



BARRY NEEDLEMAN
Direct Dial: 603.230.4407
Email: barry.needleman@mclane.com
Admitted in NH, MA and ME
11 South Main Street, Suite 500
Concord, NH 03301
T 603.226.0400
F 603.230.4448

February 19, 2016

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

Re: SEC Docket No. 2015-02: Antrim Wind Energy, LLC: Application for a Certificate of Site and Facility

Dear Ms. Monroe:

In response to your letter dated December 28, 2015, Antrim Wind Energy, LLC (“AWE”) submits this letter and additional information to the New Hampshire Site Evaluation Committee (“SEC” or the “Committee”) to conform to the readopted rules of the Committee.

Introduction

In anticipation of the adoption of the Committee’s new rules, the Applicant included such additional information in its application for a Certificate of Site and Facility (the “Application”) to comply with the requirements of the proposed draft rules. As a result, the Application already substantially encompasses information to satisfy many of the new rules. There are, however, some instances in which additional information is required that is not contained in the Application. The Applicant has identified these rules where the Application now requires additional information and the Applicant provides that information below.

Supplemental Application Information

Site 301.03(c)(vi): provide evidence that the applicant has a current right, an option, or other legal basis to acquire the right, to construct, operate, and maintain the facility on, over, or under the site, in the form of either; ownership, ground lease, easement, or other contractual right.

Copies of the recorded memoranda of lease and option agreements for all lands required to construct and operate the Project are included starting on page 429 of AWE’s wetlands permit application, found in Appendix 2A.

Site 301.03(f)(vi): for a proposed wind energy facility, information regarding the cumulative impacts of the proposed facility on natural, wildlife, habitat, scenic, recreational, historic, and cultural resources, including, with respect to aesthetics, the potential impacts of combined observation, successive observation, and sequential observation of wind facilities by the viewer.

Pursuant to Site 301.03(f)(vi), please see Attachment 1 to this supplement which contains assessments of cumulative impacts of the proposed facility on natural, wildlife, and habitat resources. Please also see Attachment 2 to this supplement which contains an assessment of cumulative impacts on scenic and recreation resources. This assessment serves as an addendum to Appendix 9A of the Application. Please also see Attachment 3 of this supplement which contains an assessment of cumulative impacts on cultural and historic resources.

Site 301.04(a)(iv): provide an explanation of how the applicant's financing plan compares with financing plans employed by the applicant or its affiliates, or, if no such plans have been employed by the applicant or its affiliates, then by unaffiliated project developers if and to the extent such information is publicly available, for energy facilities that are similar in size and type to the proposed facility, including any increased risks or costs associated with the applicant's financing plan.

AWE will finance the Project using a typical 2-phase project finance structure:

- 1) Construction phase: once all permits, off-take agreements, construction and operation contracts are in place, Walden will invest construction equity for approximately 15% of project costs. The remaining 85% will be provided by a project finance lender (see LOIs attached to application), funding the project's construction and placing it into commercial operation;
- 2) Permanent financing phase: upon commercial operation tax equity investors will come into the capital structure to monetize the PTC. The tax equity will replace a portion of the construction loan, and the remaining loan will convert to a term loan with term of 15-18 years.

This structure is the standard financing structure for all energy projects and renewable energy projects across the United States. In 2015 alone, \$17 billion of bank construction loans and \$6.4 billion of tax equity was deployed in wind projects in the U.S. Walden and its affiliates projects' have all been financed in a similar manner, and this is industry norm. As this financing approach is so widely used there are no additional risk or unexpected costs associated with this approach.

Site 301.04(a)(v): provide current and pro forma statements of assets and liabilities of the applicant.

AWE provided a balance sheet statement in Appendix 1 of its application. AWE does not expect its financial condition will materially change until closing on project financing, as described in Section H.5.a of the Application.

Site 301.05(b)(7): prepare photosimulations from representative key observation points, from other scenic resources for which the potential visual impacts are characterized as "high" pursuant to (6) above, and, to the extent feasible, from a sample of private property observation points

Pamela G. Monroe

February 19, 2016

Page 3

within the area of potential visual impact, to illustrate the potential change in the landscape that would result from construction of the proposed facility and associated infrastructure, including land clearing and grading and road construction, and from any visible plume that would emanate from the proposed facility.

