine "provide a sound basis for
10 estimating the wind resource across the site." *Third Supplement to Application of Antrim*
11 *Wind Energy, LLC, Appendix 21* at 2. Nevertheless, AWE believes a second met tower
12 would enhance the value of the on-site data collected to date by further reducing
13 uncertainty and therefore increasing the associated p-values (probabilities of exceedance)
14 that lenders use to size the amount of debt they are willing to lend to the Project.

15 Furthermore, without collecting and correlating data from the two towers simultaneously,
16 the value of the data obtained by the second met tower would be diminished. For that
17 reason, AWE is seeking certification of both towers as part of this facility.

18 **Q. Please describe the required equipment and other facilities for the two met**
19 **towers?**

20 A. Both towers are NRG 60M XHD tilt-up tubular towers manufactured by NRG
21 Systems in Hinesburg, Vermont and are described in the first supplement to AWE's
22 Application filed on August 10, 2012. The towers do not require any external power

1 source (they use a small solar panel to power the logger), produce no sound and have no
2 lights.

3 The first tower is already in place pursuant to local permits and therefore will
4 result in no additional impacts. The site has already been cleared, along with an existing
5 ATV path for access. The second tower is proposed to be located in the same location
6 as turbine #8. As such, all clearing for the installation of this tower will be within the
7 area ultimately to be cleared for turbine #8. The installation of this tower will not impact
8 any sensitive environmental resources (wetlands, vernal pools, rare plants, etc.). Site
9 access will be via existing ATV trails to the greatest extent possible.

10 **Agreement with Town of Antrim**

11 **Q. Please describe the Agreement between AWE and the Town of Antrim.**

12 A. AWE and the Town of Antrim negotiated an Agreement that addresses various
13 topics related to the construction, operation and removal of AWE's proposed wind
14 facility. The Agreement was signed after a public hearing held by the Antrim
15 Selectboard on March 8, 2012 and has been submitted to the SEC as Appendix 17A. The
16 form of this agreement is substantially similar to agreements that were entered into
17 between the Town of Groton and Groton Wind, and between the Town of Lempster and
18 Lempster Wind. The 15 page Agreement signed on March 8th addresses issues such as
19 construction timing, the use of Town roads, blasting protocols (including notice to the
20 Town of blasting activities), noise levels during operations, required setbacks from
21 property lines, buildings and roads, signage and site security, emergency response,

1 complaint response, decommissioning and decommissioning funding assurance, among
2 other things.

3 **Q. Is it AWE's intent that standards and protocols detailed in the Agreement be**
4 **included as conditions of any Certificate of Site and Facility issued by the SEC?**

5 A. Yes. Through the course of discussions with the Antrim Board of Selectmen in
6 in public hearings concerning this Agreement, AWE has made its position clear that it
7 expects the Agreement's standards and protocols to be included as conditions in any
8 Certificate issued by the SEC to AWE. AWE affirms that position here.

9 **PILOT Agreement**

10 **Q. Please describe the PILOT Agreement negotiated between the Town of**
11 **Antrim and Antrim Wind.**

12 A. AWE and the Town of Antrim negotiated an agreement pursuant to RSA 72:74
13 that details payments in lieu of taxes (PILOT) that AWE will make to the Town of
14 Antrim commencing with construction and continuing for 20 years of Project operations.
15 This Agreement was the subject of a duly noticed public hearing on November 30, 2011.
16 At that hearing, members of the public voiced concerns that Antrim's participation in a
17 cooperative school district (and the funding agreement among the nine Towns comprising
18 the district) posed a risk that the Town could be negatively impacted from a net-revenue
19 perspective under the terms of the original PILOT if the NH Department of Revenue
20 Administration ("DRA") valued the Project at fair market value for the purposes of
21 equalization. The problem created by fair market valuation arises in the context of
22 determining the Town of Antrim's school funding contributions. Under the current

1 funding structure for the Contoocook Valley School District (“ConVal”), the amount that
2 each town contributes to the school district is based on a weighted formula where 50% of
3 the town’s payment is derived from the number of pupils sent and 50% is derived from
4 the equalized value of the property located in the town. The tax concern here centered
5 around the potential for the Project to be valued by DRA at full market value for the
6 purpose of equalization, which would result in the Town of Antrim paying incrementally
7 more money to ConVal than the amounts received under the original PILOT agreement.

8 **Q. Was AWE aware of this potential issue during negotiations with the Town on**
9 **the PILOT Agreement?**

10 A. No. AWE had no knowledge of the potential increase in Antrim’s payments to
11 ConVal during the original negotiations on the PILOT in 2011. AWE became aware of
12 the issue shortly before the November 30, 2011 public hearing.

13 **Q. How did AWE and the Town respond to these concerns?**

14 A. AWE and the Town took this potential issue very seriously. The proposed PILOT
15 was not signed the evening of that public hearing and both parties simultaneously began
16 to investigate both the legitimacy of the concern and possible solutions. With respect to
17 the question of the concern’s legitimacy, AWE and the Town of Antrim filed a letter with
18 the DRA requesting DRA’s position on the valuation methodology likely to be applied to
19 the Project. AWE and the Town also met with DRA on January 11, 2012 to discuss the
20 issue, at which time AWE and the Town submitted a letter describing the issue. On
21 January 13, 2012, DRA issued a reply letter stating its position that the Project would be
22 valued at full market value for equalization purposes. Subsequently, AWE requested

1 reconsideration of DRA's position to exhaust all administrative options and to obtain a
2 final position on the matter from within DRA. DRA upheld its position in a letter to the
3 Town of Antrim dated June 6, 2012. AWE subsequently filed a Petition for Declaratory
4 Judgment in New Hampshire Superior Court on July 6, 2012, which is still pending.

