Department Licensing Decision under Appeal

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

BLUE SKY WEST, LLC &	) SITE LOCATION OF DEVELOPMENT LAW
BLUE SKY WEST II, LLC	) NATURAL RESOURCES PROTECTION ACT
Bingham & Mayfield Twp., Somerset County	) FRESHWATER WETLAND ALTERATION
Kingsbury Plt., Abbot, and	) WATER QUALITY CERTIFICATION
Parkman, Piscataquis County	)
BINGHAM WIND PROJECT	)
L-25973-24-A-N (approval)	)
L-25973-TG-B-N (approval)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of Maine's *Expedited Permitting of Grid-Scale Wind Energy Development* law (known as the Maine Wind Energy Act or WEA), 35-A M.R.S.A. §§ 3401-3404, 3451–3459, *Natural Resources Protection Act* (NRPA), 38 M.R.S.A. §§ 480-A to 480-HH, and *Site Location of Development* law (Site Law), 38 M.R.S.A. §§ 481–490, and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection (Department) has considered the application of BLUE SKY WEST, LLC and BLUE SKY WEST II, 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 applicants are requesting approval to construct a 62 wind turbine, up to 206 megawatt (MW), wind energy development which is an "expedited wind energy development" as defined in the, WEA, 35-A M.R.S.A. § 3451(4). In addition to the generating facilities, the project will include an operations and maintenance (O&M) building as well as associated facilities. The development of the O&M building will result in approximately 0.91 acres of impervious area. The overall proposed project will include 83.78 acres of impervious area and 88.61acres of developed area.

1. Turbines: The applicants propose to construct 62 wind turbines in 63 possible locations. The applicants propose to use Vestas V112-3.0, Vestas V112-3.3, or Siemens SWT 3.0-113 turbines, which are rated to produce either 3.0 MW or 3.3 MW of power. The project will be capable of producing up to 206 MW. The Siemens turbines will have a total height of 489 feet to the tip of a fully extended blade, and the Vestas turbines will have a total height of 492 feet to the tip of a fully extended blade. The applicants have proposed 37 turbines on the north side of Route 16 and 25 on the south side of Route 16. The turbines will be located in the Town of Bingham, Mayfield Township and Kingsbury Plantation. The turbines will be placed on Johnson Mountain and on unnamed ridges and hills in the vicinity of Route 16.

2. Turbine Pads: Typical clearing associated with each turbine pad will be approximately 2.5 acres. Following the erection of each turbine, each turbine pad will be re-vegetated so that approximately 0.28 acres of impervious area will remain.

3. Access Road and Crane Path:
The applicants propose to construct 17 miles of crane path in order to provide access to the turbine pads. The crane path will be 38 feet wide. The applicants will also upgrade 5.3 miles of existing roads. The upgrades will consist of, but are not limited to, widening to 24 feet wide, straightening, ditching, drainage improvements and changing grades.

4. Electrical Transmission Lines: The applicants propose to construct an underground 34.5 kilovolt (kV) collector line along the ridges. The collector line will transition to above ground for a four mile segment along Route 16 and will continue above ground until it reaches the collector substation on the north side of Route 16 in Mayfield Township. The applicants will locate a dynamic reactive device (DRD), such as a synchronous condenser, adjacent to the collector substation. From the collector substation in Mayfield Township, a 115 kV transmission line will be constructed that will extend above ground for 17 miles, through Kingsbury Plantation and Abbot, before connecting to an existing substation owned by Central Maine Power Company in Parkman.

5. O&M Building: The applicants propose to construct the O&M building off Route 16, in the center of the project. The 5,880-square foot building will be designed to accommodate a staff of six to ten employees.

6. Meteorological Towers: The applicants propose to construct up to five temporary meteorological (met) towers and up to five permanent met towers throughout the project site. Each met tower will have a maximum height of 341 feet.

The applicants are also requesting approval under the NRPA to permanently fill 1.34 acres of freshwater wetland, temporarily fill 6.32 acres of freshwater wetland with the placement of timber mats, and permanently convert 26.75 acres of freshwater wetland from forested to scrub shrub. In addition to this application, the applicants submitted three Permit by Rule Notification Forms (PBR) pursuant to the Department's *Permit By Rule* standards, 06-096 CMR 305(19), for impacts to critical terrestrial habitat associated with significant vernal pools. The PBR's (#55936, #55937 and #55938) were accepted by the Department on May 3, 2013. During the course of the Department's review it was determined that PBR #55936 was not necessary because that vernal pool is not on land that is controlled by the applicants.

