

**STATE OF NEW HAMPSHIRE  
SITE EVALUATION COMMITTEE**

**DOCKET NO. 2006-01  
APPLICATION OF LEMPSTER WIND, LLC**

**DECISION ISSUING CERTIFICATE OF SITE AND FACILITY  
WITH CONDITIONS**

**JUNE 28, 2007**

**APPEARANCES:** Susan S. Geiger, Esq. of Orr & Reno for the Applicant; Peter C.L. Roth, Esq., Senior Assistant Attorney General, Counsel for the Public; Harold T. Judd, Esq. for the Town of Lempster; Richard D. Webb and Lisa Linowes for the Consolidated Intervenors; and Jaye Pershing Johnson, Esq. of Gardner Fulton & Waugh for the Town of Goshen.

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**I. APPLICATION**

On August 28, 2006, Lempster Wind, LLC, (the Applicant) filed an application for a Certificate of Site and Facility (Application) to construct and operate a 24 megawatt (MW) wind powered electric generation facility consisting of twelve wind turbines rated at 2 MW each on several tracts of land located in Lempster, New Hampshire (Project or Facility). The Application contained information identifying the Applicant, as well as its parent companies; setting forth the state of incorporation and the address and principal place of business of the Applicant, as well as the names of its principal directors, officers and stockholders; and identifying the Applicant as the owner of the project. It also contained statements of assets and liabilities and income statements for the Applicant and its parent companies. Additionally, the Applicant set forth information concerning its financial, technical and managerial capabilities.

The Applicant identified itself as a Delaware limited liability company, registered to do business in New Hampshire. The Applicant is a wholly owned subsidiary of Community Energy, Inc., (CEI) a Delaware corporation with its principal place of business in Wayne, Pennsylvania. The Application asserts that Iberdrola Renewable Energies USA Ltd. owns 100% of CEI. See Exh. App. 1 (Application Volume I), p. 19. Iberdrola Renewable Energies USA Ltd., in turn, is wholly owned by Iberdrola, S.A., a Spanish multi-national corporation engaged in the generation, transmission, distribution and marketing of electricity and natural gas. See, Exh. App. 1 (Application Vol. I), p. 6, 18.

The Applicant asserts that, along with its parent companies, it has sufficient financial, technical and managerial capability to successfully construct and operate the Facility. CEI, which was founded in 1999, has participated in the development of at least six wind farms totaling 250 MW of capacity in New York, Illinois and the middle Atlantic region. The Applicant also asserts that CEI has more than three billion kilowatt hours of wind energy sales under contract with residential, business and institutional customers across the United States. CEI claims to be the first company to develop a 2-MW scale wind turbine facility in the United States, located at Bear Creek, Pennsylvania. Exh. App. 1 (Application Vol. I), p. 21. The Applicant also asserts that its parent company is presently developing approximately 2,000 MW of wind energy in twelve states. *Id.* The Applicant claims that Iberdrola, S.A., presently manages almost 3,500 MW of wind power, is the world leader in wind power generation, and has more than 500 employees in the area of renewable energy. The Applicant avers that Iberdrola's vast resources in the wind power generation industry will be incorporated into the project if a certificate of site and facility is granted. Exh. App. 1 (Application Vol. I), p. 21; Exh. App. 1, Appdx. 13.

The proposed facility is located on privately owned land along the ridgeline of Lempster Mountain, which runs from the northeast to the southwest, parallel to New Hampshire Route 10. The Application indicates that the project will be located on five separate parcels of privately owned land, which are identified on the Lempster tax map as Parcels 6-132000, 9-175111, 8-530094, 6-218115, and 6-034044. Access is available to the site from the property of Kevin and Debra Onella on Bean Mountain Road in Lempster, New Hampshire. See Exh. App. 1 (Application Vol. I) p. 23-24. The project site will include approximately 35 to 40 acres and the project access road, which is estimated to be five miles long. See Exh. App. 1 (Application Vol.

I) p. 23-24. The Applicant provided various maps, photographs and other documentation identifying the location of the project. The Application also contained information identifying natural resources and wildlife at the site.

The Application identified certain wetlands and surface waters on the site. Attached to the Application is a New Hampshire Department of Environmental Services (DES) Standard Dredge and Fill Permit Application, which had been filed with the Wetlands Bureau of DES. Exh. App. 1 (Application Volume I) Appdx. 8. The Application also included an application for Alteration of Site Specific Terrain and an application for a Section 401 Water Quality Certificate, both of which were filed with the Water Division of DES. Along with its alteration of terrain application, the Applicant filed a storm water pollution prevention plan, which included a number of erosion control measures, and maintenance and inspection measures. Exh. App. 1 (Application Volume I) Appdx. 9 and 10. On March 14, 2007, the Applicant filed a supplement to its Application with correspondence from Clough Harbor & Associates to the Water Division of DES advising that the alignment of the haul road for the project had been changed, resulting in the elimination of almost all of the wetland impact, with the exception of one wetland area.

The Applicant reports that it has performed approximately three years of wind testing in the location of the site and has measured average wind speeds of 15 to 18 miles per hour. Based on the nature of the equipment to be used and the wind speeds, the Applicant estimates that the facility will have a 37% to 40% capacity factor, producing 70,000 to 80,000 kilowatt hours per year, which is equivalent to the average annual usage of 10,000 to 12,000 households. Exh. App. 1 (Application Vol. I), p. 26-29.

The Application indicates that the wind turbines to be used are Gamesa G87 models. Each turbine will consist of a rotor 280 feet in diameter, a cell (containing gear box shifters and generator), and a tower approximately 256 feet tall constructed out of tubular steel. The weight of each wind turbine unit is expected to be 303 tons. Each turbine will also include: a remote control system that will permit monitoring the operation of the unit in real time and will also permit communication with weather measurement instrumentation at the site; a predictive maintenance system and a transformer capable of converting the electricity generated at 690 volts to 34.5 kilovolts; and braking systems and lightening protection systems. Exh. App. 1 (Application Vol. I), p. 28. The electricity generated by each turbine will be collected by a series of underground cables that will deliver the electricity to the metering station at the intersection of Bean Mountain and Nichols Roads. At that point, the facility will interconnect with the Public Service Company of New Hampshire (PSNH) 34.5 kilovolt distribution line. The minimum wind speed necessary to operate the turbines is eight miles per hour and the cut off wind speed for braking is 55 miles per hour. Exh. App. 1 (Application Vol. I), p. 29.

The Application asserts that a system impact study would be conducted to determine if construction of the facility would have any significant impact on the stability, reliability or other characteristics of the New England power grid. On March 14, 2007, in the supplement to its Application, the Applicant presented a system impact study performed by E. Pro Engineering and Environmental Consulting, LLC, concluding that the facility would have no significant system impact on the stability, reliability and operating characteristics of the New England bulk power transmission system. Exh. App. 3 Appdx. 9.

The Applicant contends that it has sufficient financial, technical and managerial capability to construct and operate the Project. The Applicant relies also upon its parent

companies' capabilities in its assertion. The Project is backed by the financial resources of Iberdrola, S.A., a multinational corporation which, as of June 30, 2006, held total assets of \$32,013,000,000 euros. See, Exh. App. 1 (Application Vol. I), Appdx. 1. The Applicant asserts that, for the six-month period ending June 30, 2006, Iberdrola S.A. had total revenue of \$5,496,600,000 euros and a net profit of \$817,800,000 euros. The Applicant also claims that it will be able to draw on the technical and managerial resources of Iberdrola S.A., which presently manages almost 3,500 MW of wind power and is the largest wind power generator in the world. See, Exh. App. 1 (Application Vol. I), Appdx. 2, p. 3.

## **II. PROCEDURAL BACKGROUND**

On December 1, 2005, the New Hampshire Site Evaluation Committee (Committee) received a letter from the Selectmen of the Town of Lempster (Sullivan County), New Hampshire, requesting "an initial site inspection" of a wind powered electric generation facility proposed in Lempster. On March 30, 2006, the Selectmen of the abutting Town of Washington requested that the Committee "review the significant wind energy project proposed for a prominent ridgeline in Lempster." On April 10, 2006, the Committee received a petition to review the project signed by 122 registered Lempster voters and certified by the Lempster Town Clerk. The petition was presented to the Committee by Teresa Spada and Dorothy Hathaway, both residents of Lempster.

Treating the correspondence from the Towns of Lempster and Washington as petitions defined by R.S.A. 162-H:2, X-a and XI (c), the Committee held hearings on June 21, 2006, and July 6, 2006, to determine whether the proposed facility should require the issuance of a Certificate of Site and Facility as set forth at R.S.A. 162-H: 1 et. seq.

On June 30, 2006, CEI filed a Motion for Jurisdiction and for a Condensed Procedural Schedule. The Motion for Jurisdiction requested that the Committee assert jurisdiction over the project pursuant to R.S.A. 162-H: 2. After hearing from the parties, the Committee determined that asserting jurisdiction over the proposed facility would be consistent with the legislative findings and purposes set forth in R.S.A. 162-H:1. On July 6, 2006, the Committee voted unanimously to assert jurisdiction over the proposed facility. On August 28, 2006, Lempster Wind, LLC filed a formal Application for Certificate of Site and Facility.

On October 2, 2006, the Committee held a public meeting at which time it reviewed the Application. The Committee was informed by Harry Stewart, Director of the Water Resources Division of the Department of Environmental Services, that the permit applications<sup>1</sup> filed with DES had been deemed administratively complete. The Committee was also informed that no other state agency with jurisdiction over the proposed facility had noted any insufficiency in the Application<sup>2</sup>. The Committee reviewed the Application and determined that it complied with R.S.A. 162-H: 7, III, IV and V. It was further determined that the Application provided sufficient information to enable the Committee to carry out the purposes of the statute. The Committee determined that the Application was complete for the purposes of R.S.A. 162-H and therefore voted unanimously to accept the Application.

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<sup>1</sup> A Standard Dredge and Fill Application, a Site Specific Application, and a Request for Section 401 Water Quality Certification were filed with the appropriate bureaus within the Department of Environmental Services. See, Exh. App. 1, Appdxs. 8, 9, 10.

<sup>2</sup> The Application implicates the jurisdiction of the Water Management Bureau, Wetlands Bureau and the Site Specific Program of the Department of Environmental Services as well as the Department of Transportation. The facility does not implicate the jurisdiction of the Air Resources Division of the Department of Environmental Services. On September 15, 2006, counsel for the Committee advised each state agency, in writing, of the existence of the Application before the Committee. In addition, notification of the Application was provided to the United States Army Corps of Engineers and the Upper Valley/Lake Sunapee Regional Planning Commission.

On October 30, 2006, the Committee conducted a site visit and public informational hearing at the Goshen-Lempster Cooperative School located in Lempster. Notice of the public hearing and site visit was published in compliance with RSA 162-H:10, I. Members of the

Committee traveled to various locations in Lempster to view the ridgeline and the site of one of the proposed wind turbines. The locations were all sites where the Applicant had taken photos for the purpose of photo simulations, which were later shown at the public informational hearing and entered as exhibits at the adversarial proceedings. See Public Information Hearing, Exh. 1; Exh. App. 4-14.

At the public informational hearing, the Applicant presented information about the Project to the Committee and to the public. See, RSA 162-H:10, I. The Applicant's representatives also answered questions from the public about the proposed project. See Transcript, October 30, 2006, p. 41-51. After public questions about the project, the Committee took public comment. See, Transcript, October 30, 2006, p. 51-69. All members of the public who wished to speak about the proposed project were permitted to do so. The Committee has continued to receive public comment, in the form of letters and emails, and time has been set aside at various meetings and hearings to take oral comments from the public.

On November 30, 2006, the Committee convened a public meeting to consider a variety of procedural matters regarding the conduct of adversarial hearings. The Committee issued a procedural order on December 22, 2006, resolving outstanding motions and establishing a procedural schedule for discovery, testimony and the adversarial hearings.

### **III. INTERVENTION AND HEARINGS**

The Committee received a number of requests to intervene in the proceedings, both before and after the filing of the formal Application. The Committee, for the most part, granted



the requests for intervention. The Committee did, however, consolidate the participation of certain intervenors for the purpose of the adversarial hearings after determining that they shared similar interests or sought similar relief. See, R.S.A. 541-A:32, III; N.H. CODE OF ADMINISTRATIVE REGULATIONS, JUS - 809.01.

Correspondence from the Board of Selectmen of the Town of Lempster initiated the Committee's pre-application review in this docket. Thereafter, the Town of Lempster, through Planning Board Member Mark Adams, filed a petition to intervene as a full party. The motion to intervene was granted by order dated September 23, 2006. On September 28, 2006, attorney Harold T. Judd filed his appearance on behalf of the Town of Lempster, which participated throughout the proceedings.

Teresa Spada and Dorothy Hathaway presented the aforementioned citizens' petition to the Committee. By order dated September 23, 2006, Ms. Spada and Ms. Hathaway were allowed to intervene jointly in the proceedings. After the Committee asserted jurisdiction over the Application neither Ms. Spada nor Ms. Hathaway participated in the proceedings.

Richard Webb filed a motion to intervene on May 25, 2006, asserting an interest in the outcome of the proceeding based upon the proximity of property owned by his family to the proposed project site. Mr. Webb's motion to intervene was granted by order dated September 23, 2006, and he participated, *pro se*, throughout the proceedings. His intervention was consolidated with other intervenors pursuant to a December 22, 2006 order.<sup>3</sup>

Deborah Stone filed a request to intervene on June 7, 2006. Ms. Stone is a resident of Lempster and asserts that she has been active in town affairs. Ms. Stone's motion to intervene

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<sup>3</sup> The Committee, on its own motion, determined that Richard Webb, Deborah Stone, Jeffrey Dwyer and Lisa Linowes shared similar views or represented similar interests and therefore required that their presentations, cross examinations and oral argument be consolidated, but permitted each party to present its own brief.

was granted by order dated September 23, 2006. Although involved in the preliminary proceedings, Ms. Stone did not participate in the adversarial hearings.

Jeffrey Dwyer filed a motion to intervene in the proceedings on June 7, 2006. Mr. Dwyer resides on property abutting the proposed project. Mr. Dwyer's motion to intervene was granted by order dated September 23, 2006. Although involved in the preliminary proceedings, Mr. Dwyer did not participate in the adversarial hearings.

Elizabeth O'Grady filed a motion to intervene on June 7, 2006. Ms. O'Grady is the Trustee of the Elizabeth O'Grady Revocable Trust. The trust owns property located at 397 Mountain Road, Lempster and abuts the proposed site<sup>4</sup>. On September 26, 2006, attorney Derek Lick filed an appearance on behalf of Ms. O'Grady but withdrew as counsel on January 3, 2007. Although involved in the preliminary proceedings, Ms. O'Grady did not participate in the adversarial hearings.

The Town of Washington filed a letter, on March 30, 2006, asking the Committee to review the proposed project but it did not seek to intervene. By letter dated September 14, 2006, the Town of Washington requested that the Applicant be required to post a bond to cover damage to roads caused by heavy equipment during the construction or decommissioning of the project "should the Route 31/Lempster Mountain Road route be chosen." The Applicant subsequently informed the Committee that the Route 31/Lempster Mountain Road route will not be used by construction or decommissioning vehicles. See, Transcript, March 28, 2007, p. 202; Exh. Lempster C.

Lisa Linowes filed a petition to intervene as a party in the proceedings on September 25, 2006. Ms. Linowes is neither a resident of Lempster nor a property owner in Lempster. The

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<sup>4</sup> The trust owns the property in which both Ms. O'Grady and Mr. Dwyer reside.

Committee found that Ms. Linowes did not qualify as an intervenor by right under R.S.A. 541-A:32, I, but the Committee exercised its discretion, under R.S.A. 541-A:32, II, to allow Ms. Linowes to intervene. Ms. Linowes is the co-founder of an organization called Industrial Wind Action. Her intervention was consolidated with other intervenors and she participated, on a *pro se* basis, throughout the proceedings.

On November 8, 2006, the Committee received correspondence from the Town of Goshen requesting that the Committee assess the impacts of the proposed project as they pertain to the power line and utility pole replacement through the Town of Goshen. Eventually, the Town of Goshen, through its counsel, filed a petition to intervene on January 16, 2007. On January 22, 2007, the Town of Goshen clarified that it sought to intervene in the proceedings for the limited purpose of addressing the replacement poles and wires to be installed in the Town of Goshen. Transcript, January 22, 2007, p. 35. Public Counsel supported Goshen's motion. After hearing objections from the Applicant and PSNH, the Committee granted the Town of Goshen's motion to intervene on a limited basis related to the issue of the effects on the electrical distribution lines and utility poles in Goshen. PSNH was granted intervention for the sole purpose of objecting to the Town's motion to intervene.

Finally, RSA 162-H:9, I provides that the Attorney General shall appoint an assistant attorney general as counsel for the public. In this docket, by letter dated June 20, 2006, the Attorney General appointed Senior Assistant Attorney General Peter Roth as Public Counsel. Public Counsel's obligation is to represent the interest of the public by seeking to protect the quality of the environment and seeking to assure an adequate supply of energy. RSA 162-H: 9, I. Counsel to the Public is accorded all of the rights, privileges and responsibilities of an attorney representing a party in a formal action. Public Counsel participated throughout the proceedings.

On March 26, 27, 28, and April 9, 2007, the Committee conducted adversarial hearings. The Applicant provided testimony from eight witnesses. Mr. Webb and Ms. Linowes testified in opposition to the Application and shared the task of cross-examining other witnesses, but filed separate briefs. The Town of Lempster presented two witnesses, Selectman Everett Thurber and William Murgatroy, Jr., who testified in favor of the Application, subject to an agreement between the Town of Lempster and the Applicant. The Town of Goshen presented Selectmen James Carrick and John Wirkaala to testify about the Town of Goshen's position with respect to the proposed replacement of utility poles and electric distribution wires in Goshen. Both Public Counsel and the Town of Lempster negotiated agreements with the Applicant setting forth various conditions that were submitted for the Committee's consideration.

On May 7, June 20, and June 28, 2007, the Committee met publicly to deliberate on the Application. At the June 20, 2007 meeting, the Committee denied various motions to strike filed by the Applicant and the Consolidated Intervenors regarding materials submitted after the close of the adversarial hearings. The Committee determined that the materials were either responsive to record requests made by the Committee or were permissible pursuant to RSA 162-H:10, III and would be accorded the weight appropriate to materials not provided under oath or subject to cross-examination. The Committee also determined that, in light of its action on the motions to strike, that the Applicant's motion to close the record was moot.

#### **IV. POSITIONS OF THE PARTIES**

##### **A. Applicant**

The Applicant supports its Application with the testimony of the following witnesses.

- Jeffrey Keeler, New England Director for CEI
- Gilbert Chauny, Director of Finance, Business Evaluation and Planning, Iberdrola USA
- Carl DeLoof, Midwest Construction Supervisor, Iberdrola USA
- Inigo Malo deMolina Lezama Leguizamon, an engineer employed by Iberdrola USA

- Martin L. Risley, a professional engineer employed by Clough Harbor & Associates
- Lloyd Pasley, a mechanical, chemical and process engineer employed by Superna Energy, LLC
- Robert D. Roy, a certified wildlife biologist employed by Woodlot Alternatives, Inc.
- S.B. Wicker, Jr., Manager of Supplemental Energy Sources Development for PSNH

The Applicant takes the position that it has demonstrated that a Certificate of Site and Facility should be issued for the siting, construction and operation of the Project. The Applicant argues that it has more than adequate financial, technical and managerial capabilities in order to construct and operate the project. The Applicant also asserts that it has considered and presented other alternatives to the Committee but that the proposed project as contained in the Application is the most reasonable alternative. The Applicant contends that the Project will not unduly interfere with the orderly development of the region either through the siting of the proposed Project in Lempster, New Hampshire or, the upgrade of the electric distribution lines that will occur as a result of the Project both in Lempster and in the Town of Goshen, New Hampshire.

