



Appalachian Mountain Club

January 7, 2014

Town of Alexandria
Board of Selectmen
47 Washburn Road
Alexandria, NH 03222

Re: Appalachian Mountain Club's comments on proposed agreement between Iberdrola and the Town regarding the Wild Meadows wind power project

To the Selectmen:

The Appalachian Mountain Club (AMC) submits the following comments on the proposed agreement related to the Wild Meadows wind power project submitted by Iberdrola to the Selectmen.

Appalachian Mountain Club background and standing: Founded in 1876, the AMC is the oldest conservation and recreation organization in the country, with 100,000 members, supporters, and advocates from Maine to Washington, DC, including more than 10,000 here in New Hampshire. AMC owns and operates Cardigan Lodge and Reservation in Alexandria adjacent to Cardigan Mountain State Park (Appendix 1). Built by the AMC as one of New Hampshire's first ski lodges and newly renovated in 2005, Cardigan Lodge is set on a 1,200-acre reservation that has been owned and managed by the AMC for over 75 years. AMC recently invested about \$1.5 million in a major renovation and upgrade of our Cardigan facilities.

Cardigan Reservation offers an extensive trail network for hiking and cross-country skiing, including easy access to Cardigan Mountain; a nature trail and swimming pond; and family-friendly programs and theme weekends. The Reservation abuts the 5,655-acre Cardigan Mountain State Park, a well-known and heavily used recreational resource of state significance. Both AMC's land and facilities and Cardigan Mountain State Park are open to the public. We maintain over 50 miles of publicly-accessible hiking and ski trails on our reservation, Cardigan Mountain State Park and surrounding private lands as a public service.

In addition, AMC owns and operates High Cabin, located on the upper slopes of Cardigan Mountain. For over 80 years, High Cabin has been a popular and rustic retreat for backcountry enthusiasts looking for a secluded escape with breathtaking scenery. Built in 1931 and renovated in 2004, High Cabin provides a unique small group, self-service, backcountry trip experience. High Cabin is less than half a mile from the

spectacular sunrise/sunset viewing and uncompromised stargazing from Cardigan Mountain's summit.

Cardigan Lodge and Reservation is one of AMC's most popular and heavily-used facilities and plays a critical role in AMC's programs and activities. This facility also contributes to the local economy. Though a non-profit, AMC makes voluntary annual payments in lieu of taxes to the town of Alexandria. The Lodge provides employment for up to 7 full-time and seasonal employees. In 2013 Cardigan Lodge and facilities hosted 9,639 bednights, and we estimate that over 10,000 day use visitors also came to the reservation. These visitors may patronize other local businesses on their way to and from the Reservation.

The Lodge hosts and runs numerous environmental education programs for children and youth – a chance for kids to experience and learn about the natural world using the forests, mountains, trails and night sky in their natural settings as an outdoor classroom. For 45 years the Lodge has been the primary training base for AMC's Youth Opportunities Program (YOP), an AMC program that makes the outdoors accessible and meaningful to urban and at-risk youth by training youth leaders to independently lead outdoor trips.

At Cardigan Lodge in 2013 AMC:

- provided Outdoor Leadership Training (OLT) to 100 new YOP members (youth workers) who go on to serve thousands of youth per year.
- hosted over 1,300 bednights for youth groups and our Outdoor Leadership Training. This included dozens of youth groups leading independent trips as well as AMC trainings.
- hosted eight YOP staff-led trips through YOP's Youth Mountain Adventure Program, and
- hosted eleven school groups totaling over 300 students and 45 youth groups for overnight trips ranging from 2-4 days.