The details of the turbines, access roads, buildings and associated facilities are provided on the set of plans entitled "Bingham Wind Project" prepared by Deluca-Hoffman Associates, Inc. and dated September 2012 with the last revision on September 3, 2013. During the review of the project, Deluca-Hoffman Associates, Inc. became Fay, Spofford & Thorndike, Inc. and several plans were revised in November, 2013 under that name. The details of the transmission line

and the associated infrastructure are provided on the set of plans entitled "Bingham Wind Project" prepared by SGC Engineering, LLC and dated April 12, 2013 or March 20, 2013, with the last revision of any plan on October 29, 2013.

B. Current Use of Site: The area surrounding the proposed project is currently managed for commercial timber. The area contains numerous logging roads, some of which will be upgraded as part of this project.

C. Public Interest: During the course of the application review process, the Department received numerous comments from members of the general public, from people who submitted comments, or from those who made inquiries as "interested persons" as defined in the Department's *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2(1)(J), for the purposes of the review of this application.

The Department received one timely request for a public hearing, which was received on May 30, 2013. On June 17, 2013, after considering the information presented in the request for a public hearing, the Department determined that the request provided no evidence of any credible conflicting technical information regarding any of the licensing criteria, and that a hearing would not be likely to assist the Department in understanding the evidence, and therefore denied the request to hold a public hearing. The Department also received several requests for a public hearing that were dismissed because they were not submitted within 20 days of the application being accepted for processing as required by Chapter 2. In accordance with Department policy, the Department held two public meetings. The purpose of the meetings was to allow members of the public an opportunity to present their comments to the Department. The first public meeting was held on July 22, 2013 at the Moscow Elementary School. On January 29, 2014 the Department released a Draft Staff Analysis of the project. The second public meeting was held on February 12, 2014 at the Quimby School in Bingham.

The Department released a Draft Department Order (Draft Order) on August 27, 2014. The Draft Order was sent to all of the interested parties and a copy was also placed on the Department's website. The comment period on the Draft Order closed on September 4, 2014. The Department received several comments regarding the Draft Order. All of the comments were reviewed and given consideration in relation to the statutory review criteria in the Site Law, NRPA and WEA. The comments received included but were not limited to, comments stating that the Department's noise rules are inadequate; the risk of fire from the development; the projects potential negative effect on fish and wildlife; the projects visual impact on scenic resources that are not protected by the WEA; the developers lack of financial capacity to undertake the project; and the decommissioning fund is inadequate to cover the cost to dismantle the project. The Department received several additional requests for the Department to hold a public hearing prior to issuing a final decision on the project. The Department is unable to act on these requests since they were not received within 20 days of the application being accepted for processing as required by Chapter 2. Several interested persons commented that the comment period associated with the Draft Order was insufficient. The Department notes that the public comment period of

five working days to review the Draft Order is provided for in Chapter 2 of the Department's rules.

2. TITLE, RIGHT OR INTEREST:

Pursuant to Chapter 2(11)(D) and the Department's *Policies and Procedures Under the Site Location Law* (Chapter 372), 06-096 CMR 372(9), an applicant shall demonstrate to the Department's satisfaction sufficient title, right, or interest in all of the property that is proposed for development or use. Blue Sky West, LLC will own the turbines, collector line, O&M building, met towers, substation and their associated infrastructure. Blue Sky West II, LLC will own the transmission line and its associated infrastructure from the point where it exits the substation in Mayfield Township.

To demonstrate title, right or interest for the proposed development, the applicants submitted signed copies of leases, easements, and purchase and sale options for the properties on which the proposed project will be located. The submissions include deeds which show that the property owners who are leasing, granting easements, or selling their property to the applicants, own the parcels. In addition, the applicants have submitted copies of three noise and shadow flicker easements for parcels in close proximity to the project.

The Department received several comments that part of the proposed project is located in Brighton Plantation. According to a signed and stamped survey, prepared by Pisga and Day Land Surveyors, the project is not located in Brighton Plantation. In addition, the applicants submitted documentation that it has sufficient title, right and interest to the land proposed to be developed as part of this project.

