



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

August 2013

Champlain Wind, LLC
129 Middle Street, Floor 3
Portland, Maine 04101
ATTN: Mr. Neil Kiely

RE: Site Location of Development Act/ Natural Resources Protection Act Applications, Carroll Plantation and Kossuth Township, #L-25800-24-A-N/#L-25800-TE-B-N/#L-25800-IW-C-N Denial

Dear Mr. Kiely:

Please find enclosed a signed copy of the denial of your Department of Environmental Protection applications for permits under the Site Location of Development Act and the Natural Resources Protection Act. You will note that the denial includes a description of your project, and findings of fact that relate to the criteria the Department used in evaluating your project. The Department reviews every application thoroughly and strives to formulate reasonable findings of fact within the context of the Department's environmental laws. You will also find attached some materials that describe the Department's appeal procedures for your information.

If you have any questions or concerns on how the Department processed this application please get in touch with me directly. I can be reached at (207) 446-9026 or at Jim.R.Beyer@maine.gov.

Sincerely,

James R. Beyer, Regional Licensing and Compliance Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

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(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
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DEPARTMENT ORDER

IN THE MATTER OF

CHAMPLAIN WIND, LLC) SITE LOCATION OF DEVELOPMENT ACT
Kossuth Township, Washington County)
Carroll Plantation, Penobscot County) NATURAL RESOURCES PROTECTION ACT
BOWERS WIND PROJECT) WATER QUALITY CERTIFICATION
L-25800-24-A-N (denial)) SIGNIFICANT WILDLIFE HABITAT
L-25800-TE-B-N (denial)) WATER QUALITY CERTIFICATION
L-25800-IW-C-N (denial)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 35-A M.R.S.A. §§ 3401 -3457, 38 M.R.S.A. §§ 481 et seq. and 480-A et seq., and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection (Department) has considered the application of CHAMPLAIN WIND, LLC with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

- A. Summary: The applicant proposes construct a wind energy development consisting of 16 turbines. This project qualifies as an expedited wind energy development as defined in the Wind Energy Act (35-A M.R.S.A. §3451(4)) (WEA). In addition to the turbines, the project would include an operations and maintenance (O&M) building as well as associated facilities. The O&M building would be located in Carroll Plantation on Route 6. The proposed project overall would include 33.92 acres of impervious area and 33.92 of developed area. The O&M building would result in approximately 7,000 square feet of impervious area. The project is shown on a set of plans included in the application, the first of which is entitled "Overall Location Plan," prepared James W. Sewall Company, and dated September 26, 2012.
- 1) Wind Turbines. The applicant proposes to construct 16 wind turbines, either the Siemens 3.0 megawatt (MW) model (SWT-3.0-113) or the Vestas 3.0 MW turbine (V112 3.0-MW) for a total of 48 MW of generation capacity. The turbines would be either 446 (Siemens) or 459 (Vestas) feet in total height to the tip of the fully extended blade. The turbines would be located on Dill Hill and Bowers Mountain in Carroll Plantation and Kossuth Township.
 - 2) Turbine Pads. The turbines would be constructed on 16 pads. The total impervious area associated with the turbine pads is 0.66 acre.
 - 3) Access Roads and Crane Path. The applicant is proposing 3.0 miles of 24-foot wide access roads and 4.0 miles of 35-foot crane paths. The total impervious area associated with the linear portion of the project is 21.74 acres.

- 4) Electrical Collector Substation and O&M building. The applicant proposes to construct an electrical substation adjacent to Line 56 in Carroll Plantation. The applicant is also proposing a 7,000 square foot O&M building in Carroll Plantation located north of Route 6, adjacent to the express collector line. The total new impervious area associated with the electrical substation and the O&M building is 5.65 acres.
- 5) Meteorological Towers. The applicant is proposing to construct one permanent meteorological tower on the site to monitor turbine performance.
- 6) Express Collector Line. The applicant is proposing to collect the power from the turbines in a 34.5 kilovolt (kV) express collector line. The express collector line would run approximately 5.2 miles to the proposed substation.

The applicant's proposal includes the conversion of 2.58 acres of forested wetland to scrub-shrub wetland associated with the summit collector line and express collector line and no permanent wetland fill. The proposal would also include 0.14 acre of fill in the upland portion of an Inland Waterfowl and Wading Bird Habitat (IWWH).

B. Public Hearing. The Department received numerous requests for a public hearing. The proposed project is a modified version of a project previously denied by the Land Use Regulation Commission (LURC) in 2011. The previous project was subject to an evidentiary public hearing process. To assist the Department in its decision making for the proposed project, the Commissioner exercised her discretion pursuant to 096 CMR Chapter 2, Section 7.B to hold a public hearing. The Department held a public hearing on April 30th and May 1st, 2013 at Lee Academy in Lee, Maine. The Department granted intervenor status to Conservation Law Foundation (CLF)/Maine Renewable Energy Associates (MREA), Partnership for the Preservation of Downeast Lakes Watershed (PPDLW), and David Corrigan, and they participated in the public hearing process. Throughout the public hearing process the Department issued five procedural orders:

- 1) First Procedural Order. The first procedural order set forth the Hearing Officer's decision with respect to Petitions for Leave to Intervene and set a date for the pre-hearing conference.
- 2) Second Procedural Order. The second procedural order was completed after the pre-hearing conference and summarized the discussions of the attendees at the conference, and included the scheduling of the public hearing.
- 3) Third Procedural Order. In the third procedural order the Hearing Officer set forth time limits for the summary of direct testimony and witness requests for cross-examination, and made other rulings with respect to procedural issues and objections to ensure the fair and orderly conduct of the hearing.
- 4) Fourth Procedural Order. The fourth procedural order was issued upon conclusion of the public hearing. The Hearing Officer set forth time limits for

submission of post-hearing briefs, and made other rulings with respect to procedural issues and objections.

- 5) Fifth Procedural Order. The fifth procedural order dealt with three specific objections that had been raised by PPDW and the applicant.

C. Current Use of the Site. The site of the proposed project is woodlands and is currently used for commercial forestry operations.

2. TITLE RIGHT OR INTEREST:

To demonstrate title, right or interest in the property proposed for development, as required in Chapter 2(11)(D) and Chapter 372(9) of the Department's rules, the applicant submitted copies of deeds, leases and lease options between the applicant and the property owners for the proposed project site. The owner of one protected location has a license agreement with the underlying landowner from the wind energy development, as described in Section 5 below. There are no other proposed easements for adjacent parcels of land pertaining to shadow flicker effects and safety setbacks.

The Department finds the applicant has demonstrated sufficient title, right or interest for the area which would be occupied by the project.

3. FINANCIAL CAPACITY:

The applicant estimates the total cost of the project to be \$100 million. Champlain Wind, LLC is a legal entity authorized to do business in the State of Maine and is a wholly owned subsidiary of First Wind Holdings, LLC. The applicant submitted a plan detailing financing for the project. The financing is proposed to include First Wind Holdings, LLC equity funded from cash balances, bank construction and long-term debt sourced on market terms, tax equity source on market terms, and cash contributions from Emera pursuant to its joint venture with First Wind. Prior to the start of construction, the applicant would be required to submit to the Bureau of Land and Water Quality (BLWQ) for review and approval evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in the State or evidence of any form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate.

PPDLW argued in pre-filed testimony that the applicant had not submitted accurate and complete cost estimates for the proposal because "other construction costs" were not detailed to a sufficient level to conduct an analysis. PPDW also questioned if these costs included the cost that would be incurred to retrofit the turbines to include the Obstacle Collision Avoidance System once it is approved by the Federal Aviation Administration (FAA). PPDW concluded that the applicant should have submitted detailed audited financials similar to what the applicant was required to submit to the Public Utility Commission in connection with the Emera transaction, an up to date organization chart that clearly informs the Department of where project assets and liabilities would be held, and two sets of financials with one set reflecting if the Emera

transaction is overturned. PPDLW also argued that the Department should hire a certified professional accounting firm to properly assess the finances of the applicant.

In rebuttal testimony submitted by the applicant, the applicant stated that it has met requirements set forth by Chapter 373. The Site Location of Development Law (Site Law) authorizes the Department to condition a permit such that the applicant submits evidence of financial capacity prior to construction. 38 M.R.S.A. § 484 (1). The applicant contends that the breakdown of the project cost is consistent with what the Department has required for other developments. The project estimate does include the cost of installing radar-assisted lighting technology. The applicant concludes that it has submitted sufficient financial evidence to satisfy Chapter 373. In order to further guard against any financial risk to the public, the applicant is proposing to post appropriate financial security (a letter of credit, performance bond, or other similar security) that would be independent from the decommissioning fund and available to the State to fully restore the site in the event that the developer started but did not complete construction within a certain time period.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards, conditioned on the applicant submitting prior to construction evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State, or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate for the BLWQ review and approval.

4. TECHNICAL ABILITY:

The applicant operates 16 other wind energy projects across the country with a total generation capacity of 980 MW. The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also retained the services of several consulting firms to assist in the design and engineering of the project. The firms and their proposed involvement are as follows:

- Stantec Consulting – natural resource assessment, permitting
- James W. Sewall Company – engineering and stormwater
- SGC Engineering, LLC – electrical engineering
- Kevin J. Boyle, PhD – user surveys
- Landworks – visual impact analysis
- Kleinschmidt Associates, LLC – recreational surveys
- TRC/Northeast Cultural Resources – prehistoric archaeological resources
- Verrill Dana – legal counsel

Based on the experience and expertise of the applicant and their retained consultants, the Department finds that the applicant has demonstrated adequate technical ability to develop the project in compliance with Department standards and provisions of the Site Law.

5. NOISE:

To address the Site Law standard pertaining to the control of noise, 38 M.R.S.A. §484(3), and the applicable rules, Chapter 375(10), the applicant submitted a Noise Impact Study entitled “Sound Level Assessment for the Bowers Wind Project,” completed by Stantec Consulting and dated September 2012. The Noise Impact Study was conducted to predict expected sound levels from the proposed project, and to compare the model results to the applicable requirements of Chapter 375(10).

The Bowers Wind Project must comply with Department regulations applicable to sound levels from construction activities, routine operation and routine maintenance. Chapter 375(10) applies hourly sound level limits (L_{eqA-Hr}) at facility property boundaries and at nearby protected locations. Chapter 375(10)(G)(16) defines a protected location as “[a]ny location accessible by foot, on a parcel of land containing a residence or planned residence or approved subdivision near the development site at the time a Site Location of Development application is submitted...”. In addition to residential parcels, protected locations include, but are not limited to, schools, state parks, and designated wilderness areas. For the proposed project, the nearest protected location is approximately 3,600 feet from a turbine.

As outlined in Chapter 375(10)(I)(2), the sound level resulting from routine operation of a wind energy development is limited to 75 decibels (dBA) at any time of day at any development property boundary. At any protected location, the limit is 55 dBA between 7:00 a.m. and 7:00 p.m., and 42 dBA between 7:00 p.m. and 7:00 a.m.

Pursuant to Chapter 375(10)(C)(5)(s) sounds from a regulated development received at a protected location are exempt from the regulations when the owner of the property conveys a noise easement for that location to the generator of the sound. The owner of one protected location has a license agreement with the underlying landowner from the wind energy development.

To assist with the review of the application, the Department retained an independent noise expert, Peter Guldberg of Tech Environmental, Inc., to review the applicant’s prediction model and associated data as well as other evidence received on the issue of noise.

A. Sound Level Modeling. The applicant’s noise consultant, Stantec Consulting, Ltd., developed a sound level prediction model to estimate sound levels from the operation of the proposed project. The sound model for the project was created using Cadna/A software developed by DataKustik of Germany. Cadna/A allows the consultant to construct topographic surface models of area terrain for calculating sound attenuation from multiple sound sources such as wind turbines. The location of the proposed turbines, roads, parcels, land uses and waterbodies were entered into Cadna/A in order to calculate sound levels at various points within the proposed project area. Sound level predictions were calculated in accordance with ISO 9613-2, which is an international standard for calculating outdoor sound propagation.