5 Despite the uncertainty around the appropriate methodology for equalizing
6 renewable energy property, both Antrim Wind and the Town of Antrim believed that it
7 was in the interest of the Project and the Town to move forward with an agreement that
8 would address either possible outcome of the DRA dispute. As such, AWE and the
9 Town commenced negotiations on a "backup" agreement to address the scenario where
10 DRA's position was upheld. Under the terms of the backup agreement, in the event of a
11 final binding decision by a New Hampshire Court upholding DRA's current position that
12 the Antrim Project would be valued at full market value for the purposes of equalization,
13 AWE has agreed to pay the greater of A + B, or C, where: A is equal to the total increase
14 in Antrim's liability to ConVal and Hillsborough County as a result of the Project, B is a
15 schedule of payments set forth in Schedule B of the Backup Agreement; and C is the
16 original PILOT payment. After negotiating acceptable terms to both AWE and the
17 Town, the Town held a second public hearing on the PILOT and Backup Agreement on
18 June 20, 2012. Both agreements were executed after an affirmative vote by the
19 Selectboard at the end of the public hearing that night.

20 **Q. In your opinion, do these Agreements protect the Town of Antrim from the**
21 **risk of negative tax consequences should DRA's position prevail in court, and**
22 **provide for substantial economic benefit from the Project?**

1 A. Yes. AWE responded swiftly and comprehensively to the concerns raised by the
2 Town after the November 30, 2011 meeting. The original PILOT, which will stand if
3 AWE and the Town prevail in the DRA dispute, provides for the highest per MW
4 payment to the host town of any wind project in New Hampshire that has executed a
5 PILOT Agreement. If the Town and AWE do not prevail, AWE has agreed to pay 100%
6 of the increase in the Town's obligations to ConVal and Hillsborough County attributable
7 to the Project, plus a series of scheduled fixed payments - a clear net benefit to the Town.
8 Those "Schedule B" payments begin at \$125,000 per year and increase to \$332,233 in
9 Year 20 (these are net figures to the Town). The backup agreement also provides that if
10 at any time the original PILOT payment (C) is greater than the backup agreement
11 payment (A+B), then AWE will pay the original PILOT Payment instead.

12
13 **Agreement with Appalachian Mountain Club ("AMC")**

14 **Q. Please describe the Agreement between AWE and AMC**

15 A. AWE and AMC entered into an Agreement in order to satisfy AMC's concerns
16 with respect to AWE's Application, which were related to visual impacts. *See Second*
17 *Supplement to Application of Antrim Wind Energy, LLC, Appendix 20.* The Agreement
18 consists of two components: 1) AWE agreed to expand its analysis of visual impacts
19 from 5 to 10 miles and to perform several additional visual simulations within the 5-10
20 mile range, with one location being Pitcher Mountain; and 2) AWE made a commitment
21 to utilize a radar activated lighting system (RALS), subject to necessary approvals by the
22 Federal Aviation Administration (FAA). Such a lighting system is meant to address

1 nighttime visual impacts by keeping the required obstruction lights on turbines turned
2 “off” unless the radar detects aircraft in the area and activates the obstruction lights. In
3 return, AMC agreed not to pursue further actions in this docket as long as AWE does not
4 make changes to its Application that would materially alter the visual impacts from the
5 Project.

6 **Q. What steps has AWE taken to include the RALS in its Application?**

7 A. AWE has amended its application via the Second Supplement filed August 22,
8 2012 to include the necessary facilities for the RALS. Primarily, this includes the
9 addition of a 90-foot tall monopole tower with radar mounted on top, and a 16’ x 6’ pad
10 containing ancillary equipment at the base of the monopole. This radar equipment will
11 be located in close proximity to turbine #10, which is the highest turbine in the array, thus
12 allowing a single radar unit to cover the entire Project. Due to its close proximity to
13 turbine #10, no new clearing and no new roads will be required for the installation of
14 these facilities. The radar tower will be a small new visual element in the Project and
15 AWE has updated several of its visual simulations to include this feature. Any increase
16 in visual impacts caused by the small radar tower will be more than offset by the ability
17 to greatly reduce the frequency of active red synchronized lights.

18 AWE has updated its environmental reports and engineering and stormwater
19 designs to include these new facilities, which have been approved with conditions by the
20 New Hampshire Department of Environmental Service (NH DES), and requests that the
21 SEC certificate them as part of the Project.

22 **Q. When does AWE plan to install these facilities?**

1 A. That depends on the status of FAA approvals. AWE's operation of this
2 equipment is contingent upon the FAA issuing a revised Advisory Circular setting forth
3 the accepted standards for radar activated lighting systems. If the FAA has issued such
4 an advisory more than 60 days before the commencement of construction, then per the
5 AMC Agreement, AWE will install the radar system and operate it coincident with the
6 start of the Project's commercial operations. If the FAA advisory has not been issued by
7 that time, then AWE may either install the facilities simultaneously with the remainder
8 the facilities (if it expects that the advisory will be issued in the near future), or AWE
9 may install and commence operating the radar system no later than one year from the
10 issuance of the FAA advisory. In either event, AWE has committed either to using the
11 technology from the beginning of the Project's operations or retrofitting the Project with
12 this technology after the FAA advisory is issued, assuming it is issued.