The Applicant also argues that the Project, as proposed, will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment or public health and safety. Finally, the Applicant argues that the construction and operation of the site and facility is consistent with the state energy policy as set forth at RSA 378:37. The Applicant has also entered into separate agreements with the Town of Lempster and Public Counsel through which it promises to abide by certain conditions. Believing that it has satisfied all of the statutory criteria, the Applicant requests that the Committee issue a Certificate of Site and Facility for the Project as proposed in its Application.

## **B. Public Counsel**

Public Counsel commissioned an environmental review performed by Epsilon Associates, Inc., which includes a noise analysis, viewshed analysis, an analysis of avian and endangered species, a shadow flicker analysis, ice shedding analysis, and a wind resource assessment. For the most part, the Epsilon environmental review confirmed similar studies prepared by the Applicant. Public Counsel and the Applicant entered into an agreement stipulating to certain conditions pertaining to the protection of avian species, noise, ice shedding, and public access.

Finally, Public Counsel and the Applicant agreed that, as a condition of the Certificate, the Applicant shall donate a certain parcel of land known as Tax Parcel 12-036, 324 Earl's Lane, to an appropriate entity for conservation purposes and subject to a conservation easement. Public Counsel, in the light of the conditions negotiated, ultimately took the position that certificating the Project is a sound policy choice, and one that appropriately balances environmental impact and energy development.

### **C. Town of Lempster**

The Town of Lempster presented the testimony of two Selectmen, Everett Thurber and William Murgatroy, Jr. The Town also negotiated an agreement with the Applicant, which governs a number of aspects of the construction and operation of the proposed facility. The Town, with the benefit of the conditions contained in its agreement, agrees with the Applicant and Public Counsel that the Project should be issued a certificate of site and facility.

### **D. Consolidated Intervenors**

The Consolidated Intervenors generally oppose the siting, construction and operation of the Project. Both Mr. Webb and Ms. Linowes testified before the Committee, and each submitted a number of exhibits. Mr. Webb argues that the Applicant has failed to prove by a

preponderance of the evidence that the Project will not have an unreasonable adverse effect on aesthetics, the natural environment, and public health and safety. He also argues that the Applicant has failed to prove that the Project will not unduly interfere with the orderly development of the region. Similarly, Ms. Linowes opposes the siting, construction and operation of the Project for a number of reasons. She claims that the development of the Project is not consistent with traditional patterns of development in the area. She also argues that the road design and stormwater management plan are under-designed for a project of this size. Ms. Linowes contends that the various wildlife studies conducted by the Applicant, including its avian and bat studies, are methodologically flawed and fail to comply with guidelines of the United States Fish and Wildlife Service. Ms. Linowes and Mr. Webb both oppose the certificating of the facility and, alternatively, argue for a number of conditions. Ms. Linowes asks as well that the Committee make numerous “findings of fact.”<sup>5</sup>

#### **E. Town of Goshen**

The Town of Goshen presented the testimony of two selectmen, John Wirkaala and James Carrick. Goshen takes no position with respect to whether the facility should be issued a certificate, but it opposes the plans of PSNH to upgrade the utility lines that, as a result, will run through the Goshen village. Goshen asserts that the replacement poles will be larger and contain more cable than the existing system. They claim that the replacement poles and additional cable will unduly interfere with the orderly development of the town and have an unreasonable adverse impact on the aesthetics of the village core area of the Town of Goshen. Goshen also asserts that the replacement poles and additional cabling violate the various

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<sup>5</sup> At its public meeting on June 20, 2007, the Committee noted that specific findings of fact are arguably obviated by a comprehensive written decision. Nonetheless, the Committee considered and ruled on each of the proposed findings. See Attachment A for a summary of the Committee’s disposition of each proposed finding.

planning ordinances that the Town has enacted. The Town requests that the Committee require either an alternate route for the replacement distribution line, or a condition requiring that the distribution line be buried through the village core of Goshen, New Hampshire.

## **V. ANALYSIS AND FINDINGS**

### **A. State Permits**

The proposed Facility will entail construction and operation activities that implicate three state permits. The Facility requires a Standard Dredge and Fill Permit (referred to as a Wetlands Permit), a Terrain Alteration Permit (referred to as a Site Specific Permit) and a Section 401 Water Quality Certification (pursuant to Section 401 of the Federal Clean Water Act).

The Applicant filed its application for a Wetlands Permit on March 26, 2006, and it was deemed complete on April 5, 2006. See, Application Vol. I, Appdx. 8. In its original iteration, the application designated approximately 4,375 square feet of wetlands impact, consisting of intermittent streams, roadside ditches, manmade watering holes and two bog areas. *Id.* See also, Exh. App. 1 (Application Vol. I) p. 40. However, during the pre-hearing process the Applicant realigned some of the access roads within the Project and reduced the wetlands impact to 1,470 square feet. See Exhibit App. 3, Appdx. 2. On March 20, 2007, the Water Division of DES issued its recommended findings and conditions based upon the revised plans. See, Exh. App. 21, Attachment 1. The Water Division classified the proposal as a minimum impact project because its wetlands impact was less than 3,000 square feet. The Water Division also found that the revised plan presented the proposal that is “the alternative with the least adverse impact to areas and environments under the department’s jurisdiction per Rule Env.-Wt 302.03.” Exh. App. 21. Similarly, the Water Division found that the revised plan will not have significant impacts on protected resources and that the affected wetland area does not have special value



from a regional, state, or local perspective. *Id.* The Water Division recommended that a Wetlands Permit be approved, subject to 19 general and specific conditions. Exh. App. 21, Attachment 1.

On April 14, 2006, the Applicant filed, with the Water Division of DES, a Site Specific Permit application and a Stormwater Pollution Prevention Plan. The site specific application sought authority to disturb 1,100,000 square feet (approximately 25 acres) of land for the construction of approximately five miles of access roads, electric cable conduit and service pads for twelve wind turbines. See, Exh. App.1 (Application Vol. 1) Appdx. 9. The Applicant later submitted a revised set of erosion control plans and a supplemental drainage summary reflecting revisions as a result of the realignment of the proposed access roads. On March 20, 2007, the Water Division issued recommended findings and conditions on the Site Specific Permit. The Division recommended that the Committee approve the proposal to disturb approximately 25 acres of land at the site to construct the access roads, electric cable conduit and service pads for the turbines. The Division found that water quality degradation will not occur as a result of the proposed project but it did recommend that ten conditions be imposed. Exh. App. 21, Attachment 2.

The Applicant filed its request for a 401 Water Quality Certificate on August 11, 2006, identifying the surface water subject to the water quality certification as scattered wetlands on Lempster Mountain ridgeline, drainage basins, Richardson Brook, Ashuelot River, Beaver Brook, Cold Brook, May Pond, Babb Brook and Dodge Pond. The Applicant asserted that there would be no appreciable withdrawal or discharge during the construction or operation phases of the project. The Applicant further averred that there would be no discharges or other impacts

that would alter the water quality standards below their present classification, Class B. Exh. App. 1 (Application Vol. I), Appdx. 10

On February 28, 2007, the Applicant filed its revised project design plans and Stormwater Pollution Prevention Plan, as well as additional information in response to questions from the Watershed Management Bureau of the Water Division of DES. Exh. App. 3 Appdx. 3. On March 20, 2007, the Water Division issued its recommended findings and conditions for the issuance of a 401 Water Quality Certificate. Exh. App. 21, Attachment 3.

Although the Applicant asserts that no party challenged the recommended findings and conditions issued by the Water Division pertaining to the Wetlands Permit, the Site Specific Permit and the 401 Water Quality Certificate, Ms. Linowes argued that the Stormwater Pollution Prevention Plan is under-designed for the location and scale of the proposed project. See, Linowes Brief at p. 7. She states that there have recently been two 100-year flood events in New Hampshire and that many small towns in the state require at least a 25-year storm analysis.

The Applicant asserts that the testimony of its expert, Martin Risley, a registered engineer, confirms the recommended findings of the Water Division. Mr. Risley testified that the proposed roads and turbine service pads may increase peak runoff flows at the proposed site. However, he notes that the overall size of the watershed is more than adequate to accommodate the increased runoff. Mr. Risley further relies upon the detailed soil erosion and sediment controls contained within the Stormwater Pollution Prevention Plan in order to protect against degradation of water quality from runoff. Exh. App. 9, p. 5.

The Committee, having considered the evidence, finds that the Applicant has minimized the impacts of the proposed site on wetlands. Based upon the revised road alignment, the proposed facility will impact only one small wetland with an area of less than 1,500 square feet.

The Committee adopts the findings and conditions recommended by the Water Division as they pertain to the issuance of a Standard Dredge and Fill Permit. The Water Division shall issue the permit with the recommended conditions. The Wetlands Permit and its conditions shall be included in the Certificate of Site and Facility.

With respect to the Alteration of Terrain Permit, the Committee shares some of Ms. Linowes' concerns about the capacity of the Stormwater Pollution Prevention Plan. The proposed site, for the most part, is undeveloped. It is impossible to predict the size of storms or the rapidity of snow melt that may occur over the course of the project life. The Committee has determined to require the Applicant to re-design the Stormwater Pollution Prevention Plan, including its soil erosion and sediment control criteria to accommodate a 25-year storm event. This condition will be added to the existing findings and conditions recommended by the Water Division on both the Alteration of Terrain Permit and the 401 Water Quality Certificate. The Water Division shall issue the Alteration of Terrain Permit and the 401 Water Quality Certificate subject to the additional condition. Both permits and their respective conditions shall be part of the Certificate of Site and Facility.

Additionally, the Committee, as part of the Certificate of Site and Facility, attached hereto as Attachment B, delegates the authority to monitor the construction and operation of the proposed facility to the Water Division for compliance with the terms and conditions of the Standard Dredge and Fill Permit, the Alteration of Terrain Permit, and the 401 Water Quality Certificate. See, RSA 162-H:4, III. The Water Division is also delegated the authority to specify the use of any technique, methodology, practice, or procedure designed to ensure compliance with the terms and conditions of the Standard Dredge and Fill Permit, the Alteration of Terrain Permit and the 401 Water Quality Certificate. See RSA 162-H:4, III-a.

## **B. Available Alternatives**

Pursuant to RSA 162-H:16, IV, the Committee is tasked with determining if available alternatives have been considered with respect to the siting of a proposed energy facility and it has heard evidence with respect to such alternatives. Jeffrey Keeler, Project Director for the Applicant, testified that the present site was chosen after consideration of alternative sites, meeting initial criteria, in Croyden, Newbury and elsewhere within the Town of Lempster, New Hampshire. Exh. App. 5, p. 5-6; Transcript, March 26, 2007, p. 142-144. The proposed site was chosen because of its remoteness, its significant wind resources, its proximity to an efficient interconnection with the electric grid at the distribution level, and the availability of suitable tracts of land. *Id.*

In addition, the record reveals that the Applicant has considered various configurations with respect to the placement of the turbines and other associated equipment within the confines of the proposed site. Furthermore, the Applicant has scaled down the overall size of the proposed project in order to efficiently interconnect to the existing grid. Transcript, March 26, 2007, p. 144.

Other than suggesting that ridgelines are, in general, inappropriate for the placement of wind facilities, and championing offshore wind power development, the Consolidated Intervenor do not present any evidence that more appropriate alternatives exist to the siting of the proposed wind facility pursuant to the Application.

The Committee finds that the Applicant has engaged in a reasonable process in examining alternative sites and that it has made a reasonable determination in its selection of the Lempster site. The Committee also finds that the location of the proposed site, its significant wind resources, the availability of sufficient undeveloped acreage, and the proximity of the site

to an efficient interconnection point to the electrical distribution grid render the proposed site a reasonable location among available alternatives for construction of the proposed Facility.

Pursuant to RSA 162-H:16, IV, the Committee is also required to have fully reviewed the environmental impact of the site. That review is reflected *supra*, in the section discussing State Permits, and *infra*, in the section discussing Adverse Effects.

## **C. Statutory Criteria**

### **1. Financial, Technical and Managerial Capability**

The owner of the proposed project, Lempster Wind, LLC, is a subsidiary of Iberdrola S.A., a multi-national corporation headquartered in Madrid, Spain. Iberdrola S.A. owns 100% of an entity known as Iberdrola Renewable Energy which, in turn, owns Iberdrola Renewable Energy USA. Iberdrola Renewable Energy USA is a 100% owner of CEI which owns the applicant, Lempster Wind, LLC. Iberdrola S.A. and its subsidiaries intend to finance the construction and operation of the proposed project directly off its balance sheet. Transcript, March 26, 2007, p. 150-151; 153; Exh. App. 6, p. 3. At the end of 2006, Iberdrola S.A. reported total assets in the amount of \$33,061,000 euros, or approximately \$44.3 billion US and net profit of \$1,666,300,000 euros, or approximately \$2 billion US<sup>6</sup>. App. Exh. 25; see also, Transcript March 26, 2007, p. 151. The testimony of Gilbert Chauny also revealed that Iberdrola, S.A. carries insurance capable of covering losses in the event of a force majeure, as well as liability and construction insurance. Exh. App. 6, p. 3-4; Transcript, March 26, 2007, p. 151-152.

The Project is expected to cost approximately \$40 million for equipment, construction and commencement of operations. Exh. App. 6, p. 3. The Applicant anticipates initial funding from Iberdrola, S.A. in an amount of approximately \$850,000 for operation of the facility.

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<sup>6</sup> See Applicant Exhibit 25; see Application, Appendix 1. The conversion from euros to United States dollars was

Transcript, March 26, 2007, p. 151. In addition to being able to completely fund the construction and operation of the proposed facility from its balance sheet, Iberdrola, S.A. will seek out a long term purchase power agreement for the project and will sell renewable energy credits. These are additional positive financial factors and Iberdrola, S.A. intends to proceed with construction of the facility whether it can sell renewable energy credits or not. See, Transcript, March 26, 2007, pp. 54-55; 58-60. It should also be noted that Iberdrola, S.A. is likely to bring in a passive investor to make use of the federal production tax credits because it is a foreign corporation and is not eligible for the tax credits. See, Transcript, March 26, 2007, p. 153-154.

Iberdrola, S.A. employs over 500 employees in the area of renewable resources and currently operates approximately 3,400 MW of wind power generation. Exh. App. 1 (Application Vol. I), Appdx. 1; Exh. App. 6. The Iberdrola companies, moreover, have committed to exceed 10,000 MW of wind energy, worldwide, by the year 2011. See, Exh. App. 6, p. 2. Iberdrola, S.A. also owns and operates other types of electric generation facilities, including hydro-electric (9,000 MW), combined cycle technology (6,000 MW), nuclear (3,300 MW), coal (2,800 MW), oil (1,200 MW), and co-generation (400 MW). Exh. App. 1 (Application Vol. I), Appdx. 1. Additionally, CEI was named one of the world's 100 most sustainable companies for two years in a row and it has been involved in the development and financing of over 250 MW of wind power projects in the United States. See, Exh. App. 6, p. 4. It is also important to note that the Iberdrola subsidiary companies will be supported by a separate engineering subsidiary, wholly owned by Iberdrola S.A. Exh. App. 6, p. 4.

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done on May 31, 2007 using an exchange rate of 1.34190 United States dollars to one euro.

Based on the uncontroverted evidence presented in this proceeding and summarized above, the Committee finds that the Applicant has adequate financial, technical and managerial capability to assure construction and operation of the Lempster facility in continuing compliance with the terms and conditions of the certificate as issued.

## **2. Orderly Development of the Region**

RSA 162-H:16 IV(b) requires that the Committee find that the site and facility “will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning committees and municipal governing bodies.”

The Applicant asserts that the proposed facility is consistent with the current character of the Town of Lempster and that the operation of the proposed facility will not interfere with that character or ongoing land uses in the area. See, Exh. App. 1 (Application Vol. I), p. 62; Exh. App. 5, p. 8-9. The Applicant also observes that there are no zoning laws in the Town of Lempster and that, before the commencement of these proceedings, the Applicant had already secured building permits from the Town of Lempster for the proposed facility. See, Exh. App. 1 (Application Vol. I), p. 62. The Applicant further notes that it reached a comprehensive agreement with the Town of Lempster addressing issues of local concern. See, Exh. Lempster C. The Applicant asserts that this agreement demonstrates the views and concerns of the municipality of Lempster and its governing bodies. Likewise, the Applicant asserts that the agreement with the Town of Lempster addresses and satisfies the primary concerns raised by the Upper Valley/Lake Sunapee Regional Planning Commission, namely, visual impacts, fire protection/emergency response and decommissioning. Moreover, the Applicant contends that

the Regional Planning Commission has expressed support for clean renewable energy within the region, and that the proposed project is consistent with that view.

Both Public Counsel and the Town of Lempster agree with the Applicant that the proposed facility will not unduly interfere with the orderly development of the region as demonstrated by the stipulations and agreements made between Public Counsel and the Applicant, and between the Town of Lempster and the Applicant. The Consolidated Intervenors take two positions with respect to this issue. Mr. Webb, in his closing brief, suggests that the Committee cannot determine if the proposed project unduly interferes with the orderly development of the region without evaluating how this particular project will “fit in with the thousands of other turbines which could be lining our region’s ridgelines after the Lempster project is approved”. See, Webb Brief May 3, 2007. Ms. Linowes argues that the development of the proposed facility is inconsistent with the current rural and undeveloped nature of the area and, therefore, is of an inappropriate scale for the surrounding area. Linowes Brief, p. 7-9.

The preponderance of the evidence in the case indicates that the proposed facility will not unduly interfere with the orderly development of the region. In fact, aspects of the project can assist in the orderly development of the region. For instance, the project will deliver power directly to the existing distribution grid at existing voltage in the region without the need to obtain new rights-of-way. This increases the amount of electricity available to the distribution grid and, with the addition of the 3-phase line, will allow options for future users of 3-phase power in the area.

Additionally, in the absence of a zoning ordinance, the Town has negotiated an agreement with the Applicant that addresses project security, emergency response, construction period requirements, noise restrictions, setbacks, and decommissioning. Through this



agreement, the Town has obtained concessions from the Applicant that would not be applicable in the absence of the zoning ordinance and thus provides the Town of Lempster assurances regarding orderly development during both the construction and operational phases of the project.

The Committee notes that the Applicant has submitted a number of exhibits concerning various viewsheds and depicting the turbines. Although the turbines will be visible from various vantage points, the Committee cannot find that such visibility alone will interfere with the orderly development of the region. The Committee also notes that the turbine towers will require some lighting pursuant to regulations of the Federal Aviation Administration. The Upper Valley/Lake Sunapee Regional Planning Commission has expressed some concerns with the nature of that lighting. The Applicant, in response to those concerns, has provided the Regional Planning Commission and this Committee with information concerning the possible aviation lighting configurations. Specifically, the Applicant indicates that the FAA regulations will likely require that turbines 1 and 9 have safety lighting. Additionally, the Applicant expects that at least three other wind turbines will be fitted with safety lighting in order to comply with the FAA's minimum spacing requirements. It was also established that lighting would only be required at night and that the Applicant would not activate the lighting during the day. Finally, the Applicant indicates that it is also investigating, with the FAA, the use of technologies to limit ground level light pollution. See, Exh. App. 14.