This computerized model is capable of predicting sound levels at specific receiver positions originating from a variety of sound sources. Applicable national or international standards can also be included in the analysis as described above. Cadna/A accounts for such factors as:

- Distance attenuation;
- Geometrical characteristics of sources and receivers;
- Atmospheric attenuation (i.e. the rate of sound absorption by atmospheric gases in the air between sound sources and receptors);
- Ground attenuation (effects of sound absorption by the ground as sound passes over various terrain and vegetation types between source and receptor);
- Screening effects of surrounding terrain; and
- Meteorological conditions and effects.

The model used the Vestas 112 3.0 MW turbine since this turbine has the greatest potential sound impact. To be conservative in calculating the high end of the sound power levels produced by the turbines, a factor of 2 dBA was added by the applicant's consultant to the manufacturer's sound power level of the Vestas turbine, and a factor of 1 dBA was added to account for uncertainty in the mathematical modeling, resulting in a total adjustment factor of 3 dBA.

Sound associated with the operational phase of the project was modeled excluding other existing sound sources. Modeling the sound generated from the operation of the 16 turbines was conducted by first obtaining the manufacturer's sound power level specifications 106.5 dBA, and then applying the uncertainty factors described above to account for the manufacturer's uncertainty and the modeling uncertainty, for a total sound power level of 109.5 dBA from each turbine. The model was run with all 16 turbines operating at full sound power output. No noise reduction operations are proposed for this project. The applicant reported that the predicted hourly nighttime sound levels at 4 protected locations at distances of 3,646 feet to 5,906 feet from the nearest proposed turbine ranged from 39.4 dBA to 40.2 dBA. The applicant concluded that the proposed project would result in sound levels below the required daytime sound level limit of 55 dBA and the nighttime sound level limit of 42 dBA at all protected locations.

Although substation transformers emit sound, they were not considered significant sound sources by the applicant's consultant due to a low sound output and relatively large distance from protected locations, and were therefore not included in the model. The Department and Peter Guldberg found this appropriate and acceptable.

- B. Tonal Sound. As defined in Chapter 375(10)(I)(3), a tonal sound exists if: at a protected location, the 10 minute equivalent average one-third octave band sound pressure level in the band containing the tonal sound exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies at or between 500 Hz and 10,000 Hz, by 8 dB for center frequencies at or between 160 and 400 Hz, and by 15 dB for center frequencies at or between 25 Hz and 125 Hz. 5 dBA shall be added to any average 10 minute sound

level ($Leq_{A 10\text{-min}}$) for which a tonal sound occurs that results from routine operation of the wind energy development.

The applicant's September 2012 Noise Impact Study states that the Vestas V112 turbines proposed for use carry Sound Level Performance Standard warranties certifying that they would not produce a tonal sound as it is defined by the Department's Noise Regulations. In his review of the applicant's Noise Impact Study on behalf of the Department, Mr. Guldborg confirmed that an analysis of the sound power octave band spectrum for the Vestas V112 reveals that they have no potential for creating a tonal sound as defined in the Department's Noise Regulations.

- C. Short Duration Repetitive Sound. Chapter 375(10)(I)(4) defines short duration repetitive sound (SDRS) as:

“a sequence of repetitive sounds that occur within a 10-minute measurement interval, each clearly discernible as an event resulting from the development and causing an increase in the sound level of 5 dBA or greater on the fast meter response above the sound level observed immediately before and after the event, each typically ± 1 second in duration, and which are inherent to the process or operation of the development.”

Chapter 375(10)(I)(4) requires that if any defined SDRS results from routine operation of a development, 5 dBA must be added to the average 10-minute sound level ($Leq_{A 10\text{-min}}$) measurement interval in which greater than 5 SDRS events are present.

The September 2012 Noise Impact Study submitted by the applicant summarized measurements of operating wind turbines in Maine and data from published literature that indicate that sound level fluctuations during the blade passage of the wind turbines typically range from 2 to 5 dBA, with an occasional event reaching 6 dBA. The applicant's report states that amplitude modulation is not likely to occur in more than one-third of the measurement intervals, meeting the “worst-case” test protocol criteria. The applicant states that the conservative assessment of the 5 dBA penalty to one-third of the compliance measurement intervals would result in an added 1.7 dBA to the measured average $Leq_{A 10\text{-min}}$. Based on the applicant's Noise Impact Study and the assessment of the Department's noise expert, it appears the proposed project is unlikely to generate SDRS in exceedance of the applicable sound limits. Compliance testing for SDRS would be incorporated into the post-construction noise monitoring program (discussed in Section 5.E. below) after completion would provide assurance that SDRS was not occurring.

- D. Department Analysis. Mr. Guldborg reviewed the proposed project and the report, entitled, “Sound Level Assessment Bower Wind Project,” submitted by Stantec and dated September 2012 to determine if the acoustic studies submitted by the applicant were reasonable and technically correct according to the standard engineering practices and the Department's Regulations on Control of Noise (06-096 CMR 375(10)). Mr. Guldborg concluded that the Vestas 112 3.0 MW turbine maximum sound power levels with conservative uncertainty factors were used in the analysis;

the acoustic model and its assumptions are appropriate; the sound receiver locations are appropriate; the decibel contour maps adequately cover the potential impact area; and the Department Regulations on Control of Noise have been properly interpreted and applied for by the applicant.

- E. Post-Construction Monitoring Program. In his project review, Mr. Guldberg states that to ensure that the sound level predictions submitted by the applicant are accurate for the wind turbines actually installed, and to ensure compliance with the Department's Noise Regulations, including provisions regarding SDRS and tonal sound, the Department should require post-construction sound monitoring for the project.

To ensure compliance, post-construction monitoring must meet all applicable standards of Chapter 375(10)(I)(8), which specifies the methods for measuring sound and the information to be reported to the Department.

- F. Sound Complaints Response and Resolution Protocol. The applicant proposes to implement a formal protocol for responding to sound complaints. The protocol would meet all applicable standards of Chapter 375(10)(I)(7)(j). The applicant must notify the Department of any complaints within three business days of receiving them and must notify the Department of the outcome of its investigation within three business days of completion.

Based on the applicant's submissions and the review of those submissions by the Department's expert, the Department finds that the proposed project would meet all applicable standards of Chapter 375(10), including both tonal sound and SDRS, and that the applicant has made adequate provisions for the control of excessive environmental noise from the proposed project. To ensure that the project operates in compliance with the permit and the Department's regulations, the Department finds that the applicant must implement the post-construction monitoring program described above, including the sound complaint protocol. The applicant must investigate all complaints and must notify the Department of any complaints within three business days of receiving them, and must notify the Department of the outcome of this investigation within three business days of completion; and the applicant must submit sound level monitoring reports in accordance with the post-construction monitoring program described above. Upon any finding of non-compliance by the Department, the applicant must take short-term action immediately to adjust operations to reduce sound output to applicable limits under Chapter 375(10). Within 60 days of a determination of non-compliance by the Department, the applicant must submit, for review and approval, a mitigation plan that proposes actions to bring the project into compliance. The Department would review any such mitigation plan and may require additional mitigation or alternative measures. If immediate actions to bring the project into compliance with the applicable noise standards are not taken or not successful while the process of generating and obtaining approval of a longer term plan is taking place, the Department may take such enforcement action as it finds appropriate to ensure compliance with the Site Law, applicable provisions of Chapter 375(10), and this Order.

6. SCENIC CHARACTER:

The Site Law and the NRPA both have standards pertaining to scenic impacts that must be satisfied in order to obtain a permit for a wind energy project. The Site Law requires an applicant for a wind energy project to demonstrate that the proposed project would not adversely affect existing uses or scenic character. Pursuant to the NRPA an applicant must demonstrate that a proposed project would not unreasonably interfere with existing scenic, aesthetic or recreational uses of a protected natural resource. The WEA further specifies those standards and declares that when expedited wind energy developments are being evaluated:

[T]he [Department] shall determine, in the manner provided in subsection 3 [which provides specific criteria discussed below], whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character . . . Except as otherwise provided in subsection 2, determination that a wind energy development fits harmoniously into the existing natural environment in terms of potential effects on scenic character and existing uses related to scenic character is not required for approval under . . . Title 38, section 484, subsection 3. 35-A M.R.S. §3452(1).

The proposed wind project contains “generating facilities” including wind turbines as defined by 35-A M.R.S. §3451(5) and “associated facilities” such as buildings, access roads, collection lines, and substation, as defined by 35-A M.R.S.A. §3451(1). With regard to the associated facilities, the WEA, 35-A M.R.S. §3452(2), provides in pertinent part that:

The [Department] shall evaluate the effect of associated facilities of a wind energy development in terms of potential effects on scenic character and existing uses related to scenic character in accordance with . . . Title 38, section 484, subsection 3, in the manner provided for development other than wind energy development if the [Department] determines that application of the standard subsection 1 to the development may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities. An interested party may submit information regarding this determination to the [Department] for its consideration. The [Department] shall make a determination pursuant to this subsection within 30 days of its acceptance of the application as complete for processing.

The WEA, 35-A M.R.S. §3452(3), further provides that:

A finding by the [Department] that the development’s generating facilities are a highly visible feature in the landscape is not solely sufficient basis for determination that an expedited wind energy project has an unreasonable adverse effect on the scenic character and existing uses related to scenic character of a scenic resource of state or national significance. In making its determination under subsection 1, the [Department] shall consider insignificant the effects of portions of the development’s

generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.

As provided in the WEA, 35-A M.R.S. §3452(2), the Department made a determination within 30 days of the receipt of the application that the potential effects of the express collector line on the scenic character and existing uses would be reviewed under the standards set forth in the Wind Energy Act (35-A M.R.S. §3452).

To address the scenic impact criteria, the applicant submitted a Visual Impact Assessment (VIA) for the proposed project prepared by LandWorks and dated October 2012. The VIA examined the potential scenic impact of the generating facilities and associated facilities on Scenic Resources of State or National Significance (SRSNS) within eight miles of the proposed project using the evaluation criteria contained in the WEA. The applicant also submitted the results of user intercept surveys conducted by Kleinschmidt and dated September 2012.

The applicant identified fifteen SRSNS within eight miles of the proposed generating facilities. Fourteen of the SRSNS are great ponds, and the other is the Springfield Congregational Church. Additional descriptions of these fifteen SRSNS are included below, including the anticipated scenic impacts on them from the proposed project.

The applicant conducted a VIA within an eight-mile radius of the proposed generation facilities portion of the project. The applicant's VIA for the generating facilities and associated facilities addresses the criteria set forth in 35-A M.R.S. §3452(3):

- (A) The significance of the potentially affected scenic resource of state or national significance;
 - (B) The existing character of the surrounding area;
 - (C) The expectations of the typical viewer;
 - (D) The expedited wind energy development's purpose and the context of the proposed activity;
 - (E) The extent, nature, and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and
 - (F) The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape.
- A. Scenic Resources of State or National Significance. SRSNS are defined in 35-A M.R.S. §3451(9). The following is a description of what constitutes each type of a SRSNS and the applicant's summary of potential impacts to each of the SRSNS within eight miles of the proposed generating facilities:

- 1) National Natural Landmarks. National Natural Landmarks are federally designated wilderness areas or other comparable outstanding natural and cultural features, such as Orono Bog or Meddybemps Heath. The applicant did not identify any National Natural Landmarks within eight miles of the proposed project.
- 2) Historic Places. Historic Places are properties listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox.

The applicant identified one historic property within eight miles of the proposed project, the Springfield Congregational Church, located on Route 6. The church is 5 miles from the proposed project and would not have any view of the project.

