

**STATE OF NEW HAMPSHIRE
BEFORE THE SITE EVALUATION COMMITTEE**

Docket No. SEC 2015-02

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

**SUPPLEMENTAL PRE-FILED DIRECT TESTIMONY OF
JACK KENWORTHY
ON BEHALF OF ANTRIM WIND ENERGY, LLC**

1 **I. RESPONSE TO PRE-FILED TESTIMONY OF CHARLIE LEVESQUE**

2 **Q. Have you read Mr. Levesque's Pre-Filed Testimony?**

3 A. Yes.

4 **Q. Do you agree with the statement Mr. Levesque makes on page 4 lines 13-14**
5 **of his Testimony that "the facts show that the majority of Antrim voters do not support the**
6 **development of a wind farm on the Tuttle Hill Ridge"?**

7 A. I do not.

8 **Q. Please explain the basis for your disagreement with Mr. Levesque's position.**

9 A. There are two main reasons: first, Mr. Levesque misrepresents the results of the
10 Town votes on the issue of large scale wind energy regulation in Antrim; and second, Mr.
11 Levesque ignores the numerous other forms of support the Project has received consistently over
12 the past 7 years.

13 **Q. Explain what you mean regarding the Town votes.**

14 A. Mr. Levesque cites four Town votes to support his position, but he
15 mischaracterizes the circumstances that lead to those votes as well as the meaning of the results.

16 The first vote that Mr. Levesque references took place in November 2011, which
17 contained two ballot items related to wind energy: one asking whether the Town should adopt a
18 Large Scale Wind Energy Ordinance and the second asking whether the Large Scale Wind
19 Energy Ordinance, if adopted, should prohibit wind energy in the rural conservation district.
20 (Please see Attachment JK-1 to this Testimony for a copy of the 2011 ballot language and
21 results)

22 The Large Scale Wind Energy Ordinance on the ballot was an anti-wind ordinance. If
23 passed it would have prohibited any commercial wind project from getting built in the Town. It
24 contained provisions fatal to any wind project. To name just one fatal provision, any permit

1 issued under that ordinance would only be valid for 5 years and would then need to be renewed
2 by the Planning Board. No wind project could get financing if a permit required renewal every 5
3 years. Antrim Wind opposed the ordinance, the Board of Selectmen opposed the ordinance and
4 so did the overwhelming majority of Antrim voters. This wind ordinance was defeated by 501 to
5 309 votes.

6 The second ballot item in November 2011 would have prohibited commercial wind
7 facilities in the rural conservation district (“RCD”). The RCD contains approximately half of the
8 Town of Antrim including the site of the proposed Antrim Wind project. This ballot item was
9 defeated by an even larger margin of 584 to 225, with 72% of voters rejecting it. The second
10 vote is very clear that Antrim residents did not want to ban wind energy facilities in the rural
11 conservation district, where the Antrim Project is proposed, despite that fact that Mr. Levesque
12 and the Antrim Planning Board did.

13 The votes on these items drove the largest voter turnout in the history of the Town of
14 Antrim and both ballot items were defeated by substantial majorities. And as noted in several
15 newspaper articles after the November 2011 vote, it was clear, to those paying attention to issues
16 in Antrim at the time, that the first ballot item was defeated not because it would have allowed
17 wind projects in town, but because in fact it would have prohibited them. (Please see
18 Attachment JK-2 and JK-3 for examples of these articles from two different newspapers.)

19 The second vote that Mr. Levesque references took place in March of 2012 on a new
20 version of the Large Scale Wind Energy Ordinance proposed by the same Antrim Planning
21 Board of which Mr. Levesque was a member. (Please see Attachment JK-4 for a copy of the
22 March 2012 ballot items.) Again, this version of the ordinance contained provisions that would
23 be untenable for any commercial wind facility. For example, this version would have also

1 required periodic permit renewals, thereby prohibiting the long term financing that is necessary
2 for large wind projects. Antrim residents again soundly struck down this ordinance by a vote of
3 350-244. As noted by then recently elected Planning Board Member Steve McDonald, after
4 having overly restrictive wind energy ordinances soundly defeated twice, the people in Antrim
5 had spoken. (See Attachment JK-5.)

6 The third vote referenced by Mr. Levesque was another ordinance vote that took place in
7 March 2014. This ordinance vote was brought about by a petitioned warrant article to adopt an
8 ordinance that was based on the requirements set forth in the March 2012 Agreement between
9 Antrim Wind and the Town of Antrim. In collaboration with residents in Antrim, Antrim Wind
10 undertook the effort to adapt the terms and conditions that had already been negotiated and
11 agreed between AWE and the Town into the form of a zoning ordinance, and Antrim residents
12 gathered signatures on a petition to have the article added to the March 2014 ballot. While the
13 ordinance would have provided a reasonable framework for an application to be processed by the
14 Township, the voters felt that Antrim Wind was writing the ordinance and were concerned about
15 the lack of independent review. Rejecting this ordinance reflected the Town's desire to write
16 their own ordinances, or let the SEC maintain jurisdiction over the Antrim Wind Project.

17 With respect to the final vote referenced by Mr. Levesque regarding the removal of the
18 words "public utility" from the Antrim Zoning ordinance, this was an arcane legal change with
19 no context or reference to any wind farm related issues, which was presented to Antrim voters on
20 the March 2013 ballot and the change was adopted. This change cannot be interpreted to have
21 anything to do with the Antrim Wind project or commercial wind energy facilities in general.
22 (Please see Attachment JK-6 containing the ballot language.)

1 To sum up, Mr. Levesque misrepresents and obscures the voting history of the Town.
2 The votes clearly show strong support for a commercial wind project in the rural conservation
3 district. As the SEC found in the prior docket: “While the Applicant, the various Boards and
4 other intervenors vehemently disagree about how the votes at town meetings should be
5 interpreted, it was clear to the Subcommittee that those votes generally indicated that the
6 townspeople who voted generally supported the development of the proposed Facility.”
7 Regarding this issue, nothing has changed.

8 **Q. Regarding your second point, please describe the other forms of support you**
9 **reference?**

10 A. Mr. Levesque ignores the many other forms of support that have been evidenced
11 consistently over the past 7 years. These include:

- 12 • The vocal support at the SEC public hearing on February 22, 2016, where speakers in
13 support of the Project outnumbered those opposed by a 3-1 margin. Please see JK-7.
- 14 • The written support of all five elected state representatives that represent Antrim in
15 Concord. The bi-partisan letter from all four State Representatives explicitly stating
16 that “The Antrim Wind Energy Project has broad support within the Town of Antrim,
17 and both its Select Board and its citizens are anxious to move forward.” Please see
18 attachments JK-8A and JK-8B.
- 19 • The consistent support of the Antrim Board of Selectmen for the past 7 years, who
20 have been elected and re-elected by Antrim voters, and who have stated their belief
21 that the majority of the Town is supportive of the Project. In addition to their
22 positions in this Docket, see also attachments JK-9A showing the unanimous vote on

1 September 2014 to support the Project and JK-9B, a September 2015 letter to
2 Governor Hassan stating the Town's support for the Antrim Project.

- 3 • The independent survey conducted in February 2011 by American Research Group
4 on behalf of Antrim Wind in which of the 618 respondents (70% of households
5 contacted), 77% were in favor of the Antrim Wind project and only 10% in
6 opposition (13% were undecided). Please see attachment JK-10.
- 7 • The 2011 Straw Poll conducted by the Antrim Board of Selectmen on March 8, 2011
8 on election day, which showed respondents (533 total votes cast) in favor of the
9 proposed Antrim Wind project 337-102 (63.2% - 19.1%), with 94 respondents
10 (17.6%) undecided. Over three times as many respondents were in favor as opposed.
11 Please see attachment JK-11
- 12 • The 2010 Straw Poll conducted by the Antrim Planning Board on March 9, 2010 on
13 election day, which showed respondents in favor of commercial wind energy 81-15
14 (84.375%), and still in favor if the turbines would be visible to them by 70-23 (75%).
15 Please see Attachment JK-12.