AMC's position on the Wild Meadows Project: The AMC is extremely concerned about and will seek intervenor status in opposition to the Wild Meadows project in New Hampshire's Site Evaluation Committee's (SEC) permitting process for the application. The proposed wind farm development will adversely impact this undeveloped area and compromise the very reason why the public comes to use AMC's Cardigan facilities and Cardigan Mountain State Park. The construction of an industrial-scale wind farm in such close proximity to a premier outdoor recreational destination would significantly degrade the quality of the visitor experience. Guests come to both AMC's facilities and Cardigan Mountain State Park in large part because of the high quality scenery and night sky, which is largely natural and predominately devoid of visible large manmade structures or lights.

Cardigan Mountain State Park spans 5,655 acres and is an excellent area for hiking, snowshoeing, and skiing. Cardigan Mountain's 3,121-foot extensive treeless granite

summit (the second highest peak in the state south of the White Mountains, just a bit shorter than Mount Monadnock) affords outstanding 360 degree views of west-central New Hampshire, with a panorama that includes Mount Monadnock and the White Mountains, Camel's Hump in Vermont, and Pleasant Mountain in Maine. Newfound Lake is a major New Hampshire natural resource whose visual qualities also attract visitors from across New Hampshire and New England. These high value scenic and recreational resources are frequented year-round by tens of thousands of visitors annually. For a large number of both overnight and day use visitors to AMC's Cardigan Reservation, the hike to the summit for the vista is the focus of their visit.

At their closest the 492-foot tall turbines will be less than 4 miles from the summit of Cardigan Mountain, AMC's Cardigan Lodge, and Newfound Lake – a distance at which they will be an overwhelmingly dominant and incongruous feature in this relatively natural landscape. The entire project will be visible from much of the expansive treeless summit area of Cardigan Mountain – not only all 23 turbines but also a 290 foot tall steel lattice meteorological tower and roads and turbine pad clearings. The bright white turbines will stand out against the darker forested backdrop. The presence of multiple red blinking aircraft warning lights from 13 turbines and the meteorological tower will severely degrade the high-quality nighttime experience from the summit, which is readily accessible from High Cabin. A number of turbines (including their nighttime lighting) will also be visible from open areas adjacent to Cardigan Lodge and potentially from upper-floor windows as well.

Last March, in a letter to the SEC, the Board of Selectmen expressed their opposition to industrial scale wind farm development in the town. AMC encourages you to continue your opposition to this project and to actively participate in the SEC review of the application.

AMC's comments on Iberdola's Proposed Agreement: The AMC understands that the Selectmen may feel the need to enter into agreements with Iberdola in order to protect the town's interests if the project is permitted. We urge you to exercise caution to ensure that entering into these agreements does not compromise your ability to oppose the project before the SEC should you choose to do so. We also urge you to be clear that entering into these agreements does not in any way indicate your support for the project.

AMC offers the following comments that we believe will strengthen the proposed "agreement" between the Town of Alexandria and Atlantic Wind, LLC .

Section 3.1.1 – Visual appearance. This project will have a significant impact on the night sky that can be avoided. At least 13 turbines and a 295 foot tall meteorological tower will have nighttime red blinking aircraft warning lights intended for long range visibility (ca. 10-20 miles). The town should require the project to install and utilize a radar-activated lighting (RAL) system once such systems are approved for use on wind turbines by the FAA (e.g. Detect's Harrier system at <http://www.detect-inc.com/security.html#vws>; the Obstacle Collusion Avoidance System (OCAS) is owned

by the proposed Project turbine vendor Vesta at <http://www.ocas-as.no/us/>; etc.). This type of system utilizes on-site radar to detect approaching aircraft and to turn on the flashing warning lights for aircraft. At all other times the lights remain off. Use of a RAL system greatly reduces nighttime light pollution. Though not yet approved by the FAA, this system is in use on other types of tall structures in the US and Europe and FAA approval is expected for wind farms in the US in the near future, though the exact time frame is uncertain.