- 3) National or State Parks. There are no national or state parks within eight miles of the project.
- 4) Great Ponds. A great pond is a SRSNS if it is:
 - a. One of the 66 great ponds located in the State’s organized area identified as having outstanding or significant scenic quality in the *Maine’s Finest Lakes* study published by the Executive Department, State Planning Offices in October 1989; or
 - b. One of the 280 great ponds in the State’s unorganized or de-organized areas designated as outstanding or significant from a scenic perspective in the *Maine Wildlands Lake Assessment* published by the Maine Land Use Regulation Commission in June, 1987.

There are fourteen great ponds within eight miles of the project that have been rated significant or outstanding for scenic quality in the *Maine Wildlands Lake Assessment*. (Assessment)

GREAT POND	MWLA RATING	NEAREST TURBINE	NUMBER OF TURBINES VISIBLE
Pleasant Lake	Outstanding	2.4 miles	0-16
Duck Lake	Significant	2.7 miles	0-14
Junior Lake	Significant	3.2 miles	0-13
Shaw Lake	Significant	3.5 miles	0-14
Keg Lake	Significant	3.7 miles	0-12
Scraggly Lake	Significant	4.1 miles	0-16
Bottle Lake	Significant	5.1 miles	0-10
Sysladobsis Lake	Significant	6.3 miles	0-10
Pug Lake	Outstanding	7.7 miles	0-6
Horseshoe Lake	Significant	approx. 7.8 miles	No visibility

Lombard Lake	Outstanding	approx. 5.5 miles	No visibility
West Musquash Lake	Outstanding	approx. 6.0 miles	No visibility
Norway Lake	Significant	approx. 7.8 miles	No visibility
Upper Sysladobsis Lake	Significant	approx. 6.5 miles	No visibility

The applicant's VIA utilized a system by which methods and indicators were used collectively to evaluate each of the criteria in the WEA and determine their contribution to, or potential impact on, the scenic impact. Based on the evaluation of the indicators by the applicant, each criterion was given a rating of Low, Medium or High impact. For each SRSNS, the VIA concluded with a rating of Low, Medium or High for the overall scenic impact to the SRSNS. The following is a summary of the applicant's VIA materials and evaluations.

BOTTLE LAKE

Bottle Lake is approximately 258 acres, all of which are located within eight miles of the project. This lake is 5.1 miles from the nearest visible turbine. The applicant states that Bottle Lake is the most densely developed lake in the study area, with roughly 100 camps along the shoreline. Bottle Lake is listed as a great pond with a scenic resource rating of significant in the Assessment. The applicant did not conduct any user surveys on this lake.

The applicant's VIA indicates that up to 10 turbine hubs may be visible over 21% of the lake. The turbines would be visible within a horizontal viewing angle of 7 degrees. The applicant concludes that Bottle Lake will be minimally affected by the project since the closest turbine is 5.1 miles away and the views of the project would not appear dominant to a typical user. Given these facts along with the small horizontal viewing angle, the applicant contends that the overall scenic impact to Bottle Lake would be Low.

DUCK LAKE

Duck Lake is 262 acres in size. The nearest turbine is 2.7 miles away. Duck Lake is listed as a great pond with a scenic resource rating of significant in the Assessment. The applicant states that Duck Lake has approximately 37 camps along its wooded shoreline. The applicant did not conduct any user surveys on this lake.

The VIA identifies that up to 14 turbine hubs may be visible from the southern shore of the lake, while there would be no visibility from the northern side of the lake. The photosimulation prepared by the applicant shows that the turbines would be visible within an 8 degree angle of view. The project would be visible from 61% of the lake surface. The applicant concludes that the scenic values would not be unreasonably diminished by the visibility of the proposed project and rates the overall impact to Duck Lake as Low.

JUNIOR LAKE

Junior Lake is 4,000 acres in size with a mixed forest land cover. The applicant states that there are approximately 87 camps and/or structures on this lake. The proposed project would be 3.2 miles from the lake. Junior Lake is listed as a great pond with a scenic resource rating of significant in the Assessment. A portion of the eastern shore is conserved through what is referred to in the administrative record as the Sunrise Conservation Easement, which limits the amount of development allowed along the lake shore. The applicant conducted user surveys on this lake and submitted them with the application.

The applicant's VIA indicates that there may be up to 13 turbine hubs visible from Junior Lake. The photosimulation shows that the proposed project would be visible within a horizontal angle of view of 17.25 degrees. The project would be visible from 85 % of the lake. The applicant completed the user survey on Junior Lake over 12 days between May 25 and August 11, 2012. The survey found that 73% of the users expected to have a "very high quality" experience on the lake. The VIA noted that 60% of the respondents said that the proposed project would adversely affect their use and enjoyment of the lake. The applicant noted that these numbers may be related to the "significant public opposition" of the project because the survey found that, after viewing simulated conditions of post construction views, 74% of the users stated they would continue to use the resource. The applicant argues that the impact of the extent and nature of the visibility of the turbines from this lake is diminished by the lake's variety of views and the variety of the surrounding landscape. In other words, the applicant concludes that, because the ridge lines around the SRSNS are low-lying and not distinct, the addition of wind turbines on two of them would be visually absorbed, thus reducing the scenic impact of the project. The applicant rates the overall scenic impact to Junior Lake as Medium.

KEG LAKE

Keg Lake is 371 acres and located 3.7 miles from the nearest turbine. The applicant states that Keg Lake has a mixed growth forest and approximately 15 camps along the western shore. Keg Lake is identified as a great pond with a scenic resource rating of significant in the Assessment. The applicant did not conduct any user surveys on this lake.

The applicant's VIA indicates that up to 12 turbine hubs may be visible from this lake. The photosimulation shows that turbines would be visible within a horizontal view angle of 15 degrees. The project would be visible from 54% of the lake surface. The applicant concludes that the visibility is limited and not overly dominant and it would not have an adverse, unreasonable effect on scenic values and existing uses of Keg Lake. The applicant rated the scenic impact to Keg Lake as Low-Medium.

PLEASANT LAKE

Pleasant Lake is listed as a great pond with a scenic resource rating of outstanding in the Assessment. The lake is 1,550 acres in size and is surrounded by mixed growth forest. The nearest turbine is 2.4 miles from the lake. The majority of the shoreline is undeveloped. The applicant did a user survey for this resource.

The applicant's VIA indicates that 16 turbine hubs may be visible from the lake. The photosimulation shows the turbines would have a horizontal view angle of 30 degrees. The project would be visible from 90% of the lake. The user survey was completed in 12 days between May 25 and August 11, 2012. The user survey found that 70% of the respondents anticipated that the project would have a neutral or positive effect on their enjoyment and 86% indicated that it would have a positive or neutral effect on their continued use of the lake. Based upon this information the applicant concluded that "the effect on continued use and enjoyment of the scenic resource is low." Dr. Palmer, examining the converse of percentages, notes that the applicant does not explain its rationale as to why a negative effect to enjoyment of 30% and a negative effect on continued use of 14% is within the threshold of a Low scenic impact rating. Ultimately the applicant concludes that the overall result of the project would be a Medium impact to Pleasant Lake.

PUG LAKE

Pug Lake is a nearly enclosed bay that is considered part of West Grand Lake, which is listed as a great pond with a scenic resource rating of outstanding in the Assessment. Pug Lake is 7.7 miles from the nearest turbine. The lake is surrounded by the Sunrise Conservation Easement, which maintains a working forest. The applicant did not conduct any user surveys for this lake.

In the applicant's VIA, it states that only approximately 97.2 acres of the lake, which is 14,467 acres in size, are within the project's 8-mile radius and up to 6 turbine hubs may be visible. The turbines would have a horizontal view angle of 5 degrees. The project would be visible from 17% of the lake surface of Pug Lake. The applicant concluded that the overall impact to Pug Lake is Low.

SCRAGGLY LAKE

Scraggly lake is listed as a great pond with a scenic resource rating of significant in the Assessment. Scraggly Lake is 1,641 acres in size with mixed growth forest and little development. The nearest turbine would be 4.1 miles in the distance. The applicant did a user survey for this resource.

The applicant's VIA indicates that up to 16 turbine hubs may be visible from the lake. The photosimulation shows the turbines would have a horizontal view angle of 36 degrees. The VIA indicates that from other locations on the lake the turbines would have a horizontal view angle of 43 degrees. The project would be

visible from 77% of the lake surface. The user survey was conducted over 12 days from May to August 2012. The survey found that 50% of respondents anticipated that it would have a positive or neutral effect on their enjoyment and 77% indicated that it would have a positive or neutral effect on their continued use. The VIA concludes that “based on all of these factors, effect on continued use and enjoyment of the scenic resource is low”, although Dr. Palmer notes that the applicant does not explain its rationale as to why the converse of percentages results in a Low scenic impact rating. The applicant concludes that the overall scenic impact is Medium.

SHAW LAKE

Shaw Lake is listed as a great pond with a scenic resource rating of significant in the Assessment. Shaw Lake is 251 acres in size with a mixed growth forest cover. There is no road access to the lake shore and three quarters of the lake is surrounded by the Sunrise Conservation Easement. The lake is located 3.5 miles from the nearest turbine. The applicant attempted a user survey on this lake when the surveys were done for Junior, Pleasant and Scraggly Lakes, but was not able to identify any users to the lake.

In the VIA, the applicant indicates that up to 14 turbine hubs may be visible. The photosimulation of the turbines shows there would be a horizontal view angle of 45 degrees. The project would be visible from 80% of the lake surface. During the 2012 user survey, no individuals were observed using this lake. The applicant concludes that “The survey results indicate that the effect of the wind farms presence on the public’s continued use and enjoyment of the scenic resource...will be minimal” and the overall scenic impact would be Low-Medium.

SYSLADOBSIS LAKE

Sysladoobsis Lake is listed as a great pond with a scenic resource rating of significant in the Assessment. The lake is 5,401 acres in size although only 689 acres are within 8 miles of the proposed turbines. The land cover around the lake is mixed forest and the applicant states that there are approximately 52 camps along the shoreline. The nearest turbine is approximately 6.3 miles in the distance. The applicant did not conduct a user survey for this resource.

In the VIA, the applicant indicates that up to 10 turbine hubs would be visible from the lake. The most visible turbines at the photosimulation location would have a horizontal view angle of 10 degrees. The project would be visible from 47% of the lake surface. The applicant concludes that the overall scenic impact on this lake would be Low.

- 5) Scenic Rivers or Streams. A segment of a scenic river or stream is a SRSNS if it is identified as having unique or outstanding scenic attributes in Appendix G of the 1982 “Maine Rivers Study” by the Department of Conservation. There are no

scenic rivers or stream segments identified as having unique or outstanding scenic attributes within eight miles of the project.

- 6) Scenic Viewpoints. A scenic viewpoint is a SRSNS if it is located on state public reserved land or on a trail that is used exclusively for pedestrian use, such as the Appalachian Trail, that the Department of Agriculture, Conservation and Forestry (DACF) designates by rule adopted in accordance with 35-A M.R.S. § 3457. There are no scenic viewpoints within eight miles of the project.
- 7) Scenic Turnouts. A scenic turnout is a SRSNS if it has been constructed by the Department of Transportation pursuant to M.R.S. 23, § 954 on a public road designated as a scenic highway. There are no scenic turnouts within eight miles of the project.
- 8) Scenic Viewpoint in Coastal Areas. To qualify as a SRSNS, a scenic viewpoint located in the coastal area, as defined by 38 M.R.S. § 1802, subsection 1, must be ranked as having state or national significance in terms of scenic quality in:
 - a. one of the scenic inventories prepared for and published by the Executive Department, State Planning Office: “Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston,” Dominie, et al., October 1987; “Scenic Inventory Mainland Sites of Penobscot Bay,” Dewan and Associates, et al., August 1990; or “Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands,” Dewan and Associates, June 1992; or
 - b. a scenic inventory developed by or prepared for the Executive Department, State Planning Office in accordance with 38 M.R.S.A. § 3457.

There are no scenic viewpoints in a coastal area within eight miles of the project.