Aviation safety is an important factor in ensuring that the project does not unduly interfere with the orderly development of the region. The Committee finds that the proposal of the Applicant as to safety lighting at the project reasonably addresses local and regional concerns. The Committee also notes that the agreement with the Town of Lempster adequately

addresses the concerns that the Regional Planning Commission has with respect to fire protection/emergency response and decommissioning.

The Committee finds that the facility will not unduly interfere with the orderly development of the region, taking into consideration the views of the Town of Lempster, the Upper Valley/Lake Sunapee Regional Planning Commission and the Consolidated Intervenors. The Committee notes that the argument that it must consider the probable location of other wind power generation facilities that may be proposed in the future before determining whether the proposed facility should be sited is impractical and unworkable. Such an approach, in effect, could prohibit the Committee from considering any wind projects until all possible wind project applications were filed with the Committee.

### **3. Adverse Effects**

#### **a. Aesthetics**

##### **(i.) Shadow Flicker**

The Application alerts the Committee to a phenomenon called “shadow flicker,” which is defined as the “alternating change in light intensity or shadows created by the moving turbine blades when back-lit by the sun.” Exh. App. 1 (Application Vol. 1) p. 53. Shadow flicker is primarily an aesthetic issue but one exhibit submitted by the Consolidated Intervenors suggests that it may be a public health issue as well. See, Exh. Int. E-4, p. 1.

The Applicant studied the potential for shadow flicker resulting from the proposed facility. See Exh. App. 2 (Application Vol. II) App. 28. In that study, the Applicant’s consultant, Superna Energy, used standard assumptions and specific data regarding the terrain in the project area, meteorological data for the area, and the proposed turbine dimensions. The study determined that areas which would receive 30 hours or more per year of shadow flicker were

located in very close proximity to the turbines themselves. The areas encompassing Nichols Road, Maplewood Drive, Guilford Lane, Fifield Drive and Sugarhouse Drive were projected to receive not more than 10 to 20 hours per year of shadow impact. Areas of particular interest, such as the Goshen Lempster School, the Lempster Town Hall, Pillsbury State Park, the Webb residence and the Dwyer/O'Grady residence, were projected to experience less than ten hours of shadow impact in an average year. See Exh. App. 2 (Application, Vol. II) Appdx. 28.

The Applicant's shadow study has not been challenged by any party. The brief reference in Exh. Int. E-4 to the effect of shadow flicker on motion sensitive people is insufficient for the Committee to make a finding or conclusion in that regard. Thus, the Committee finds that the proposed facility will not have an unreasonable adverse impact on either aesthetics or public health and safety as a result of shadow flicker or shadow impacts.

**(ii.) Viewsheds**

In determining whether the Project will have an unreasonable adverse effect on aesthetics, the Committee considers the effects on the viewshed in the region. The Applicant argues that the viewshed impact is not unreasonable because the turbines are obstructed from view by geographic features or vegetation for most residences within one mile of the Project. The Applicant also asserts that the turbines are confined to an isolated area, will be non-obtrusive in color and lit only to the minimum extent required for aviation safety. Applicant's Brief, p. 30. The Consolidated Intervenors, however, question how building twelve towers on two miles of scenic ridgeline cannot have an adverse effect on aesthetics. Webb Brief, p. 2. The Consolidated Intervenors do not cite expert testimony in the record but rely instead on a paper from the United Kingdom, which does not contain source references. Exh. Int. E-20.

The issue to be determined by the Committee is whether the Project will have an unreasonable adverse effect on aesthetics. The Project's proposed wind turbines are just under 400 feet high and will have some effect on the viewshed in the region. However, the statutory issue presented to the Committee is whether the effect is unreasonably adverse.

The Applicant's consultant, Louis Berger Group (LBG), performed a "worst case" study to determine the visibility of the turbines over a three mile radius. Exhibit App. 2, Appendix 29. The study assumed the absence of trees, buildings and other ground features. The study includes all areas within three miles where even one foot of blade tip should be visible. See, Exh. App. 2, Appendix 29. Despite their height, the turbines will not be visible in many areas, especially to the north and east of the Project. The Committee has also reviewed exhibits documenting the existing wind turbines at the Bear Creek facility in Pennsylvania and the photo simulations for the instant Project. Exh. App. 2, Appendix 22 and Exh. App. 4-14. Additionally, members of the Committee viewed the ridgeline on Lempster Mountain while on the October 30, 2006 site visit. Having reviewed the evidence, the Committee finds that, subject to conditions contained in the Lempster Agreement, the Project will not have an unreasonable adverse effect on aesthetics.

#### **b. Historic Sites**

The Applicant submitted, as part of the Application, a Memorandum of Understanding on Cultural and Historic Resources Work Scope, dated April 12, 2006. Exh. App. 2 (Application Vol. II) Appdx. 29. The Memorandum represents the Applicant's obligation as agreed with the Division of Historical Resources (DHR) to conduct an Archeological Phase 1-a Survey and a Survey of Project Viewshed and Area of Potential Effect. The Phase 1-a Survey requires, *inter alia*, field testing in areas of ground disturbance and collaboration with cultural groups. The

survey of project viewshed is designed to determine the impact of the Project on historic sites within three miles of the Project. *Id.* The Applicant's consultant has conducted a field investigation of historic sites. The investigation identified 141 properties within the Project Viewshed Area of Potential Effect. Twenty-seven of the properties fell within the Lempster Street Historic District, which is eligible for treatment as a National Register historic district. Exh. App. 3 Appendix 12. Five additional properties are listed on the National Register and eight additional properties appear to meet the criteria for the National Register. *Id.* The status report prepared by LBG indicates that the Project is separated from the historic properties "by horizontal distance and altitude." LBG reports that the Project does not introduce any new elements into the immediate setting of any property of historical significance. LBG also found that the Project does not impact any characteristics that would qualify a historic property for inclusion on the National Register. *Id.* Therefore, LBG concludes that the Project imposes no adverse impact on historic resources and its opinion is uncontradicted in the record. Finally, the Applicant reports that it continues to work with DHR in surveying and determining if any aspect of the proposed facility will have an impact on historic sites or cultural resources.

The Committee recognizes that the discovery and identification of historic sites and cultural resources can be a fluid process. Thus, certain conditions are necessary to ensure that construction and ultimate operation of the proposed facility does not interfere with any historic sites or cultural resources. In this regard, the Applicant, as a condition of its certificate, will be required to: 1) continue its consultations with the DHR and comply with all agreements and memos of understanding with that agency; 2) complete its Phase 1-a archeological survey and provide copies to DHR and the Committee; and, 3) undertake a Phase 1-b archeological survey in all archaeological sensitive areas and file the reports of the survey with DHR and the

Committee. Additionally, in the event that new information or evidence of a historic site, or other cultural resources, are found within the project site, the Applicant shall immediately report said findings to the DHR and the Committee. The foregoing conditions shall attach to the Certificate of Site and Facility. The Committee hereby delegates to the DHR the authority to determine what methods, studies, surveys or other techniques, practices or procedures shall be employed in conducting the Phase 1-a and Phase 1-b surveys and any further surveys, studies or investigations in the event that archeological resources are discovered at the project site.

**c. Air and Water Quality**

RSA 162-H:16, IV(c) also requires that the Committee determine if the Project will have an unreasonable adverse effect on air and water quality. The Project will create no air emissions and thus will not have an adverse impact on air quality. In fact, it can reasonably be argued that the electricity produced by the Project will displace the use of fuels at other plants which do, in fact, negatively affect air quality. Section V. A of this Decision addresses the issue of water quality. For the reasons set forth therein, the Committee finds that the proposed Facility, subject to the conditions referred to in Section V. A, will not have an unreasonable adverse effect on water quality.

**d. Natural Environment**

Over the course of the proceedings, the Committee has considered extensive evidence about the impact of the proposed facility on the natural environment. Most of the evidence centered on the impact of the proposed facility on birds and bats, and its impact on the interior forest habitat. The Committee has had the opportunity to review the studies conducted by the Applicant's experts and by consultants for Public Counsel. The Committee has also reviewed

the concerns expressed by the United States Fish and Wildlife Department (USFW) and Consolidated Intervenors.

The Applicant submitted a document entitled "Phase I Avian Risk Assessment 2004" authored by Curry & Curlinger, which reaches two general conclusions. See, Exhibit App. 4-20; see also, Exh. App. 2 (Application Vol. II) Appendix 30. First, there is a potential for forest nesting birds to be displaced and/or disturbed by the construction of the project and the presence of the turbines but, at the time of the report, the matter had not been studied completely. See, Exhibit App. 4-20, p. 32. Second, based upon the literature and information obtained from the site, there is sufficient information to assess the risk of avian collision mortality and there is little likelihood of biologically significant levels of collisions. See, Exhibit App. 4-20, p. 32.

The Applicant also commissioned the Louis Berger Group, who prepared a document entitled "Pre and Post Construction Avian Survey Monitoring and Mitigation" dated August 2006. See, Exhibit App. 4-20, and Exh. App. 2 (Application Vol. II) Appendix 31. This report primarily designates a plan for future pre-construction and post-construction wildlife mitigation activities but does not assess the risk to avian or other wildlife populations. This document asserts that the literature in general does not support significant direct or indirect impacts on birds at most wind farms. See, Exhibit App. 4-20, p. 2.

The Committee reviewed as well the "Fall 2006 Survey of Bird and Bat Migration - Final Report, January 2007" authored by Woodlot Alternatives, Inc., and filed as a supplement to the application. See, Exhibit App. 3, Appdx. 10. As part of this report, Woodlot Alternatives conducted a nocturnal avian migration radar study. The study concluded: 1) there is limited avian mortality risk during the fall migration season; 2) the nocturnal avian migration patterns are similar to other sites in the region; and 3) the majority of migration during the period study

was at levels well above the height of the proposed turbines. See, Exhibit App. 3, Appdx. 10. The Fall 2006 survey of bird and bat migration also included an acoustic bat study. That study concluded that (a) the species found by the study were the species of bat that were expected to be found in the area, and (b) there was an overall low detection rate on ridge top sites compared to the valleys and other known micro-habitats such as ponds in the area. Exh. App. 3, Appdx. 10.

The Committee received an additional study entitled "Lempster Wind Farm Wildlife Habitat Summary and Assessment, March 2007" (Summary and Assessment), which was also authored by Woodlot Alternatives, Inc. See, Exhibit App. 3, Appdx. 10. This study came to the following conclusions with respect to bird populations.

1. There is no full time residency of endangered species or bird species of conservation concern.
2. The habitat in the area of the proposed facility is already widely harvested.
3. The overall impact of the proposed project on avian species is expected to be minimal based upon documented low rates of collision related mortality.

With respect to bats, this study concluded that the information collected on site indicates low levels of bat activity compared to other areas, especially those areas where there are high rates of documented bat mortality. See, Exhibit App. 3, Appdx. 10, p. 25. The wildlife habitat summary also concluded that there will be little effect on mammals because forest harvesting is already widespread in the area throughout the project site and many mammals have longer home ranges and greater tolerances for habitat disturbances and variability. See, Exhibit App. 3, Appdx. 10, p. 26. Finally, the wildlife habitat summary found that the effect of the project on amphibians and reptiles would be the area of greatest concern. However, the study concluded that existing forest harvesting has already impacted the area and resulted in the habituation of these species. Also, the study concluded that there will be a very small risk of road kill to



amphibians and reptiles due to the remoteness of the location and the light travel that is expected on the roads within the project. See, Exh. App. 3, Tab 10, p. 26.

The Consolidated Intervenors argue that the studies provided by the Applicant are insufficient or methodologically flawed. The Consolidated Intervenors also argue that the Applicant's studies fail to encompass adequate pre-construction time frames and that there will be a more significant impact on avian species and wildlife than asserted by the Applicant. The Consolidated Intervenors also suggest that the road work to be done on the site will be greater than asserted by the Applicant in its application, and will dangerously fragment the forest habitat.

The Committee finds that the studies submitted by the Applicant are thorough and persuasive. The studies were also expounded upon by Robert Roy, a certified wildlife biologist who testified during the proceedings. See, Exh. App. 10 (Prefiled Testimony of Robert Roy), Exh. App. 13 (Supplemental Prefiled Testimony of Robert Roy) and Transcript, March 27, 2007, p. 187-274, Transcript March 28, 2007, p. 18-46. Mr. Roy has conducted approximately forty wildlife assessments for wind turbine development sites as well as seasonal radar migration studies along the East coast in locations from Maine through West Virginia. He is certified as a wildlife biologist by the Wildlife Society and has been involved in this area since 1992. Moreover, his testimony revealed an extensive knowledge of both wildlife biology and the use of modern technology to document and inventory avian species. Consequently, the Committee finds Mr. Roy's testimony to be credible.

During the course of these proceedings, there has been much discussion regarding the USFW guidance that wind turbine developers obtain three years of pre-construction data as a standard for determining the presence and/or magnitude of bird and bat migration in areas of

high seasonal concentrations. The Consolidated Intervenors rely heavily on the USFW and also upon a letter from Michael J. Bartlett of the Supervising New England Field Office of USFW, which has been entered as public comment in this case. See, Exh. App. 37 and 38.

It is important to note, however, that the USFW's guidance with respect to the length of time for pre-construction surveys is a recommendation and not a requirement. Furthermore, USFW has stated that its guidelines are "voluntary and interim in nature". See, Exhibit PC-17. The Director of the United States Fish and Wildlife Service issued a memo on April 26, 2004, indicating that the guidance is intended to be "general in nature and apply with local interpretation based on local conditions." Likewise, specifically addressing pre and post-construction studies, the Director has written:

As an example, the guidance recommends 3 years of data as a standard for determining the presence and/or magnitude of bird and bat migration in areas of high seasonal concentrations. This recommendation is not intended to be a strict requirement for all areas, or if a shorter collection period can be expected to yield sufficient data. Likewise, recommending the use of acoustic, radar and infrared detection equipment as mentioned in the guidelines is not a strict requirement at all locations and under all conditions. However, where risk is considered sufficiently high and available data and/or local knowledge indicate that weather variations, changing flight paths, or variable timing of migration warranted it, 3 years of data collection using the most appropriate tools available should remain standard. The guidance states that the intended time frame for post-construction monitoring (recommended at all sites) is not expected to exceed 3 years. This does not mean that 3 years of monitoring should be recommended at all sites. A single year of monitoring through all seasons may indicate that one year is sufficient, or that additional monitoring is needed. Again, professional evaluation of the local situation is required. See, Exhibit PC-16.

The testimony of Mr. Roy and the studies provided by the Applicant demonstrate several relevant points. The studies performed by the Applicant's consultants do not identify the project area as an area of high seasonal concentrations and the testimony of Mr. Roy is persuasive that the data collected thus far is sufficient to reasonably estimate the presence and/or magnitude of bird and bat migration in the area of the proposed facility. Therefore, the facts do not indicate a

sufficiently high risk, and available data does not warrant three years of data collection.

Moreover, Mr. Roy and Woodlot Alternatives, Inc. have considerable experience in conducting such surveys and, based on their professional evaluation of the local situation, the Committee finds that a longer pre-construction survey is not necessary. Finally, the Committee recognizes that Public Counsel and the Applicant have offered a proposed certificate condition regarding avian species protection.

The proposed condition on avian species addresses a number of issues that will serve to mitigate any adverse effects. The agreement calls for: (a) formation of a technical committee; (b) reporting of the spring 2007 avian survey results; (c) post-construction avian and bat mortality surveys, for a period of two years following commercial operation of the wind turbines and including spring and fall migration seasons, using protocols reviewed and approved by the technical committee; (d) technical committee ability to comment on the reports; (e) technical committee option to recommend additional investigations and work collaboratively to address concerns identified in the report from the post-construction surveys; (f) Counsel for the Public ability to petition the Site Evaluation Committee, if the technical committee cannot achieve general consensus on the issue of avian mortality; (g) appropriate Site Evaluation Committee action within its jurisdiction if it determines that the project has an unreasonable adverse impact on any avian species; and (h) acknowledgment that the Applicant is still subject to all rights and liabilities under the federal migratory bird treaty act or other applicable law. See, Exhibit PC 20.

The Committee finds that the proposed condition concerning avian species protection will assist in protecting against unreasonable adverse effects from the proposed facility on avian species and, therefore, adopts it as a condition of the certificate.

The Applicant has met its burden to demonstrate that interior forest fragmentation will not have an unreasonable adverse effect on the natural environment. As indicated by Mr. Roy, much of the proposed facility area has been logged and heavily harvested. There are already significant areas of edge habitat and most mammals will be able to habituate to any additional habitat fragmentation. Likewise, the Committee finds that there will not be an unreasonable adverse effect on amphibians and reptiles inasmuch as the roads within the project area are remote and will not be highly traveled.

In addition, the Applicant has consulted with the Department of Resources and Economic Development's Natural Heritage Bureau (NHB). NHB identified no exemplary natural communities or rare plants or mammals at the site. Exh. App. 1, p. 55; App. 3 Appdx. 10, p. 3. A study conducted by botanist Arthur Haines confirmed these findings with respect to rare, threatened or endangered plants. Exh. App. 3, Appendix 10 (Summary and Assessment, Appdx. A).

Based upon the studies conducted at the site of the proposed facility, and the testimony of Mr. Roy, the Committee determines that the construction and operation of the proposed facility will not have an unreasonable adverse effect on the natural environment as it pertains to birds, bats, mammals, amphibians and reptiles. Further, the Committee finds that any additional habitat fragmentation that occurs will not have an unreasonable adverse impact on the natural environment at the facility site.

#### **e. Public Health and Safety**

##### **(i.) Ice Throw**

The Committee heard considerable evidence regarding the issues of ice throw or shedding, and blade fragment shedding. On the one hand, the Applicant acknowledges that such

events can occur but argues that they are relatively rare and minor. See Exh. App. 1 (Application Vol. I) p. 45, 48. On the other hand, the Consolidated Intervenors claim that the potential for significant ice throws and blade fragment throws is serious. They rely, in large part, upon theoretical “worst case calculations” derived from the work of Professor Terry Matilsky. See, Exh. Int. E-11. The Applicant, however, relies upon operational experience, mechanical safeguards, industry standards, and calculations performed by Professor Henry Seifert. See, Exh. App. 2, Appdx 24.

The Consolidated Intervenors assert that the project has the capacity to throw large chunks of ice and/or blade fragments a considerable distance. However, on cross-examination Mr. Webb acknowledged that his own and Professor Matilsky’s calculations were based upon theoretical assumptions; do not include corrections for lift or vertical topography (elements which may result in larger throw calculations); and do not consider air resistance or drag (elements which may result in smaller throw calculations). When asked about conditions where there was no air resistance, he explained that such conditions exist only in a vacuum. Transcript, March 28, 2007, p. 63-64. Mr. Webb agrees that his calculations do not account for the aerodynamics of every piece of ice or debris that might get thrown from a turbine blade and he recognizes that every piece of ice or debris would not be in an airfoil shape. Transcript, March 28, 2007, p. 108. Furthermore, Mr. Webb’s calculations do not take into account that for blades to be turning at top speed there has to be a strong wind in a direction perpendicular to the direction of the rotation that could cause thrown ice to tumble and break up or place it on a curved path instead of a straight line. *Id.*, p. 95.