16 **Q. Have you read Mr. Levesque's testimony concerning the PILOT Agreement**
17 **and tax issues related to the Project?**

18 A. Yes, I have.

19 **Q. Do you agree with his assertions?**

20 A. No. Mr. Levesque's figures are inaccurate and misleading.

21 Mr. Levesque's estimate for the payments due to the Town under the PILOT Agreement
22 is inaccurate and seems to be based on a misunderstanding of the PILOT negotiation process. As
23 part of the agreement, the Town and AWE negotiated an alternate PILOT to mitigate any risk to

1 the Town around how the New Hampshire Department of Revenue Administration (“NH DRA”)
2 would equalize property subject to a PILOT under RSA 72:74. As stated in the Agreement
3 between AWE and the Town concerning alternative PILOT payments, the original negotiated
4 PILOT payments shall apply in the event that a clarifying amendment to RSA 21-J:3, XIII is
5 made that is consistent with AWE and the Town’s interpretation of how the NH DRA should
6 equalize renewable energy property that is subject to a PILOT Agreement. HB 1549 clarified
7 this situation and was passed in March 2014. The alternate PILOT that Mr. Levesque apparently
8 uses for his calculations is irrelevant.

9 The payments under the PILOT agreement are based upon a set formula, agreed to by the
10 Town of Antrim and AWE. That formula clearly sets forth the payments due during construction
11 and the first 20 years of operations of the Project. Under the terms of the PILOT agreement
12 AWE will pay the Town \$11,250 per MW of installed capacity each year. This equals \$324,000
13 in year 1 for the 28.8 MW Project. The payment amount will escalate at a rate of 2.5% each year
14 of the Agreement, and total 20-year payments will total \$8,276,469. In addition, AWE will pay
15 \$50,000 within 30 days of starting construction and another \$50,000 within 30 days of reaching
16 commercial operations, for a total of just under \$8.4 million during construction and the first 20
17 years of the Project’s operations. If the construction period takes longer than 1 year, AWE will
18 pay an additional \$50,000.

19 Having a PILOT is a significant benefit to the Town as it provides for stable, predictable
20 revenue. A PILOT also removes the costly, time-consuming and risky process of potential
21 disputes around ad valorem valuation every year. This PILOT is the highest per MW payments
22 of any wind project PILOT in the State of New Hampshire. The Town of Antrim was advised

1 during the PILOT negotiations by the same attorneys that represented the Town of Lempster
2 during years of litigation over assessment values and taxes due.

3 **Q. Do you agree with Mr. Levesque’s ad valorem projections about tax**
4 **revenue?**

5 A. No. There is no reliable way to predict what the taxes would be 20 years into the
6 future. Mr. Levesque essentially acknowledged this point at the technical session on July 12,
7 2016.

8 A central purpose and benefit of a PILOT Agreement is to provide the kind of revenue
9 and cost certainty that cannot be achieved under ad valorem taxation. Mr. Levesque cannot
10 know what value the NH DRA would place on the facility each year for 20 years; he cannot
11 know what the contribution formula will be for the ConVal school district for the next 20 years,
12 or what the average daily membership and total equalized valuation of Antrim and the eight
13 other towns in the ConVal school district will be for the next 20 years; and he cannot know what
14 the Antrim millage rate will be for each year in the next 20 years. Taken together, all of these
15 uncertainties make any projection about what tax revenues would be in the Town of Antrim for
16 the Antrim Wind Project under ad valorem taxation unreliable and misleading.

17 In fact, in response to a technical session data request, Mr. Levesque provided certain
18 assumptions that he used in his model that illustrate how variable the actual circumstances
19 governing ad valorem taxation are in comparison to Mr. Levesque’s model. For example, Mr.
20 Levesque indicated in his response that he assumed:

- 21 • Antrim equalized assessed value for the 20 year period (starts with current, adds \$65
22 million value of Antrim Wind and then overall assessed value increases 1% per year

1 but AWE eq. assessed value within the overall town assessment depreciates on a
2 schedule starting with 7% annual and ends in 1% annual depreciation;

- 3 • Equalized assessed value of each of the ConVal School District 9 member towns
4 (current assessed value is start and then increased by 1% per year);

5 To assess the reasonableness of Mr. Levesque’s assumption that equalized assessed
6 values in all 9 towns would increase steadily at 1% per year for 20 years, I looked back at the
7 equalized assessed values for these towns for the period from 1991-2011. In doing so, the reality
8 of how equalized values change wildly is evident. The changes in equalized value from year to
9 year during the period from 1991-2011 range from -16.17% to + 32.19%. No year has a change
10 as low as 1% and the average annual change for all towns over the 20 year period is 3.87% -
11 nearly 4 times as high as the figure Mr. Levesque used in his model. The chart attached as JK-13
12 shows the annual changes for each of the 9 towns. Looking only at this assumption of the
13 equalized assessed value of Antrim and the 8 other towns in the ConVal school district, the total
14 lack of predictability becomes evident.

15 **Q. Mr. Levesque asserts that the Antrim taxpayers will experience lost revenue**
16 **that they would have received if ad valorem taxes were paid here. Do you agree?**

17 A. No. There is no “loss” of \$5,700,000 or any other amount that the Antrim
18 taxpayers must make up. AWE will not require any meaningful municipal services. The
19 proceeds from the PILOT payment are net proceeds to the Town of Antrim and AWE will
20 become the largest taxpayer in the Town – roughly doubling the current highest taxpayer. As
21 noted previously, the PILOT figures are the highest of any wind PILOT per MW payments of
22 any project in New Hampshire and in the upper range of projects across New England. The
23 agreement was negotiated and agreed over a long period in a public setting and the Town was

1 advised by counsel. It is, quite simply, a very good agreement for the Town of Antrim. The
 2 table below provides a sampling of PILOT or other fixed payments for wind energy projects in
 3 NH, ME, and VT.

State	Project Name	Location	Size	Tax Structure	\$\$/MW
ME	Mars Hill	Mars Hill, ME	42 MW	Fixed Payment	\$11,900
ME	Kibby Mountain	Franklin County, ME	132 MW	TIF	\$5,454
ME	Stetson Mountain	Washington County, ME	82.5 MW	TIF	\$3,687
VT	Sheffield Wind	Sheffield, VT	40 MW	Fixed Payment	\$13,000
VT	Deerfield	Searsburg & Readsboro, VT	30 MW	Fixed Payment	\$13,133
VT	Kingdom Community Wind	Lowell, VT	63 MW	Fixed Payment	\$8,492
NH	Granite Reliable Power	Coos County, NH	99 MW	PILOT	\$5,000
NH	Groton Wind	Groton, NH	48 MW	PILOT	\$11,000
NH	Jericho Mountain	Berlin, NH	14.25 MW	PILOT	\$10,526
NH	Antrim Wind	Antrim, NH	28.8	PILOT	\$11,250

4 **Q. Do you have any comments regarding Mr. Levesque’s testimony concerning**
 5 **the Antrim Master Plan, Zoning Ordinance and Open Space Plan?**

6 A. Yes. Mr. Levesque’s Testimony suggests that the Antrim Master Plan, Open
 7 Space Plan and Zoning Ordinance indicate that the Town of Antrim does not support the
 8 proposed Antrim Wind Project. This is an incorrect reading of the documents, and Mr.
 9 Levesque’s view is not supported by the SEC’s final determination in the 2012 Docket where Mr.
 10 Levesque made the same arguments. In that Docket, the Committee found instead that the
 11 project then proposed would not interfere with the orderly development of the region.

1 In many areas, contrary to Mr. Levesque’s assertions, those documents provide strong
2 support for building a commercial wind project in the rural conservation district. This support is
3 further strengthened by the Town votes already discussed.

4 Mr. Levesque cites extensively from the Antrim Master Plan in his Testimony. Going
5 through his Testimony one can see the many ways that the Project is consistent with and supports
6 the Antrim Master Plan, thus undercutting Mr. Levesque’s assertions. The Master Plan lists
7 many things that residents like about Antrim and things they are looking to encourage:

- 8 • Rural Character (Page 10 line 13 Levesque testimony): The Project will preserve the
9 rural character of the Town by conserving over 900 acres of land and preventing any
10 other development on the property.
- 11 • Affordability ... and low property taxes (Page 10 line 14): The Project will help hold
12 down property taxes by significantly increasing the tax base while requiring no services
13 from the town.
- 14 • A diverse economy (Page 11 line 11): The Project will significantly diversify the tax
15 base and bring short term and long-term jobs to the region. Mr. Levesque cites the results
16 of the Antrim Master Plan visioning process which occurred 10 years ago and included
17 232 survey responses and 75 attendees at a visioning session and resulted in a list of
18 criteria that are in some instances directly supported by the proposed Antrim project, and
19 in no instances in direct contravention to it. AWE has cited survey results from 5 years
20 ago where over 600 respondents responded overwhelmingly in favor of AWE’s proposed
21 project in the rural conservation district. Mr. Levesque also cites the Antrim Open Space
22 Plan from 2005, claiming that the Town “through a Town meeting vote in 2006,
23 approved a plan to conserve the entire area proposed for the wind farm from

1 development.” But on closer inspection of the plan itself, this is not at all what it says.
2 The Antrim Open Space Plan was a series of recommendations about priorities. In
3 reviewing the actual responses from Antrim residents that provided survey responses
4 (only 55 total according to the Open Space Plan provided by Mr. Levesque), just two
5 respondents identified the mountainous regions of town as priorities. Most respondents
6 identified wetlands as the highest priority (a resource category where AWE will have
7 virtually no impact). And although the survey contained space to identify specific
8 resources to be prioritized for conservation, none of the responses identified the site of
9 the Antrim Wind project.