- B. Public Hearing. At the public hearing, PPDLW summarized its pre-filed testimony asserting that, based on the applicant’s intercept user intercept study, the PPDLW User Survey, and public opposition, the proposed project would have an unreasonable adverse effect on both scenic character and the existing uses related to the scenic character of the SRSNS within eight miles of the proposed project. PPDLW also submitted Exhibit N *Critique of Project Developer’s VIA* prepared by Michael Lawrence & Associates, Landscape Architect & Site Planning Consultants, dated March 2013.

PPDLW also asserted that the tourism in the region would suffer serious impacts due to the proposed project. PPDLW argued that the guides that use this area rely on the “wilderness brand that brings visitors to the lakes.” PPDLW disputes the applicant’s assertion that tourism and guiding does not occur within 8 miles of the project location. PPDLW contends that, while the applicant described the area as “heavily forested” and a “working forest” thereby implying that these areas are not pristine or worth protecting from an industrial wind development, tourism and guiding can actually go hand in hand with forestry activities.

PPDLW's prefile testimony provides that twelve of the fourteen SRSNS that lie within eight miles of the project are connected by water or short portages. This water-way trail is discussed in the book "Quiet Water Maine", and is noted in ten other websites for paddling enthusiasts provided by PPDLW. Nine of those SRSNS would have views of the turbines closer than 8 miles.

In prefiled testimony PPDLW described how the Legislature did not designate certain areas for expedited wind permitting in the WEA. These areas that were not designated were described in the report of the Governor's Wind Task Force on Wind Power Development as "...broad areas that encompass concentrations of ecological, recreational and/or scenic values that are among the most significant in the jurisdiction." PPDLW describes how the Downeast Lakes areas were not included in the expedited wind permitting area. The proposed project is inside the expedited permitting area, but as close as approximately 1,220 feet to the edge of the expedited permitting area. PPDLW stated that the Downeast Lakes economy relies on forestry and tourism, and that the proposed project would be the first project to be visible from a total of nine SRSNS. PPDLW also testified that the applicant's VIA consistently minimized and understates the "scenic quality of the Downeast Lakes Region and the nine Scenic Resources of State or National Significance (SRSNS) with visibility of turbines within eight miles."

The applicant argued in its post-hearing brief that the area is not a tourist destination and found no publications to support the fact that it is a tourist destination. In its post-hearing brief the applicant states the proposed project is supported by many Maine guides, including the two sporting camps located closest to the project, the Maine Snowmobile Association, ATV Maine, Downeast Salmon Federation, Maine State Chamber of Commerce, Sierra Club Maine, Maine Audubon Society, large landowners within the vicinity of the proposed project, the Passamaquoddy Tribe, construction companies and the host communities, among many others. The applicant testified that they did not find much evidence of guides working in the vicinity of the project while conducting its user surveys.

PPDLW also noted in its post-hearing brief that the Maine Sporting Camp Association, Grand Lake Stream Association, Maine Professional Guides Association, Forest City Guides Association and Maine Wilderness Guides Association all oppose the proposed project.

CLF/MREA submitted pre-filed testimony regarding the "purpose and context" of the purposed activity as discussed in 35-A M.R.S.A. §3452(3). This included testimony from Abigail Krich, the president of Boreas Renewables, who testified about the positive economic and environmental impacts of wind energy in Maine. They also submitted testimony from George A. Smith, an outdoor writer, who testified that fishermen would still fish in waters within view of an industrial turbine development. CLF/MREA also submitted testimony from Philip Bartlett and Stacey Fitts regarding the WEA and its specific purpose to promote wind. Senator Bartlett and Mr. Fitts testified during the public hearing that the Governor's Task Force on Wind Power

Development (on which they served) knew that areas that were not included in the expedited permitting area would be able to see turbines that were located in the expedited permitting area. Further, areas of special interest, like Baxter State Park, were not located in the expedited permitting area and the nearest expedited permitting area is many miles away, therefore creating a ‘buffer’ area around these special interest areas.

- C. Peer Review of the Visual Impact Assessment. The Department hired Dr. James F. Palmer of Scenic Quality Consultants, an independent scenic expert, to assist in its review of the evidence submitted on scenic character. Dr. Palmer provided the Department with review comments March 8, 2013. Dr. Palmer ranked fifteen SRSNS in a table entitled “Summary of Evaluation Criteria Ratings for the Bowers Wind Project”. The fifteen SRSNS were evaluated by Dr. Palmer based on the WEA criteria, namely, significance of the resource; character of surrounding area; typical viewer expectations; development’s purpose and context; extent, nature, and duration of uses; effect on continued use and enjoyment; and, scope and scale of project views. Dr. Palmer rated each statutory criterion for each of the fifteen SRSNS with ratings between “None” to “High”. Dr. Palmer then determined an overall scenic impact to those SRSNS based on his evaluation of the three core criteria – extent, nature, and duration of uses; effect on continued use and enjoyment; and scope and scale of project views. No SRSNS reached the level of a “High–” or “High” overall scenic impact in Dr. Palmer’s judgment. However, Dr. Palmer concluded that eight of the great ponds (Bottle Lake, Duck Lake, Junior Lake, Keg Lake, Pleasant Lake, Scraggly Lake, Shaw Lake, and Sysladobsis Lake) would reach a level of “Medium” overall scenic impact. Dr. Palmer concludes that “While the Bowers Wind Project is found to have an Adverse scenic impact, it does not reach the level of Unreasonably Adverse.”

In his review comments, Dr. Palmer noted that the VIA did not set forth a procedure for combining evaluation criteria into an overall evaluation, and that nighttime use or visibility of the FAA lighting of the lakes are not discussed. In addition to the overall scenic impact ratings, Dr. Palmer provided the following comments to the Department on the nine great ponds within eight miles and with visibility of the proposed project:

1) Bottle Lake:

Dr. Palmer found that the proposed project would have an overall scenic impact on Bottle Lake of “Medium”. Dr. Palmer reached this conclusion by using what he believes are the three core scenic criteria from the WEA (extent, nature and duration; effect to enjoyment and continued use, and scope and scale). Since these three core scenic criteria combined did not rate “High-“ or “High”, then he found the scenic impact to this resource would not be unreasonably adverse.

2) Duck Lake:

For Duck Lake, Dr. Palmer states the applicant's basis for concluding that the overall scenic impact on this resource would be Low is not clear. Specifically, he questioned how the views of turbines from this lake are limited when the turbines would be visible from half the lake, and why a communications tower would lessen the impacts of the turbines. Dr. Palmer found that by combining the three core scenic criteria from the WEA, the project's overall scenic impact on Duck Lake would be "Medium" but the overall scenic impact to Duck Lake would not be unreasonably adverse.

3) Junior Lake:

Dr. Palmer reviewed the applicant's VIA and questioned the applicant's basis for rating the project's effect on continued use and enjoyment of the lake as Low when 60% of the respondents to the user surveys indicated that the proposed project would have a negative effect on their enjoyment, and 27% indicated that it would have a negative effect on their continued use. The applicant states that "The visibility of the project is not so extensive and dominant as to deter the typical user, and will not substantially reduce use and enjoyment". Dr. Palmer found that by combining the three core scenic criteria from the WEA, Junior Lake would have an overall scenic impact of "Medium", but the overall scenic impact to Junior Lake would not be unreasonably adverse.

4) Keg Lake:

Dr. Palmer reviewed the applicant's VIA and found that there were no studies provided on how additional development such as the proposed project would affect user enjoyment of Keg Lake. The applicant's VIA states, "the common activity is likely fishing and some paddling, primarily by camp owners. As such, they are still likely to continue to visit and use the resource" but the applicant offers no specific evidence to support this claim. Dr. Palmer found that by combining the three core scenic criteria from the WEA, Keg Lake would have an overall scenic impact of "Medium", but the overall scenic impact to Keg Lake would not be unreasonably adverse.

5) Pleasant Lake:

Dr. Palmer points out that the applicant's VIA states that, "although the turbines are visible throughout much of the lake, they would not be an unduly dominant presence". Dr. Palmer also notes that the applicant's VIA states that "the central angle of view occurs within 40-60 degrees and is the area that most highly influences human perception of a scene, given a fixed viewing direction". Dr. Palmer believes that the 30 degree and 45 degree angle of view visible in Exhibits 15 and 16 of the VIA represent a "very large proportion of the 'central angle of view... that most highly influences human perception of a scene.'" Exhibit 16 is a view of the northern shore of Pleasant Lake and from this viewpoint the turbines

are visible over a horizontal view angle of 45 degrees at a distance of 2.8 to 4.3 miles away. Dr. Palmer found that by combining the three core scenic criteria from the WEA, the project would have an overall scenic impact on Pleasant Lake of “Medium”, but the overall scenic impact to Pleasant Lake would not be unreasonably adverse.

6) Pug Lake:

Dr. Palmer found that by combining the three core scenic criteria for the WEA, Pug Lake would have an overall scenic impact of “Low”, and the overall scenic impact to Pug Lake would not be unreasonably adverse.

7) Scraggly Lake:

Dr. Palmer reviewed the applicant’s VIA that described Scraggly Lake as having “poor access and a lack of development” which can “give the lake a feeling of relative remoteness.” Dr. Palmer found the statement in the applicant’s VIA that, “it can also be posited that the extent of the project and linear layout reduces the potential for the view of the project to act as a distinct focal point that will continually draw the eye,” confusing since it seemed to be saying that since the turbines were visible for such a large angle of view there was no focal point. The user survey results for this proposed project for Junior, Pleasant and Scraggly Lakes indicated that 66%, 57% and 62% of the respondents, respectively, would be less likely to continue to use the lakes if the proposed project were to be built. Dr. Palmer found that by combining the three core scenic criteria from the WEA, the project would have an overall scenic impact on Scraggly Lake of “Medium”, but the overall scenic impact to Scraggly Lake would not be unreasonably adverse.

8) Shaw Lake:

Dr. Palmer reviewed the applicant’s VIA and questioned the statement that “the project will not appear overly dominant” in part because “the regular pattern and linear nature of the array reflects accepted practice for reducing visual impact by providing order and pattern to the turbine siting” . He also stated that the applicant’s VIA asserts that “the Baskahegan and Bowers project area lakes reinforce the fact that having wind turbines in view does not necessarily diminish the likelihood of users to return to this resource”. Dr. Palmer found that by combining the three core scenic criteria from the WEA, the project would have an overall scenic impact on Shaw Lake of “Medium”, but the overall scenic impact to Shaw Lake would not be unreasonably adverse.

9) Sysladobsis Lake:

Dr. Palmer reviewed the applicant’s VIA and commented that the VIA stated that “Getchell Mountain is the proximate landform in view, and it would serve to provide visual balance to the turbines on the adjacent Bowers Mountain (see

Exhibit 20: Visual Simulation from Sysladobsis Lake), contributing to the landscape's ability to visually absorb the Project". Dr. Palmer found that this assertion was not true, that the turbines would be the highest element in the landscape and would be very much visible from the lake. Dr. Palmer found that by combining the three core scenic criteria from the WEA, the project would have an overall scenic impact on Sysladobsis Lake of "Medium", but the overall scenic impact to Sysladobsis Lake would not be unreasonably adverse.

- D. Department Analysis and Findings. On December 7, 2012, the Commissioner exercised her discretion to hold a public hearing for the proposed project. The Commissioner determined that due to the unique history of the project and the fact that the previously proposed project was subject to an evidentiary public hearing process by the Land Use Regulation Commission, a public hearing would allow for sufficient public testimony, comment, and cross-examination that would be helpful to the Department's decision-making process. The Department reviewed and analyzed all information in the record related to scenic impacts including but not limited to, the applicant's VIA, Dr. Palmer's review and analysis, the Intervenor's submissions, the Department's site visit, and public testimony and comments.