13 **Q. Is it AWE's intention that the terms of the Agreement between AWE and**
14 **AMC that relate to the radar system be included as conditions in any Certificate of**
15 **Site and Facility issued in this Docket.**

16 A. Yes, that is AWE's intention.

17 **Superior Court Litigation Concerning Met Tower**

18 **Q. Please briefly describe the outcome of the Superior Court litigation**
19 **concerning the Project's met tower.**

20 A. By order dated July 5, 2012, the Hillsborough County Superior Court Northern
21 District ruled that the Project's existing met tower is a permitted use in the Town of
22 Antrim's Rural Conservation District, the area in which the Project is proposed to be

1 built. In so doing, the Court found that, according to the Town's zoning ordinances,
2 "public utilities" are a principal permitted use within the Rural Conservation District and
3 that, as a necessary antecedent to a commercial wind farm, the met tower constitutes a
4 public utility within the meaning of the ordinance. A copy of the Court's decision is
5 submitted herewith as Attachment JK- 1. The time period for appealing that decision has
6 passed, and no party has appealed it.

7 **Q. What is the significance of the above-described Court decision?**

8 A. The Court's ruling on the met tower litigation is significant as it establishes that
9 the met tower and the Antrim Wind Project are both permitted uses under the Town of
10 Antrim's zoning ordinances, and thus supports AWE's position that the Project is
11 consistent with the orderly development of the region.

12 **Q. Please describe the Project site's wind resource information requested by the**
13 **Committee in its August 22, 2012 Order.**

14 A. Pursuant to the SEC's directives, AWE submitted a detailed amendment to
15 Section F.3.a of its Application on September 5, 2012 that provides substantial
16 information regarding the characteristics of the wind resource at the site, the
17 methodology used to evaluate that resource and the relationship between the wind
18 resource and turbine selection. The information contained in the Third Supplement to
19 AWE's Application speaks fairly clearly for itself. In brief summary, as requested by the
20 SEC, we have submitted information on the range of long term hub height wind speeds
21 (7.0-8.3 m/s), wind direction, diurnal and seasonal variations, turbulence and sheer. The
22 supplemental wind information also demonstrates that using shorter, smaller rotor legacy

turbines (such as those previously certificated by the SEC) would have a significantly negative impact on the Project's capacity factor and energy yield, and therefore competitiveness.

Rebuttal Issues

Q. The prefiled testimony submitted by Richard Block, Geoffrey Jones and Susan Morgan allege that AWE has commenced construction activities by clearing land around the turbine areas. Have you reviewed this testimony?

A. Yes, I have.

Q. Is there any truth to these allegations?

A. No, there is no truth to them. AWE is committed to complying with the law and the SEC process and has no interest in committing any violations by prematurely commencing any construction activities without the appropriate permits. Furthermore, it would make no sense for AWE to incur the cost of such activities and commence any construction activity without knowing with certainty that the Project will be certificated by this Committee.

AWE's leases allow the landowners substantial latitude with respect to the management of their properties. One of their retained rights is the ability to log the property as they see fit, provided such logging is in compliance with all applicable laws and regulations. AWE became aware that one of the landowners that AWE leases property from, Antrim Limited Partnership (unrelated in any way to Antrim Wind Energy LLC), intended to log certain portions of its property in accordance with a forestry management plan. It is AWE's understanding that the landowner filed a notice of intent

1 to cut as prescribed by law, and obtained other permits (including from DES) that were
2 required to truck the timber off the site. For over a year, well before any logging took
3 place, AWE has made it clear that any logging activities on lands leased by AWE are
4 neither requested, nor controlled or directed by AWE. In particular, John Soininen of
5 AWE sent a letter to Mr. Craig Rennie at DES on August 10, 2011, explaining that AWE
6 was aware that the private landowner had filed an intent to cut on property that was
7 leased by AWE, that AWE had not requested the cutting and finally that AWE had no
8 control over the landowner's legal right to harvest timber from his own land. That letter
9 is attached to this testimony as Attachment JK-2.

10 In subsequent meetings with Mr. Rennie, including a meeting at DES on
11 November 1, 2011 and a site visit that Mr. Rennie participated in on December 13, 2011,
12 the question of the logging and the AWE's letter was raised once again. AWE reiterated
13 that those activities were planned and conducted by the landowner with guidance from
14 his forester and were not related in any way to AWE or the Project. Neither Mr. Rennie
15 nor any of the other participants in those meetings had further questions of AWE or
16 expressed concerns about the landowner's logging operation.

17 The area where AWE has sited its Project has been periodically logged,
18 sometimes heavily, for the past several decades – including several recent cuts that took
19 place both before and after AWE executed leases with landowners. The allegations that
20 AWE had any involvement in requesting or directing these operations is simply baseless
21 and false.

1 **Q. Please address Ms. Von Mertens's response to the Applicant's Data Request**
2 **1-10 which states her belief that the Applicant's conservation plan is inadequate.**

3 A. A copy of Ms. Von Mertens's response to AWE's Data Request 1-10 is attached
4 to this testimony as Attachment JK-3. I am personally disappointed by the position taken
5 by Ms. Von Mertens on behalf of the Audubon Society of New Hampshire in light of the
6 fact that on several occasions during the Project's development, AWE requested that NH
7 Audubon provide input on the Project, including its proposed conservation plans. Despite
8 AWE's outreach efforts regarding the Project and AWE's land conservation efforts, NH
9 Audubon refused to provide any input.

10 Furthermore, I do not agree with Ms. Von Mertens' opinion for the following reasons:

- 11 1. The 685 acres of new permanent conservation land (depicted in dark green on the
12 map submitted herewith as Attachment JK-4) is more than ten times as much land
13 as will be directly impacted by the Project, including one parcel roughly 295 acres
14 in size that will not be impacted by the Project at all.
- 15 2. AWE's efforts in establishing these conservation lands required more than a year
16 of effort negotiating agreements between many parties. During this time, AWE
17 sought input from many conservation groups, including NH Audubon and also
18 The Nature Conservancy, the Monadnock Conservancy, The Society for the
19 Protection of New Hampshire Forests and the Harris Center, who will hold the
20 conservation easements. This is an extraordinary voluntary effort to secure
21 conservation easements with broad input from the conservation community. The
22 Harris Center has recognized that the easements will provide a valuable

1 contribution to the conservation interests of stakeholders in the region. It is my
2 understanding that the Antrim Conservation Commission has been attempting to
3 secure similar conservation easements, however, its efforts in obtaining
4 conservation easements on the scale of those obtained by AWE have not been
5 successful. The Project, therefore, provides a valuable contribution to the Town's
6 conservation efforts.