10 Furthermore, the 2005 Open Space Plan identified a set of principles to guide the Open
11 Space Committee in its recommendations (see Antrim Open Space Plan Page 16). One of those
12 principles was that not all land can be conserved; and another was that land conservation
13 techniques will only include a “willing buyer/willing seller and educated taxpayer.” Mr.
14 Levesque also cites from the Master Plan that is aware of the importance of maintaining property
15 rights. It states “Development of the rural areas of Antrim pits the desires of the citizens to
16 protect the small town and rural character of Antrim against the interest and property rights of
17 land holders.” (Page 16 line 6). Furthermore the Open Space Plan clearly states on Page 20 that
18 “The decision to place a conservation easement on land in town should be solely up to the
19 private landowner” (emphasis added). It is clear that the Open Space Committee was aware that
20 not all lands in the areas identified could reasonably be conserved, and the Master Plan
21 acknowledges the importance of property rights.

22 AWE has received letters from all of the landowners in the Project area. And these
23 letters clearly indicate (please see Attachments JK-14A through JK-14E) that the landowners are

1 unwilling to enter into any conservation easements in the event that the Antrim Wind Project is
2 not constructed. If the Project is built, AWE will bring over 900 acres of conservation land to the
3 Town and region that would be otherwise unavailable and subject to development, including 3
4 acre residential subdivisions, by right.

5 In evaluating the Open Space Committee process, this much is evident:

6 • It consisted of 10 members, chaired by Mr. Levesque, who met monthly for
7 approximately 1 year and produced a 22 page document as a result;

8 • Not all OSC members agree with Mr. Levesque about what the Open Space Plan
9 says about the Town of Antrim's position regarding the AWE project. Mr. Ben Pratt was also a
10 member of the OSC and has intervened in support of the AWE project.

11 • Public involvement consisted of:

12 ○ An informational display at Town Meeting in 2005, where residents could mark
13 areas on a map that they thought were important to protect and could complete a
14 survey. There were 55 responses to the survey, only two of which identify
15 mountainous areas as high priorities for conservation and none of which identify
16 the location of the Antrim Wind Project as a specific location for conservation;

17 ○ A public meeting on June 14, 2005 attended by 11 members of the public; and

18 ○ A public meeting on July 12, 2005 attended by 9 members of the public

19 On the other hand, in a 2011 vote that would have expressly forbid the
20 construction of large scale wind energy projects in the Rural Conservation District
21 in Antrim, voters turned out in the largest voter turnout in the history of the Town
22 of Antrim and defeated that measure overwhelmingly by a margin of 2.6 to 1 with
23 809 votes cast.

1 **Q. Do you have any comments about Mr. Levesque’s testimony concerning the**
2 **Antrim Zoning Ordinance?**

3 A. AWE agrees with Mr. Levesque that the Antrim Zoning Ordinance would require
4 a variance and major site plan approval in order to allow the Antrim Wind Project to be
5 permitted there if the Project were not under SEC jurisdiction. We understand that is a major
6 reason why the Antrim Board of Selectmen, the Antrim Planning Board, Antrim Wind Energy
7 and over 100 residents in Antrim petitioned the Committee to assert jurisdiction over AWE’s
8 revised proposal. The Committee is required to make a determination as to whether the Project
9 will unreasonably interfere with the orderly development of the region after due consideration to
10 the views of the municipal and regional planning commissions and the municipal governing
11 bodies. The need for a variance does not mean a use is prohibited or not supported by the Town.
12 The Antrim Planning Board is not a party to this proceeding, although as evidenced by the 2012
13 proceedings had they decided to intervene to take a position contrary to the Board of Selectman,
14 they were free to do so. Instead the Planning Board joined AWE, the Board of Selectman and
15 over 100 Antrim voters in requesting that the SEC take jurisdiction in this docket and have left
16 the elected Board of Selectmen to speak on behalf of the Town.

17 **Q. Do you have anything further that you would like to add in response to Mr.**
18 **Levesque’s testimony?**

19 A. Yes. Master Plans by their nature contain numerous goals that are at times
20 contradictory. The Antrim Wind Project stands out as a project that will support a broad
21 selection of goals identified in the Antrim Master Plan, some of them in very significant ways.
22 The Project will encourage the growth of renewable energy, combat climate change, spur
23 economic development and increase the tax base, conserve significant amounts of new open

1 space forever helping to maintain the rural character of the Town, and contribute to the charitable
2 efforts of the community. The evidence shows clearly that the Town is supportive of the Project.
3 A more complete list of AWE's responses for the basis upon which the Antrim Master Plan is
4 supportive of the proposed project was supplied during discovery in response to PC 1-22 and is
5 attached hereto as Attachment JK-15.

6 **II. RESPONSE TO PRE-FILED TESTIMONY OF KELLIE CONNELLY**

7 **Q. Have you read the testimony and VIA prepared by Ms. Connelly and**
8 **Terraink for Public Counsel concerning the Antrim Wind Project?**

9 A. Yes.

10 **Q. Do you have any comments with respect to that testimony or study?**

11 A. Yes, there are two areas in in Ms. Connelly's testimony and VIA that I would like
12 to address which pertain to my initial testimony. 1) Ms. Connelly characterizes the Project as
13 being at odds with local conservation efforts when in fact the Project compliments those efforts
14 as evidenced by the support of many local environmental groups. 2) Ms. Connelly takes a
15 position regarding on-site and off-site mitigation that is at odds with the broad environmental
16 community and is contrary to prior positions of Counsel for the Public in other New Hampshire
17 wind project dockets.

18 **Q. How has Ms. Connelly mischaracterized the local conservation efforts?**

19 A. Ms. Connelly concludes her VIA by saying that she "acknowledges and agrees
20 with both LandWorks and Jean Vissering's evaluation that the site appears to be a "good"
21 location for a wind project on paper due to the topography, "moderate" visual effects on many of
22 the SEC determined sensitive resources, limited views from towns and roadways, water bodies,
23 and wood lands; however, what cannot be accounted for by the "on paper" assessment is the

1 vigor and commitment of the local population’s passion and investment in purchasing,
2 connecting, protecting, and preserving local conservation lands.”

3 First, Ms. Connelly may not be informed, or at least has not accounted for the fact that
4 local efforts to preserve the properties leased by Antrim Wind have failed. Without the Antrim
5 Wind Project the land will not be conserved. Under current zoning regulations in the rural
6 conservation and highway business districts in Antrim, these private lands could be developed by
7 right in numerous ways, including three-acre subdivisions. Second, Ms. Connelly’s assessment
8 is directly at odds with numerous large and well-respected conservation organizations in New
9 Hampshire, including those most active in this region.

10 For example, The Nature Conservancy (“TNC”) takes a very different view. In New
11 Hampshire, TNC has approximately 10,000 supporters, with many long time members residing
12 in communities impacted by this Project, as noted in their April 8th letter to the Committee in
13 this Docket. TNC owns two significant conservation properties in the immediate vicinity of the
14 proposed Antrim Project, the 1,200 acre Loveren’s Mill Cedar Swamp in Antrim, Stoddard and
15 Windsor and the 1,300 acre Otter Brook Preserve. TNC has closely reviewed AWE’s plans and
16 followed the development of the Project for more than 5 years and has stated clearly in their
17 letter that the proposed Project will not have an unreasonable adverse effect on the environment
18 and will be in the public interest.

19 Similarly, the New Hampshire Sierra Club (“NHSC”), has strongly endorsed the Project
20 and has issued two supportive letters to the Committee in this Docket. As noted in their second
21 letter to the Committee, NHSC also has over 10,000 members in New Hampshire who prioritize
22 issues from preserving open space, protecting state parks, clean air, drinking water and wild
23 rivers. That letter notes that the AWE Project “continues the vision of the Quabbin to Cardigan

1 Partnership, Pillsbury-Sunapee Highlands and Sunapee-Kearsarge-Ragged Greenway,” and
2 “requests that the Committee approve the Antrim Wind Energy Project.”