The Commissioner and Department staff conducted a site visit on May 21, 2013. Department staff also conducted site visits on November 6, 2012 and December 13, 2012 to six of the great ponds within eight miles of the proposed project. While the project area is designated as part of the expedited permitting area for wind energy projects, the Department notes that the project area is adjacent to the only area not designated as a wind expedited area in the entire southern and eastern part of the state, which is the Downeast Lakes region. On the site visit the Department visited Scraggly Lake, Junior Lake and Pleasant Lake by motor boat. On the site visit Junior Lake was easily accessed by boat via Scraggly Lake through a water passage between the two lakes. The Department's observations of these three lakes were consistent with other evidence in the record in that these lakes are undeveloped and provide a sense of remoteness. The Department acknowledges that these lakes do not meet the definition of a remote pond (04-061 CMR Chapter 10 106. Management Class 6 Lake (Remote Pond)) because they have existing road access and some level of development. Pleasant Lake and Scraggly Lake, however, appeared almost completely void of development in that there was only one sporting camp and the public boat launch visible on the shore from the lakes. Thus, the views of the turbines in the distance would not be interrupted by any shoreline development in the foreground when viewed from these three SRSNS. The only visible development on the shoreline of Junior Lake was a few scattered camps, which were developed in such a manner that masked most of the camps. This may be due to the fact that, consistent with regulatory land use standards of the Land Use Planning Commission, new camp construction along the shoreline since 1972 is required to be set back 100 feet, and to retain vegetation as screening from the shoreline, as pointed out in public comment. On the site visit the Department observed the unique character and topography, described in more detail below, involved in evaluating scenic impacts within the project area.

As listed above, there are fourteen SRSNS within 8 miles of the proposed generating facilities. The Department concludes based upon the evidence in the record that since the following five SRSNS do not have any visibility of the project, there would not be an unreasonable adverse effect on the scenic character or existing uses related to scenic character of these scenic resources:

- Springfield Congregational Church
- Horseshoe Lake
- Lombard Lake
- West Musquash Lake
- Norway Lake

The Department has reviewed the applicant's VIA, and it disagrees with many of the applicant's descriptions of the existing character of many of the lakes classified as SRSNS. In reference to Pleasant Lake, the VIA states that "logging activity directly influences user expectations by diminishing the potential for this area and the lake itself to be viewed as a pristine, unaffected landscape". However, the applicant's user surveys demonstrate that 90 percent of respondents give the three surveyed lakes high or highest ratings for existing scenic value. The Department acknowledges that the areas around the proposed project are working forests, but because of the rolling topography logging activity was not a primary visible feature from the resources observed on the Department's May 21, 2013 site visit. Logging activity did not change the undeveloped and remote character of Pleasant Lake and Scraggly Lake, a character description that was brought up many times in the public testimony and comments.

The Department has reviewed Dr. Palmer's reports and analyses, and it recognizes he found that the proposed project would have "an adverse scenic impact, [but] it does not reach the level of Unreasonable Adverse". The Department supports Dr. Palmer's, and the applicant's, approach of assigning scenic impact ratings (of Low, Medium or High) to each of the project's fourteen SRSNS and basing such rating on each of the six statutory criteria for scenic impact in the WEA. The Department agrees with Dr. Palmer that if an extensive number of SRSNS are determined to have an overall scenic impact of Medium, the project could be considered to have an unreasonable adverse effect on the scenic character of SRSNS. However, the Department did not agree with Dr. Palmer's assessment that the three core criteria (extent, nature and duration; effect to enjoyment and continued use; and scope and scale) should, as a matter of course, be given extra weight for determining scenic impacts to SRSNS. Rather, scenic impacts on SRSNS must be evaluated on a case by case basis, applying each of the six review criteria to the facts in the administrative record to determine whether a project's impacts would be unreasonable.

The Department also disagrees with Dr. Palmer's statement that "if SRSNSs with ratings of Medium or higher comprise 10 percent of the area within 3 miles or 8 miles then the scenic impact is Unreasonably Adverse" because, on this administrative record, such a bright line test cannot be drawn. While the Department gave considerable weight to Dr. Palmer's analyses of the applicant's VIA, it finds that since Dr. Palmer assigned a majority of, or eight of the project's fourteen, SRSNS an

overall scenic ranking of Medium, the Department must further review the scenic impact evidence in the record to determine whether the project would result in an unreasonable adverse effect on scenic character. For example, if a single SRSNS receives an overall scenic impact rating of High, it appears that that would be sufficient grounds for concluding that the project would have an unreasonable adverse effect on scenic character, based on the statutory language in 35-A M.R.S. §3452(1).

In his review of the applicant's VIA, Dr. Palmer concluded that the overall scenic impact to Pleasant Lake would be Medium. The Department disagrees with Dr. Palmer's rating of this lake, and after reviewing the evidence in the record, concludes that the impact to Pleasant Lake would be greater than Medium and very close to receiving an overall scenic impact rating of High. The reasons for the Department's conclusion include: the lake received a rank of outstanding in the Assessment; 73% of the lake surface would have visibility of 9 to 16 turbines; it is 2.4 miles from the closest turbine, and therefore the turbines would appear large and if constructed, would dominate the viewshed from the lake; the observations of undeveloped nature of the May 21 site visit; and, that LUPC assigns a Management Class 2 and Resource Class of 1A to Pleasant Lake. The LUPC defines Management Class 2 lakes as "high value, accessible, undeveloped lakes", their second highest Management Class. LUPC defines Resource Class 1A as "lakes of statewide significance with two or more outstanding values". Resource Class 1A is the LUPC's highest Resource Class. The Department ultimately concluded that Pleasant Lake would not have an overall scenic impact rating of High because of the relatively small horizontal angle of view (30 degrees), which is in the middle of the range of angles of view for the other SRSNS within 8 miles of this project.

For the other seven great ponds (Duck Lake, Junior Lake, Shaw Lake, Keg Lake, Scraggly Lake, Bottle Lake, and Sysladobsis Lake) the Department concurs with Dr. Palmer's assessment that these lakes have a ranking of Medium for overall scenic impact. As stated above, the Department concludes that since a majority of the SRSNS (eight lakes out of the fourteen SRSNS, or 57%) received an overall scenic impact of Medium, and the Department concludes this is a significant impact on SRSNS by the proposed project, then that must be factored into the Department's analysis. The Department, however, further considered the evidence in the record with regard to whether the proposed project would have an unreasonable adverse effect on scenic character and existing uses related to scenic character.

After reviewing the administrative record as a whole, the Department notes the following pieces of evidence, reviewed in determining whether the proposed project would have an unreasonable adverse effect on scenic character or existing uses related to scenic character:

- 1) The applicant's user intercept survey indicates that if the scenic conditions remained the same, that is, if the project were not built, only 1% of the respondents indicated that they would be unlikely or very unlikely to visit the lakes again. When asked if the proposed project were to be constructed, the

percentage of respondents indicating they would be unlikely or very unlikely to visit the lakes again jumped up to 20%. The Department finds that this is a significant increase and impact on existing uses related to scenic character.

- 2) Forty-five percent of the user survey respondents (including 31% indicating it would have a very negative effect) indicated that the proposed project would have a negative effect on their enjoyment of the SRSNS. While this is mitigated somewhat by the 36% of the user survey results respondents would have no effect on their enjoyment of the SRSNS, this negative effect is relevant in the Department's analysis.
- 3) Similarly, not one user survey respondent rated the scenic value ratings of the lakes as Low in the current condition. After being shown the applicant's photosimulations, that number increased to 58%, which is a significant jump. Further, 90% of the respondents gave the lakes High or the highest scenic value ratings in the current condition, but that number dropped to 33% in the simulated conditions.
- 4) Dr. Palmer concluded that Pug Lake received an overall scenic impact ranking of "Low +", which mitigates the "Medium" and higher scenic impact rankings of the other SRSNS.
- 5) There was substantial public testimony and comment received at the public hearing and during the processing of the application. There were large numbers of project supporters at the public hearing, but the Department also received a significant number of comments from those opposed to the project. The common themes of the public comments received at the public hearing that expressed opposition to the project were: scenic impacts; nighttime lighting impacts; fire safety; negative impacts to local businesses and tourism; and noise issues. The comments received at the public hearing expressing support for the project included: job creation; support by local residents; tangible benefits; lack of concern about project's impact to tourism; and support for renewable energy.
- 6) A unique aspect of this project is that many of the great ponds within 8 miles of the proposed project are interconnected. The applicant supplied credible evidence indicating that, of the sample of users consulted, there is little actual multi-day use of the connected lakes. However, the Department gives consideration to the fact that this interconnection exists.
- 7) The Department agrees with the applicant that when considering whether a project's scenic impacts would cause an unreasonable adverse effect on scenic character, a case-by-case inquiry must be made. Each wind energy development project must be reviewed individually on its own merits, under the statutes and regulations applicable to that development. The applicant attempted to compare the proposed project's scenic impacts with impacts from other wind energy developments reviewed by the Department in an attempt to portray how the proposed impacts were comparable to other approved wind energy developments.

For instance, the applicant stated that the proposed project's scenic impacts were mitigated by the fact that the prior Bowers Wind project reviewed and denied by LURC in 2011 consisted of 27 turbines while the proposed project now consists of 16 turbines. The Department did not compare the proposed project with other previous wind energy developments, and gave no weight to the applicant's evidence in this regard.

- 8) The Department gave little weight to the applicant's "hypersensitivity" argument related to the user surveys. The applicant has asserted that people employ two coping strategies when they fear change, namely precaution and hyperdefensiveness. With the precaution strategy people follow a sort of "why take a chance" approach and people can become hyperdefensive about the presumed change or "danger". The applicant asserts that this coping strategy could have affected the user survey results. The Department concludes that the user surveys cannot be discounted due to assumed "hypersensitivity." There are two existing wind energy projects (the Rollins Wind project in Lincoln and the Stetson Wind project in T8 R3 NBPP) in near proximity to this proposed project. It is reasonable to conclude that many of the users of these SRSNS know what an existing wind energy project looks like, and could base their responses to the user survey questions on their experiences and not feelings of "hypersensitivity".
- 9) The Department gave little weight to the post-construction Baskahegan Survey supplied by the applicant. The Department does not infer that the proposed project's SRSNS users would not be impacted, and would continue to use the SRSNS, because of the results of this Baskahegan Survey. The reasons for this conclusion are that Baskahegan Lake is not a SRSNS; there is no pre-development information on the Stetson Wind project; the boat launch where the Baskahegan Survey was conducted is more than 8 miles from the Stetson Wind project; and the applicant did not provide credible evidence to support the concept that many people that were using Baskahegan Lake prior to the Stetson Wind project have not stopped. For these reasons, the Department was not persuaded by this survey to support the idea that the users of the proposed project's SRSNS would continue to use the resources even if the user surveys did not always indicate this fact.
- 10) Numerous amounts of public comment and testimony raised the issue of FAA lighting because the nature of star gazing requires a sky with limited man-made lighting. The applicant's user survey found that 38% of respondents reported star gazing in response to the question of what the users' plans for the day were. Dr. Palmer states, "I believe that FAA warning lights can pose a serious scenic impact to viewers of the nighttime sky. Of course there need to be such observers, but the Bowers survey suggests that a large percentage of respondents do enjoy viewing the nighttime sky." The applicant did not provide any photosimulations of the impacts from the night lighting system proposed by the applicant due to the difficulty in accurately simulating night lighting. And there is not clear evidence in the record as to when the FAA will approve radar-activated lighting for wind projects. In view of this evidence in the record, the Department is concerned

about the negative effect of nighttime lighting on the scenic character of the project's SRSNS without the use of FAA-approved radar-activated lighting. To mitigate for those negative scenic effects, the applicant is willing to accept a condition to install FAA-approved radar-activated lighting prior to the start of project construction.

The Department considered the evidence in the record regarding scenic impacts and weighed the evidence in determining if the proposed project would have an unreasonable adverse effect on scenic character and existing uses related to scenic character. The Department concluded that it is not allowed under the WEA to balance a project's potential scenic impacts with the project's potential benefits. The Department concludes that it is responsible for considering all the evidence in the record and determining if all the applicable statutes and regulations are met. For the proposed Bowers Wind project, the Department finds that the generating facilities portion of the project would have an unreasonable adverse effect on the scenic character and the existing uses related to the scenic character of the nine SRSNS listed above. This finding is not based on the fact that the proposed project would be highly visible, but rather on evidence in the record that demonstrates the great ponds within 8 miles of the project have a high scenic significance; there are 8 great ponds that were deemed to have an overall scenic impact rating of Medium or greater; and the user surveys demonstrate that in addition to the negative effect on scenic character, there would be negative effects on continued use and enjoyment of the SRSNS.