In response to Site 301.05(b)(7), please see Attachment 4 to this supplement which contains three (3) additional photosimulations taken from private property observation points within the area of potential visual effect.

Site 301.05(b)(8)(b): photosimulations shall be printed at high resolution at 15.3 inches by 10.2 inches, or 390 millimeters by 260 millimeters.

An original printed set of the photosimulations, in conformity with the specifications identified in Site 301.05(b)(8)(b), is attached as Attachment 5 to this supplement and a digital version has also been included with this supplement.

Site 301.05(b)(8)(c): at least one set of photosimulations shall represent winter season conditions without the presence of foliage typical of other seasons.

The visual simulations prepared in response to the new requirement provided in Site 301.05(b)(7) were completed during the winter months without the presence of foliage. Therefore, please see Attachment 4 to this supplement which contains the visual simulations from private property prepared in connection with the requirements in Site 301.05(b)(7).

Site 301.08(a)(2): provide an assessment that identifies the astronomical maximum as well as the anticipated hours per year of shadow flicker expected to be perceived at each residence, learning space, workplace, health care setting, outdoor or indoor public gathering area, other occupied building, and roadway, within a minimum of 1 mile of any turbine, based on shadow flicker modeling that assumes an impact distance of at least 1 mile from each of the turbines.

Pursuant to Site 301.08(a)(2), please see Attachment 6 to this supplement which contains a shadow flicker study addressing the considerations included above. This Attachment is intended as a substitute for Appendix 13B including in the original Application.

In addition, Section I.6.d of the Application is replaced with the following:

Pursuant to Site 301.08(a)(2), please see Attachment 6 to this supplement, which contains a shadow flicker study addressing the considerations included above. This Attachment is intended as a substitute for Appendix 13B included in the original Application. In addition, Section I.6.d of the Application is replaced with the following.

Rotating turbine blades that create intermittent shadows that fall inside a structure can create a flicker effect known as "shadow flicker." This phenomenon only occurs under certain circumstances: the wind turbine generator blades must be rotating; it must be daylight; the sun

must be shining so as to cast shadows; the structure must have an unshaded window that faces the wind turbine generator; and the structure must be within ten rotor diameters of the wind turbine generator. Without all of these variables happening simultaneously, there is no shadow flicker. Therefore, not only is shadow flicker not an everyday event, it only occurs if several very specific conditions are present.

AWE engaged Epsilon Associates, Inc. to perform a Shadow Flicker study for the Project, which was updated in February 2016. The updated study report on shadow flicker is provided as an updated Appendix 13B of this Application. The study used widely-accepted modeling software in its evaluation, taking into account terrain, latitude and longitude, wind turbine generator dimensions, blade rotation speed, expected rotor operational time, expected rotor orientation, sun angle, sunshine probabilities, and the locations of potentially affected structures (it was conservatively assumed that each structure had windows on every side). The study also conservatively assumed that the area lacks vegetation and intervening structures. Because of this, some structures which are shown to have the potential to experience shadow flicker may in fact be screened by vegetation.

As the study shows, of the 150 receptors within 1 mile of a turbine, there is a total of 73 locations are expected to experience some level of shadow flicker. Of that number, 49 are expected to have between zero and eight hours of shadow flicker per year. Twenty-four of the locations that are expected to experience some shadow flicker could experience periods of shadow flicker of between 8 hours and 14 hours per year, without any operational adjustments employed by the Project.

The SEC's newly adopted rules require that the expected shadow flicker at any non-participating receptor not exceed a total of eight (8) hours per year. In order to comply with the new SEC rules regarding shadow flicker, AWE will utilize a Siemens provided shadow control method to ensure that the 24 locations that are conservatively expected to experience between 8 hours and 14 hours of shadow flicker per year, will not exceed 8 hours per year. The remaining 49 locations that will experience some shadow flicker will not require AWE to implement any operational control measures to comply with the SEC rule. The Siemens shadow control method will allow AWE to utilize operational controls to curtail specific turbines that are identified as potentially causing shadow flicker in excess of the 8 hour maximum at any of the 24 locations to reduce the actual shadow flicker to no more than 8 hours per year.