3 The Harris Center for Conservation Education (“HCCE”), arguably the most active local
4 land conservation group, provides another strong example that refutes Ms. Connelly’s position in
5 her concluding paragraph. The Letters of Intent signed by HCCE, land owners and AWE all
6 state that “this agreement and easement will make a valuable contribution to the conservation
7 interests of stakeholders in this region.” The easement documents, also signed by HCCE, all state
8 that in addition to adding to the conservation values of the region, the area has been identified
9 “as being well-suited for the conversion of wind energy to electricity, a renewable form of
10 energy, the furtherance of which is also identified in the aforesaid Master Plan as one of the
11 principal objectives of Antrim residents, who also voted to adopt the NH Climate Change
12 Resolution, which identified the risks climate change presents to the integrity and health of New
13 Hampshire ecosystems.” This language has been reviewed and approved by the HCCE Board.

14 The New England Forestry Foundation (“NEFF”) has also written a letter to the
15 Committee articulating a different view than Ms. Connelly’s with respect to conservation. NEFF
16 states, “the project would not seriously compromise the long-term conservation values or the
17 vision for protection of the large forest block where the turbines would be located,” and “The
18 turbines, in fact, would advance the protection of this large forest block, which is deemed a
19 priority focus area by the Quabbin to Cardigan collaborative, of which NEFF is a founding and
20 active member.” The NEFF letter is attached here as Attachment JK-16.

21 Finally, AWE reached a settlement agreement with the Appalachian Mountain Club
22 (“AMC”) in 2012, the execution of which “will satisfy AMC’s specific concerns related to the
23 Project.”

1 AWE has collaborated with numerous conservation groups throughout the 7 years this
2 Project has been in development. From the beginning this Project has been designed to enhance
3 the conservation interests in the region. AWE has consulted with TNC, NHSC, NEFF, HCCE,
4 AMC, Conservation Law Foundation, Monadnock Conservancy, Society for the Protection of
5 NH Forests, Audubon Society of New Hampshire and the Antrim Conservation Commission. It
6 is notable that other than NH Audubon none of these groups is opposing the Project and
7 numerous groups are, for the first time ever in New Hampshire, offering public support.

8 In sum, contrary to Ms. Connelly's assertions, numerous environmental groups with
9 significant expertise and experience in this specific region believe this Project will enhance the
10 conservation efforts in the region.

11 **Q. How is Ms. Connelly's position on using land conservation as mitigation for**
12 **aesthetic impacts at odds with the views of the majority of the environmental community?**

13 A. In a letter dated October 15, 2014 to the Committee in Docket 2014-04 during the
14 rulemaking process, NH Audubon, TNC, CLF, Forest Society and AMC all agreed that "best
15 practical mitigation' means methods or technologies used during design, siting, construction or
16 operation of an energy facility that control or reduce to the lowest feasible level impacts to
17 aesthetics, historic sites, air and water quality, the natural environment, and public health and
18 safety. Mitigation may also include strategies (such as land conservation) to compensate for
19 unavoidable impacts." Ms. Connelly has noted in her report that AWE has apparently taken all
20 feasible measures to reduce impacts other than moving the Project to some other site. AWE's
21 use of extensive on and off-site land conservation to mitigate for any remaining unavoidable
22 impacts is a tool with broad support from the conservation community in New Hampshire. It is
23 also a tool that has been widely used in other jurisdictions in New England such as Vermont.

1 **Q. How is Ms. Connelly’s position contrary to prior positions of Counsel for the**
2 **Public in other New Hampshire wind project dockets?**

3 A. Ms. Connelly argues that it is inappropriate for the Town of Antrim to accept
4 funds for the enhancement of the recreational facilities at Gregg Lake as mitigation for aesthetic
5 impacts, despite the fact that the Town of Antrim thought it was in its best interests to do so. Ms.
6 Connelly’s position departs from the position that Public Counsel took in the Granite Reliable
7 wind Docket here in New Hampshire. In that Docket, Public Counsel requested that the
8 Committee require the applicant to construct a visitor center and information kiosks as mitigation
9 for the unavoidable visual impacts. Public Counsel also requested in that docket that the
10 applicant be required to contribute funds to Coos County and the Department of Resources and
11 Economic Development for eco-tourism development. (Docket 2008-004, Public Counsel Post
12 Hearing Memorandum, Page 4.)¹

13 **III. RESPONSE TO PRE-FILED TESTIMONY OF GEOFFREY JONES**

14 **Q. Have you read the Pre-Filed Testimony of Mr. Geoffrey Jones?**

15 A. Yes.

16 **Q. Do you agree with his views regarding the potential impacts from the Project**
17 **on the conservation values in Stoddard?**

18 A. No, I do not.

19 First, Mr. Jones ignores the fact that major roadways - NH Route 9 as well as Route 123 -
20 completely separate the vast majority of the Town of Stoddard from the location of the Antrim
21 Wind project in Antrim. If Mr. Jones is concerned about potential fragmentation and impacts to

¹ The Committee did not require these conditions as part of the Certificate in Docket 2008-04 because they concluded that the “evidence did not support a finding that the turbines themselves are aesthetically displeasing” and consequently that “the Project will not have an unreasonable adverse effect on the aesthetics of the area.”

1 conservation values caused by remote, sixteen-foot gravel surface roads with very limited traffic,
2 then certainly double-lane paved highways with significant traffic certainly present a far greater
3 problem.

4 Second, his position is contrary to the statements made above concerning the views of
5 HCCE, TNC, NHSC and NEFF. These are all well-established conservation organizations that
6 are very active in New Hampshire including in this region. All those environmental groups agree
7 that this Project will not cause unreasonable adverse effects on the environment and will be a
8 valuable addition to the conservation interests in the region.

9 Mr. Jones states that conservation lands in one town benefit conservation lands in
10 adjacent towns. The AWE Project, then, will be an asset to Stoddard's conservation interests.
11 This is especially true given that the more than 908 acres on site and more lands off site will not
12 be conserved without the AWE project. And without the Project, the 908 acres of land that are
13 of great interest to Mr. Jones will be open to far greater impacts such as the potential for
14 extensive residential development with 3 acre subdivisions.

15 **Q. Do you agree with Mr. Jones' concerns around invasive species?**

16 A. No. AWE has committed to using best management practices for invasive species
17 management during construction, as it had in the 2012 Docket. In the 2012 Docket, NHFG
18 requested that AWE extend its invasive species monitoring for the first three years of operations.
19 AWE has agreed to this request and incorporated this commitment in its application in the 2015-
20 02 Docket. AWE engaged Stantec Consulting to develop a post construction Invasive Species
21 Management Plan ("ISMP"), which has now been completed and submitted to the Parties and the
22 Committee together with the supplemental testimony of Mr. Valleau and Mr. Gravel.

23 **IV. RESPONSE TO PRE-FILED TESTIMONY OF CAROL FOSS**

1 **Q. Have you read the Pre-Filed Testimony of Carol Foss?**

2 A. Yes.

3 **Q. Do you have any comments in response to her testimony?**

4 A. Yes, I would like to address five areas of her testimony: 1) her conclusions
5 regarding the Project’s effect on the natural environment; 2) the importance of the Project area to
6 “multiple conservation efforts”; 3) impacts of the Project on highest ranked habitat according to
7 the NHFG Wildlife Action Plan (WAP); 4) invasive species; and 5) the content of AWE’s
8 conservation easements.

9 **Q. What are your concerns regarding Ms. Foss’s conclusions?**

10 A. Ms. Foss’ conclusions with respect to the effects on the natural environment and
11 orderly development contradict the SEC Subcommittee findings in the 2012 Docket which found
12 that the project as then proposed would not have an unreasonable adverse effect on the natural
13 environment or orderly development. Since that time, the impacts associated with the Project
14 have only been reduced and the benefits increased – reinforcing the Subcommittee’s findings in
15 that Docket.

16 Ms. Foss’ conclusions alleging that the project will disrupt well-established conservation
17 initiatives is incorrect and unsubstantiated. This Project will advance the conservation interests in
18 the region. The HCCE decided that entering into agreements with the Project to conserve land in
19 the area and not opposing the wind farm was in its best interest. AWE’s contributions to local
20 and regional conservation interests is made clear in the language of the LOI and easements
21 between AWE and the HCCE, which state this “Agreement and Easement will make a valuable
22 contribution to the conservation interests of stakeholders in this region.” The letter from NEFF
23 also specifically supports AWE’s position and refutes Ms. Foss, stating “The turbines, in fact,

1 would advance the protection of this large forest block, which is deemed a priority focus area by
2 the Quabbin to Cardigan (“Q2C”) collaborative, of which NEFF is a founding and active
3 member.”