Under cross-examination by Public Counsel, Mr. Webb relied on a wind turbine accident report authored by the Caithness Windfarm Forum, which appears to be a compilation of

summaries from press or internet reports. See Exh. Int. E-10. Moreover, the information about ice throw or blade fragment throws does not confirm the contention that lengthy throws of heavy projectiles are likely. See Transcript, March 28, 2007, p. 117-124. Finally, the Consolidated Intervenor do not consider either the operational experiences of the Applicant and the wind power industry or the various mechanical controls contained within the turbines.

The Applicant has the experience of operating more than 3,400 MW of wind generated electricity and it states that the vast majority of ice shedding occurs when ice on the blades begins to thaw and then drops to the ground in the vicinity of the turbine. Exh. App. 8, p. 8. The Applicant also reports its experience that when ice is thrown from a turbine blade it usually breaks into tiny pieces and lands within three hundred feet of the turbine. Exh. App. 8, p. 8. The Applicant further asserts that ice is only thrown by the blades when it is at the tip of the blade and the blade is running at a very high rotational speed. Exh. App. 8, p. 8.

In order to prevent ice throw, the Applicant states that the turbines are outfitted with a safety control system that can sense an imbalance in the weight of the blades and adjust the pitch of the blade to slow down the rotational speed and avoid throwing ice. Additionally, if there are very heavy amounts of ice frozen to the blades the turbines will not operate at all. Exh. App. 8, p. 9; Exh. App. 1 (Application Vol. I) p. 46. The Applicant also stated that icing decreases the efficiency of the blades and results in turbine output being lower than expected for a given wind speed. Such a decrease in expected output is detected by the monitoring system and, when combined with ambient temperature low enough to allow ice formation, results in the turbine being automatically placed in its low or stopped safe mode. Transcript, March 26, 2007, p. 139. Similarly, the system will detect blade failures, placing the turbine in a safe mode and automatically shutting it down. Transcript March 27, 2007, p. 74-75.

The Applicant also employs substantial setbacks from residences and roadways as a safety factor against injuries from ice throw or blade failure. The applicant relies upon an industry standard of 1.1 times the tower height adjacent property lines or 440 feet for the Gamesa G 87 turbines. Transcript March 27, 2007, p. 76. In addition, the Applicant has entered into agreements with both Public Counsel and the Town of Lempster concerning setback distances and ice shedding conditions. Pursuant to the Town of Lempster Agreement, the Applicant has agreed that turbines will be set back: at least three times the turbine height from any non-participating land owner's occupied building; at least 1.1 times the turbine height from any non-participating landowner's property line; and at least 1.5 times the turbine height from public roads. See, Exh. Lempster C, p. 12-13. The Applicant has also agreed with Public Counsel to monitor turbine conditions to determine the presence of ice; respond with operational measures to limit ice throw; ensure that turbines are free from accumulated ice prior to restarting turbines that have been shut down due to icing; and, post warning signs alerting others to the danger of ice shedding during winter conditions. See, Exh. PC-20 p. 2-3.

At hearing, an incident of blade failure at a facility in Allegheny Ridge, Pennsylvania employing Gamesa turbines was discussed and the Applicant was directed to provide a status report on the incident, which it filed on May 18, 2007. The report indicated that the causes of the blade failure were being addressed through revisions to Gamesa's quality control measures at its manufacturing facilities and institution of a mandatory thermo graphic inspection. The Committee discussed the report at its public meeting on June 20, 2007, and determined that the Certificate of Site and Facility would include a condition that the Applicant take all commercially reasonable measures to ensure that the blade problem identified at Allegheny Ridge not impact the safe operation of the Facility.

Having considered both sides of these arguments, the Committee finds that the Applicant has shown by a preponderance of the evidence that the proposed facility will not have an unreasonable adverse effect on the public health and safety as the result of ice throw or blade fragment throw. In considering the Consolidated Intervenors' worst case theoretical situation, and weighing a number of countervailing factors including the experience of the Applicant's parent companies in operating wind farms, the operational controls that exist on the proposed turbines, the remote location of the proposed turbines and the setback agreements, the Committee concludes that the likelihood of ice throw or blade fragment throws is far less both in frequency and distance than predicted by Mr. Webb. The Committee, furthermore, adopts the conditions pertaining to setbacks and ice shedding in the Town of Lempster and the Public Counsel agreements.

**(ii.) Noise**

Determining whether a proposed facility will have an unreasonable adverse noise impact on the public health and safety can be a vexing and complex problem because noise issues have both objective and subjective aspects. The measurement of incremental increases in sound, moreover, is complicated by the presence of ambient sound and the effect of other environmental factors such as temperature. Further, there are sounds that are not noticeable to some individuals but are annoying to others.

In this case, the Applicant asserts that it has demonstrated that any noise impact from the proposed facility is not unreasonable and, in fact, will be minimal. See, Exh. App. 1 (Application Vol. I) p. 43. In support, the Applicant presents a noise assessment study for the proposed project prepared by Lloyd Pasley of Superna Energy. In determining predicted sound levels, Mr. Pasley utilized the specifications provided by the manufacturer of the wind turbines.



Mr. Pasley presents predicted sound levels in six critical locations between 26 dBA and 35.1 dBA as set forth in Table 4.1 of his study. See, Exh. App. 2, Appdx. 21, p. 11. He also provides a 5 dBA contour map illustrating the predicted sound levels through the affected areas. See, Exh. App. 2, Appendix 21, p. 12. In addition, the Applicant provided a more detailed dBA contour map illustrating the affected areas. See, Exh. App. 39. Mr. Pasley asserts that his calculations are based upon conservative assumptions and do not take into effect sound absorption due to trees, grass and vegetation, outbuildings around residences, and the fact that sound levels inside residences will be lower. However, Mr. Pasley indicates that his calculations include a factor for absorption of sound by the atmosphere, which will vary with frequency. See, Exhibit App. 2, Appdx. 21, p. 11.

In his pre-filed direct testimony, Mr. Pasley reviews various standards used in other jurisdictions. He concludes that noise levels at sensitive local receptors will not exceed 35.1 dBA nor will noise levels exceed 43 dBA at the very closest residences (excluding the home of “participating” landowners Kevin and Debra Onella). In the last submitted version of a sound contour map showing residences, all homes except that of the Onella residence, are shown outside or beyond the 45 dBA contour. Exh. App. 39. Based on noise limitation standards from various jurisdictions, Mr. Pasley concludes that the noise impacts of the proposed project will be minimal. See, Exh. App. 11, p. 3-5.

Public Counsel commissioned a review through its consultant, Epsilon Associates, of the Superna study. Although Epsilon found the Superna study incomplete in several areas, it concluded that the sound level modeling estimates for the six sensitive receptor areas were reasonable. See, Exh. PC-18, p. 2-4. Epsilon concludes that although the wind turbines may be audible at times, the expected sound levels are still very low. In fact, Epsilon concluded that the

predicted sound levels should actually be somewhat less than those predicted in the Applicant's study. In determining the effect of the predicted sound levels on the community, Epsilon relies upon a document entitled "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety" published by the United States Environmental Protection Agency, Office of Noise Abatement Control in March 1974. Exh. PC-18, p. 2-3. Epsilon also relies upon a document entitled "Guideline for Community Noise" published by the World Health Organization in 1999. *Id.* Based upon these documents, Epsilon concludes that the predicted sound levels are within acceptable ranges.

Additionally, Public Counsel and the Town of Lempster have both entered into agreements with the Applicant regarding noise impacts. The Town and Public Counsel have agreed to the following noise restrictions.

1. Audible sound from the project shall not exceed 55 dBA measured at 300 feet from any existing occupied building or at the property line if the property line is less than 300 feet from an existing occupied building.
2. Sound pressure levels shall not be exceeded for more than 3 minutes in any hour of the day.
3. If the existing ambient sound pressure level exceeds 55 dBA, the standard shall be ambient dBA level plus 5 dBA.
4. Audible sound from the project at the Goshen/Lempster school shall not exceed 45 dBA. If the ambient sound pressure level at the Goshen/Lempster school exceeds 45 dBA, the standard shall be ambient dBA plus 5 dBA.
5. The Applicant shall, using an independent qualified acoustics engineer, take sound pressure level measurements after the commencement of commercial operation at sensitive receptor locations, identified by the owner of the town including the Goshen/Lempster school, both inside and outside of the building. These post-construction noise measurements shall include, at a minimum, daytime, winter and summer seasons, nighttime after 10 p.m. and for measurements at the school periods when school is in session.
6. The Applicant must provide a report of its acoustics engineer, once available, to the town and the NH Office of the Attorney General.

7. In the event that the noise standards are exceeded by the Applicant, the project shall undertake operational measures to come into compliance.

See, Exh. Lempster C, p. 12 and Exh. PC 20, p. 2. The Applicant, the Town of Lempster and Public Counsel argue that the agreements with respect to noise restrictions reasonably limit any adverse impact resulting from noise created by the project.

The Consolidated Intervenors take a different view. They assert that the Applicant's predicted sound levels are methodologically flawed because the Applicant "incorrectly utilizes a 5 dBA per kilometer atmospheric attenuation factor to reduce projected noise levels at locations removed from the sound source" (Exh. Int. C, p. 3) and suggest, based on a NASA study, that a more appropriate atmospheric attenuation factor would be 1 dBA per kilometer due to the low frequency nature of some of the wind turbine noise. (Exh, Int D-1, Appendix 1 to prefiled testimony of Mr. Webb, see also transcript for 3-27-07 at p. 92, lines 5-8, and pages 93 & 94.) The Consolidated Intervenors also rely on the work of a Dr. VandenBerg to assert that the Applicant's attenuation factor is incorrect and to assert that the wind turbines are likely to produce a "harmonic beating" noise which is particularly annoying and dangerous to public health. The Consolidated Intervenors suggest that harmonic beating occurs when two or more sound sources such as wind turbines produce noise in a synchronous fashion and rely upon Dr. VandenBerg's work to state that the effect has been "documented both analytically and experimentally." In addition, the Consolidated Intervenors have provided a number of exhibits, including Intervenor Exhibits E-3, E-7, E-8, E-9 and E-34, which are anecdotal illustrations of complaints made by others who live in proximity to wind farms. A number of public comments along these lines have also been received by the Committee.

In order to mitigate noise from the proposed project, the Consolidated Intervenors suggest that a condition be imposed that no wind turbine shall be located within one mile of a residence, which would effectively preclude the project. Alternatively the Consolidated Intervenors suggest the following two conditions pertaining to noise.

1. At all times of the year, the applicant must either feather blades, take other operational measures, or apply effective sound mitigation improvements to nearby residences that successfully reduce indoor nighttime sound levels below 30 dBA and beat amplitude inside residences to less than 5 dBA, measured from peak height to adjacent peak low. These improvements could include requiring closed insulated windows during winter time periods to achieve the required limits. Noise mitigation which results in degraded living conditions including but not limited to higher indoor temperatures will require additional mitigation to restore living conditions to normal levels.
2. During the period from Memorial Day to Columbus Day between the hours of 10 PM and 7 AM when windows will be open, the applicant must either feather blades or take other operational measures that successfully reduce indoor sound levels below 30 dBA inside nearby residences and beat amplitude inside residences to less than 5 dBA, measured from peak height to adjacent peak low.

See, Consolidated Intervenors Brief on Sound Mitigation, p. 4

Dr. VandenBerg's article, based on a study of certain wind power projects in Europe, and other anecdotal information on other wind projects, none of which were specific to the type of turbines being proposed by Applicant and all of which may or may not have characteristics similar to the Applicant's project, do not provide a sufficient basis upon which the Committee can find that unreasonable noise levels or unreasonable noise effects will occur in Lempster. It would likewise be unsound to render a decision in reliance on the anecdotal evidence submitted by the Consolidated Intervenors that was not subject to qualification as to its source nor subject to cross-examination, and cannot be directly linked to this project. At the same time, the sound levels predicted by Superna Energy and affirmed by Epsilon, which rely upon various published standards to determine whether the predicted sound levels would unreasonably impact the local area, are instructive in considering the potential effects of increased sound levels attributable to

the proposed project but they are not entirely dispositive with respect to the issue of determining an appropriate noise standard, or predicting sound levels that residents will actually experience immediately adjacent to and within their homes.

The Committee finds, based on the record, that the project is unlikely to create the harmonic beating effect suggested by the consolidated intervenors. However, in the event the project does create such an effect, the Committee finds that such effects can be reasonably mitigated by the application of the conditions outlined below.

The Committee appreciates the fact that the Town of Lempster, Public Counsel and the Applicant have reached agreement with respect to maximum noise limitations from the project. We will incorporate those provisions into our conditions for approval of the project. However, after review, the Committee is concerned that those noise limitations could still allow unacceptable noise levels at some residences under certain conditions.

The agreements between the Town of Lempster, Public Counsel and the Applicant provide for a 55 dBA (or 5 dBA more than the ambient level, which ever is greater) noise limit from the wind turbines at the property line of nearby homeowners, or 300 feet from homes, whichever is closer. Whether the Applicant's atmospheric sound attenuation factor of 5 dBA per kilometer or Intervenor's suggested 1 dBA per kilometer factor is assumed, inasmuch as 300 feet is less than 1/10 of a kilometer, in theory, sound levels close to 55 dBA immediately outside of residences could be permissible under the agreements. Applicant's Noise Assessment notes that the typical sound level in a "Quiet Bedroom at night (no wind)" is 30 dB(A). Exh. App. 2, Appdx. 21, p. 9. Applicant's Noise Assessment further notes that "Sounds levels will be lower inside the residences; a further 10 dB(A) attenuation can be expected inside a typical residence, with open windows and if the windows are closed the attenuation is 20 dB(A) or more,

depending on the standard of glazing. (Ref. ISO 1996).” *Id.* at p. 11. Thus, if sound from the wind turbines were as high as 55 dBA immediately outside a home, then the noise in a bedroom could be as high as 45 dBA with windows open, and as high as 35 dBA with windows closed.

Public Counsel’s consultant, Epsilon Associates, Inc., in its January, 2007 report cites two generally accepted guidelines for appropriate regulatory standards for noise (See, Exh. PC 18, under 2.2.1, Criteria at p. 2-3).

The first guideline document is the “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety” (U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Washington, DC, 550/9-74-004, March 1974). This document, often referred to as the “Levels” document, identifies an Ldn of 55 dBA outdoors in residential areas as the maximum level below which no effects on public health and welfare occur due to interference with speech or other activities. This level includes a 10 dBA “penalty” for sound levels at night (10 p.m. to 7 a.m.). This level will permit normal speech communication, and would also protect against sleep interference inside a home with the windows open.

The second guideline is the “Guideline for Community Noise” (World Health Organization, Geneva, 1999). Daytime and evening outdoor living area sound levels at a residence should not exceed 55 dBA Leq to prevent “serious annoyance”, and 50 dBA Leq to prevent “moderate annoyance” from a steady, continuous noise. At night, sound levels at the outside facades of the living spaces should not exceed 45 dBA Leq so that people may sleep with bedroom windows open.

We find these guidelines instructive and, in order to assure that nearby residents are protected against sleep interference from the project, as a general matter we will require the applicant to undertake mitigation measures if sound levels at the outside facades of homes exceed 45 dBA or 5 dBA greater than ambient, whichever is greater, to ensure that interior bedroom sound levels do not exceed 30 dBA or 5dBA greater than ambient, whichever is greater, with windows closed. In addition, during summer nights when some people sleep with their bedroom windows open, we will require the applicant to undertake operational or other measures to reduce the sound level at the outside facades of homes to not more than 45 dBA or 5

dBA above ambient, whichever is greater, if installation of a home mitigation package is not otherwise sufficient to reduce project noise inside bedrooms to 30 dBA or 5 dBA above ambient sound levels, whichever is greater, with windows open.

Therefore, the Committee will add the following four conditions:

1) If sound levels generated by the project immediately outside any residence of a non-participating homeowner are found to be: a) more than the greater of 45 dBA or 5 dBA above the ambient sound level (the background sound level measured with wind turbine blades locked and not operating ), or b) generating a measurable harmonic or beating noise effect in a short cycle that fluctuates with an amplitude of 5 dBA or more, both as measured at any exterior facade of the home, then the Applicant shall, within 90 days of confirmation of such exceedances and, at its option, either complete actions to reduce project generated noise below the above specified sound levels on a going forward basis, or offer such homeowner, at Applicant's expense, an installed package of sound mitigation measures to ensure that the sound level within the home is reduced to less than 30 dBA or 5 dBA above interior home ambient sound levels, whichever is greater, and/or that such harmonic or beating noise effect is reduced to less than 1 dBA in amplitude, both as measured with doors and windows closed. Such noise mitigation measures shall be consistent with generally accepted sound attenuation practices for homes and should include, but not be limited to, well sealed interior or exterior laminated glass storm windows, or at Applicant's option, Energy Star rated laminated glass insulated replacement windows; weather stripping and air sealing of any openings; insulated doors; and the addition of wall or attic insulation, such as injected foam, if feasible and necessary.

2) If sound levels generated by the project immediately outside any affected residence of a non-participating homeowner are found to be more than the greater of 45 dBA or 5 dBA above

the ambient sound level as measured at any exterior facade of the home, at any time between 10 p.m. and 7 a.m., during the months of June, July or August, then the Applicant shall, in addition to the mitigation measures described above, offer such non-participating homeowner, at Applicant's expense, installed Energy Star rated room air conditioners for each bedroom in the home, or, at the homeowner's option, an installed whole-house fan with automatically closing well sealed and insulated doors. If the homeowner accepts such mitigation measures and upon further complaint the sound level generated by the project is found to be greater than 30 dBA or 5 dBA above ambient levels, whichever is greater, at the sleeping area within any bedroom of the home, measured with windows open, and there continues to be sound levels generated by the project as measured at any exterior facade of the home more than the greater of 45 dBA or 5 dBA above the ambient sound level, at any time between 10 p.m. and 7 a.m., during the months of June, July or August of summers following the acceptance of such mitigation measures, then the Applicant shall undertake operational or other measures to mitigate and reduce sound levels on an ongoing basis to no greater than 45 dBA or 5 dBA above ambient levels measured at any exterior facade of the home.

3) The standards referenced above that trigger the need for mitigation shall be considered to be exceeded if an independent qualified acoustics engineer measures such an exceedance for more than three minutes in any hour.

4) The applicant shall provide the Town of Lempster with a decibel meter of sufficient quality to allow an initial response to homeowner complaints regarding the noise allegedly created by the turbines. If the Board of Selectmen of the Town of Lempster certifies in writing to the Applicant that they find any complaint of a violation of these requirements to be well founded in their judgment, then the Applicant shall pay for the reasonable cost of an



investigation of the complaint by an independent qualified acoustics engineer. Homeowners, whether residents of Lempster or other towns, may also engage their own consultants or engineers and bring complaints directly to the Applicant for investigation and resolution consistent with the complaint resolution provisions of the Town of Lempster Agreement.