7. WILDLIFE AND FISHERIES:

Applicants for Site Law and NRPA permits are required to demonstrate that the proposed project would not unreasonably harm wildlife and fisheries; any significant wildlife habitat; freshwater plant habitat; threatened or endangered plant habitat; aquatic or adjacent upland habitat; travel corridor; freshwater, estuarine or marine fisheries; or other aquatic life. To address these criteria, the applicant submitted the results of a series of ecological field surveys conducted by Stantec Consulting (Stantec), including wildlife species surveys, and vernal pool surveys within the project area, including the area affected by the express collector line. During the preparation of the surveys and other material in support of the application, Stantec consulted with the Department and other natural resource review agencies.

- A. Significant Vernal Pools. Stantec conducted vernal pool surveys in 2010 and 2011 within the project area and identified 5 natural vernal pools, 1 of which meets the criteria of a significant vernal pool. The project was designed to avoid any impacts to the significant vernal pool depression and a 250-foot buffer area around the pool.
- B. Inland Waterfowl and Wading Bird Habitat. The proposed project includes upland clearing in approximately 0.14 acre of Inland Waterfowl and Wading Bird Habitat (IWWH) for construction of a road.

- C. Deer Wintering Area. The applicant states that neither the generating facilities nor the transmission line portions of the project would impact any Deer Wintering Areas as defined under NRPA.
- D. Rare, Threatened, and Endangered Species. Stantec conducted a survey of the area within the proposed project for plant and animal species that are state or federally listed as Rare, Threatened, or Endangered. No Rare, Threatened or Endangered plant or animal species were found.
- E. Salmon Habitat Streams. The project is located outside the mapped Critical Habitat for Atlantic Salmon.
- F. Birds and Bats. The applicant retained Stantec to conduct bird and bat surveys to identify which species occurred in the area of the proposed project; the extent of the use of the site by such species; and potential impacts of the proposed project. Stantec conducted field surveys between September 2009 and June 2012. In the fall of 2009, Stantec conducted nocturnal radar surveys, bat acoustic surveys, raptor migration surveys, and nest surveys for bald eagle and great blue heron. In the spring/summer of 2010, Stantec conducted nocturnal radar surveys, acoustic bat surveys, raptor surveys and bald eagle nest surveys. Bald eagle nest surveys were also conducted in the spring of 2011 and 2012.

Stantec provided the results of the studies in the *Wildlife Habitat Report* in Section 7 of the application. The majority of the bat calls identified were unknown calls (1509 out of 2374), followed by the Genus *Myotis* (840 out of 2374 calls). No bald eagle nests are located within four miles of the proposed project.

MDIFW reviewed the proposed project and stated that there would be no significant adverse impact under the standards of Site Law and NRPA in the application submitted by Champlain Wind, LLC if these standards are met or exceeded as explicit permit conditions:

For the period of April 20th through October 15th over the life of the project, set the cut-in speed for all turbines to 5.0 meters per second each night starting at one-half hour before sunset to one-half hour after sunrise. Cut-in speeds are determined based on mean wind speeds measured at hub heights of a turbine over a 10-minute interval. Turbines would be feathered during these low wind periods to minimize risks of bat mortality.

The applicant has agreed to these operational control measures for the proposed project.

Exhibit 7D of the application contains a post-construction monitoring plan. As the turbines would be curtailed to minimize impacts to bats, the Department would not require post-construction mortality monitoring of the project. However, should the applicant choose to apply to the Department to modify the curtailment plan, the

Department strongly advises the applicant to consult with MDIFW prior to the start of a study for methodology review and approval.

- G. Fisheries. No fisheries impacts are anticipated from the proposed project.
- H. Intervenor position on wildlife issues. In his pre-filed testimony, intervenor David Corrigan testified that the applicant had failed to meet its burden of proof under Chapter 375: No Adverse Environmental Effect Standard of the Site Location Law. Mr. Corrigan testified that the United States Fish and Wildlife Service (USFWS) recommended that the applicant consider doing winter track surveys to determine the presence of Canada Lynx in and around the project area and they also recommended having discussions with biologists at the MDIFW who may have first-hand knowledge of the local Canada Lynx population. The applicant only did a desktop assessment to determine if there was high quality snowshoe hare habitat within the project area, which is the primary prey for Canada Lynx. Mr. Corrigan did not believe that the applicant met their burden of proof under Chapter 375 as it relates to the threatened Canada Lynx population.

In rebuttal testimony submitted by the applicant, the applicant testified that in Exhibit 7C-4 of the application, Stantec conducted a desktop assessment to identify potential habitat suitable for Canada Lynx. The methodology for the desk top assessment Stantec used was recommended by USFWS. Based on this assessment, no high or moderate-value hare habitat was present in the project area. The assessment did find 15 small patches of moderate value hare habitat and 8 small patches of low value hare habitat within the vicinity of the project, but none of those areas were within the project footprint. USFWS recommended that the applicant either conduct a desktop habitat assessment and/or conduct winter track surveys. The applicant determined that the desktop assessment was a more thorough approach than winter tracking. The applicant determined that the project would not result in habitat loss for the lynx. The project would include minimal road construction, with all roads posted to speeds less than 30 mph. The applicant thereby concludes that the proposed project should not adversely impact Canada Lynx or its habitat.

Mr. Corrigan testified at the public hearing that the applicant did several aerial surveys which showed bald eagle nests in close proximity to the project area (as close as 4.72 miles). The applicant also noted several instances of bald eagles being seen in and near the project area during their site surveys. Despite the high numbers of federally protected birds using the area, Mr. Corrigan concluded that the applicant offered no real evidence that the project would not have an unreasonable adverse effect on the residence and migratory populations of bald eagles or other raptors.

In rebuttal testimony submitted by the applicant, the applicant stated that they had consulted with both USFWS and the US Army Corps of Engineers (ACOE) in connection with the previously proposed larger 27-turbine project. In the review of the previous project USFWS had stated, "survey dated suggests that current use of the project area by migrating and resident bald eagles is lower than many proposed or

existing Maine wind projects.” The applicant developed all wildlife surveys in consultation with MDIFW and USFWS.

Mr. Corrigan testified that the applicant did not offer a solid plan to avoid undue adverse effects on bats. Mr. Corrigan noted that the applicants even objected to the curtailment plan presented by MDIFW.

In rebuttal testimony submitted by the applicant, they agreed to the conditions of curtailment stipulated by MDIFW, as described above.

Mr. Corrigan also submitted a list of questions regarding Canada Lynx and bald eagles to the Department for a response from MDIFW. In an email dated May 30, 2013 MDIFW submitted responses to Mr. Corrigan’s questions specifically regarding the management of the Canada Lynx habitat and previous consultation between MDIFW and the applicant.

The Department concludes the project would not result in an unreasonable impact on fisheries and wildlife or habitat protected by the NRPA provided turbine operation is curtailed as outlined above. If post-construction monitoring indicates an unreasonable impact on birds, bats and/or raptors, the Department, in conjunction with MDIFW, may require modified operation of the project, including the curtailment of turbines, as necessary.

8. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission (MHPC) reviewed the proposed project and stated that it would have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program (MNAP) database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 6, MDIFW did not identify any unusual wildlife habitats located on the project site. The applicant’s consultant surveyed the proposed project site and determined that four rare plant species were in the project area. They included populations of male fern, Orono sedge, large toothwort, and swamp fly-honeysuckle. MNAP worked with the project consultant on the development of avoidance and minimization plans for these four species. The applicant proposed to reduce the size of the turbine pad at Turbine 1 and to run underground electrical collector in the vicinity of Turbine 1; locate the express collector poles outside of any area determined to have a rare plant; and locate the O&M building away from any rare plant locations in order to avoid and minimize impacts to rare plants. MNAP worked with the applicant in order to provide the best methods of avoiding and minimizing any impacts to the rare plant communities.

Based on the information in the application, MHPC’s review and MNAP’s review, the Department finds that the proposed development would not have an unreasonably

adverse effect on the preservation of any historic sites or unusual natural areas either on or near the project site.

9. BUFFER STRIPS:

The applicant proposes four basic buffer types for the proposed project. The buffers for the proposed project would include no-disturbance buffers around roads and turbines, right-of-way (ROW) buffers, waterbody and stream buffers, and Inland Waterfowl and Wading Bird Habitat buffers. All buffer strips would be clearly marked prior to construction.

- A. Access Road, Crane Path and Turbine Buffers. The applicant proposes to maintain forested buffers along the access road and around the turbine pads. Those buffers provide both a visual screen and stormwater and phosphorus treatment. The stormwater and phosphorus treatment measures are more fully described in Finding 11. Most of the area of the turbine pads would be revegetated after construction is complete, providing additional buffering.
- B. ROW buffers. The collector line would require cutting to meet required safety standards. The applicant would flag all resources and their buffers in the field prior to any clearing. During clearing activities all methods to reduce ground disturbance, erosion and sedimentation would be employed.
- C. Waterbody and Stream Buffers. There are 12 streams within the collector line ROW. These streams would have the standard buffer of 25-feet wide, measured from the top of the bank of the stream. No poles are proposed to be located in the stream buffer area. During initial construction, any vegetation that must be removed would be done by hand-cutting or traveling or reaching into the buffer using low ground pressure mechanized harvesting equipment. Following construction, any disturbed areas would be graded to the original contour and stabilized with permanent seeding.
- D. Inland Waterfowl and Wading Bird Habitat (IWWH) Buffers. The proposed access road and collector line cross upland portions of one moderate-value mapped IWWH. During construction, the applicant proposes to only remove capable species. Topping of trees is the preferred method of vegetation maintenance unless the tree is dead or dying. No other vegetation would be removed. Removal of capable species would be by hand-cutting or with low ground pressure tree harvesting equipment. Where possible, the applicant would leave two to three snags per 500 linear feet of corridor to provide nesting habitat for waterfowl. Initial ROW clearing would be done during frozen conditions whenever practical. No clearing would take place between April 15 and July 15 in any calendar year, unless approved by the Department and MDIFW.
- E. Vegetation Management Plan (VMP). The applicant proposes to utilize a Post Construction Vegetation Plan, prepared by Stantec Consulting, for the Bowers Wind Project, dated August 2012, which includes routine maintenance along the ROW to prevent vegetation from getting too close to the conductor. This plan summarizes vegetation management maintenance methods and procedures that would be utilized

by the applicant for transmission line corridor and collector lines. This plan describes restrictive maintenance requirements for natural resources and significant wildlife habitats. The plans also include procedures for managing or removing osprey nests built on power line structures, describe a system for identifying restricted areas, and summarize training requirements for construction personnel.

The Department finds that the applicant has made adequate provision for buffer strips based on the post-construction VMP and provided that the buffers are clearly marked on the ground prior to construction, for all visual screening buffers, stream buffers and other resource buffers, and the stormwater buffers. Additionally, prior to operation, the applicant must record all deed restrictions for stormwater buffers and submit the recorded deeds along with plot plans to the Department within 60 days of recording.

10. SOILS:

The applicant submitted a Class L soil survey for the turbine and road areas and a Class B soil survey for the O&M building location. These surveys were prepared by a certified soils scientist and reviewed by staff from the Division of Environmental Assessment (DEA) of the BLWQ. DEA commented that the applicant must submit the geotechnical data for review and approval prior to construction. DEA also reviewed a blasting plan and commented that the applicant must submit a revised blasting plan for review and approval prior to construction. If a rock crusher is being utilized on site, the applicant must ensure that the crusher is licensed by the Department's Bureau of Air Quality and is being operated in accordance with that license. DEA also commented that they recommend that the applicant submit an evaluation of any potentially reactive rock types encountered in the proposed construction area.