Site 301.08(a)(3): a description of planned setbacks that indicate the distance between each wind turbine and the nearest landowner's existing building and property line, and between each wind turbine and the nearest public road and overhead or underground energy infrastructure or energy transmission pipeline within 2 miles of such wind turbine, and explain why the indicated distances are adequate to protect the public from risks associated with the operation of the proposed wind energy facility.

Section I.6 of the Application describes the planned setbacks and adequacy to protect the public from risks associated with the operation of the proposed facility. In addition to information

already provided in the Application relating to setbacks from the proposed turbines, the nearest overhead or underground electrical line is the PSNH L163 transmission line. There are no energy transmission pipelines within 2 miles of the proposed wind facility.

Site 301.08(a)(8)(f): all underground infrastructure at depths less than four feet below grade shall be removed from the site and all underground infrastructure at depths greater than four feet below finished grade shall be abandoned in place.

AWE will agree to an amendment to its proposed decommissioning plan found in Appendix 21 to require removal of all underground infrastructure to a depth of four feet where practicable.

Site 301.08(a)(10): an assessment of the risks that the proposed facility will interfere with the weather radars used for severe storm warning or any local weather radars.

AWE retained Comsearch to evaluate potential interference that could be caused by the project on both private and government radar systems including Doppler and NEXRAD weather radars. The studies performed conclude that: (a) none of the nine Doppler radar systems in the vicinity of the Antrim Wind Energy Project could be impacted by the project's planned wind turbines; (b) no issues were identified with the Weather Service's NEXRAD Radar Systems. The studies also confirmed that the FAA has issued Determinations of No Hazard to Air Navigation for all nine turbines.

Please see copies of the technical reports included as Attachments 7 and 8 to this supplement and labeled Appendices 22A and 22B.

Site 301.08(c)(2): a facility decommissioning plan prepared by an independent, qualified person with demonstrated knowledge and experience in similar energy facility projects and cost estimates; the decommissioning plan shall include each of the following:

- a) A description of sufficient and secure funding to implement the plan, which shall not account for the anticipated salvage value of facility components or materials;
- b) The provision of financial assurance in the form of an irrevocable standby letter of credit, performance bond, surety bond, or unconditional payment guaranty executed by a parent company of the facility owner maintaining at all times an investment grade credit rating; ...
- d. All underground infrastructure at depths less than four feet below grade shall be removed from the site and all underground infrastructure at depths greater than four feet below finished grade shall be abandoned in place.

AWE retained TRC Engineering to prepare a decommissioning plan utilizing decommissioning cost estimates provided by Reed & Reed, Inc. this has been included in Appendix 21 of AWE's application. As noted in response to Site 301.08(a)(8)(f), AWE will agree to an amendment to require removal of all underground infrastructure below four feet where practicable.

Site 301.14(f)(2)a: With respect to sound standards, the A-weighted equivalent sound levels produced by the applicant's energy facility during operations shall not exceed the greater of 45 dBA or 5 dBA above background levels, measured at the L-90 sound level, between the hours of 8:00 a.m. and 8:00 p.m. each day, and the greater of 40 dBA or 5 dBA above background levels, measured at the L-90 sound level, at all other times during each day, as measured using microphone placement at least 7.5 meters from any surface where reflections may influence measured sound pressure levels, on property that is used in whole or in part for permanent or temporary residential purposes, at a location between the nearest building on the property used for such purposes and the closest wind turbine.

In response to Site 301.14(f)(2)a, AWE worked with Epsilon Associates to update and revise its sound study included Appendix 13A in the initial application. The revised sound study, labeled Attachment 9 to this supplement, is intended to replace the study included in the application as Appendix 13A.

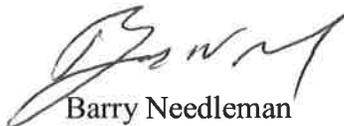
Site 301.18: Sound Study Methodology.

The new rules set out numerous requirements in Site 301.18 with respect to preconstruction sound study methodology for wind energy facilities. These new requirements were identified by Epsilon Associates and incorporated into the revised sound study included here as Attachment 9.

In addition, please see Attachment 10 to this supplement, which is intended to update and replace Robert O'Neal's prefiled testimony and associated attachments to reflect the updates to the sound and shadow flicker study developed in connection with the newly adopted rules.

Please feel free to contact me regarding any of the supplemental information provided or any of the attachments included with this submission.

Sincerely,



Barry Needleman

BN:rs3