Having considered the evidence regarding the potential noise effects of the proposed facility, the Committee finds that construction and operation of said facility will not have an unreasonable adverse effect on public health and safety due to noise so long as the foregoing conditions are made part of the Certificate of Site and Facility.

### **(iii.) Fire/Lightning Strikes and Other Emergencies**

In considering whether the proposed facility will have an unreasonable adverse effect on the public health and safety, the Committee has considered the effects of lightning strikes, fires and other site specific emergencies.

As installed, the proposed turbines will contain a “total lightning protection” system that complies with standards promulgated by the International Electrotechnical Commission (IEC). Exh. App. 1 (Application Vol. I) p. 47. The system conducts lightning from both sides of the blade tip down to the root joint and into the nacelle, tower and earthing system. Additionally, the turbine’s blade monitoring system provides documentation of all critical lightning events. Exh. App. 1 (Application Vol. I), p. 9; Exh. App. 8 p. 9. These operational safety features ensure that the risk of lightning strikes is not unreasonable.

The turbines contain relatively few flammable components but the Applicant does admit that a turbine fire, although extremely rare, is possible. Exh. App. 1 (Application Vol. I), p. 49. The turbines contain internal fire safety systems. *Id.* Potential causes of fire such as lightning strikes, short circuits, or other internal malfunctions are sensed by the turbine monitoring system,

which can shut down the turbine and alert appropriate maintenance personnel. Exh. App. 1 (Application Vol. I), p. 49; Exh. App. 8, p. 11.

A turbine fire could conceivably occur at extreme heights, in which case the only available emergency response may be to monitor the fire until it has burned itself out. Exh. App. 8 at p. 11. Under such circumstances, it is necessary to ensure that the fire remains under control and does not spread to structures on the ground or to the forested areas. This requires a prompt response by both employees of the Applicant and local emergency responders. Cooperation and coordination between the Applicant and the Town of Lempster's emergency personnel is subject to the Town of Lempster Agreement, which calls for the establishment of protocols that will provide emergency response access to the turbines within 30 minutes of alarm or call for emergency response. In addition, the Applicant has agreed to cooperate with the Town of Lempster in determining the need for, and the purchase of, adequate emergency response equipment.

The Town of Lempster Agreement also contains a number of additional provisions concerning training, equipment and cooperation, which will help mitigate the chances of a destructive fire event. Once the protocols, procedures and other criteria envisioned by the Town of Lempster Agreement are in place, the Committee concludes that the proposed facility will not pose an unreasonable adverse effect to public health or safety due to fire or lightning concerns. The Committee will require the Applicant to abide by the terms and conditions contained within the Town of Lempster Agreement, and commercial operation of the turbines shall not commence until all provisions contained within the agreement with regard to lightning strike, fire and emergency response are met.

**(iv.) Public Access**

The record indicates that the landowner who will be leasing the bulk of the project site to the Applicant has, in the past, permitted public access to their property for recreational purposes such as hunting and snowmobiling. Exh. App. 1 (Application Vol. I), p. 67. At a public hearing held on June 21, 2006, the primary landowners filed a letter explaining that they had acquired approximately 1,500 acres and had kept it open for hunters, hikers, snowmobilers and four-wheelers. Transcript, June 21, 2006, p. 199-201. The landowners have also indicated that they would prefer to continue to allow access to the unaffected portions of their property after construction of the turbines.

In order to restrict public access to the turbines, structures and supporting equipment, the Applicant, Public Counsel and the Town of Lempster have entered into agreements which, in part, contain conditions governing access and warning signs. See Proposed Certificate Conditions Pursuant to Agreement of Counsel for the Public and the Applicant (Public Counsel Agreement), Exh. PC 20, p.3; Exh. Lempster C, p. 4. The conditions set forth in the agreements require the Applicant to:

1. Gate and lock entrances to the project site; (PC)
2. Ensure that turbines are not climbable up to 15 feet above the ground; (PC)
3. Lock all access to turbine and other equipment to prevent entry by non-authorized persons; (PC)
4. Install clearly visible warnings signs concerning voltage at the base of all facilities; (PC and Town)
5. Identify any guy wires and guy wire anchor points with colored objects; and (Town)
6. Post visible warning signs related to storm and winter conditions no less than 300 feet from each turbine base. (Town)

In addition, the applicant has agreed to carry general liability insurance, including bodily injury and property damage coverage, with limits of at least \$10 million dollars. See Exh. Lempster C, p. 4.

The Committee finds that the aforementioned conditions will assist in avoiding unauthorized access to the proposed Facility and will adopt them. The Committee finds that the proposed facility, subject to the conditions set forth herein, does not present an unreasonable adverse effect on the public health and safety from the standpoint of public access to the facility.

**(v.) Construction**

The Committee recognizes that, during the construction period of the proposed facility, certain activities may affect the public safety. Specifically, the Committee recognizes that the Applicant may have to undertake blasting measures. Indeed, the agreement with the Town of Lempster includes certain provisions pertaining to blasting. At this point in time, it is not possible to know the full extent of the amount of blasting that may be necessary during construction. Thus, the Committee will require that the Applicant file for and obtain all necessary permits from the Department of Safety and/or the Department of Transportation (DOT) as may be necessary to conduct blasting activities. The Applicant shall pay all fees and file all necessary paperwork and applications with said agencies and obtain necessary approvals prior to undertaking blasting activities. In this regard, the Committee hereby delegates to the Department of Safety and DOT the authority to designate all means, methods, and criteria for blasting activity at the proposed site, as well as the transportation of explosive materials to the site.

In addition, the Committee recognizes that increased heavy equipment traffic will occur during the course of both construction and decommissioning of the proposed facility, which may

trigger DOT jurisdiction. The Applicant and its agents, contractors and subcontractors shall comply with all rules and regulations concerning trucking, overweight loads, and other matters pertaining to transportation along state municipal highways. The Applicant shall file applications for all necessary permits as would normally be required by DOT. The Applicant shall pay all fees pertaining to said applications and permits, as well as excise taxes, fines or other monies owed pursuant to law stemming from transportation activities. Further, the Committee hereby delegates to DOT the authority to specify the means, criteria, methods and processes to be used to regulate trucking, overweight loads, and any other matter within the jurisdiction of DOT to and from the proposed project site during its construction period and during decommissioning.

#### **4. Consistency with State Energy Policy**

In order to issue a certificate of site and facility, the Committee must find that the operation of the proposed facility is consistent with the state energy policy as established in RSA 378:37. See, RSA 162-H:16 IV(d). RSA 378:37 states that it is the energy policy of this state:

To meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; the protection of the safety and health of the citizens, the physical environment of the state, and the future supplies of non-renewable resources; and consideration of the financial stability of the state's utilities.

The Applicant submits that the proposed facility is consistent with the energy policy of the state because it will produce needed electricity; add to the diversity of the generation portfolio in the state; will not have adverse environmental effects; and will not burn fossil fuels. See, Exh. App. 1 (Application Vol. I), p. 30-33. Additionally, the Applicant asserts that the proposed project maintains an "appropriate balance between the state's environment and the

need for new renewable energy facilities that can be constructed without undue delay and in conformance with sound environmental considerations.” See, Exh. App. 5, p. 6. The Applicant points out that the regional system operator, ISO-New England, has encouraged investment in new power generation and has encouraged greater diversity in the portfolio of electricity generating resources. See, Exh. App. 5, p. 6. The Applicant also contends that wind power is more economic than other forms of generation, will benefit system reliability, and limit vulnerability to high prices from fossil fuels such as natural gas. See, Exh. App. 5, p. 6-7. The Applicant also asserts that ISO-New England has indicated that significant additional renewable energy projects are needed in the region to meet these requirements. See, Exh. App. 5, p. 7. Finally, the Applicant asserts that construction and operation of the facility will contribute toward achieving the goal of obtaining 25% of the state’s energy needs from renewable sources by the year 2025, a proposition that has been promoted by Governor Lynch and codified in recently passed legislation. See, 2007 Laws of New Hampshire, Chapter 26, (HB 873).

Public Counsel and the Town of Lempster support the position of the Applicant that the proposed facility is consistent with the state’s energy policy. The Consolidated Intervenors, however, disagree with the Applicant’s position. They point out that wind energy is an intermittent resource and suggest that construction of the proposed project will not relieve the region’s need for electricity due to its size and their doubts about the achievable capacity of the project. See, Exh. Lin. A, p. 13. The Consolidated Intervenors, meanwhile, do not dispute the need for power in the region. See, Exh. Lin. A, p. 13; see, Exh. Int C, p. 1-2. Mr. Webb nevertheless describes the proposed project as “an empty symbolic gesture preying on a widespread and heartfelt desire by the people to solve the real problems of global warming and an over-reliance on fossil fuels.” See, Exh. Int. C, p. 2.

Having reviewed the evidence, the Committee acknowledges that the proposed project is a small step in achieving the New England region's need for greater diversity in the generation of electric power but finds that the construction and operation of the proposed facility is an important step nonetheless. Similarly, the Committee concludes that such is the case even if the resulting capacity factor for the project is lower than the range predicted by the Applicant and nearer that cited by the Consolidated Intervenors. Further, the Committee finds that the proposed project contributes to fuel diversity without appreciable harm to the health and safety of the residents of the state or the physical environment, and that it will not emit air pollutants or water pollutants. The Committee also finds that the project, although it relies upon an intermittent energy source, will not adversely affect system reliability but can contribute to the reliability of the electric transmission system. In addition, the Committee finds that the generation cost of wind power is a reasonable low cost option inasmuch as wind generation facilities, given the availability of investment tax credits and renewable portfolio requirements, can be built and operated at a relatively reasonable cost and brought on line in a comparatively short time frame. Based upon these findings, the Committee concludes that the construction and operation of the proposed facility is consistent with the state energy policy as established in R.S.A. 378:37. The Committee also finds that the construction and operation of the proposed facility will contribute to meeting the goal of obtaining 25% of state energy needs from renewable sources by the year 2025.

#### **D. Town of Goshen**

The Committee has considered separately the issues pertaining to the Town of Goshen, New Hampshire. While the Town has intervened in these proceedings, it takes no position with respect to the certification of the wind turbines themselves. It opposes, however, the rewiring of

the 34.5 kV electric distribution line through the village core and the resulting installation of larger utility poles and additional cable and wires running along those poles. The Town argues that this portion of the project unduly interferes with the orderly development of the region, and will have an unreasonable adverse effect on aesthetics and historic sites. The Town also complains that the utility pole replacement and additional wires and cables contravene its master plan, and zoning and building ordinances.

The Applicant contends that the sole authority for the erection and installation of utility poles, structures, conduits, cables or wires upon state maintained highways rests with DOT pursuant to RSA 231:161. The Applicant asserts that the existing utility poles and wires are substandard and it argues that the upgrade in the distribution line will advance the orderly development of the region by providing a source for a future electrical substation planned by another electric distributor, New Hampshire Electric Cooperative. See, Exh. App. 29, p. 5-6; see Transcript, April 9, 2007, pp.83-84 and 59-63.

The proposed project will require PSNH to replace virtually all of the utility poles within the Town of Goshen along state Route 10. The majority of the poles presently in the Goshen village are 35 feet tall. PSNH will replace those poles with either 45-foot or 50-foot replacement utility poles. The new utility poles will carry additional cabling and wire necessary to guy the poles and to transfer 3-phase power. See, Exh. App. 32. Although such poles normally have a cross arm, PSNH has proposed the elimination of cross arms and use of a device called a Hendricks Pin to guide the 3-phase wire through the Goshen village core. The use of the Hendricks Pin will alleviate some of the aesthetic concerns that can arise from wooden cross arms on the utility poles but, if a 3-phase electric customer were to migrate to the area, the addition of cross arms may be necessary to serve the customer. To the extent that PSNH



replaces poles currently, they are generally replaced with 45 or 50-foot poles, which are the current standard.

At the outset, the Committee recognizes that the Applicant, PSNH and the Town of Goshen have explored alternatives for the rebuilt distribution line to proceed, including a new right-of-way on the opposite side of the Sugar River from the core of Goshen village, and a route that would take the distribution line behind the historic buildings in the core of the Goshen village. The Town, moreover, has argued that the Applicant should run the distribution line entirely underground through the village core. In the event an alternative is not selected, the Town proposed “establishment of a mitigation fund to be held by the Town for the improvement of the village core.” See, Goshen Brief, May 3, 2007, p.31. Despite the search for alternatives, it is clear that the most practical, cost effective and orderly way to manage the distribution line is to use the existing right of way, remove the substandard poles and replace them with poles that meet current standards for 3-phase power and telecommunication needs.

The Committee notes that there are presently above ground distribution lines running through the Town of Goshen along Route 10 and many of the poles are old and show signs of wear and tear. See Exh. Goshen A. Additionally, many of the poles are leaning in haphazard directions and the cable or wires interfere with a view of the historic structures in the Goshen village core. *Id.* Thus, the Committee finds that the proposed upgrade to the distribution line will not have an unreasonable adverse effect on aesthetics but, arguably, could be an aesthetic improvement. The Committee also notes that the replacement of the existing poles with modern utility poles creates the possibility for additional cable, broadband, and telecommunications which are not presently accommodated. Finally, a change in height to the poles or the additional

cable wire does not *per se* create an unreasonable impact either on the orderly development of the village of Goshen or on the aesthetics of the village.

In reaching this conclusion, the Committee makes the following observations about the master plan and zoning ordinances of the Town of Goshen. While the plan and ordinances are not controlling in this instance, the Committee nevertheless notes its interpretation that the proposed upgrade of the distribution line is not inconsistent with the master plan for the Town of Goshen or its zoning ordinance. A utility pole is not part of the definition of a “building” within the meaning of Goshen zoning ordinances. See, Transcript, April 9, 2007, p. 183. The Goshen zoning ordinance contains a number of exceptions for church towers, barns and silos, and wireless service facilities. See, Transcript, April 9, 2007 p. 159-160; see also, Exhibit Goshen E, (Zoning Ordinance Section 3D.3; Section 13 X.I, X.II; Section III, D.3.) The Committee recognizes the concern of the Town of Goshen in maintaining its rural character, but the evidence does not support a finding that the upgrade to the distribution line either undermines that rural character or violates the planning tools enacted in the Town of Goshen.

The Committee also notes that at its public meeting on May 7, 2007, it directed Committee counsel to meet with the Applicant, PSNH and Town officials to ascertain whether specific adjustments to pole locations and configurations in the village core could be arranged. Counsel reported to the Committee at the public meeting on June 20, 2007, that a meeting was held among the parties on June 7, 2007 in Goshen. He indicated that accommodations were reached in three cases within the village core.

Assuming *arguendo* that the issues raised by the Town of Goshen are properly before the Committee, the Committee finds, having given due consideration to the views of the Town of Goshen, that the project, to the extent it requires the upgrade of the distribution lines through the

Town of Goshen, does not unduly interfere with the orderly development of the region.

Likewise, the Committee finds that the proposed project does not have an unreasonable adverse impact on aesthetics or historic sites stemming from the upgrade of the distribution line through the Town of Goshen.

## **VI. CONCLUSION**

The Legislature has declared that it is essential to maintain a balance between the environment and the need for new energy facilities or power sources. In furtherance of its declared purpose, the Legislature has prescribed, in RSA Chapter 162-H, a detailed procedure to be followed by the Site Evaluation Committee when considering an application for a certificate of site and facility and described specific findings that the Committee must make before it can issue a certificate.

In this proceeding, the Committee has conducted an open and inclusive process during which it heard a full range of opinions on how best to achieve the balance between the environment and the need for the proposed wind facility. In addition to a number of preliminary hearings and an informational hearing in Lempster, the Committee held four days of evidentiary hearings, heard testimony from 14 witnesses, entertained briefs from the parties and conducted two days of deliberations. The Committee has closely examined the evidence and arguments of the parties, and weighed and considered public input to reach the results articulated in this Order.

The Committee has made the requisite findings, “having considered available alternatives and the environmental impact of the site.” Subject to the conditions described herein, the Committee has determined that: the Applicant has adequate financial, technical and managerial capabilities; the project will not interfere with the orderly development of the region; the project

will not have an unreasonable adverse effect on the environment; and the project is consistent with state energy policy.

**Summary of Disposition of Lisa Linowes' Requests for Findings**

The Committee has reviewed the record in this matter and issued a comprehensive written decision addressing the application by Lempster Wind, LLC for a Certificate of Site and Facility. The decision addresses all of the facts and issues raised in the requests for findings made by Lisa Linowes. Nevertheless, the Committee, during its deliberative session on June 20, 2007, ruled individually on each of Ms. Linowes' numbered requests for findings contained in her May 3, 2007 Final Brief and Proposal for Decision.

The Committee ruled as follows:

Proposed findings numbered 1, 2, 4, 6, 8, 16, 20, 23, 26 are granted.

Proposed finding numbered 3 is granted in part and denied in part. The access roads are not entirely on the summit and ridgelines, and the record does not reflect a rotor sweep pf 1.5 acres.

Proposed finding numbered 23 is granted as an accurate statement of what a portion of the wetlands permit states.

Proposed finding numbered 24 is granted in part and denied in part. The request accurately quotes a portion of Mr. McCarthy's letter to Public Counsel. However, the Committee found that the U.S. Fish and Wildlife Service guidelines are recommendations and not requirements. The Committee also found that the Applicant has conducted sufficient wildlife studies to demonstrate that a full 3 years of data is unnecessary and that the project is unlikely to have an unreasonable adverse effect on wildlife including avian species, bats and mammals.

Proposed findings numbered 5, 9, 11, 14, 15, 18, 19, 25, are denied.

Proposed finding numbered 7 is denied as an incomplete description of the proposal.

Proposed finding numbered 10 is denied as an incomplete description of the Applicant's testimony and the information presented to the Committee.

Proposed finding numbered 12 is denied in part. It is granted to the extent that it accurately restates a portion of what the Lempster Selectmen wrote in the December 2005 letter. However, the issuance of a Certificate of Site and Facility is the statutory mechanism to ensure that the energy facility will not have unreasonable adverse effects.

Proposed finding numbered 13 is denied as irrelevant to the appropriate analysis.

Proposed finding numbered 17 is denied because it is irrelevant given the facts in the record.

Proposed finding numbered 21 is denied. The Applicant conducted extensive studies and the presence of Bicknell's Thrush or any other endangered species or species of conservation concern has not been documented.

Proposed finding numbered 27 is denied. The Committee do not agree that the Applicant has understated the clearing that will occur in the construction of the turbines or the access roads.

Proposed finding numbered 28 is denied and the Committee finds no inconsistency between Mr. Roy's statements on direct or cross-examination.