4 **Q. Please respond to Ms. Foss’ comments regarding the targeting of this area by**
5 **multiple conservation efforts.**

6 A. With respect to the Q2C initiative, it is important to note that no organization
7 speaks for the Q2C members, of which there are 22 individual organizations. Of the 22 member
8 organizations, NH Audubon is the only one that has taken a position opposing this Project. As
9 noted previously TNC, another member organization, has submitted detailed comments to the
10 committee stating, “In our view, the overall impact is not unreasonably adverse and the
11 application offers a reasonable overall package to help mitigate or offset these impacts,” and
12 further that “The Nature Conservancy believes that the proposed project meets the public interest
13 finding as put forward in RSA 162-H:16 and further defined by SEC rules.” NEFF, another
14 member organization, has also stated “the project would not seriously compromise the long-term
15 conservation values or the vision for protection of the large forest block where the turbines
16 would be located.” And the HCCE, also a Q2C member, has entered into agreements with AWE,
17 which clearly state that the Project as a whole, including its conservation lands, will be a
18 valuable contribution to the conservation interests in the region. No other Q2C member has
19 provided comments in this proceeding.

20 With respect to the HCCE, Ms. Foss also notes that there is a visionary “supersanctuary”
21 project that was initiated by Meade Cadot, former head of the HCCE. Meade Cadot and I are the
22 signatories to the conservation easement agreements associated with this Project. These
23 agreements were the result of long and fruitful negotiations between HCCE, landowners, and

1 AWE.

2 **Q. Please provide a response to Ms. Foss' concerns regarding invasive species?**

3 A. Mr. Valleau and Mr. Gravel have addressed concerns related to invasive species
4 management during and post construction with respect to the Project. In response to Ms. Foss's
5 specific concerns about invasive species after decommissioning, by placing all of the land
6 surrounding the turbines and all roads beyond Mr. Ott's property in permanent conservation,
7 agreeing to break up and reseed the roads and pad areas with a NH native seed mix, AWE has
8 gone well beyond anything that is required under NH law or SEC rules and also well beyond
9 what any other wind farm in New Hampshire has ever done to effect a complete
10 decommissioning and ensure a rapid return to forested landscape after decommissioning.

11 **Q. Ms. Foss expressed concerns about the form and content of the conservation**
12 **easements that have been agreed to by Harris Center, AWE and the private landowners,**
13 **can you comment on those concerns?**

14 A. The easement documents attached to the binding letters of intent signed by the
15 parties is based on a form provided to AWE by the Harris Center. Throughout much of the
16 testimony we have seen from several intervenors in this Docket, including Ms. Foss, the Harris
17 Center is lauded as one of the most trusted and effective conservation organizations in the region.
18 This is their form of easement. And as Ms. Foss noted during the technical session on July 12,
19 she does not have any experience drafting conservation easement language.

20 The easement documents contain numerous provisions that speak to Ms. Foss' specific
21 concerns directly:

22 • "Forestry and agricultural management practices shall be in accordance with the
23 then current scientifically based practices recommended by the University of New

1 Hampshire Cooperative Extension, U.S. Natural Resource Conservation Service,
2 or other government or private non-profit natural resource conservation and
3 management agencies then active.” (see Section 2.A.ii)

- 4 • Section 2.D states “No removal, filling or other disturbances of soil surface, nor
5 any changes in topography, surface, or subsurface water systems, wetlands, or
6 natural habitat shall be allowed unless such activities:
 - 7 ○ are commonly necessary in the accomplishment of the agricultural,
8 forestry, conservation, habitat management, or noncommercial outdoor
9 recreational uses of the Property; and
 - 10 ○ do not harm state or federally recognized rare, threatened, or endangered
11 species, such determination of harm to be based upon information from
12 the New Hampshire Natural Heritage Inventory or the agency then
13 recognized by the State of New Hampshire as having responsibility for
14 identification and/or conservation of such species; and
 - 15 ○ are not detrimental to the purposes of this Easement.
- 16 • The Purposes section of the Easements state: “The Easement hereby granted is
17 pursuant to NH RSA 477:45-47, exclusively for the following conservation
18 purposes:
 - 19 ○ The preservation of the land subject to the Easement granted hereby for
20 outdoor recreation by and/or the education of the general public, through
21 the auspices of the Grantee; and
 - 22 ○ The preservation and conservation of open spaces, particularly the
23 conservation of the 130 acres, more or less, of productive forest land of

1 which the Property consists and of the wildlife habitat thereon, and for the
2 scenic enjoyment of the general public.

3 To summarize, the easements associated with the Project are based on the Harris Center
4 form, contain requirements to adhere to current best practices for agriculture and forestry, and
5 prohibit any activity that would jeopardize water resources, RTE species, or be in conflict with
6 the purposes of the easement.

7 Finally with respect to Mr. Ott's right to construct a single home within his easement area,
8 this was reserved right was necessary in order to secure the highly valuable 130 acres for
9 conservation. HCCE and AWE had a choice between conserving 130 acres and allowing 1
10 house to be built, or not conserving the 130 acres at all. As noted in Mr. Ott's letter attached to
11 this testimony, he was hesitant to sign any easement at all and would never do so in the absence
12 of the Antrim Project, as the other landowners have also stated in their attached letters.

13 **V. RESPONSE TO PRE-FILED TESTIMONY OF LISA LINOWES**

14 **Q. Have you read the Pre-Filed Testimony of Lisa Linowes on behalf of Wind**
15 **Action Group?**

16 A. Yes.

17 **Q. Are there any areas of Ms. Linowes testimony that you would like to respond**
18 **to?**

19 A. Yes. I will address Ms. Linowes comments regarding AWE's decommissioning
20 plan as well as setbacks from wind turbines to adjacent property lines.

21 **Q. What are your comments regarding Ms. Linowes testimony on AWE's**
22 **decommissioning plan.**

1 A. Ms. Linowes incorrectly states that AWE has not complied with the SEC rule
2 requirement to remove all underground infrastructure to depths of 4 feet below grade. In its
3 letter to the SEC dated February 19, 2016, AWE has agreed to remove all underground
4 infrastructure to depths of 4 feet below grade. AWE’s letter, which is an official part of the
5 record in this Docket, clearly states this. The decommissioning plan that was filed as Appendix
6 21 to AWE’s Application on October 2, 2015 notes that it will remove underground
7 infrastructure to depths of 2 ft and by its February 19th letter AWE has now agreed to remove all
8 underground infrastructure to depths of 4 ft., which AWE expects will become a condition of a
9 Certificate.

10 **Q. What about Ms. Linowes objection to the use of the words “where**
11 **practicable” in AWE’s February 19th letter to the Committee?**

12 A. The purpose of AWE’s inclusion of those words was to account for circumstances
13 where it would be more environmentally detrimental to remove certain underground facilities at
14 those depths than it would be to leave them in place. For example, it may be more detrimental to
15 remove an underground electrical line buried at a depth of four feet in an area where there may
16 be wetlands or stream impacts associated with the removal. Should the Subcommittee determine
17 that all facilities should be removed to 4 feet below grade despite this, AWE is confident that the
18 Committee will include such a requirement as a condition of any Certificate, and AWE will
19 comply.

20 **Q. What about Ms. Linowes objection to the description in AWE’s**
21 **decommissioning plan of burying concrete rubble/debris onsite?**

22 A. The SEC rule does not contain any requirement to remove all debris off site. It
23 requires the removal of all underground infrastructure to depths of four feet. AWE

1 decommissioning plan, as amended to change from 24” to 48” below grade, is consistent with
2 the SEC rule requirements. Ms. Linowes misinterprets NH Site 301.08(a)(8)f. The rule does not
3 require environmentally benign concrete rubble to be removed. It requires infrastructure to be
4 removed. Using inert concrete rubble (that has had all metal removed from it for
5 disposal/recycling offsite) for fill is a common industry practice, it is environmentally benign, it
6 will limit the need to import any new materials for fill/grading and once completed there will be
7 no project infrastructure remaining at depths to 4 feet, which is consistent with the SEC rule.