The Department finds that, based on these reports and the blasting plan, and DEA's review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices, provided that the geotechnical report and revised blasting plan are submitted to the Department for review and approval prior to construction, in addition to the evaluation of any potentially reactive rock types encountered in the proposed construction area.

11. STORMWATER MANAGEMENT:

The proposed project includes approximately 33.92 acres of impervious area and 33.92 acres of developed area. It lies within the watersheds of Mill Privilege Lake, Dipper Pond, Baskahegan Lake, and Pleasant Lake. The applicant submitted a stormwater management plan based on the Basic, Phosphorus and Flooding standards contained in Department Rules, Chapter 500. The proposed stormwater management system would consist of 22 meadow buffers and 59 forest buffers and an underdrained soil filter.

A. Basic Standards:

- (1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) that is based on the

performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Division of Land Resource Regulation (DLRR) of the BLWQ.

Erosion control details would be included on the final construction plans and the erosion control narrative would be included in the project specifications to be provided to the construction contractor. Given the size and nature of the project site, the applicant must retain the services of a third-party inspector in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order. Prior the start of construction, the applicant must conduct a pre-construction meeting to discuss the construction schedule and the erosion and sediment control plan with the appropriate parties. This meeting must be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector.

- (2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of, DLRR. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant would be responsible for the maintenance of all common facilities including the stormwater management system.
- (3) Housekeeping: The proposed project would comply with the performance standards outlined in Appendix C of Chapter 500.

The following minor adjustments may be made during construction without advance notice to the Department provided they do not impact protected resources and are reflected in the final as-built drawings: changes that result in a reduction in impact and/or footprint (such as a reduction in clearing or impervious area, and elimination of structures or a reduction in structure size); location of a structure within the identified clearing limits; the type of foundations used; additional drainage culverts, level spreaders or rock sandwiches; changes to culvert size or type provided that the culvert does not convey a regulated stream and that the hydraulic capacity of the substitute culvert is greater than or equal to that of the original; and changes of up to 10 feet in the base elevation of a turbine vertically as long as the change in elevation does not result in increased visual impacts or changes to the stormwater management plan.

Additionally, the following minor adjustments may be made upon prior approval by the third-party inspector or Department staff, and do not require a revision or modification of the permit but must be reflected in the final as-built drawings: minor changes that do not increase overall project impacts or project footprint and which do not impact any protected resources as long as any new areas of impact have been surveyed for environmental resources and do not affect other landowners. These

changes include adjustments to horizontal or vertical road geometry that do not result in changes to the stormwater management plan; a shift of up to 100 feet in a turbine clearing area; and adjustments to culvert locations based on field topography.

Based on DLRR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project would meet the Basic Standards contained in Chapter 500(4)(A) provided the applicant retains a third-party inspector and conducts a pre-construction meeting as described above.

B. Phosphorus Standards:

The applicant's stormwater management plan includes general treatment measures that would mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area for the O&M building. The proposed access road and turbine pads meets the definition of "a linear portion of a project" in Chapter 500 and the applicant is proposing to control runoff volume from no less than 75% of the impervious area and no less than 50% of the developed area.

The forested and meadow buffers would be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500 and submitted a draft deed description that meets Department standards.

Prior to operation, the applicant must record all deed restriction for stormwater buffers and submit the recorded deeds to the Department within 60 days of recording.

Because of the proposed project's location in the watersheds of Mill Privilege Lake, Dipper Pond, Baskahegan Lake and Pleasant Lake, stormwater runoff from the project site would be treated to meet the phosphorus standard outlined in Chapter 500(4)(C). The applicant's phosphorus control plan was developed using methodology developed by the Department and outlined in "Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development". For this project, the lakes have the following Predicted Phosphorus Export and Permitted Phosphorus Export values:

Lake	Town	Predicted Phosphorus Export (Lbs/Phos/Year)	Permitted Phosphorus Export (Lbs/Phos/Year)
Mill Privilege	Carroll Plt.	3.50	3.66
Dipper Pond	Carroll Plt.	0.30	0.30
Pleasant Lake	Carroll Plt.	4.57	4.65
Pleasant Lake	Kossuth Twp.	0.83	1.47
Baskahegan Lake	Carroll Plt.	14.72	14.74

Baskahegan Lake	Kossuth Twp.	2.35	2.43
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The applicant is proposing to remove phosphorus by using buffers and an underdrained soil filter. The proposed stormwater treatment would be able to reduce the export of phosphorus in the stormwater runoff below the maximum Permitted Phosphorus Export for the site.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, DLRR. After a final review, DLRR commented that the proposed stormwater management system is designed in accordance with the Phosphorus Standard contained in Chapter 500(4)(C) provided that the design engineer or a third-party engineer oversees the construction of the stormwater management structures according to the details and notes specified on the approved plans.

Within 30 days of completion of the entire system or at least once per year, the applicant must submit a log of inspection reports detailing the items inspected, photos and the dates of each inspection to the BLWQ for review.

Based on the stormwater system's design and DLRR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project would meet the Phosphorus Standard contained in Chapter 500(4)(C).

C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site would not exceed the pre-development peak flow from the site and the peak flow of the receiving waters would not be increased as a result of stormwater runoff from the development site.

DLRR commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500(4)(E).

Based on the system's design and DLRR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project would meet the Flooding Standard contained in Chapter 500(4)(E) for peak flow from the project site, and channel limits and runoff areas.

The Department further finds that the proposed project would meet the Chapter 500 standards for: (1) easements and covenants; (2) management of stormwater discharges; (3) discharge to freshwater or coastal wetlands; (4) threatened or endangered species; and (5) discharges to public storm sewer systems.

12. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. The applicant is proposing a single well to serve the domestic water needs at the O&M building, as described in Finding 13. The applicant submitted a Post-Construction Vegetation Management Plan for the project site, dated August 2012, that was reviewed by DEA. DEA recommended the plan be revised to add the requirement that the express collector line is reviewed prior to any herbicide application in order to determine whether any new wells or water supplies have been established that would require marking additional buffer areas.

The applicant submitted a Spill Prevention, Control and Countermeasures (SPCC) plan detailing steps to be taken to prevent groundwater contamination during construction, however if the contractor is required to provide a SPCC the plan must be submitted to the Department for review and approval.

The Department finds that the proposed project would not have an unreasonable adverse effect on groundwater quality provided the applicant submits the contractor or subcontractor SPCC plans to the Department for review as outlined above. The Department may require changes to any SPCC plan or handling or storage procedure based on review of the SPCC plans or inspection of the site. The Department further finds that the proposed project would not have an unreasonable adverse effect on groundwater quality provided the applicant submits a revised Post-Construction Vegetation Management Plan with the added requirement that the express collector line be reviewed prior to any herbicide application in order to determine whether any new wells or water supplies have been established that would require marking additional buffer areas prior to operation of the facility, and submits any revised SPCC plan to the Department for review and approval.

13. WATER SUPPLY:

When completed, the proposed project is anticipated to use less than 300 gallons of water per day for the O&M building. The applicant submitted an assessment of the groundwater supplies available on the project site. This assessment was prepared by a well driller and was reviewed by the DEA.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

14. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge less than 300 gallons of wastewater per day for the O&M building. Wastewater would be disposed of by an individual subsurface wastewater disposal system. The applicant submitted an HHE-200 form for the proposed wastewater disposal system. This information was reviewed by DEA.

Based on DEA's comments, the Department finds that the proposed wastewater disposal system would be built on suitable soil types.

15. SOLID WASTE:

When completed, the proposed project is anticipated to generate minor amounts of general solid waste per year. All general solid wastes from the proposed project would be disposed of at Penobscot Energy Recovery Center, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

All marketable timber would be removed from the project site. A single one-acre stump dump may be located on the project site. All stumps and grubblings generated would be disposed of on site, either chipped or burned, with the remainder to be worked into the soil, in compliance with the Maine Solid Waste Management Rules.

The proposed project would generate approximately 400 cubic yards of construction debris and demolition debris. All construction and demolition debris generated would be disposed of at Juniper Ridge, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

16. FLOODING:

A portion (0.5 mile) of the electrical collector is located within the 100-year flood plain of a river, stream or brook. Four poles of the collector line would be located in the floodplain of Lindsey Brook and three poles of the collector line would be located in the floodplain of Tolman Brook. The applicant would alter 7.5 acres of floodplain forest to scrub-shrub vegetation. The applicant is not proposing to alter the topography or existing drainage ways.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

17. WETLAND IMPACTS:

The applicant retained Stantec to locate wetlands and waterbody resources on the proposed project site. The results of the applicant's surveys for wetlands and waterbodies which may be affected by the turbine sites, access roads and collection lines are summarized as follows:

- 257 wetlands were identified along the proposed access roads and the electrical collector line.
- 81 jurisdictional streams were identified, including 47 perennial streams.
- 50 vernal pools were identified, including 1 significant vernal pool, none of which would be impacted, as discussed in Finding 7.

- 67 wetlands were identified that meet the definition of wetlands of special significance.

The applicant is not proposing to fill any wetlands. The proposed project would include 2.5 acres of wetland clearing.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, provide the framework for the Department's analysis of whether a proposed project's impacts to protected resources will be unreasonable, as that term is used in the NRPA, and whether the project meets the NRPA licensing criteria. A proposed project's impacts may be found to be unreasonable if the project will cause a loss in wetland area, functions and values and for which there is a practicable alternative that will be less damaging to the environment. For this aspect of the Department's review an applicant must provide an analysis of alternatives to the project.

- Avoidance. The applicant submitted an alternatives analysis for the proposed project completed by Stantec and dated October 1, 2012. The applicant designed the project road and turbine pad layout in order to minimize impacts to wetlands while meeting the project purpose. The applicant used existing roads as much as possible in order to minimize new impacts to wetlands. The applicant was able to avoid permanent wetland fill in wetland areas.
- Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. As stated above, the applicant was able to design the project so that there is no proposed permanent fill in wetland areas. The applicant would allow cleared areas to revegetate.
- Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. The applicant is not required to compensate due to the fact that the proposed wetland clearing would not result in lost functions and values.

The Department finds that the applicant has avoided and minimized wetland and waterbody impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project. The proposed project would not result in an unreasonable impact to freshwater wetlands

18. SHADOW FLICKER:

In accordance with 38 M.R.S.A. §484(10), an applicant must demonstrate that the proposed wind energy development has been designed to avoid unreasonable adverse shadow flicker effects. Shadow flicker caused by wind turbines is defined as alternating changes in light intensity caused by the moving blade casting shadows on the ground and stationary objects. Shadow flicker is the sun seen through a rotating wind turbine rotor. Shadow flicker does not occur when the sun is obscured by clouds or fog or when the turbine is not rotating. The spatial relationships between a wind turbine and receptor, as

well as wind direction which cause the turbines to rotate, are key factors relating to shadow flicker occurrence and duration. At distances of greater than 1,000 feet between wind turbines and receptors, shadow flicker usually occurs when the rotor plane is in-line with the sun and receptor (as seen from the receptor), the cast shadows would be very narrow (blade thickness) and of low intensity, and the shadows would move quickly past the stationary receptor. When the rotor plane is perpendicular to the sun-receptor “view line,” the cast shadow of the blades would move within a circle equal to the turbine rotor diameter.

The applicant submitted a shadow flicker analysis with its application based on the Vestas 112 MW turbines. The applicant used WindPRO, a wind modeling software program, to model expected shadow flicker effects on adjacent properties from the 16 proposed turbine locations. The applicant assumed a worst case scenario, that all receptors have a direct in-line view of the incoming shadow flicker sunlight, and did not take into account any existing vegetative buffers.