STATE OF NEW HAMPSHIRE  
SITE EVALUATION COMMITTEE

**Docket No. 2006-01**  
**Application for Certificate of Site and Facility for the Lempster Mountain Wind  
Power Project, Lempster, Sullivan County New Hampshire.**

**ORDER**

**CERTIFICATE OF SITE AND FACILITY**

WHEREAS, the Applicant, Lempster Wind, LLC, filed an Application for a Certificate of Site and Facility to site, construct, and operate a wind powered electric generation facility designed for operation at 24 Megawatts (MW) to be located on private property along the ridge line of Lempster Mountain in Lempster, Sullivan County, New Hampshire. The proposed site is bounded on the North by the Goshen town line and Lempster Mountain Road to the South. The proposed site includes land identified by the Town of Lempster Tax Map as Map/Parcel: 6-132,000; 9-175,111; 8-530,094; 6-218,115; 6-034,044; and,

Whereas, the proposed facility will include twelve (12) Gamesa G87 wind turbine generator units each of which is rated at a capacity of 2.0 MW. Each turbine generator unit will contain a rotor measuring 285 feet in diameter, made up of three individual blades of 139 feet each in length; a nacelle that attaches to the rotor and contains a gearbox, low and high speed shafts, generator and other controls; and, a tubular structural steel tower, in four sections, with an approximate height of 255.9 feet. The gross weight of each turbine generator unit will be approximately 303 tons, including the rotor hub (38 tons), nacelle (65 tons) and tower (200 tons); and,

Whereas, the proposed facility also includes access roads, a metering station, and an interconnection point with the Public Service Company of New Hampshire 34.5 kV distribution line at the intersection of Bean Mountain Road and Nichols Road in Lempster; and,

Whereas, the Committee has held a number of public meetings and hearings regarding the Application including a Public Informational Hearing pursuant to R.S.A. 162-H: 10 on October 30, 2007 and adversarial proceedings on March 26, 27, 28 and April 7, 2007, to hear evidence regarding the Application; and,

Whereas, the Committee has received and considered comments from the public concerning the Application; and,

Whereas the Committee has considered available alternative sites and fully reviewed the impact of the site and all other relevant factors bearing on whether the objectives of R.S.A. 162-H would be best served by the issuance of the certificate; and,

Whereas the Committee finds that the Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in continuing compliance with the terms and conditions of this Certificate; and,

Whereas the Committee finds that the proposed facility will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies; and,

Whereas the Committee finds that the proposed facility will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety; and,

Whereas the Committee finds that the siting, construction and operation of the proposed facility is consistent with the state energy policy established in R.S.A. 378:37.

NOW THEREFORE, it is hereby ORDERED that the Application of Lempster Wind LLC is approved subject to the conditions set forth herein and this Order shall be deemed to be a Certificate of Site and Facility pursuant to R.S.A. 162-H: 4; and it is,

Further Ordered that the Site Evaluation Committee's Decision, dated June 28, 2007, and conditions contained therein, are hereby made a part of this Order; and it is,

Further Ordered that the Applicant may site, construct and operate the facility as outlined in the Application subject to the terms and conditions of the Decision and this Order; and it is,

Further Ordered that this Certificate is not transferable to any other person or entity without the prior written approval of the Committee; and it is,

Further Ordered that this Certificate is conditioned on the present ownership structure of the Applicant, which is wholly owned by Iberdrola S.A. through subsidiary companies, and neither the Applicant, nor the Applicant's assets shall be transferred by sale or other method to any other person or entity without the prior written approval of the Committee. In the event of an unapproved sale, this Certificate shall be null and void; and it is,

Further Ordered that the Applicant shall provide immediate notice to the Committee in the event that the Applicant or any of its parent companies shall file a bankruptcy or insolvency petition in any jurisdiction, foreign or domestic; and it is

Further Ordered, that all permits and/or certificates recommended by the New Hampshire Department of Environmental Services including the Standard Dredge and



Fill Permit, the Alteration of Terrain Permit (subject to re-design for a 25 year storm event) and the Section 401 Water Quality Certificate shall issue and this Certificate is conditioned upon compliance with all conditions of said permits and/or certificates which are appended hereto as Appendix I; and it is,

Further Ordered, that the New Hampshire Department of Environmental Services is authorized to specify the use of any appropriate technique, methodology, practice or procedure associated with the conditions of the Standard Dredge and Fill Permit, the Alteration of Terrain Permit and the Water Quality Certificate including the authority to approve minor modifications to said permits and certificates; and it is,

Further Ordered that the Agreement between Public Counsel and the Applicant, attached as Appendix II, shall be a part of this Order and the Conditions contained therein shall be conditions of this Certificate; and it is,

Further Ordered that the Agreement between the Applicant and the Town of Lempster, attached as Appendix III, shall be a part of this Order and the conditions contained therein shall be conditions of this Certificate; and it is,

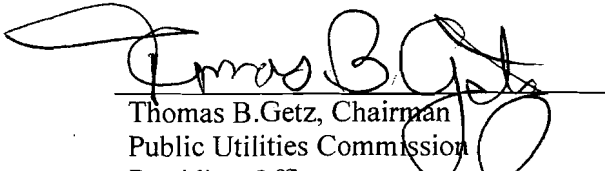
Further Ordered that the Additional Conditions Pertaining to Noise, attached as Appendix IV, shall be a part of this Order and shall be conditions of this Certificate; and it is,

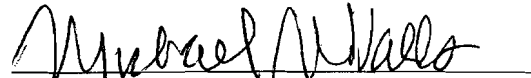
Further Ordered, that the Applicant, as a condition of this Certificate shall continue to consult with the Division of Historic Resources and shall complete a Phase 1-a and appropriate Phase 1-b archeological surveys and shall report all findings of historic or cultural significance to the Division of Historic Resources and the Committee pursuant to the terms of the Decision; and it is,

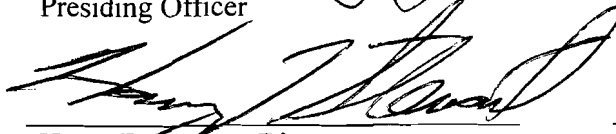
Further Ordered, that to the extent that blasting may be necessary in the construction or decommissioning of the facility the Applicant shall comply with all rules and regulations for blasting and the transportation of explosive materials and use of state and local thoroughfares as promulgated by statute or the regulations of the Department of Safety and the Department of Transportation. The Department of Safety and the Department of Transportation are each delegated the authority to specify the use of any appropriate technique, methodology, practice or procedure associated with blasting, transportation of explosives or other heavy loads which shall occur during the construction or decommissioning of the facility; and it is,

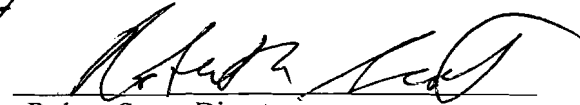
Further Ordered that all Conditions contained in this Certificate and in the Decision shall remain in full force and effect unless otherwise ordered by the Committee.

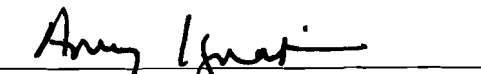
By Order of the Site Evaluation Committee this twenty-eighth day of June, 2007.

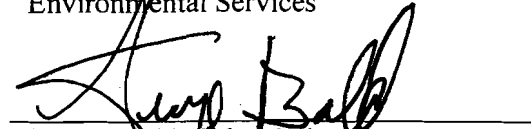
  
Thomas B. Getz, Chairman  
Public Utilities Commission  
Presiding Officer

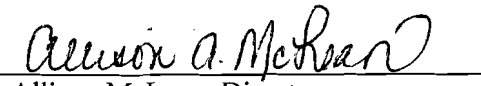
  
Michael J. Walls, Asst. Commissioner  
Department of Environmental Services

  
Harry T. Stewart, Director  
Water Division, Department of  
Environmental Services

  
Robert Scott, Director  
Air Resources Division, Department of  
Environmental Services


  
Amy Ignatius, Director  
Office of Energy & Planning

  
George Bald, Commissioner  
Department of Resources & Economic  
Development

  
Allison McLean, Director  
Division of Parks, Department of  
Resources & Economic Development

  
Philip Bryce, Director  
Division of Forest & Lands, Department  
of Resources & Economic Development

  
Graham Morrison, Commissioner  
Public Utilities Commission

  
Clifton C. Below, Commissioner  
Public Utilities Commission

  
Michael Harrington, Staff Engineer  
Public Utilities Commission

## **Appeals Process**

Any person or party aggrieved by this decision or order may appeal this decision or order to the New Hampshire Supreme Court by complying with the following provisions of RSA 541

**R.S.A. 162-H: 11 Judicial Review.** – Decisions made pursuant to this chapter shall be reviewable in accordance with RSA 541.

**R.S.A. 541:3 Motion for Rehearing.** - Within 30 days after any order or decision has been made by the commission, any party to the action or proceeding before the commission, or any person directly affected thereby, may apply for a rehearing in respect to any matter determined in action or proceeding, or covered or included in the order, specifying in the motion all grounds for rehearing, and the commission may grant such rehearing if in its opinion good reason for the rehearing is stated in the motion.

**R.S.A. 541:4 Specifications.** - Such motion shall set forth fully every ground upon which it is claimed that the decision or order complained of is unlawful or unreasonable. No appeal from any order or decision of the commission shall be taken unless the appellant shall have made application for rehearing as herein provided, and when such application shall have been made, no ground not set forth therein shall be urged, relied on, or given any consideration by the court, unless the court for good cause shown shall allow the appellant to specify additional grounds.

**R.S.A. 541:5 Action on Motion.** – Upon the filing of such motion for rehearing, the commission shall within ten days either grant or deny the same, or suspend the order or decision complained of pending further consideration, and any order of suspension may be upon such terms and conditions as the commission may prescribe.

**R.S.A. 541:6 Appeal.** Within thirty days after the application for a rehearing is denied, or, if the application is granted, then within thirty days after the decision on such rehearing, the applicant may appeal by petition to the supreme court.

Appendix I  
Certificate of Site and Facility

Department of Environmental Services  
Permits and Conditions

- Attachment 1: Standard Dredge and Fill Permit
- Attachment 2: Alteration of Terrain Permit
- Attachment 3: Section 401 Water Quality Certificate

## ATTACHMENT 1

### APPLICATION OF LEMPSTER WIND LLC

### WETLANDS PERMIT APPLICATION: DEPARTMENT OF ENVIRONMENTAL SERVICES RECOMMENDATION, FINDINGS AND CONDITIONS

#### **RECOMMENDATION:**

That the New Hampshire Energy Facility Site Evaluation Committee pursuant to RSA 162-H, approve the proposal to dredge and fill 1,472 square feet of palustrine forested wetlands to construct approximately five (5) miles of access roads, electric cable conduit and service pads for twelve (12) wind turbines.

#### **RECOMMENDED FINDINGS:**

1. The project is classified as a Minimum Impact Project per NH Administrative Rule Env-Wt 303.04(f), as wetland impacts are less than 3,000 square feet.
2. On April 8, 2005, DES held a pre-application meeting with Community Energy, Inc. and their agents to discuss the proposed project and methods of avoiding permanent wetland impacts.
3. On March 28, 2006, DES received a Standard Dredge and Fill application that proposed impacting 4,375 square feet of wetlands, which includes 151 linear feet of stream impact, for roadway construction with 10 wetland crossings.
4. On April 5, 2006, DES issued a "Notice of Administrative Completeness" letter to the applicant and their agent.
5. In a letter dated April 19, 2006, the Lempster Conservation Commission stated that Lempster Wind LLC is meeting their requirements as needed at this time, but that they are concerned with the disturbance of wetlands in this area of this of the project. In addition, the letter stated there is still concern on sensitive species and are waiting for surveys from NH Natural Heritage Bureau, NH Fish & Game, and NH Division of Historical Resources.
6. In a letter dated June 6, 2006, the Army Corps of Engineers stated that they have reviewed the application and concluded that the project is ineligible for authorization under the NH Programmatic General Permit because US Fish & Wildlife Service has expressed concerns about the potential impact of the project on migratory birds and endangered species.
7. On June 19, 2006, DES issued a "Request for More Information" letter to the applicant and their agent to address questions and concerns that were found during the technical review of the application.
8. On July 7, 2006, DES received revised plans and application that responded to concerns raised in the DES "Request for More Information" letter.

9. On July 27, 2006, DES staff conducted a site inspection of the subject property to view wetland areas and other natural resources within the project vicinity. A few wetland areas were found within close proximity to the proposed roadway that were not previously identified on the plans. The applicant agreed to revise the plans accordingly.
10. In a letter dated August 31, 2006, an abutter wrote to express concerns about the potential environmental impact on the area surrounding the proposed project and specifically on their property. In addition, the abutter requested that DES hold a public hearing to allow citizens an opportunity to express their concerns.
11. In a letter dated September 15, 2006, the SEC's counsel notified DES that the Committee had received an application for the proposed wind powered electric generation project and that the letter is to inquire whether or not the applicant supplied DES with sufficient information to undertake our regulatory authority.
12. On September 29, 2006, DES received revised plans and application from the applicant to respond to additional comments and concerns raised by DES, USFWS, ACOE, and the Lempster Conservation Commission. The revisions include a change in proposed wetland impact from 4,375 square feet (impacting 151 linear feet of streams) to 5,126 square feet (impacting 136 linear feet of streams); however full-sized plans were not yet submitted.
13. On November 13, 2006, DES received an email from Jeff Keeler of Lempster Wind, LLC explaining that revised plans had not been submitted as they are working on possible changes to the roadway alignment based on comments from the Army Corps of Engineers.
14. On February 7, 2007, DES, NHF&G and USFWS met with the applicant and their agents to discuss wildlife issues as well as results from bat and bird surveys that were conducted on-site.
15. On March 1, 2007, DES received revised plans and application showing that the road had been realigned to avoid all but one wetland crossing. The revised plans propose a total of 1,470 square feet of wetland impact for one road crossing at "Wetland W10"; therefore, the applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Rule Env-Wt 302.03.
16. The need for the proposed impacts has been demonstrated by the applicant per Rule Env-Wt 302.01.
17. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(b) Requirements for Application Evaluation, has been considered in the design of the project.
18. DES Wetlands Bureau staff screened the project through a GIS database for exemplary natural communities, sensitive plant species, and state/federal threatened and endangered species. DES found that there are no such species/communities known to exist within the project vicinity.

19. The project is classified as a Minimum Impact Project; therefore, the project does not have significant environmental impact as defined by Rule Env-Ws 101.83.
20. Public hearing is not required with the finding that the revised project plans will not have significant impacts on the resources protected under RSA 482-A and that the wetland impact area is not of special value from a local, regional, or state perspective as defined by Rule Env-Wt 101.87. In addition, public hearings are being held by the SEC to allow citizens the opportunity to comment on the overall project.

**RECOMMENDED PROJECT SPECIFIC CONDITIONS:**

1. All work shall be in accordance with revised plans by Clough Harbour & Associates, LLP dated February 23, 2007, as received by the Department on March 1, 2007.
2. Any further alteration of areas that are within the jurisdiction of the DES Wetlands Bureau will require a new application and further approvals by the Bureau.
3. This approval is contingent on approval by the DES Alteration of Terrain Program (formerly known as Site Specific Program).
4. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.
5. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
6. Culvert outlets shall be protected in accordance with the DES Best Management Practices for Urban Stormwater Runoff Manual (January 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August 1992).
7. Proper headwalls shall be constructed within seven days of culvert installation.
8. Within three days of final grading in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
9. Where construction activities have been temporarily suspended within the growing season, all exposed soil areas shall be stabilized within 14 days by seeding and mulching.
10. Where construction activities have been temporarily suspended outside the growing season, all exposed areas shall be stabilized within 14 days by mulching and tack. Slopes steeper than 3:1 shall be stabilized by matting and pinning.
11. The contractor responsible for completion of the work shall utilize techniques described in the DES Best Management Practices for Urban Stormwater Runoff Manual (January, 1996) and the Stormwater Management and Erosion and Sediment

Control Handbook for Urban and Developing Areas in New Hampshire (August, 1992).

**RECOMMENDED GENERAL CONDITIONS:**

12. A copy of this approval shall be posted on site during construction in a prominent location visible to inspecting personnel;
13. This approval does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
14. The DES Wetlands Bureau shall be notified upon completion of work;
15. This approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required;
16. Transfer of this approval to a new owner shall require notification to and approval by the Department;
17. This approval shall not be extended beyond the current expiration date.
18. This project has been screened for potential impacts to known occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This approval does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.
19. The permittee shall coordinate with the NH Division of Historic Resources to assess and mitigate the project's effect on historic resources.



## ATTACHMENT 2

### **TERRAIN ALTERATION: DEPARTMENT OF ENVIRONMENTAL SERVICES RECOMMENDATION, FINDINGS AND CONDITIONS**

#### **RECOMMENDATION:**

That the New Hampshire Energy Facility Site Evaluation Committee pursuant to RSA 162-H, approve the proposal to disturb approximately 25 acres of land to construct approximately five (5) miles of access roads, electric cable conduit and service pads for twelve (12) wind turbines.

#### **RECOMMENDED FINDINGS AND CONDITIONS:**

1. Water quality degradation shall not occur as a result of the project.
2. Revised plans shall be submitted for an amendment approval prior to any changes in construction details or sequences. The Department must be notified in writing within ten days of a change in ownership.
3. The Department must be notified in writing prior to the start of construction and upon the completion of construction.
4. The revised plans dated January 23, 2007 and supporting documentation in the file are a part of this approval.
5. This approval expires on March 15, 2009. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the Department.
6. This approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required (e.g. from US EPA, US Army Corps of Engineers, etc.) Projects disturbing over 1 acre require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained through the following e-mail address: [www.des.state.nh.us/StormWater/construction.htm](http://www.des.state.nh.us/StormWater/construction.htm).
7. The smallest practical area shall be disturbed during construction, but in no case shall exceed 5 acres at any one time before disturbed areas are stabilized.
8. A Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in the State of New Hampshire (“Monitor”) shall be employed to inspect the site from the start of alteration of terrain activities until the alteration of terrain activities are completed and stabilized.
9. During this period, the Monitor shall inspect the subject site at least once a week, and if possible, during any ½ inch or greater rain event (i.e. ½ inch of precipitation or more within a 24 hour period). If unable to be present during such a storm, the Monitor shall inspect the site within 24 hours of this event.
10. The Monitor shall provide technical assistance and recommendations to the Contractor on the appropriate Best Management Practices for Erosion and Sediment

Controls required to meet the requirements of RSA 485-A:17 and all applicable DES approval conditions.

11. Within 24 hours of each inspection, the Monitor shall submit a report to the DES Alteration of Terrain Program.

**Additional Condition Added by the Site Evaluation Committee:**

12. The Applicant shall submit to the Department of Environmental Services Terrain Alteration Program information such as hydrologic calculations to demonstrate that the proposed stormwater infrastructure will handle a 25-year storm event. Should this not be the case, the Applicant shall make appropriate adjustments to the project design under the direction of the DES Terrain Alteration Program.

### ATTACHMENT 3

#### APPLICATION OF LEMPSTER WIND LLC

#### 401 WATER QUALITY CERTIFICATE: DEPARTMENT OF ENVIRONMENTAL SERVICES RECOMMENDATION, FINDINGS AND CONDITIONS

##### **RECOMMENDATION:**

That the New Hampshire Energy Facility Site Evaluation Committee pursuant to RSA 162-H, approve the proposal to dredge and fill 1,472 square feet of palustrine forested wetlands to construct approximately five (5) miles of access roads, electric cable conduit and service pads for twelve (12) wind turbines.