7 3. NH Audubon has not provided any evidence to support the argument that the
8 conservation plan is inadequate. AWE believes it has provided ample evidence
9 that the Project will not result in unreasonable adverse impacts, and will provide
10 ample clean energy and emissions benefits, while permanently conserving
11 valuable conservation land that is either abutting or very close to the existing NH
12 Audubon easements. AWE has also taken additional steps to mitigate the visual
13 impact of the Project by agreeing to use the Radar Activated Lighting System to
14 mitigate lighting impacts. Given the low levels of noise expected on NH
15 Audubon's undeveloped lands, the lack of direct impacts to its property, and the
16 efforts to mitigate visual impacts, AWE believes that the conservation package
17 generous and very adequate.

18 **Q. Please address the testimony of Mr. Cleland and Ms. Law, at page 3, in**
19 **which Mr. Cleland asserts that you stated that the Project would have a direct**
20 **impact on their property.**

21 A. I recall being at the social event that Mr. Cleland describes in his testimony, but I
22 do not recall ever making any statement that the Project would have a direct impact on

1 his property. I do not believe I ever made any such a statement and cannot think of any
2 reason why I would.

3 **Q. Please address the testimony of Mr. Cleland and Mr. Law, at page 6, that**
4 **alleges AWE will sell the Project once approvals are granted.**

5 A. There is no basis for Mr. Cleland's statement. AWE's Application to the SEC
6 has described its financing and operating plans, and has addressed its plans in the
7 testimony of Mr. Cofelice and Mr. Pasqualini as well as in testimony of Mr. McCabe,
8 Ms. Crivella and Mr. Segura-Coto.

9 **Q. Please address the recommendations made in Ms. Vissering's report, at page**
10 **18, that turbines #9 and #10 should be eliminated and smaller turbines should be**
11 **used to mitigate the Project's visual impacts.**

12 A. The implications of reducing the number of Project turbines and reducing the size
13 of the proposed turbines will also be discussed in the supplemental prefiled testimony of
14 Joe Cofelice and Martin Pasqualini, however, I will address it generally here. AWE does
15 not agree with Ms. Vissering's recommendations and does not believe that Ms.
16 Vissering's recommendations for reducing the number of turbines and the size of the
17 turbines reflect the current status of the wind industry in terms of technology
18 advancements. In general, advocating for older models and smaller turbines is a recipe
19 for rendering a wind energy project uncompetitive. Although Ms. Vissering stated during
20 Tech Session #2 that her report and analysis recognized and took into account the 685
21 acre conservation package that AWE has negotiated, her report conspicuously makes no
22 mention of this effort or its value. Furthermore, Ms. Vissering's report does not take into

1 account the significant additional measures AWE has taken to mitigate against the visual
2 impacts from this 30 MW Project.

3 As the Application states in Section H.2.a, AWE had considered a Project
4 consisting of 11 turbines, which would have required another turbine further down the
5 flank of Willard Mountain and closer to Willard Pond and the NH Audubon property.
6 AWE also considered a 10-turbine layout with WTG #10 also located further down the
7 flank of Willard Mountain. AWE rejected both of these options and elected to pursue the
8 smaller 10-turbine project with a more compact footprint and greater distance from the
9 Audubon property and Willard Pond even with the loss of an estimated 6-7%
10 productivity for one of the turbines. AWE evaluated both a larger project (11 turbines)
11 and a 10-turbine project with higher energy yields, and elected to advance the smaller
12 project - which has a more compact footprint and is a greater distance from nearby
13 recreational areas - in order to minimize impacts. Thus, AWE has already taken steps to
14 reduce visual and other Project impacts. It is AWE's position that modifying the Project
15 to reduce the number of turbines or to include smaller, less productive turbines makes the
16 Project far less competitive and thus unlikely to obtain financing.

17 The selection of the Acciona AW-3000/116 turbine allows the Project to achieve
18 a 30 MW installed capacity with fewer turbines than previously possible using older
19 technology. Fewer turbines require less ancillary infrastructure (foundations, roads,
20 collection system) and thus actually renders a relatively smaller project more economic.
21 Similarly, from a visual perspective, the Antrim Wind Project achieves 25% greater
22 installed capacity with 20% fewer turbines than the Lempster Project. AWE submits that

1 an equivalent 30 MW project (e.g. larger rotor machines capable of higher capacity
2 factors – as is now the norm) consisting of twenty 1.5 MW turbines or fifteen 2 MW
3 would lead to much greater visual impacts.

4 In much the same way as AWE has committed to using the best available turbine
5 technology to maximize project benefits and minimize impacts, AWE has also committed
6 to utilize the best available technology in the Radar Activated Lighting System to
7 mitigate against any increased visual impacts by virtually eliminating night time red
8 lights as soon as the FAA approves the technology.

9 **Q. Mr. Edwards' prefiled testimony, at page 1, recommends that the SEC**
10 **should require AWE to obtain a Letter of Credit acceptable to the Antrim Board of**
11 **Selectmen to protect the Town if AWE defaults on its tax payment obligations. Do**
12 **you agree with this recommendation?**

13 A. No. To my knowledge, the SEC has never required any such condition on any
14 other wind energy projects that it has certificated. As described in AWE's Application,
15 AWE intends to use project financing to construct and operate the Project. Anticipating
16 that approach, the PILOT Agreement allows for any default to be cured by AWE's
17 lender. Beyond that, the Town has legal remedies available to it under RSA 80 if any
18 default were to extend beyond the cure period. To require a Letter of Credit to secure
19 future tax payments is, in AWE's view, unwarranted and unreasonable.