The Department generally recommends that an applicant conduct a shadow flicker model out to a distance of 1,000 feet or greater from a residential structure, and the applicant’s model did so. The applicant modeled 54 receptors. All modeled receptors do not show any impact of shadow flicker; the modeling showed shadow flicker only on the project parcel. Maine currently has no numerical regulatory limits on exposure to shadow flicker; however, the industry commonly uses 30 hours per year as a limit to reduce nuisance complaints. No parcels outside the project parcel would receive any shadow flicker. Based on the WindPRO analysis, no properties outside the project parcel have been calculated to receive flicker in excess of 30 hours per year.

The Department finds the shadow flicker modeling conducted by the applicant is credible. Based upon the proposed project’s location and design, the distance to the nearest shadow flicker receptor, and results of the shadow flicker analysis, the Department finds that the proposed project, in accordance with 38 M.R.S.A. §484(10), would not unreasonably cause shadow flicker to occur over adjacent properties which would not be subject to an easement allowing for shadow flicker.

19. PUBLIC SAFETY:

The proposed project would use either Vestas V-112 3.0-megawatt (MW) wind turbine generators or Siemens 3.0 wind turbine generators. The Vestas V-112 conformity with International Electrotechnical Commission standards has been certified by Det Norske Veritas and included in the applications in Appendix 27-2 dated March 19, 2010. The Siemens 3.0 certification is in progress.

The Department recognizes that locating wind turbines a safe distance away from any occupied structures, public roads or other public use areas is extremely important. In establishing a recommended safety setback, the Department considered industry standards for wind energy production in climates similar to Maine, as well as the guidelines recommended by certifying agencies such as Det Norske Veritas. Based on these sources, the Department requires that all wind turbines be set back from the

property line, occupied structures or public areas a minimum of 1.5 times the maximum blade height for the wind turbine. Based on the Department setback specifications, the minimum setback distance to the nearest property line should be 688.5 feet for the Vestas turbines, the taller of the turbine options. A review of the application indicates that all turbines are proposed to be setback 1490 feet from the nearest non-participating landowner.

In the Fourth Procedural Order, the Department requested additional information from the applicant on fire safety issues. The Department received several comments from the public regarding fire safety of wind turbines. The applicant supplied additional evidence regarding the design of the turbines, the constant monitoring of the turbine conditions, operation and maintenance procedures used to reduce fire risk, and fire protection plan and emergency communications protocols. The Department reviewed these materials under Site Law, and concluded that the proposed project would pose a minimal adverse impact to the health, safety and general welfare of the people.

The Department finds that the applicant provided documentation for the Vestas turbine of industry standard compliance that the wind generation equipment has been designed to conform to applicable industry safety standards, and has demonstrated that the proposed project would be sited such that it would not present an unreasonable safety hazard to adjacent properties or adjacent property uses. The Department further finds that the applicant has submitted sufficient evidence which demonstrates that the proposed project would be sited with appropriate safety setbacks from adjacent properties and existing uses provided that prior to construction, the applicant submits the required certification to the Department for the Siemens 3.0 turbine if the proposed project utilizes that type of turbine.

20. DECOMMISSIONING PLAN:

In order to facilitate and ensure appropriate removal of wind generation equipment when it reaches the end of its useful life or if the applicant ceases operation of turbines, the Department requires an applicant to demonstrate, in the form of a decommissioning plan, the means by which decommissioning would be accomplished. The applicant submitted a decommissioning plan which includes a description of the trigger for implementing the decommissioning, a description of work required, an estimate of decommissioning costs, a schedule for contributions to its decommissioning fund, and a demonstration of financial assurance.

A. Trigger for implementation of decommissioning. The proposed wind turbine generators are designed and certified by independent agencies for a minimum expected operational life of 20 years, however other factors may trigger the requirement for decommissioning before 20 years have passed. The applicant's proposal is that the wind generation facility, or any single turbine, would be decommissioned when it ceases to generate electricity for a continuous period of twelve months. In the case of a force majeure event which causes the project, or any single turbine, to fail to generate electricity for 12 months, the applicant proposes that it be allowed to submit to the Department for review and approval reasonable

evidence in support of a request that they not be required to decommission the project at that time.

Decommissioning would begin if twelve months of no generation occurs. An exception to the requirement would be allowed for a force majeure event, however the Department finds that the applicant's proposed definition of "force majeure" is exceedingly broad, and instead the definition would be as follows: The Department considers a force majeure to mean fire, earthquake, flood, tornado, or other acts of God and natural disasters; and war, civil strife or other similar violence. In the event of a force majeure event which results in the absence of electrical generation by one or more turbines for twelve months, by the end of the twelfth month of non-operation the applicant shall demonstrate to the Department that the project, or any single turbine, would be substantially operational and producing electricity within twenty-four months of the force majeure event. If such a demonstration is not made to the Department's satisfaction, the decommissioning must be initiated eighteen months after the force majeure event.

- B. Description of work. The description of work contained in the application outlines the applicant's proposal for the manner in which the turbines and other components of the proposed project would be dismantled and removed from the site. Subsurface components would be removed to a minimum of 24 inches below grade, generating facilities would be removed and salvaged and disturbed areas would be re-seeded. At the time of decommissioning, the applicant must submit a plan for continued beneficial use of any wind energy development component proposed to be left on-site to the Department for review and approval.
- C. Financial Assurance. The applicant estimates that the current cost for decommissioning the project would be \$616,020. The applicant proposes that financial assurance for the decommissioning costs would be in the form of (i) performance bond, (ii) surety bond, or (iii) letter of credit, or other acceptable form of financial assurance for the total cost of decommissioning. The applicant proposes to have the financial assurance mechanism in place prior to construction and to re-evaluate the decommissioning cost at the end of years ten and fifteen. Proof of acceptable financial assurance must be submitted to the Department prior to the start of construction.
- D. Notification. The applicant must notify the Department within two business days of any catastrophic turbine failure. Catastrophic turbine failure shall include the voluntary or involuntary shut-down of a turbine due to a fire event, structural failure or accidental event resulting in a turbine collapse, a force majeure event, or any mechanical breakdown the applicant anticipates would result in a turbine being off-line for a period greater than six months.

Based on the applicants' proposal outlined above, the Department finds that the applicant's proposal would adequately provide for decommissioning, provided the applicant implements the decommissioning plan as proposed and submits proof of financial assurance for the decommissioning costs as set forth above.

21. TANGIBLE BENEFITS:

In its application the applicant described tangible benefits that the project would provide to the State of Maine and to host communities, including economic benefits and environmental benefits.

- A. Job Creation. The applicant states that its proposal would benefit the host communities and surrounding areas through construction-related employment opportunities. The applicant has indicated that it would hire local firms and individuals whenever possible for construction, operations, and maintenance positions related to the project. Jobs created could include tree clearing jobs, and jobs in businesses that support construction such as lodging, restaurant, fuel and concrete supply. The applicant estimates the project would create approximately 100 full-time jobs during construction and 6 to 9 permanent jobs for operation and maintenance of the facility after construction.
- B. Generation of Wind Energy. The applicant estimates that the proposed project would provide an approximate average output of 157,000 megawatt-hours per year, which is enough to power over 25,000 homes.
- C. Property Tax Payments. Champlain estimates that the Project would result in estimated average annual tax payments of approximately \$15,933 to Kossuth Township, (net value after adjustment through a Credit Enhancement Agreement) and in estimated average annual tax payments of \$287,358 to Carroll Plantation.
- D. Community Benefits Agreement. The applicant has provided proposed Community Benefit Agreements with Carroll Plantation, Kossuth Township, and Washington County. The communities may use the funds at their discretion for public purposes including lowering tax rates or investment in municipal assets and/or services. Annual payments made to with Carroll Plantation, Kossuth Township, and Washington County as part of the Community Benefits Agreements total \$8,875 per turbine per year for 20 years. The applicant must submit confirmation of the receipt of funds by the communities and county to the Department annually for review.
- E. Other tangible benefits. Based on from area stakeholders, the applicant has also agreed to provide \$300,000 to a Watershed Recreational Tourism and Conservation Fund to benefit the watershed area from Bowers Mountain extending south to Grand Lake Stream. This fund would be hosted by the Sunrise County Economic Council. Also, the applicant is evaluating the preliminary mapping of a “Ride the Wind” snowmobile trail that would link all the wind farms in the State, and the proposed project would provide \$25,000 in seed money to finalize the snowmobile routes, create marketing materials and promote the trail.

Based on the proposed employment opportunities, energy generation, property tax revenue and the Community Benefits Agreements proposed by the applicant, the Department finds that the applicant has demonstrated that the proposed project would provide significant tangible benefits to the State, host communities and surrounding area

pursuant to 35-A M.R.S.A. §3454, provided that annual payments are made to Carroll Plantation, Kossuth Township, and Washington County as described above.

22. MAINE LAND USE PLANNING COMMISSION CERTIFICATION:

The proposed project was reviewed by the Land Use Planning Commission (LUPC) to determine if the project is an allowed use in the subdistricts affected and if the project meets the Commission's land use standards applicable to the project that are not considered in the Department's review. The LUPC standards for this project include land division history, vehicular circulation, access and parking, lighting, minimal dimensional requirements, vegetation clearing, signs, and general criteria for approval.

In a Commission Determination, dated January 4, 2013 and signed by LUPC Director Nicholas Livesay, the LUPC certified that the project is an allowed use in the subdistricts affected and complies with LUPC standards, subject to conditions. The conditions, detailed by the Commission Determination, may be enforced by either the LUPC or the Department.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity would not interfere with existing navigational uses, but the proposed activity would interfere with existing recreational uses and significantly compromise views from a SRSNS and would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the resource, the proposed activity would unreasonably interfere with existing scenic and aesthetic uses.
- B. The proposed activity would not cause unreasonable erosion of soil or sediment.
- C. The proposed activity would not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity would not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life, provided the applicant was to implement turbine curtailment and provide a final mortality monitoring methodology to the Department as described in Finding 7, and all buffers were marked prior to construction as described in Finding 9.
- E. The proposed activity would not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity would not violate any state water quality law including those governing the classifications of the State's waters.

- G. The proposed activity would not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 35-A M.R.S.A. §§ 3401-3457, and 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that the applicant meets the requirements of Finding 3.
- B. The proposed activity would significantly compromise views from a SRSNS and would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the resource. The applicant has made adequate provisions for air quality, water quality, the control of noise and other natural resources in the municipality or in neighboring municipalities provided that the applicant was to implement the post-construction noise monitoring program, and were to investigate all noise complaints as described in Finding 5; the applicant were to install FAA-approved radar-activated lighting prior to the start of construction as described in Finding 6; the applicant were to implement turbine curtailment and provide a final mortality monitoring methodology to the Department as described in Finding 7; and all buffers were marked prior to construction as described in Finding 9.
- C. The proposed development would be built on soil types which are suitable to the nature of the undertaking and would not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil, provided that the applicant meets the requirements of Finding 10.
- D. The proposed development meets the standards for stormwater management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided that the applicant meets the requirements of Finding 11.
- E. The proposed development would not pose an unreasonable risk that a discharge to a significant groundwater aquifer would occur provided that the applicant meets the requirements of Finding 12.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development would not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services.

- G. The activity would not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.
- H. The proposed development would not unreasonably cause shadow flicker effects to occur over adjacent properties.
- I. The activity would not present an unreasonable safety hazard to adjacent properties or adjacent property uses.
- J. The applicant has made adequate provisions to achieve decommissioning of the wind power facility provided the decommissioning plan is implemented as described in Finding 20 and financial assurance of funds for decommissioning is demonstrated as set forth in Finding 20.

- K. The activity would provide significant tangible benefits to the host communities and surrounding area, provided that the applicant implements the Community Benefit Agreement as discussed in Finding 21.

THEREFORE, the Department DENIES the application of CHAMPLAIN WIND, LLC to construct a 16-turbine, grid-scale, wind energy development as described in Finding 1.

DONE AND DATED IN AUGUSTA, MAINE, THIS 5th DAY of August, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Patricia W. Aho
Patricia W. Aho, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

JD/L#25800ANBNCN/ATS#75284/75285/76298



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-3901

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.