##### **RECOMMENDED FINDINGS:**

1. The Activity will result in a discharge and may cause the permanent alteration of, or temporary impacts to surface waters.
2. Storm water runoff to surface waters from the Activity area, during construction or operation, constitutes a discharge under Env-Ws 1702.18.
3. The Activity requires water quality certification under Section 401 of the federal Clean Water Act.
4. The Activity will temporarily and permanently alter or impact wetlands under the jurisdiction of DES. The 401 Certification decision relies, in part, on an approved permit from the DES Wetlands Bureau for the potential construction-related impacts to jurisdictional wetlands, including unnamed tributary to High View Wildlife Pond, Unnamed tributary Brown Pond, Dodge Pond, Cold Brook, South Branch Sugar River, Babb Brook, Dodge Brook, Unnamed tributaries to Butterfield Pond, Ashuelot River, and Richardson Brook. Through its processing and anticipated issuance and signature, the DES wetlands permit will address the impacts to jurisdictional wetlands.
5. The unnamed tributary to High View Wildlife Pond, Unnamed tributary Brown Pond, Dodge Pond, Cold Brook, South Branch Sugar River, Babb Brook, Dodge Brook, Unnamed tributaries to Butterfield Pond, Ashuelot River, Richardson Brook, and unnamed wetlands adjacent to the Activity are the surface waters affected by the Activity. The affected surface waters are Class B waterbodies; Class B New Hampshire surface water quality standards (SWQS) apply to the Activity. Class B waterways are considered suitable for aquatic life, primary and secondary contact recreation, fish consumption, wildlife, and, after adequate treatment, as a water supply.
6. During construction, the excavation of earth, installation of foundations for wind generator units, and other land disturbance within the Activity area may temporarily increase turbidity levels and benthic deposits in surface waters downstream from the

Activity area, particularly during wet weather events, and may contribute to long-term sediment retention in and/or transport through the downstream reaches of these surface waters. The potential for turbidity and benthic deposits can be evaluated through a loading analysis. Specifically, a loading analysis can be used to determine the difference between pre-development and post-development loads for specific pollutants for a typical year.

7. The Applicant documented its proposed erosion control practices, as follows:
8. A Stormwater Pollution Protection Plan (SWPPP) dated April 14, 2006, which described the installation and use of stormwater best management practices (BMPs). This included, but was not limited to silt fences, water bars, and stone check dams. The SWPPP also described the maintenance and inspection of BMPs.
9. An erosion control plan dated April 21, 2006, revised February 23, 2007, which described inspection and maintenance of erosion controls. The Applicant stated that all erosion control devices will be inspected weekly prior to forecasted rain events, and after each rainfall event of 0.5" or greater. Further, the Applicant stated necessary repairs will be made immediately.
10. The Activity, if conducted with proper installation, monitoring, and maintenance of the BMPs for construction or operation, as described above, will not likely cause or contribute to violations of water quality standards for turbidity or benthic deposits.
11. The Applicant, in its additional information transmittal dated March 1, 2007 included a Spill Prevention, Control, and Countermeasures plan (SPCC) for its Locust Ridge Wind Farm in Schuylkill County, Pennsylvania. The SPCC served as a sample SPCC for the Lempster Wind Farm and included provisions for on-site storage and maintenance of hydraulic oils. The sample SPCC also discussed emergency response measures in the event of spills. The Applicant stated that an SPCC for the Lempster Wind Farm will not be completed until after final approval is granted for the Lempster Wind Farm and turbine locations by the New Hampshire Site Evaluation Committee. The operation of the Lempster Wind Farm is not expected to violate surface water quality standards provided the storage of oils and other pollutants and remediation of spills are conducted in accordance with a SPCC developed and implemented for the Lempster Wind Farm.
12. The Activity, particularly the operation of the turbine units, may require maintenance during winter months that may include the application of de/anti-icing compounds. By letter dated October 24, 2006, DES requested information relative to winter maintenance practices. To date, the Applicant has not provided winter maintenance plans for the Activity. This information gap can reasonably be resolved by the Applicant through timely submittal of the information to DES.

#### **RECOMMENDED CONDITIONS:**

1. The Activity shall not cause or contribute to a violation of surface water quality standards. If DES determines that surface water quality standards are being violated as a result of the Activity, DES may modify this 401 Certification to include

additional conditions to ensure the Activity complies with surface water quality standards, when authorized by law, and after notice and opportunity for hearing.

2. The Applicant shall inspect all erosion control devices weekly prior to forecasted rain events, and after each rainfall event of 0.5” or greater, unless otherwise approved by DES. Further, the Applicant shall immediately repair any erosion control measure(s) to restore proper function of the erosion control measure(s). The Applicant shall consult DES Watershed Management Bureau (WMB) relative to the resources used for measuring and forecasting rainfall events. In addition, the Applicant shall retain records of rainfall events and erosion control maintenance, and make the records available to DES WMB upon request by DES WMB.
3. The Applicant shall prepare and submit a Spill Prevention, Control, and Countermeasures plan (SPCC) for the Activity. The Applicant shall submit the plan to DES Watershed Management Bureau for review and approval at least 60 days prior to the installation of the first turbine. The plans shall include provisions for inspection and maintenance of the turbine units for spills, leaks, or other releases of hydraulic oils, and provisions for emergency responses to spills, leaks or other releases at any time, including non-work hours.
4. The Applicant shall submit a winter maintenance plan for the Activity, specifically for operation of the turbines. The plan shall include a description of the use of de/anti-icing compounds, and how application of de/anti-icing compounds shall be minimized, particularly those that contain chloride. The Applicant shall submit the plan to DES Watershed Management Bureau for review and approval at least 60 days prior to operation of the first turbine.
5. The Applicant shall consult DES WMB relative to the need to develop and submit a loading analysis for the Activity. Should a loading analysis be necessary, the Applicant shall submit the loading analysis for approval by DES WMB at least 45 days prior to the installation of the Best Management Practices referred in 7 of this 401 Certification.
6. The Applicant shall comply with the conditions of DES Wetlands Bureau. Requirements of the Wetlands Bureau shall become conditions of this 401 Certification upon issuance of this 401 Certification.
7. The Applicant shall comply with the conditions of the approved DES Alteration of Terrain Program. Any conditions of the Alteration of Terrain Program shall become conditions of this 401 Certification upon issuance of this 401 Certification.
8. The terms and conditions of this 401 Certification may be modified and additional terms and conditions added as necessary to ensure compliance with New Hampshire surface water quality standards, when authorized by law, and after notice and opportunity for hearing.

Appendix II  
Certificate of Site and Facility

Conditions Pursuant to Agreement  
Of Counsel for the Public and the Applicant

**State of New Hampshire  
Site Evaluation Committee  
Application of Lempster Wind, LLC  
Docket No. 2006-01**

**Proposed Certificate Conditions Pursuant to  
Agreement of Counsel for the Public and the Applicant**

Now come Lempster Wind, LLC (the "Applicant" or the "Project") and Peter C.L. Roth, Counsel to the Public ("NHOAG" or "Counsel to the Public"), and jointly submit the following as agreed upon conditions to any certificate for operation granted by the New Hampshire Site Evaluation Committee ("NHSEC") in this docket.

These conditions shall become effective when ordered and adopted by the Committee. If the NHSEC does not adopt any particular condition(s), or adopts particular conditions with modification or in part, the remaining conditions shall remain effective.

1. Avian species protection

- a. A balanced technical committee shall be assembled with voluntary participation of organizations including New Hampshire Fish and Game Department ("NHF&G"), United States Fish & Wildlife Service ("USF&W"), NHOAG, Town of Lempster, NH Audubon, representatives of the Project, representatives of Public Service Company of New Hampshire ("PSNH") and technical consultants selected by NHOAG and the Project (the "technical committee").
- b. The Project shall report spring 2007 avian survey results to NH SEC, and the technical committee.
- c. The Project shall conduct post-construction avian and bat mortality surveys similar to those implemented at other constructed wind projects in the United States, using protocols reviewed and approved by the technical committee that includes searches of individual turbines at entire project site, searcher efficiency trials, and scavenging rate (carcass removal) trials. Surveys will be conducted for a period of two years following commercial operation of the wind turbines, including spring and fall migration seasons. A brief report on the number and locations of fatalities will be provided after each season. A final report will then be prepared that summarizes all seasons combined, and will present estimates of the overall annual rate of fatalities at the project.

- d. The periodic reports and final report will be presented to the technical committee for review. The technical committee shall have the opportunity to comment on the report. The Project shall be obligated to review and respond to the technical committee comments within a reasonable time.
- e. The technical committee may recommend additional investigations and the technical committee will work collaboratively to address any concerns identified by the report.
- f. If the technical committee cannot achieve general consensus on the issue, Counsel to the Public may petition the NHSEC.
- g. If after notice and an opportunity to be heard, the Site Evaluation Committee determines that the Project is having an unreasonable adverse impact on any avian species, it may take appropriate action within its jurisdiction.
- h. This condition is not intended, nor shall it be deemed to constitute a permit to take any species, or as any waiver of any of the entities that are represented on the technical committee, of its enforcement rights and powers under the federal Migratory Bird Treaty Act or any other applicable law.

2. Noise:

- a. The Project shall, in its Agreement with the Town of Lempster and consultation with Counsel to the Public, develop standards for noise restrictions that include:
  - Limitations on audible sound from the wind power project, including sound level metric (55 dBA), duration of measurement (3 minutes in any hour of the day), and location of compliance (within 300 feet of a residence or at the property line, whichever is less.)
  - The specific limitation on audible sound at the Goshen-Lempster School shall be 45 dBA.
  - Pre-operation measurement of ambient noise conditions will be conducted by a qualified and independent sound engineer, at the Project's cost. Measurements will be conducted during a summer and winter test using standard protocols for wind noise measurement at defined receptor locations, including the Goshen-Lempster School.
  - Reporting of results to the Town of Lempster and NHOAG
  - Maintaining compliance with noise restrictions; if standards are exceeded, the Project shall undertake operational measures to come into compliance.

3. Ice shedding:

- a. Project on-site personnel and remote operations centers shall monitor turbine conditions (regardless of the time of day) to determine the presence of ice, and



respond with operational measures to limit potential ice throw. Personnel shall ensure that turbines are free of accumulated ice before any restart of turbines that have been suspended due to icing.

- b. The Project shall post warning signs at visible locations on access roads and at turbine sites to alert unauthorized or recreational users of the site property to the danger of ice shedding during winter storm conditions.

4. Access:

- a. Entrances to the Project site shall be gated, and locked during non-working hours. If problems with unauthorized access are identified, the Project shall work to install additional gated access points.
- b. Turbine exteriors shall not be climbable up to fifteen (15) feet above ground surface.
- c. All access doors to wind turbines and above-ground electrical equipment shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons.
- d. A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers, above-ground electrical collection facilities, switching or interconnection facilities, and substations.

5. Conservation Easement:

- a. As a condition of the certificate, the Project, in consultation with NHOAG and the Town of Lempster, shall, prior to the commercial operation date, donate the lands owned by the Project in the Town of Lempster (Tax parcel 12-036,324, "Earl's Lane") or such other parcel as they may agree upon, to an organization approved by Counsel to the Public for conservation purposes and subject to a conservation easement.
- b. The Project shall maintain permanent easement rights upon Earl's Lane necessary to operate, maintain and decommission the Project utilizing access roads and facilities as constructed. The Project shall install and maintain gated access to the Project site at a point on the north end of Earl's Lane access road.
- c. The Project shall return the Earl's Lane access road and disturbed area to the final post-construction width and conditions consistent with the Project's erosion and sediment control plan.

The Applicant and Counsel to the Public respectfully request that the NHSEC adopt these conditions and incorporate them within any certificate that the NHSEC may issue to the Applicant with this docket.

Respectfully submitted this 6th day of April 2007,

COUNSEL TO THE PUBLIC

PETER C.L. ROTH

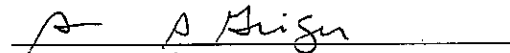


Peter C.L. Roth  
Senior Assistant Attorney General

LEMPSTER WIND, LLC

By its attorneys

ORR & RENO  
Professional Association



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Appendix III  
Certificate of Site and Facility

Agreement Between Town of Lempster and  
Lempster Wind, LLC, Developer/Owner of the Lempster Mountain Wind  
Power Project

**AGREEMENT BETWEEN TOWN OF LEMPSTER  
AND LEMPSTER WIND, LLC, DEVELOPER/OWNER OF THE  
LEMPSTER MOUNTAIN WIND POWER PROJECT**

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**AGREEMENT BETWEEN TOWN OF LEMPSTER  
AND LEMPSTER WIND, LLC, DEVELOPER/OWNER OF THE  
LEMPSTER MOUNTAIN WIND POWER PROJECT**

**1. Definitions**

- 1.1. "Agreement" - This agreement between the Town of Lempster, New Hampshire and Lempster Wind LLC, and its successors and assigns.
- 1.2. "Ambient Sound Pressure" - The sound pressure level excluding that contributed by the operation of the Wind Park.
- 1.3. "End of Useful Life" - The Wind Park or each of its individual Wind Turbines will be deemed to be at the End of Useful Life if no electricity is generated by the Wind Park or turbine for a continuous period of twelve months.
- 1.4. "Non-Participating Landowner" - Any landowner in the Town of Lempster, other than a Participating Landowner.
- 1.5. "Owner" - The entity or entities having equity interest in the Wind Park, including their respective successors and assigns.
- 1.6. "Occupied Building" - A permanent structure used as a year-round or seasonal residence, school, hospital, church, public library or other building used for gathering that is occupied or in use as of the time that the permit application was submitted to the New Hampshire Site Evaluation Committee.
- 1.7. "Participating Landowner" – Any landowner having entered into an agreement with the Owner for hosting Wind Park facilities, providing easements for access, entry or conveyance of other rights related to the Wind Park, or any other agreement related to the construction or operation of the Wind Park.
- 1.8. "Project Site" – Property with rights as conveyed to Owner by lease, easement or other agreement with a Participating Landowner that includes all Wind Turbines, access roads, and other facilities required for construction and operation of the Wind Park.
- 1.9. "Town" – Town of Lempster, New Hampshire.

- 1.10. "Turbine Height" - The distance from the surface of the tower foundation to the tip of the uppermost blade when in a vertical position. For the Lempster Wind Power Project, this height is approximately 424 feet.
- 1.11. "Wind Turbine" - A wind energy conversion system that converts wind energy for the generation of electricity, including a tower, a nacelle housing the generator and transformer, and a 3-blade rotor.
- 1.12. "Wind Park" - The totality of the Wind Turbines, cables, accessory buildings and structures including substations, meteorological towers, electric infrastructure and cables and other appurtenant structures and facilities that comprise the Lempster Mountain Wind Power Project under development by Owner.

## **2. General Provisions**

- 2.1. **Enforceability.** This Agreement shall apply to and be binding and enforceable on all successors and assigns of the Owner, including a Participating Landowner or any other party that assumes control of the Wind Park or any Wind Turbines after the End of Useful Life.
- 2.2. **Applicability to Owner.** This Agreement shall apply to the Owner only to the extent of Owner's rights and responsibilities related to the Wind Park and Project Site as conferred to Owner by Participating Landowner Agreements.
- 2.3. **Recording.**
- 2.3.1. Owner shall submit to the Town evidence of all Participating Landowner agreements, which may take the form of memoranda recorded with the Sullivan County Registry of Deeds.
- 2.3.2. This Agreement shall be recorded at the Sullivan County Registry of Deeds.
- 2.4. **Survivability.** The invalidity, in whole or in part, of any of this agreement will not affect any other paragraph in this Agreement.

2.5. **Limitation on Turbines.** This Agreement is for the installation and operation of a Wind Park that utilizes up to twelve Wind Turbines. The Owner shall not construct more than twelve Wind Turbines on the site without prior agreement with the Town. Communications or other equipment attached to the Wind Turbines shall be limited to that incidental and necessary for the safe and efficient operation of the Wind Park.

2.6. **On-site Burning.** The Owner will obtain a permit from the Lempster Fire Chief and comply with all State requirements before any onsite burning occurs.

## 2.7. **Warnings**

2.7.1. A clearly visible warning sign identifying danger from voltage must be placed at the base of all pad-mounted transformers, electrical collection facilities, switching or interconnection facilities, and substations.

2.7.2. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on all anchor points of guy wires, if any, and along the guy wires up to a height of ten feet from the ground.

2.7.3. A clearly visible warning sign concerning safety risks related to winter or storm conditions shall be placed no less than 300 feet from each Wind Turbine tower base on access roads.

2.8. **Access.** The Town shall have access to the Project Site for the purpose of emergency response. The Owner shall provide access to the Project Site, Wind Turbines or other facilities upon request of the Town for the purpose of building or safety inspections under Town ordinances. The Owner shall provide access for emergency response purposes pursuant to the protocols provided under Section 7 of this Agreement

2.9. **Liability Insurance.** There shall be maintained a current general liability policy covering bodily injury and property damage with limits of at least \$10 million in the aggregate. Certificates shall be made available to the Town upon request.

2.10. **Indemnification.** The Owner specifically and expressly agrees to indemnify, defend, and hold harmless the Town and its officers, elected officials, employees and agents (hereinafter collectively "Indemnitees") against and from any and all claims, demands, suits, losses, costs and damages of every kind and description, including attorneys' fees and/or litigation expenses, brought or made against or incurred by any of the Indemnitees resulting from or arising out of any negligence or wrongful

acts of the Owner, its employees, agents, representatives or Subcontractors of any tier, their employees, agents or representatives in the connection with the Wind Park. The indemnity obligations under this Article shall include without limitation:

- 2.10.1. Loss of or damage to any property of the Town, the Owner or any third party;
- 2.10.2. Bodily or personal injury to, or death of any person(s), including without limitation employees of the Town, or of the Owner or its Subcontractors of any tier.

The Owner's indemnity obligation under this Article shall not extend to any liability caused by the sole negligence of any of the Indemnitees.

### **3. Wind Turbine Equipment and Facilities**

#### **3.1. Visual Appearance**

- 3.1.1. Wind Turbines shall be a non-obtrusive color such as white, off-white, or gray.
- 3.1.2. Wind Turbines shall not be artificially lighted, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety.
- 3.1.3. Wind Turbines shall not display advertising, except for reasonable identification of the turbine manufacturer and/or Owner.

**3.2. Controls and Brakes.** All Wind Turbines shall be equipped with a redundant braking system. This includes both aerodynamic over-speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for over-speed protection.

**3.3. Electrical Components.** All electrical components of the Wind Park shall conform to relevant and applicable local, state, and national codes, and relevant and applicable international standards.

**3.4. Power Lines.** On-site transmission and power lines between Wind Turbines shall, to the maximum extent practicable, be placed underground.



#### **4. Project Security**

- 4.1.1. Wind Turbines shall not be climbable up to fifteen (15) feet above ground surface.
- 4.1.2. All access doors to Wind Turbines and electrical equipment shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons.
- 4.1.3. Entrance to the Project Site shall be gated, and locked during non-working hours. If problems with unauthorized access are identified, the Owner shall work to install additional gated access points.

#### **5. Public Information, Communications and Complaints**

- 5.1. **Public Inquiries and Complaints.** During construction and operation of the Wind Park, the Owner shall maintain a phone number and identify a responsible person for the public to contact with inquiries and complaints through completion of decommissioning. The Owner shall make reasonable efforts to respond to the public's inquiries and complaints.
- 5.2. **Complaint Resolution.** The Owner shall develop and submit to the Town a process to resolve complaints from Town residents concerning the construction or operation of the Wind Park. The process shall not preclude the local government from acting on a complaint.
- 5.3. **Public Information Facility.** Within six months of commercial operation of the Wind Park, the Owner will construct and maintain a public information kiosk at a public location designated by the Town. The Owner will be responsible for keeping the kiosk in good condition, and the Town will be responsible for maintaining the site of the kiosk, including public security.
- 5.4. **Signs.** Signs shall be reasonably sized and limited to those necessary to identify the Project Site and provide warnings or liability information, construction information, or identification of private property. There will be no signs placed in the public right of way. The Owner and Town may agree on the placement of signs in the public right of way that relate to a Public Information Facility.