20 **Q. Please address pages 2-3 of Mr. Edwards' prefiled direct testimony in which**
21 **he poses several questions relating to the enforceability of the agreement between**

1 **the Town of Antrim and AWE due to the lack of appropriate corporate votes to**
2 **authorize execution of the agreement by AWE.**

3 A. I do not know what Mr. Edwards is referring to. No party ever asked AWE to
4 produce a corporate resolution demonstrating authority to sign the Agreement with the
5 Town of Antrim, nor is AWE aware of any requirements to do so. All necessary
6 authorizations were in place and the AWE officers who signed the Agreement were fully
7 authorized to do so.

8 **Q. The prefiled direct testimony of Antrim Planning Board member Charles**
9 **Levesque asserts, at page 23, that the Antrim voters chose in 2011 and 2012 not to**
10 **approve the proposed large-scale wind ordinance proposals and instead “chose to**
11 **keep the existing zoning which prohibits large-scale wind development in Antrim**
12 **unless a variance is granted by the Zoning Board of Adjustment.” Do you agree**
13 **with these statements?**

14 A. No, not at all. It is widely acknowledged that the zoning amendments proposed
15 by the Antrim Planning Board that were voted on in 2011 and 2012 were either overly
16 restrictive or outright prohibitive of wind facilities in Antrim. The voters in Antrim knew
17 this as well, and AWE believes that they defeated the ordinances on that basis. This was
18 widely covered in the local press at the time. This vote took place during the largest
19 voter turnout in the history of the Town of Antrim, and at a special Town Meeting and
20 the statement that makes is clear.

21 **Q. Mr. Block’s prefiled direct testimony at page 12 questions the**
22 **Project’s capacity factor estimates as well as efficiency claims, and indicates that the**

1 **National Renewable Energy Laboratory rates the wind resources in the Antrim area**
2 **as “marginal to fair”. Do you agree with these statements?**

3 A. No, I do not agree with them. Mr. Block’s reference to the NREL wind maps is
4 overly simplistic. Those maps are based on rough scale models that do not reflect actual
5 site conditions with any degree of accuracy. These maps are not intended to be used as a
6 final analysis of suitability for locating a wind facility, which explains the need for onsite
7 wind resource measurements campaigns. As AWE describes in the supplement to its
8 Application Section F.3.A, the wind resource in Antrim is a very competitive wind
9 resource when used with state of the art modern wind turbines.

10 With respect to the capacity factors AWE has presented in its Application, Mr.
11 Block has no basis for his challenge. These capacity factor estimates are generated by
12 professional meteorologists with decades of experience estimating energy yields from
13 wind facilities based on actual site data in complex terrain. AWE has included a letter
14 from V-Bar, our meteorologists as Appendix A to Appendix 10 of the Application
15 supporting our analysis.

16 **Q. Do you have anything further to add to this testimony?**

17 A. No, not at this time.

18 925545_1

THE STATE OF NEW HAMPSHIRE
JUDICIAL BRANCH
SUPERIOR COURT

Hillsborough Superior Court Northern District
300 Chestnut Street
Manchester NH 03101

Telephone: (603) 669-7410
TTY/TDD Relay: (800) 735-2964
<http://www.courts.state.nh.us>

July 11, 2012

RICHARD Y. UCHIDA, ESQ
HINCKLEY ALLEN & SNYDER LLP
11 SOUTH MAIN STREET SUITE 400
CONCORD NH 03301-4846

RECEIVED
JUL 12 2012

Case Name: Antrim Wind Energy, LLC v. Town of Antrim
Case Number: 216-2010-EQ-00245 216-2010-CV-00553; 216-2011-CV-00686

You are hereby notified that on July 5, 2012, the following order was entered:

RE: ZONING BOARD OF ADJUSTMENT APPEAL:

See copy of order attached - Brown, J.

John M. Safford
Clerk of Court

(539)

C: Matthew R. Serge, ESQ; Richard Block; Lorraine Carey Block; Rachel A. Goldwasser, ESQ

STATE OF NEW HAMPSHIRE

HILLSBOROUGH, SS.
NORTHERN DISTRICT

SUPERIOR COURT

Antrim Wind Energy, LLC

v.

Town of Antrim

No. 10-E-245

consolidated with

Loranne & Richard Block

v.

Town of Antrim

No. 10-CV-553

consolidated with

Loranne & Richard Block

v.

Town of Antrim

No. 10-C-686

ORDER ON ZBA APPEAL

Antrim Wind Energy, LLC ("AWE") is in the business of developing renewable energy systems, including wind energy projects. (Certified Record ("C.R.") 104.) A meteorological tower ("met tower") collects scientific data on the natural wind patterns on a site. (C.R. 100.) Following application, on October 19, 2009, AWE obtained a height variance from the Town of Antrim Zoning Board of Adjustment ("ZBA") to

construct a meteorological tower in accordance with the Small Wind Energy System ("SWES") section of the Town's Zoning Ordinance ("ZO" or the "ordinance"). (C.R. 20-25.) After obtaining approval, AWE obtained a building permit on October 22, 2009, and then erected the met tower. (Joint Stipulation of Facts ("Stip.") ¶ 4.) The issuance of this permit was never appealed or challenged. The met tower is currently standing on Tuttle Hill in Antrim, New Hampshire (the "property"). It stands 196.85 feet in height. (C.R. 104.) The property is located within Antrim's Rural Conservation District ("RCD"). (C.R. 100.) With the exception of the met tower, the subject property is held in current use as unimproved open space. (Stip. ¶ 3.)