8 **Q. Please comment on Ms. Linowes testimony raising questions about the**
9 **adequacy of AWE’s setbacks from turbines to adjacent property lines.**

10 A. The question of setbacks and public safety was thoroughly evaluated by the SEC
11 in Docket 2012-02. In that Docket, the Subcommittee found that the project would not have an
12 unreasonable adverse effect on public health and safety provided that: (a) the Fire Marshall’s
13 recommendations were included as conditions to a Certificate; (b) the Agreement between the
14 Town of Antrim and AWE were adopted by the Committee and included as a condition; and (3)
15 that AWE develop an emergency response plan in conjunction with the Town and agree to
16 provide emergency response training (see 2012-02 Order pages 69-70). Since that time all
17 setback distances have remained the same with respect to distances between turbines and all
18 residences, property lines, public roads or other public gathering areas. The new SEC rules do
19 not contain specific requirements with respect to setbacks and the types of information an
20 applicant is required to provide under the new rules are the same types of information that AWE
21 provided in the previous docket and in its current Application.

22 **Q. What about Ms. Linowes specific comments with respect to ice throw and the**
23 **distances to nearby property lines?**

1 A. AWE has not “tacitly dismissed” any concerns with respect to ice throw risk as
2 Ms. Linowes suggests. In fact, AWE’s setbacks to residences, public roads and gathering areas
3 are extremely robust, with over ½ mile to the closest turbine. Ms. Linowes overstates the risks to
4 the general public from potential turbine ice shedding.

5 **Q. How has Ms. Linowes overstated the risks from turbine ice shedding?**

6 A. For example, in AWE’s response to a data request from the meteorological group
7 on the question of ice throw risk, AWE issued the following response demonstrating that the
8 actual risk of ice throw is extremely small.

9 “For information on ice throw, please see Section 1.6.b of the Application submitted to
10 the Committee and available through the Committee’s website. As noted in that section, the
11 Siemens wind turbine generators are equipped with numerous systems that monitor for ice
12 buildup that could lead to potentially hazardous conditions and those systems will shut down the
13 affected wind turbine generators automatically should such conditions arise. The majority of ice
14 particles shed by a turbine will be found within an area that extends 10-15 meters beyond the
15 footprint of the rotor (e.g. approximately 71.5 meters from the center of the tower). In DNVGL’s
16 experience, based on empirical data, the furthest thrown ice detected at an operational project is
17 250 meters from the center of the turbine. In the event that conditions are present that would
18 allow ice throw to occur, given that the distances between the wind turbine generators at the
19 Project Site and the nearest residence, other occupied structure or public road are all greater than
20 ½ mile (804.7 meters), well beyond the maximum distance any ice fragments could travel, there
21 is very minimal risk of any ice throw to the public. It is important to note that there are currently
22 around 275,000 land-based wind turbines installed globally with approximately 25% of these
23 (approximately 68,750 turbines) installed in areas subject to icing conditions. To date, we are not

1 aware of a single reported incident of human injury due to impact from ice shed by a wind
2 turbine.”

3 **Q. Ms. Linowes mentions two properties in particular that she states have**
4 **setbacks of between 330 feet and 540 +/- feet. Can you please address those two**
5 **circumstances?**

6 A. Yes. Turbine #4 is located 589 feet from the nearest non-participating property
7 line, or slightly over 1.2 times the maximum tip height. This property is a vacant woodlot with
8 no home on it. A 1.1 times turbine height setback (50 feet less than AWE’s closest actual turbine
9 setback) is consistent with industry standards to property lines, and is far more conservative than
10 many recent examples in New England. Below are two relevant examples:

11 • The Vermont Public Service Board (“PSB”) approved a setback of just 55 meters
12 (180 ft.) from a 448-foot tall turbine to an adjacent property line for the Georgia Mountain Wind
13 project in PSB Docket 7508. In that case the VT Department of Public Utilities (“DPU”)
14 recommended a setback of 1.1X turbine height (the setback that AWE has used). The PSB
15 rejected the DPS recommendation in favor of a shorter setback. As part of the basis for their
16 decision the PSB noted that “the probability of an ice fragment striking a stationary person 55
17 meters away in a particular square meter is once in every 278 years, assuming that the person is
18 present during every potential icing event.” The turbines that were proposed for the Georgia
19 Mountain Project were substantially similar to the turbines AWE is proposing and the frequency
20 of potential icing events is also likely very similar.

21 • In a separate case in PSB docket 7628 the Vermont Public Service Board
22 approved a setback of 60 meters from any turbine to adjacent property lines. In this case the
23 DPU “consistent with a manufacturer's guideline, recommends that the Board establish a set-

1 back distance of 1.1 times the turbine height, measured at the tip of the blade in the vertical
2 position, unless the petitioner can demonstrate that site-specific, risk-based set-backs should be
3 permitted when the developer cannot meet that standard. The Department contends, given the
4 remote terrain abutting the proposed project, that a setback based on site-specific risk factors is
5 appropriate. The Department recommends the Board impose a 60-meter set-back requirement if
6 it issues a CPG for the proposed project.” It is critical to remember that absent any agreement
7 for a shorter setback distance to adjacent property lines based on site specific risk assessments,
8 the conservative recommendation by the DPU was a 1.1X turbine height setback, which is
9 exactly what the Antrim Project has been designed to meet.

10 • The Groton Wind Project in New Hampshire (SEC Docket 2010-01) featured a
11 460-foot setback from its turbines to the closest property line, nearly 130 feet closer than the
12 Antrim project. Using 399-foot tall turbines, this is a 1.15 times tip height setback, again less
13 than the Antrim Project. In that docket the Subcommittee found, “that the Project does not pose
14 a danger to the human health and safety due to ice throws and finds it unnecessary to impose any
15 conditions in this regard”(SEC Docket 2010-01 Order pg. 77).

16 Turbine #8 is located 378 feet from the property line of the Lyle & Anne Micheli. The
17 Micheli’s are participating landowners. AWE has purchased an easement from Dr. & Mrs.
18 Micheli that specifically allows for AWE to, among other things, locate turbines closer than any
19 minimum distance setback requirement to structures or property lines, including the right to have
20 blades of wind turbines overhang his property. AWE’s easement is recorded in the Hillsborough
21 County Registry of Deeds as Document #5042564 in Book 8791, Page 1806.

22 All other property line setbacks are considerably further than 1.1 times the tip height
23 standard (and the 1.2 times the tip height actual setback) and as noted previously, no public roads

1 or houses are within ½ mile of any turbine. These setbacks are very robust, meet or exceed
2 industry standards and were found to adequately protect public health and safety at this site by
3 the Subcommittee in 2012.

4 **Q. Ms. Linowes also raises concerns about turbine fires, blade throw or tower**
5 **collapse. Do you agree with her testimony on those issues?**

6 A. No. AWE's Application, and the testimony of Mr. Marcucci address these
7 concerns and the mechanisms AWE has in place to prevent major turbine failures. As Ms.
8 Linowes notes in her own testimony, she submitted much of the same information to the
9 Committee in the rulemaking Docket 2014-04. In her March 2015 letter she requested that the
10 Committee adopt a setback requirement of 1.5 times the turbine tip height to non participating
11 property owner's property lines and a 1.3 times the turbine tip height setback to the edge of the
12 ROW of public roadways. The Committee decided not to adopt either setback requirement that
13 Ms. Linowes requested, electing instead to require the applicant to demonstrate that its setbacks
14 are adequate to protect public health and safety. Now in this Docket, Ms. Linowes is suggesting
15 that contrary to her March 2015 letter to the SEC, the setbacks to property lines should be even
16 greater than 1.5 times the turbine tip height. There is no basis for her requests.

17 The SEC rules place the burden on the Applicant to demonstrate adequate setbacks and
18 AWE has met that burden. With setbacks greater than ½ mile to any structure, road or public
19 gathering spot, and setbacks greater than 1.1 times the turbine tip height to the closest non
20 participating property line, which is a vacant woodlot, the risks to the public from the
21 construction and operation of the Antrim project are extremely low. AWE has incorporated the
22 recommendations of the State Fire Marshall's office into its current application and plans, and

1 maintains a valid agreement covering public safety issues with the Town of Antrim, which the
2 SEC found adequately protected public health and safety in 2012.