#### **6. Reports to the Town of Lempster**

- 6.1. **Incident Reports.** The Owner shall notify the Chairman of the Board of Selectmen or his designee as soon as possible with:

- 6.1.1. copies of reporting of environmental incidents or industrial accidents that require a report to U.S. EPA, New Hampshire Department of Environmental Services, OSHA or another federal or state government agency; and
  - 6.1.2. all complaints from Town residents as submitted through the complaint resolution process under Section 5.2 of this Agreement
- 6.2 Periodic Reports.** The owner shall submit, on an annual basis, starting one year from commercial operation of the Wind Park, a report to the Selectmen of the Town of Lempster, providing, as a minimum, the following information:
- 6.2.1 If applicable, status of any additional construction activities, including schedule for completion;
  - 6.2.2 Copies of all reporting of environmental incidents or industrial accidents that require a report to U.S. EPA, New Hampshire Department of Environmental Services, OSHA or another federal or state government agency; and
  - 6.2.3 Details on any calls for emergency police or fire assistance;
  - 6.2.4 Location of all on-site fire suppression equipment; and
  - 6.2.5** Identity of hazardous materials including volumes and locations as reported to state and federal agencies.

## **7. Emergency Response**

- 7.1. Upon request, the Owner shall cooperate with the Town's emergency services and any emergency services that may be called upon to deal with a fire or other emergency at the Wind Park through a mutual aid agreement, to develop and coordinate implementation of an emergency response plan for the Wind Park. The Owner and Town will establish protocols to provide emergency response access to the Turbine Towers within 30 minutes of an alarm or other request for emergency response.
- 7.2. The Owner shall cooperate with the Town's emergency services to determine the need for the purchase of any equipment required to provide an adequate response to an emergency at the Wind Park that would not otherwise need to be purchased by the Town. If agreed between the Town and Owner, Owner shall purchase any specialized equipment for storage at a mutually agreeable location. The Town and

Owner shall review together on an annual basis the equipment requirements for emergency response at the Wind Park.

- 7.3. The Owner shall provide and maintain protocols for direct notification of emergency response personnel designated by the Town. The Owner shall provide the Town with contact information of personnel available at every hour of the day.
- 7.4. The Owner shall provide training to emergency response personnel identified by the Town. Those identified for training will include First Alarm mutual aid responders. Training shall be conducted at times agreed to by the Town and the Owner prior to the commencement of commercial operation and on an annual basis during operation of the Wind Park. The training shall include, but not be limited to, the location and operation of on-site fire suppression equipment, Project Site and Wind Turbine access, and communication protocols.
- 7.5. The Owner shall maintain fire alarm systems and fire extinguisher equipment that are installed in all Wind Turbines and facilities. The Town and Owner shall work to identify sources of water on or around the Project Site that may be utilized in the event of a fire at the Project Site outside the Wind Turbines, and collaborate on a process for utilizing the identified sources.
- 7.6. In the event of an emergency response event that creates an extraordinary expense for the Town based on obligations under a mutual aid agreement, Owner shall reimburse the Town for reasonable expenses.
- 7.7. In the event Lempster Fire Department changes from an all-volunteer department to a department with firefighters being paid for services, the Owner and Town will determine whether direct reimbursement for emergency response by the Town is appropriate.

## **8. Roads**

### **8.1. Public Roads**

- 8.1.1. The Owner shall identify all state and local public roads to be used within the Town to transport equipment and parts for construction, operation or maintenance of the facility.
- 8.1.2. The Owner shall hire a qualified professional engineer, as mutually agreed with the Town, to document road conditions prior to

construction and again thirty days after construction is completed or as weather permits.

8.1.3. Any road damage caused by the Owner or its contractors at any time shall be promptly repaired at the Owner's expense.

8.1.4. The Owner will reimburse the Town for costs associated with special details required to direct or monitor traffic within the Town limits during construction.

8.1.5. The Owner shall demonstrate by financial guarantee of the Owner or its parent or affiliates, that it will provide appropriate financial assurance to ensure prompt repair of damaged roads. If such financial assurance is not provided in a form acceptable to the Town, the Town may require a bond or cash deposit to meet this obligation.

**8.2. Wind Park Access Roads.** The Owner shall construct and maintain roads at the Wind Park that allow for year-round access to each Wind Turbine at a level that permits passage of emergency response vehicles. The Owner shall provide assurance, in the form of a financial guarantee from the Owner or its parent or affiliates, that Wind Park roads will be maintained to permit such emergency access.

8.2.1. The Owner shall construct and maintain roads at the Wind Park that allow for year-round access to each Wind Turbine at a level that permits passage and turnaround of emergency response vehicles. The Owner shall provide assurance by a financial guarantee from the Owner or its parent or affiliates, in a form acceptable to the Town, that Wind Park roads will be maintained at all times to permit such emergency access.

8.2.2. Any use of the Access Roads that is beyond what is necessary to service the Wind Park or that are beyond the Participation Landowner Agreements, shall be subject to approvals under relevant Town ordinances or regulations, or state or federal laws.

## **9. Construction Period Requirements**

9.1. **Site Plan.** Prior to the commencement of construction, the Owner shall provide the Town with a copy of the final Soil Erosion and Sediment Control site plans showing the construction layout of the Wind Park.

9.2. **Construction Schedule.** Prior to the commencement of construction activities at the Wind Park, the Owner shall provide the Town with a schedule for construction activities, including anticipated use of public roads for the transport of oversize and overweight vehicles. The Owner

shall provide updated information and schedules regarding construction activities to the Town on a monthly basis, or upon request of the Town.

- 9.3. **Disposal of Construction Debris.** Tree stumps, slash and brush will be disposed of onsite or removed consistent with state law. Construction debris shall not be disposed of at Town facilities.
- 9.4. **Blasting.** The handling, storage, sale, transportation and use of explosive materials shall conform to all state and federal rules and regulations. In addition, the Owner shall comply with the following Town requirements.
- 9.4.1. At least ten days before blasting commences, the Owner shall brief Town officials on the blasting plan. The briefing shall include the necessity of blasting and the safeguards that will be in place to ensure that building foundations, wells or other structures will not be damaged by the blasting.
- 9.4.2. In accordance with the rules of the State of New Hampshire, the Owner shall notify the Lempster police and fire chiefs before blasting commences. Any changes to the schedule for blasting must be reported immediately and in person to the police and fire chiefs.
- 9.4.3. A Pre-Blast Survey will cover residents within 500 ft. of the work area, and a copy of the survey will be recorded in the Town office. Residents within 500 feet will be notified in person whenever possible, or by registered mail, prior to work in the area.
- 9.4.4. A copy of the appropriate Insurance Policy and Blasting License will be recorded in the Town office.
- 9.5. **Storm Water Pollution Control** The Owner shall obtain a New Hampshire Site-Specific Permit and conform to all of its requirements including the Storm Water Pollution Prevention Plan and requirements for inspections as included or referenced therein. The Owner shall provide the Town with a copy of all state and federal storm water, wetlands, or water quality permits and related conditions.
- 9.6. **Design Safety Certification.** The design of the Wind Park shall conform to applicable industry standards, including those of the American National Standards Institute. The Applicant shall submit certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energies, or other similar certifying organizations.

## **9.7. Construction Vehicles**

- 9.7.1. Construction vehicles shall only use a route approved by the Town. There shall be no staging or idling of vehicles on public roads. The Town shall be notified at least 24 hours before each construction vehicle with a Gross Vertical Weight greater than 88,000 pounds is to use a Town road. Acceptance by the Town of vehicles exceeding this level is not a waiver of the Owner's obligation to repair all damage to roadways caused by vehicles used during construction or during any other time through the completion of decommissioning.
- 9.7.2. Construction vehicles will not travel on Town roads before 6:00 am or after 7:00 pm, Monday through Saturday. Construction vehicles will not travel on Town roads on Sunday, unless prior approval is obtained from the Town.
- 9.7.3. Construction will only be conducted between 6:00 am and 7:00 pm, Monday – Saturday. Construction will not be conducted on Sundays.
- 9.7.4. The start-up and idling of trucks and equipment will conform to all applicable Department of Transportation regulations. In addition, the start-up and idling of trucks and equipment will only be conducted between 6:00 am and 7:00 pm, Monday through Saturday

## **10. Operating Period Requirements**

### **10.1. Spill Protection**

- 10.1.1. The Owner shall take reasonable and prudent steps to prevent spills of hazardous substances, including but not limited to oil and oil-based products, used during the construction and operation of the Wind Park. This includes oil, gasoline, and other hazardous substances from construction related vehicles and machinery, permanently stored oil, and oil used for operation of permanent equipment. Owner shall provide the Town with a copy of the Spill Prevention, Control and Countermeasure (SPCC) for the Wind Park as required by state or federal agencies.

- 10.2. **Pesticides and Herbicides.** The Owner shall not use herbicides or pesticides for maintaining clearances around the Wind Turbines or for any other maintenance at the Wind Park.

- 10.3. **Signal Interference.** The Owner shall make reasonable efforts to avoid any disruption or loss of radio, telephone, television, or similar

signals, and shall mitigate any harm caused by the Wind Park, subject to the Complaint Resolution process as provided pursuant to Section 5.2.

## **11. Noise Restrictions**

**11.1. Residential Noise Restrictions.** Audible sound from the Wind Park shall not exceed 55 dB(A) as measured at 300 feet from any existing Occupied Building on a Non-Participating Landowner's property, or at the property line if it is less than 300 feet from an existing Occupied Building. This sound pressure level shall not be exceeded for more than 3 minutes in any hour of the day. If the Ambient Sound Pressure Level exceeds 55 dB(A), the standard shall be ambient dB(A) level plus 5 dB(A).

**11.2. Goshen-Lempster School Noise Restriction.** Audible sound from the Wind Park at the Goshen-Lempster School shall not exceed 45 dB(A). If the Ambient Sound Pressure Level at the Goshen-Lempster School exceeds 45 dB(A), at the school, the standard shall be ambient dB(A) plus 5 dB(A).

**11.3. Post-Construction Noise Measurements.** After commercial operation of the Wind Park, the Owner shall retain an independent qualified acoustics engineer to take sound pressure level measurements in accordance with the most current version of ANSI S12.18. The measurements shall be taken at sensitive receptor locations as identified by the Owner and Town, and shall include the Goshen-Lempster School both inside and outside of the school building. The periods of the noise measurements shall include, as a minimum, daytime, winter and summer seasons, nighttime after 10 pm, and, for measurements at the school, periods when school is in session. All sound pressure levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type II sound meter. The Owner shall provide the report of the acoustics engineer once available to the Town.

## **12. Setbacks**

**12.1. Setback From Occupied Buildings.** The setback distance between a Wind Turbine tower and a Non-Participating landowner's existing Occupied Building shall be not less than three times the Turbine Height. The setback distance shall be measured from the center of the Wind Turbine base to the nearest point on the foundation of the Occupied Building.

**12.2. Setback From Property Lines.** The setback distance between a Wind Turbine tower and Non-Participating landowner's property line shall be not less than 1.1 times the Turbine Height. The setback distance shall be measured to the center of the Wind Turbine base.

**12.3. Setback From Public Roads.** All Wind Turbines shall be setback from the nearest public road a distance of not less than 1.5 times the Turbine Height as measured from the right-of-way line of the nearest public road to the center of the Wind Turbine base.

### **13. Waiver of Restrictions**

**13.1. Waiver of Noise Restrictions.** A Participating Landowner or Non-Participating Landowner may waive the noise provisions of Section 12 of this Agreement by signing a waiver of their rights, or by signing an agreement that contains provisions providing for a waiver of their rights. The written waiver shall state that the consent is granted for the Wind Park to not comply with the sound limit in this Agreement.

**13.2. Waiver of Setback Requirements.** A Participating Landowner or Non-Participating Landowner may waive the setback provisions of Section 14 of this Agreement by signing a waiver of their rights, or by signing an agreement that contains provisions providing for a waiver of their rights. Such a waiver shall identify the applicable setback requirements provision(s) in this Agreement and the proposed changes, including a description of how the Wind Park is not in compliance with the requirements in this Agreement and a statement that consent is granted for the Owner to not be in compliance with the requirements in this Agreement. Upon application, the Town may waive the setback requirement for public roads for good cause.

**13.3. Recording.** A memorandum summarizing a waiver or agreement containing a waiver pursuant to Section 13.1 or 13.2 of this Agreement shall be recorded in the Registry of Deeds for Sullivan County, New Hampshire. The memorandum shall describe the properties benefited and burdened and advise all subsequent purchasers of the burdened property of the basic terms of the waiver or agreement, including time duration.

### **14. Decommissioning**

#### **14.1. Scope of Decommissioning Activities**

14.1.1. The Owner shall submit a detailed site-specific decommissioning estimate to the Town before construction of the Wind Park



commences. This estimate shall be updated and submitted to the Town every five years thereafter.

14.1.2. The Owner shall, at its expense, complete decommissioning of the Wind Park, or individual Wind Turbines, pursuant to Section 14.1.3 of this Agreement, within 12 months after the End of Useful Life of the Wind Park or individual Wind Turbines.

14.1.3. The Owner shall provide a decommissioning plan to the Town no less than three months before decommissioning is to begin. The decommissioning plan shall provide a detailed description of all Wind Park equipment, facilities or appurtenances proposed to be removed, the process for removal, and the post-removal site conditions. The Town will consider the remaining useful life of any improvement before requiring its removal as part of decommissioning. Approval of the Town must be received before decommissioning can begin.

#### **14.2. Decommissioning Funding Assurance**

14.2.1. The Owner shall provide funding assurance for the complete decommissioning of the Wind Park, or individual Wind Turbines in a form acceptable to the Town. ("Decommissioning Funding Assurance") The Wind Park or individual Wind Turbines will be presumed to be at the End of Useful Life if no electricity is generated from the Wind Park or any individual Wind Turbine for a continuous period of twelve months.

14.2.2. Before commencement of construction of the Wind Park, the Owner shall provide Decommissioning Funding Assurance in an amount equal to the site-specific decommissioning estimate or \$2,000,000, whichever is greater. The Owner shall adjust the amount of the Decommissioning Funding Assurance to reflect the updated decommissioning costs after each update of the decommissioning estimate, if the estimate exceeds \$2,000,000.

14.2.3. Decommissioning Funding Assurance in the amount described in Section 14.2.2 shall be provided by a financial guarantee from the Owner, its parent or affiliates, in a form acceptable to the Town. If Owner does not provide such financial guarantee, the Town may require another form of decommissioning assurance such as prepayment, external sinking funds, insurance, performance bond, surety bond, letters of credit, form of surety, or other method, or combination of methods as may be acceptable to the Board of Selectmen of the Town of Lempster.

14.2.4. Funds expended in connections with the Decommissioning Funding Assurance shall only be used for expenses associated with the cost of decommissioning the Wind Park. Any funds remaining after decommissioning has been completed shall be distributed to the current Owner.

14.2.5. If the Owner fails to complete decommissioning within the period proscribed by this agreement, the Town of Lempster may, at its sole discretion, enforce the financial guarantee and require the expenditure of decommissioning funds on such measures as necessary to complete decommissioning.

### **14.3. Transfer of Decommissioning Responsibility**

14.3.1. Consistent with Section 2.1 of this Agreement, the provisions of Section 14 of this Agreement shall apply to and be binding and enforceable on all successors and assigns of the Owner, including a Participating Landowner or any other party that assumes control of the Wind Park or any Wind Turbines after the End of Useful Life.

14.3.2. Owner shall not enter into any agreement with any party, including a Participating Landowner and successor in ownership, which waives the responsibilities of the Owner for decommissioning or the requirement to maintain decommissioning assurance without first receiving the written agreement of the Town.

Appendix IV  
Certificate of Site and Facility

Additional Conditions Pertaining to Noise

## Additional Conditions Pertaining to Noise

1) If sound levels generated by the project immediately outside any residence of a non-participating homeowner are found to be: a) more than the greater of 45 dBA or 5 dBA above the ambient sound level (the background sound level measured with wind turbine blades locked and not operating ), or b) generating a measurable harmonic or beating noise effect in a short cycle that fluctuates with an amplitude of 5 dBA or more, both as measured at any exterior facade of the home, then the Applicant shall, within 90 days of confirmation of such exceedances and, at its option, either complete actions to reduce project generated noise below the above specified sound levels on a going forward basis, or offer such homeowner, at Applicant's expense, an installed package of sound mitigation measures to ensure that the sound level within the home is reduced to less than 30 dBA or 5 dBA above interior home ambient sound levels, whichever is greater, and/or that such harmonic or beating noise effect is reduced to less than 1 dBA in amplitude, both as measured with doors and windows closed. Such noise mitigation measures shall be consistent with generally accepted sound attenuation practices for homes and should include, but not be limited to, well sealed interior or exterior laminated glass storm windows, or at Applicant's option, Energy Star rated laminated glass insulated replacement windows; weather stripping and air sealing of any openings; insulated doors; and the addition of wall or attic insulation, such as injected foam, if feasible and necessary.

2) If sound levels generated by the project immediately outside any affected residence of a non-participating homeowner are found to be more than the greater of 45 dBA or 5 dBA above the ambient sound level as measured at any exterior facade of the

home, at any time between 10 p.m. and 7 a.m., during the months of June, July or August, then the Applicant shall, in addition to the mitigation measures described above, offer such non-participating homeowner, at Applicant's expense, installed Energy Star rated room air conditioners for each bedroom in the home, or, at the homeowner's option, an installed whole-house fan with automatically closing well sealed and insulated doors. If the homeowner accepts such mitigation measures and upon further complaint the sound level generated by the project is found to be greater than 30 dBA or 5 dBA above ambient levels, whichever is greater, at the sleeping area within any bedroom of the home, measured with windows open, and there continues to be sound levels generated by the project as measured at any exterior facade of the home more than the greater of 45 dBA or 5 dBA above the ambient sound level, at any time between 10 p.m. and 7 a.m., during the months of June, July or August of summers following the acceptance of such mitigation measures, then the Applicant shall undertake operational or other measures to mitigate and reduce sound levels on an ongoing basis to no greater than 45 dBA or 5 dBA above ambient levels measured at any exterior facade of the home.

3) The standards referenced above that trigger the need for mitigation shall be considered to be exceeded if an independent qualified acoustics engineer measures such an exceedance for more than three minutes in any hour.

4) The applicant shall provide the Town of Lempster with a decibel meter of sufficient quality to allow an initial response to homeowner complaints regarding the noise allegedly created by the turbines. If the Board of Selectmen of the Town of Lempster certifies in writing to the Applicant that they find any complaint of a violation of these requirements to be well founded in their judgment, then the Applicant shall pay

for the reasonable cost of an investigation of the complaint by an independent qualified acoustics engineer. Homeowners, whether residents of Lempster or other towns, may also engage their own consultants or engineers and bring complaints directly to the Applicant for investigation and resolution consistent with the complaint resolution provisions of the Town of Lempster Agreement.