After the issuance of the building permit, Lorraine and Richard Block (the "Blocks" or the "intervenors"), filed a motion for rehearing with the ZBA challenging the grant of the height variance. (Stip. ¶ 26.) Following rehearing, the ZBA voted to grant the height variance pursuant to Article XIC-D, Section D.1(b) of the ordinance. The Blocks now appeal that decision (No. 10-CV-553).

As an alternative means of obtaining approval for the met tower, AWE applied for minor site plan approval from the Antrim Planning Board (the "Planning Board") on February 9, 2010, asserting the tower is a permitted use in the RCD and that it was not subject to the height restrictions because it is a "special industrial structure" under the ZO. (C.R. 98-118.)

After notice and hearing, on March 18, 2010, the Planning Board approved the minor site plan application. (Stip. ¶ 11.) In doing so, the Planning Board found the met tower "is a special industrial structure to gather wind data for a potential public utility use." (Stip. ¶ 11.) On March 22, 2010, abutters, including the Blocks, appealed the

Planning Board's decision to the ZBA on grounds that the Planning Board had erred in determining that the met tower constituted a "public utility" and that it was exempt from the ZO's height requirement as a "special industrial structure." (Stip. ¶ 12.)

On May 18, 2010, the ZBA overturned the Planning Board's decision and voided the approval of the application. (Stip. ¶ 14.) The ZBA found, among other things, that the AWE's proposed met tower was not a permitted use. AWE filed a request for rehearing, which the ZBA denied. (C.R. 23-27.) AWE now appeals this decision (No. 10-E-245).

On May 24, 2011, while these two appeals were pending before this court, the ZBA granted AWE both a height and use variance to construct the met tower. The Blocks now also appeal this decision (No. 11-C-686).¹

All three appeals have been consolidated for simultaneous review. The court held a hearing on the pending appeals on May 21, 2012.

The court now addresses the issues pertaining to the ZBA's decision in No. 10-E-245. Specifically, the court considers whether the ZBA's unlawfully determined that the met tower was not a permitted use under the ordinance. If the court finds the met tower is a permitted use under the ordinance and thus, finds the ZBA's decision unlawful, the court need not reach the issues surrounding the respective variances issued in No. 10-CV-553 and No. 10-C-686.

Standard

Interpretation of a zoning ordinance is a question of law that requires the court to determine the intent of the enacting body. Feins v. Town of Wilmont, 154 N.H. 715, 719

¹ A more thorough recitation of the factual and procedural background is set forth in the parties' joint stipulation of facts.

(2007). "Because the traditional rules of statutory construction generally govern [the court's review], the words and phrases of an ordinance should be construed according to the common and approved usage of the language." Anderson v. Motorsports Holdings, LLC, 155 N.H. 491, 494-95 (2007). "[A]ny ambiguity is to be resolved by reference to the apparent object of the [ordinance]." Id. at 793 (quoting Storms v. Town of Eaton, 131 N.H. 50, 52-53 (1988)). "Where, as here, no definition is provided in the ordinance itself, [the court] must look to the ordinance as a whole and attempt to discern the meaning intended by the framers." Trottier v. City of Lebanon, 117 N.H. 148, 150 (1977) (citation omitted).

Analysis

AWE argues that the ZBA's decision reversing the Planning Board was both unlawful and unreasonable for the following reasons: (1) a met tower is a permitted accessory use under the ZO and RSA 672:1; (2) the met tower is a permitted principal use as "public utility"; and (3) the met tower is a "special industrial structure." The Town and the Blocks object. For the reasons that follow, the court finds the ZBA's decision was unlawful as the met tower constitutes a "public utility" under the ordinance.

Under Article IX of the ordinance, the RCD "is intended to protect, conserve and preserve the remote mountainous portions of Antrim from excessive development pressures and/or activities that would be detrimental to the unique environmental characteristics and qualities of this district and detract from the peaceful enjoyment and tranquillity (sic) that this district affords local residents." "Public utilities" are a principal permitted use within the RCD. (ZO Article IX, Section B-1(e)). The definition of "public

utilities" is not defined within the ordinance and thus, the court must determine its meaning.

Merriam-Webster's Dictionary defines "public utility" as: "a business organization (as an electric company) performing a public service and subject to special governmental regulation." Black's Law Dictionary defines "public utility" therein as "[a] company that provides necessary services to the public, such as telephones, electricity, and water."

It is undisputed that (1) AWE seeks to provide electricity through wind energy and (2) as a wind energy provider, AWE is subject to regulation by the New Hampshire Site Evaluation Committee pursuant to RSA 162-H, the ISO New England, and the Federal Energy Regulatory Commission. Accordingly, based on the plain meaning of the term "public utility," the court finds that a met tower, as a necessary antecedent to a commercial wind farm, constitutes a "public utility" within the meaning of the ordinance. Therefore, the court finds the ZBA unlawfully determined the met tower did not constitute a "public utility."

Statutory definitions of "public utility" available at the time the ordinance was enacted further support the court's finding. Specifically, in 1989, when the Town enacted the pertinent provisions of the ordinance, RSA 362:2 defined "public utility" as "every corporation . . . owning, operating, or managing any plant or equipment or any part of the same for the manufacture or furnishing of . . . power . . . for the public, or in the generation, transmission, or sale of electricity ultimately sold to the public." RSA 362:2 (1986).