3 The Siemens turbines are designed and certified in accordance with international
4 engineering standards, and each has a state-of-the-art braking system, pitch controls, sensors and
5 speed controls that operate to reduce the risk of blade and / or tower failure as a result of
6 excessive speed. AWE’s Application and the Pre-Filed Testimony of Don Marcucci provide
7 additional details on the design and safety mechanisms inherent to the Siemens turbines,

8 In the extremely unlikely event of a turbine failure leading to fire, blade failure or tower
9 failure, AWE’s utilization of active fire suppression technology in the nacelle per the Fire
10 Marshall’s recommendation together with the large setbacks to structures and public roads make
11 the risk of injury to a member of the public extremely low. In the Vermont PSB dockets where
12 setbacks of 55 or 60 meters to adjacent property lines were approved the PSB noted “For areas
13 with ‘remote boundaries to property not owned by wind farm participants,’ GE recommends that
14 the setback be 1.1 times the blade length.” Siemens standard setback guidance provides the
15 following table:

16

Constraint	Minimum setback recommendation
Parcel boundaries	0.5 RD
Sensitive buildings (e.g. residences, schools, other normally occupied structures)	1.2 x (Hub height + 0.5 RD) or 45 dB(A) / 450 m to non-participating acoustic receptors
Other buildings (e.g. barns, outbuildings, etc.)	Hub height + 0.5 RD
Public paved roads	Hub height + 0.5 RD
Public unpaved roads	1.0 RD
Overhead utilities	Hub height + 0.5 RD
Underground utilities	0.5 RD

Neighboring wind turbines	3 RD (non-prevailing wind direction) / 5 RD (prevailing wind direction). Variable depending on site conditions.
Forestry	Lower tip height >5 m above max tree height within 2 RD

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AWE’s safety setbacks in all cases far exceed the recommended minimums.

VI. RESPONSE TO PRE-FILED TESTIMONY OF CHRIS WELLS

Q. Have you read the Pre-Filed Testimony of Chris Wells?

A. Yes.

Q. Are there any areas of Mr. Wells’ testimony you would like to address?

A. Yes, there are two general points I would like to address. First, Mr. Wells does not speak for the Q2C partnership. He no longer has any position affiliated with any of the members of the Q2C partnership and Q2C itself has not weighed in at all in this proceeding.

Second, Mr. Wells’ stated concern that “Building a wind farm in this area could negatively affect the conservation attributes of the area designated and identified in the Quabbin to Cardigan conservation plan” ignores several key facts: (1) this proposed 9 turbine project includes 908 acres of conservation land within the area of interest; (2) these lands will not be conserved if the Antrim Wind Project is not constructed, as demonstrated by the letters from all landowners owning the 908 acres (see Attachments JK-14A through JK-14E); and (3) his concern conflicts with the statements made by actual Q2C members that are active in this region such as The Nature Conservancy, the Harris Center and the New England Forestry Foundation.

VII. RESPONSE TO PRE-FILED TESTIMONY OF LORANNE CAREY BLOCK

Q: Have you read the Pre-Filed Testimony of Lorraine Carey Block?

A. Yes.

Q. Are there any areas or Mrs. Block’s testimony you would like to address?

1 A. Yes, I would like to address Ms. Block’s statements regarding AWE’s
2 communication with FAA regarding radar activated lighting.

3 **Q. What are your comments regarding Mrs. Block’s testimony concerning**
4 **AWE’s efforts with the FAA.**

5 A. First, I would like to restate AWE’s commitment to employ an ADLS at the
6 Antrim Project once approved by the FAA. It is important to note that the lack of dialogue with
7 FAA concerning ADLS at Antrim in no way relates to AWE’s commitment to employ, or its
8 ability to employ an ADLS at the site. As noted in other documents filed in this Docket, prior to
9 December 2015 the FAA had not issued any guidance with respect to the requirements for an
10 ADLS. As such, there was nothing to discuss with the FAA. In December 2015, FAA issued a
11 revised advisory circular that contained requirements for ADLS systems on wind farms. This
12 again, was not a time to enter into discussions with the FAA as the FAA can only act when an
13 application has been filed with them to review a specific project.

14 Since the new guidance for ADLS was issued in December, AWE has been diligently
15 evaluating different technology options available in the market that can meet the FAA guidance
16 requirements. In June, AWE made a commitment to utilize the ADLS system manufactured by
17 Laufer Wind, originally based in New Hampshire, subject to FAA approval at this site. Laufer
18 Wind has provided AWE a technical proposal demonstrating their ability to meet the FAA
19 requirements. AWE is evaluating that proposal, which will involve two small radars, with its
20 airspace consultant and intends to file an application with the FAA some time in the next several
21 weeks.

22 **VIII. RESPONSE TO FRANCIE VON MERTENS**

23 **Q. Have you read the Pre-Filed Testimony of Francie Von Mertens?**

1 A. Yes.

2 **Q. Are there any areas of Ms. Von Mertens testimony you would like to**
3 **address?**

4 A. Yes, there are three areas I would like to address: (1) the role of the Harris Center
5 in these proceedings and the positions it has taken with respect to the Project; (2) the
6 representations Ms. Von Mertens has made with respect to the previous efforts to obtain
7 easements on certain properties and the possibility of obtaining easements on them in the future;
8 and (3) her assertions about why people visit Willard Pond.

9 **Q. Is Ms. Von Mertens' characterization of the Harris Center's role in these**
10 **proceedings accurate?**

11 A. No. Ms. Von Mertens alleges that but for an agreement between the Harris
12 Center for Conservation Education ("HCCE") and AWE, the HCCE would be more actively
13 engaged in these SEC proceedings. Ostensibly she believes the HCCE would be engaged in
14 opposition to the Project.

15 The HCCE Board has voted to take no position on the Antrim Wind Project. That means
16 that they do not actively support it, and they do not actively oppose it. The HCCE has also
17 entered into 5 conservation easement agreement letters of intent with AWE, after years of
18 discussion and negotiation. In those agreements, approved by the HCCE Board, it states "The
19 Parties further recognize that, if the Project proceeds, the Agreement and Easement will make a
20 valuable contribution to the conservation interests of stakeholders in this region." Clearly the
21 HCCE believes there will be a valuable addition to conservation objectives in this area by virtue
22 of these agreements. Ms. Von Mertens is correct that AWE does have a bilateral agreement with
23 the HCCE and that the agreement does stipulate that HCCE will not oppose the AWE project.

1 The HCCE board of directors voluntarily voted to enter into that agreement with AWE because
2 they felt it was in the best interests of HCCE to do so.

3 **Q. Do you agree with Ms. Von Mertens' descriptions of the agreements that**
4 **HCCE had with certain landowners in the AWE project area prior to AWE becoming**
5 **involved?**

6 A. No, Ms. Von Mertens assertions are not accurate with respect to the Whittemore
7 Trust and Paul Whittemore properties. As noted by the letter from Paul and Helen Whittemore,
8 owners of both properties in question, which is attached to my testimony as JK-14D: 1) the
9 Whittemore Trust acknowledges that there were discussions with the Harris Center, but they
10 never agreed to a conservation easement on their property; and 2) the Paul Whittemore property
11 was never part of those discussions. Their letter goes on to note, that it was the Whittemore
12 family who reached out to AWE about whether AWE would be interested in leasing their
13 properties – not the other way around.

14 It is clear that any previous efforts to place conservation easements on the properties that
15 are leased by AWE have failed.

16 **Q. What about Ms. Von Mertens statement on Page 6 of her testimony that,**
17 **“given active and successful land protection in the region, including a \$3.5 million Forest**
18 **Legacy Grant that conserved over 2,000 acres in the immediate area, conservation of the**
19 **leased properties absent a wind project can't be dismissed as a possibility.” Do you agree**
20 **with this statement?**

21 A. No. Ms. Von Mertens has no personal knowledge of what the landowners wish to
22 do with their properties. Through AWE's negotiations, it was clear that all of the Project
23 landowners were very reluctant to enter into any conservation easement. AWE worked hard to

1 ensure that we were able to work with all parties to get the agreements completed. I personally
2 worked very closely with these landowners over the past 7 years. I negotiated the wind leases
3 with them and I negotiated the conservation easements with them and the Harris Center. All of
4 the letters provided by these landowners and included as attachments to this testimony make
5 clear that the participating landowners will not place conservation easements on the land without
6 the Project. Several of them make clear that they will pursue other development opportunities,
7 which would be their right to do. This valuable conservation benefit, which others have tried to
8 obtain in the past and failed, and which the Harris Center agrees will be a valuable addition to
9 regional conservation interests, will only be realized if the Antrim Wind Project moves forward.

10 **Q. Have you had any recent conversations with the Harris Center concerning**
11 **the Project or Ms. Von Mertens testimony?**

12 A. Yes. In light of Ms. Von Mertens various references to the HCCE in her
13 testimony, her identification of herself as being an honorary trustee of the HCCE and other
14 statements regarding AWE and HCCE's conservation efforts with the landowners in the Project
15 area, I reached out to Stephen Froling, Corporate Counsel to HCCE to request clarification on
16 HCCE's positions.