Retrofitting wind farms with radar-activated lighting once they receive FAA approval has been required or voluntarily agreed to on several wind farms across New England, including the Deerfield project in Vermont, the Antrim project in New Hampshire (which was denied a certificate by the SEC), and several recent projects in Maine. We believe that requiring the use of radar-activated lighting (including post-construction retrofitting) should be a standard mitigation practice for all wind farms. The Applicant's proposed language in its Application is conditional relative to how it would actually commit to RAL upon FAA approval. Furthermore the Applicant avoids any mention of RAL technology in its agreement with the Town. AMC suggests the following language requirement in the Agreement.

“To reduce the impact of night time light pollution from aircraft warning lights on the turbines and meteorological tower as required by the Federal Aviation Administration (FAA), Atlantic Wind, LLC agrees to apply to the FAA in good faith for approval and to install a radar activated lighting control system (the “Radar System”) once the Radar System is approved for wind farm use by the FAA. Atlantic Wind, LLC further agrees that depending on the status of the issuance of a revised FAA Advisory Circular detailing the requirements of the Radar System (the “Advisory Circular”), it shall take the following steps:

- i. If the FAA has issued the Advisory Circular 60 days or more before the commencement of construction of the Project that allows for the Radar System to be operated, then Atlantic Wind, LLC shall install and operate the Radar System simultaneously with the commissioning of the Project.*
- ii. If the FAA has not issued the Advisory Circular at least sixty (60) days before the commencement of construction, but issues the Advisory Circular at any time during the commercial operation of the Project, then Atlantic Wind, LLC shall be required to implement and operate the Radar System within one year of the issuance of the Advisory Circular.*
- iii. At its sole option, as an alternative to (b) above, Atlantic Wind, LLC may install the Radar System simultaneously with the remainder of the construction of the facilities in the Project. In this scenario, in the event that the Advisory Circular is issued later than 60 days prior to the commencement of construction, then Atlantic Wind, LLC will commence with operation of the Radar System as*

soon as commercially reasonable but no longer than one year of the issuance of the Advisory Circular.”

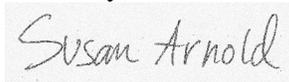
Section 10.3 – Signal interference. This section is extremely weak. Who is to determine what “commercially reasonable measures” are, and what is the recourse to the town if such measures do not adequately correct problems that may arise? At a minimum the Town should legally bind the Project to “no signal interference” because electronic communication and reception is critical for businesses, residents and visitors as well as public safety communications. The application suggests that signal interference will not be problematic, yet wants to bind the town only to “commercially reasonable measures” to resolve this interference, with minimal ability for the town to enforce correction of any issues if they cannot be resolved in a “commercially reasonable” manner.

Section 11.1 – Noise. The applicant’s proposal for a sound limit of 55 dBA should be strengthened. The application (Executive Summary p. xvii) states, “Maximum operational sound levels at all of the closest year-round occupied residential receptors are predicted to be equal to or less than 40 dBA.” We believe that this is the standard that the project should be held to. The applicant’s proposal is considerably weaker than the standards included in the most recent SEC decision document (Antrim), which were sound limits of 45 dBA immediately outside any residence (daytime) and 40 dBA immediately outside any residence (nighttime)¹. The SEC based these standards on 2009 guidelines from the World Health Organization.

Section 14 – Decommissioning. We are pleased to see that the proposed decommissioning plan requires the full amount of decommissioning funding assurance to be in place prior to the commencement of project activities. However, we note that the scope of decommissioning activities only requires the removal of project facilities to a depth of eighteen (18) inches below grade. Some other projects (including the Granite Reliable Windpark and all recent projects in Maine) have agreements that require removal to twenty-four (24) inches below grade. We believe that you should require this higher standard for decommissioning, as it will allow for a greater rooting depth and greater wind firmness for reestablished forest vegetation.

We thank you for the opportunity to present these comments.

Sincerely,



Susan Arnold
Vice President for Conservation

¹ A certificate for the Antrim project was denied on aesthetic grounds, but these standards were included in the decision document.

Appendix 1