Moreover, when looking at the ordinance as a whole, the court considers Article E XIV-D which specifically addresses "Small Wind Energy Systems" (SWES). The SWES portion of the ordinance was "enacted in accordance with RSA 674:62-66, and the purposes outlined in RSA 672:1-III-a." The ordinance goes on to state that:

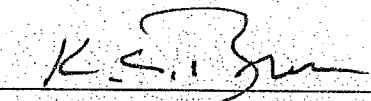
The purpose of this ordinance is to accommodate small wind energy systems in appropriate locations, while protecting the public's health, safety and welfare. In addition, this ordinance provides a permitting process for small wind energy systems to ensure compliance with the provisions of the requirements and standards established herein.

(ZO Art. E XIV-D, Sec. A.) Pursuant to the goals of this section, it is reasonable to conclude that the Town in enacting the ordinance contemplated SWES as "public utilities" and therefore explicitly allowed for them within most zoning districts.

Accordingly, the court finds the ZBA unlawfully determined that the met tower was not a "public utility," and reverses the decision. As such, it need not address the remaining arguments.²

SO ORDERED.

Date: July 5, 2012


Kenneth C. Brown
Presiding Justice

² Because the court finds the met tower is a permitted use within the RCD, it need not address the Blocks' arguments pertaining to the respective variances issued as those issues are now moot.



August 10th, 2011

Mr. Craig Rennie
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, NH 03302-0095

Dear Craig,

I am writing to you on behalf of Antrim Wind Energy, LLC ("AWE"), because of your preliminary involvement in our proposed Antrim wind energy project, to inform you that I have just been made aware that logging activity may occur soon within the leasehold area of our proposed project. As you may know, the project leases seven (7) land parcels in Antrim comprising approximately 1,820 acres where AWE plans to develop a wind energy facility consisting of up to ten (10) utility scale wind turbines. The largest of these leased parcels is approximately 900 acres in size and is owned by the Antrim Limited Partnership ("ALP"), an entity that is totally unrelated to AWE. It has recently been brought to my attention that ALP has engaged a local forester, Paul Mulcahey, to create a forest management plan for the property and to oversee the selective cutting of mature timber on the property. I wanted to make you aware of this because I have concerns that there could be the perception that AWE is starting work without following the proper procedures or obtaining the necessary permits.

I am writing to assure the New Hampshire Department of Environmental Services ("DES") that neither AWE, Eolian Renewable Energy, LLC nor any of their affiliates are in any way connected to this logging activity and that such logging is being undertaken by the landowner completely independently of the wind project. Under the terms of the project's wind leases, landowners have retained many substantial rights to continue to manage and utilize their properties as they see fit, and the right to log is one of those rights. We do not know the details of the cutting plan beyond what is outlined in the attached map (the area outlined in blue is proposed to be cut and accessed via the red skid trail). We simply know that the plan involves selectively cutting timber within an area roughly 75-90 acres in size and comprised of spruce, pine and oak trees. Again, although I have very few details about the proposed logging, I thought it would be best to inform DES of this potential activity and to make clear that neither AWE nor any other entity involved in developing the Antrim wind project is connected to this logging effort in any way, nor in any way directing the logging activity in the furtherance of the proposed wind project.

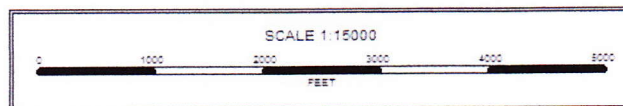
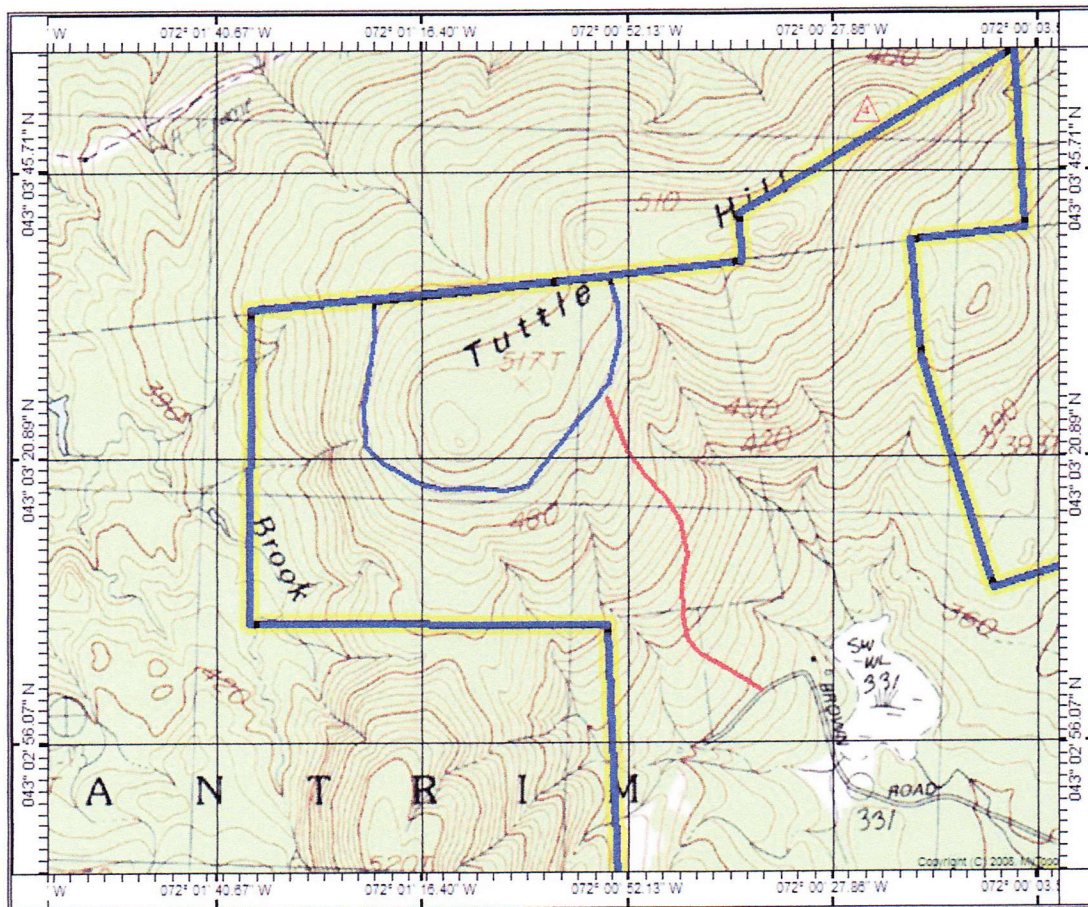
Should you have any questions about this letter, or if I can be of any assistance, please do not hesitate to contact me at (603) 570-4842 or via email at jsoininen@eolian-energy.com.