17 **Q. Did you receive any reply from the Harris Center?**

18 A. Yes, after a meeting of the HCCE Board on August 9th, 2016 Mr. Froling sent me
19 a letter addressing various points in Ms. Von Mertens testimony as they relate to the Harris
20 Center. I have attached that letter here as Attachment JK-17². That letter makes several things
21 clear:

22 a. That Ms. Von Mertens "has not been authorized by it [HCCE] to represent its

² Note – the redactions in the HCCE Board minutes attached to the letter were made by HCCE to remove material not related to the Antrim Wind discussions, not by AWE.

- 1 interests in these proceedings.”
- 2 b. That “the full Board has carefully considered its position in this matter on
3 several occasions and unanimously determined, after full consideration, that
4 its interests would be best served by neither supporting nor opposing the
5 Project.”
- 6 c. That by the end of 2010, Helen Whitemore “had refused to sign closing
7 papers [for an easement]”, and “our negotiations with other potential grantors
8 in the Bald Basin area never got that far.”
- 9 d. That “although Ms. Von Mertens expresses confidence that the Harris Center
10 would have succeeded in these [conservation] efforts, the Board perceived
11 substantial risk in that conclusion.”
- 12 e. That “after extensive discussions with AWE and other interested parties,
13 HCCE determined that it was in its best interest to resolve its long term
14 relationship with the land in question by means of a compromise or settlement
15 agreement among itself and all others – landowners and lessee – having an
16 interest in the land on and surrounding the project site.”
- 17 f. And finally, that “in making its decision to pursue a settlement agreement,
18 rather than supporting or opposing the Project, the Harris Center Board
19 expressly acknowledged” the principal that “If the wind energy project is
20 approved by the SEC, this agreement would provide substantial conservations
21 [*sic*] benefits.”

22 **Q. Do you agree with Ms. Von Mertens assertions regarding the impacts of the**
23 **Project on people visiting Willard Pond?**

1 A. No. Mr. Wes Enman and Mr. Ben Pratt recently visited Willard Pond, including
2 one visit on an 80+ degree day over July 4th weekend, and informally interviewed 26 people
3 who were at the pond recreating. According to Mr. Enman and Mr. Pratt, out of those 26 people,
4 only three were opposed to the construction of the Antrim Wind Project or having visibility of
5 the turbines from that location. Ms. Von Mertens asserts that she believes that the visual impact
6 of introducing the proposed wind facility to the Audubon property skyline will be extreme, but
7 that concern did not seem to be shared by visitors from both inside and outside of NH that were
8 enjoying Willard Pond who spoke with Mr. Pratt and Mr. Enman during a peak summer
9 weekend.

10 **IX. RESPONSE TO PRE-FILED TESTIMONY OF DOUG BECHTEL**

11 **Q. Have you read the Pre-Filed Testimony of Michael Bartlett that has been**
12 **adopted by Douglas Bechtel?**

13 A. Yes.

14 **Q. Mr. Bechtel’s pre-filed testimony describes the ways in which the public uses**
15 **the ASNH property. Do you agree with those characterizations?**

16 A. Mr. Bechtel describes the number of cars and where their license plates are from,
17 yet he does not offer any information about the opinions of those users. ASNH has not entered
18 any evidence into the record supporting their claim that there will be any significant adverse
19 effect to the users of Willard Pond. They have only provided the testimony of three witnesses
20 that feel that way. On the other hand, Wes Enman and Ben Pratt interviewed 26 visitors at
21 Willard Pond and only 3 individuals (11.5%) said they would not want to see the wind farm from
22 that location, 22 (84.6%) said they thought it was a good idea and 1 person was undecided.
23 There is extremely limited evidence from actual users to support the argument that users of

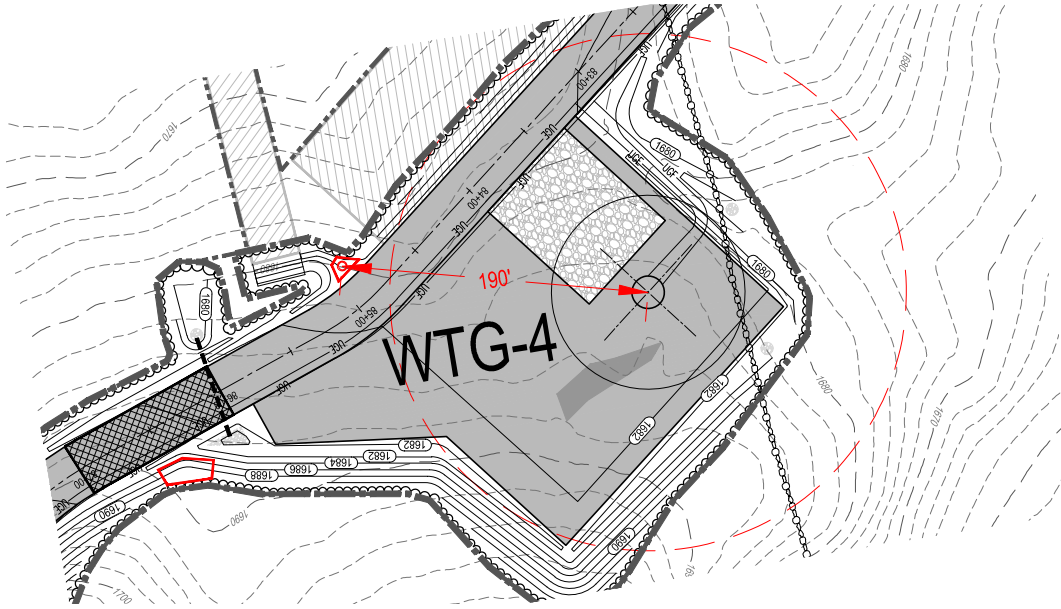
1 Willard Pond will be negatively affected in any significant way. In Pillsbury State Park in
2 Lempster, which is described on the NH State Park website as “one of the more primitive and
3 lesser known gems of the New Hampshire State Park system,” numerous entirely undeveloped
4 ponds inside the Park have open views of the turbines along the ridgeline at distances of 1-2
5 miles. AWE has submitted clear evidence that visitor levels at this State Park have increased
6 faster than any other state park in New Hampshire since the Lempster Wind Farm was built (see
7 Appendix 14A of AWE’s Application). Numerous accounts from visitors to Pillsbury State Park
8 since the installation of the Lempster turbines describe the beauty and serenity of the Park and
9 the numerous campsites there ([https://www.tripadvisor.com/Attraction_Review-g46257-](https://www.tripadvisor.com/Attraction_Review-g46257-d280130-Reviews-Pillsbury_State_Park-Washington_New_Hampshire.html)
10 [d280130-Reviews-Pillsbury_State_Park-Washington_New_Hampshire.html](https://www.tripadvisor.com/Attraction_Review-g46257-d280130-Reviews-Pillsbury_State_Park-Washington_New_Hampshire.html) and
11 <https://www.yelp.com/biz/pillsbury-state-park-washington>). There is no reason to assume in this
12 case that the experience of users at Willard Pond will be any different. Mr. Pratt and Mr.
13 Enman’s research supports this conclusion.

14 **X. ADDITIONAL TESTIMONY**

15 **Q.** Are there any other updates that you would like to provide in this supplemental
16 testimony?

17 **A.** Yes. On May 17, 2016 AWE informed the Committee and the Parties that it may
18 be necessary to employ an additional radar at the Project in order to meet the requirements of
19 FAA Advisory Circular 70-7460-L (the “AC”) with respect to the ADLS system. Our
20 consultants and vendor have now determined that a second radar will in fact be necessary in
21 order to establish sufficient radar coverage at the site to meet the AC coverage requirements.
22 AWE therefore plans to maintain the first radar on the MET tower as originally planned and will
23 install a second tower adjacent to WTG #4. The second tower is within the existing footprint of

1 the civil design plans, therefore no new clearing or other disturbance will be necessary to
2 accommodate the second tower. The radar will be mounted on a steel monopole tower
3 approximately 90 feet tall. The tower will be approximately 30 inches in diameter at its base and
4 18” in diameter at the top. The location of the tower is approximately Lat: 43.05847352, Lon: -
5 72.0175619 and is depicted in the image below.



6 **Q. Does this conclude your supplemental testimony?**

7 **A. Yes it does.**