Thank you,

A handwritten signature in blue ink, appearing to read "JMS", followed by a horizontal line.

John M. Soininen
V.P. Development

CC: Galen Stearns, Antrim Town Administrator
Josh Brown, Project Manager, TRC Solutions



THE STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

Docket No. 2012-01
Application Of Antrim Wind Energy LLC
For a Certificate of Site and Facility
For Antrim Wind Energy in Antrim, New Hampshire

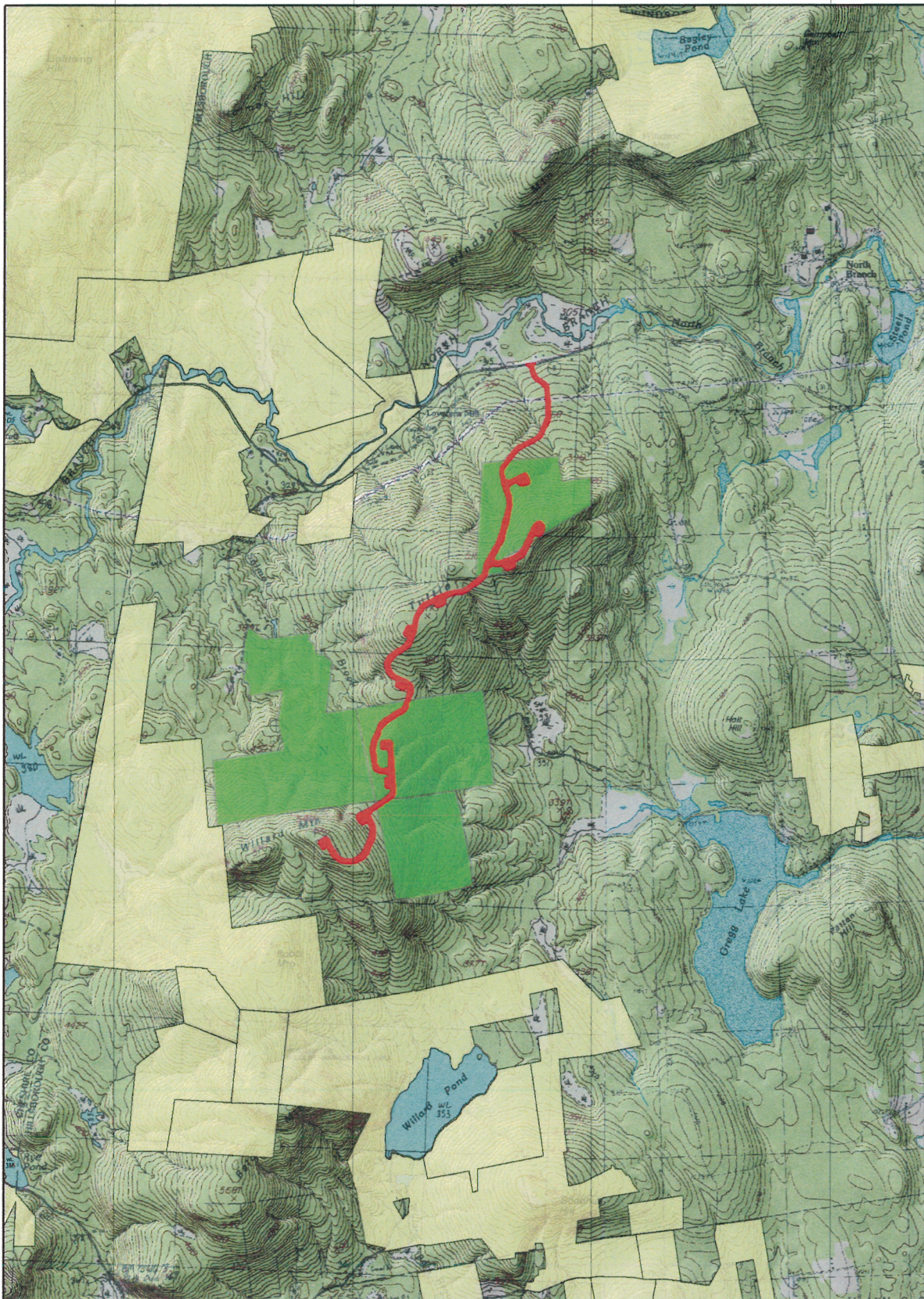
Received August 8, 2012
Request No. AWE-FVM 1-10
Mertens

Date of Response: August 20, 2012
Witness: Frances Von

Please state whether you are familiar with the Project's conservation plan. If so, please state your position regarding the conservation plan.

I am familiar with the conservation easements that would become effective upon first operation of the AWE project.

I believe the conservation plan is inadequate.



LEGEND: Dark Green -- Project Conservation Parcels
Light Green -- Other Conservation Lands
Red Line -- Project Area