The Department finds that the applicants have demonstrated sufficient title, right or interest for the area which will be occupied by the project.

3. FINANCIAL CAPACITY:

Pursuant to the *Financial Capacity Standard of the Site Location Law* (Chapter 373), 06-096 CMR 373(1), applications for approval of proposed developments shall include evidence that affirmatively demonstrates that the developer has the financial capacity to construct, operate, and maintain all aspects of the development.
The applicants estimate the total cost of the project to be $398 million. Blue Sky West, LLC and Blue Sky West II, LLC are legal entities authorized to do business in the State of Maine and are wholly owned subsidiaries of First Wind Maine Holdings, LLC, which is a wholly owned subsidiary of First Wind Holdings, LLC. The applicants submitted a plan detailing financing for the project. The financing proposed includes a combination of First Wind Holdings, LLC equity and third party debt. The applicants also submitted a letter from RBS Securities, Inc., dated April 2, 2013 indicating that First Wind Holdings, LLC will likely be able to obtain financing for the project.

Prior to the start of construction, the applicants must submit evidence that they have 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 the Department to be adequate under the Chapter 373, for review and approval by the Department.

The Department received generalized concerns from interested parties regarding the applicant's ability to demonstrate financial capacity. The concerns were centered on a 2014 Maine Law Court decision that vacated a Maine Public Utility Commission's (PUC) order allowing a joint venture between First Wind and Emera. The Maine Law Court decision also remanded that order back to the PUC for further consideration in accordance with the Maine Law Court's decision. The Department reviewed these concerns and determined that a condition in the Department's Order that requires the applicants to demonstrate final financial capacity and fully fund the decommissioning plan prior to the start of construction will provide the Department with adequate assurance that the applicants will have the ability to construct the development.

The Department finds that the applicants have demonstrated adequate financial capacity to comply with Department standards, provided that the applicants submit final evidence of financial capacity prior to the start of construction as described above.

4. TECHNICAL ABILITY:

Pursuant to Chapter 373(2), applications for approval of proposed developments shall include evidence that affirmatively demonstrates that the developer has the technical ability to undertake the proposed development and to meet state air and water pollution control standards.

The applicants provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicants. The applicants retained the services of the following companies to prepare the application:

- Stantec Consulting – natural resource assessment, shadow flicker assessment, and permitting
- Fay, Spofford and Thorndike (formerly DeLuca Hoffman) – civil engineering and stormwater analysis
- SGC Engineering, LLC – electrical engineering
- Landworks – visual impact assessment
- Kleinshmidt Associates, LLC – user surveys
- Bodwell EnviroAcoustics, LLC – sound assessment
- TRC/Northeast Cultural Resources – prehistoric archaeological resources
- Independent Archaeological Consulting – historic archaeological resources
- Public Archaeology Lab – historical architectural resources
- Albert Frick Associates – soil assessment
- Sewall Engineers – decommissioning plan
- Verrill Dana – legal counsel

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

5. NOISE:

To address the standards pertaining to the control of noise in the Site Law, 38 M.R.S.A.

§ 484(3), and the Department's *No Adverse Environmental Effect Standard of the Site Location Law* (Chapter 375), 06-096 CMR 375(10), the applicants submitted a sound level assessment entitled "Sound Level Assessment Bingham Wind Project," completed by Bodwell EnviroAcoustics LLC and dated April 2013. The sound level assessment 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 Bingham Wind project must comply with Department regulations applicable to sound levels from construction activities, routine operation and routine maintenance. Chapter 375(10) applies sound level limits (L_{eqA}-Hr) at facility property boundaries and at "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 4,675 feet from the closest turbine.

As outlined in Chapter 375(10)(I)(2), the sound levels 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.

To assist with the review of the application, the Department retained an independent noise consultant, Tech Environmental, Inc., to review the applicants' prediction model and associated data as well as other evidence received on the issue of noise.

A. Sound Level Modeling. The applicants' noise consultant, Bodwell EnviroAcoustics LLC, 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 locations 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 (effect 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.

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 62 turbines was conducted using the manufacturer's full rated sound level output. Both Vestas turbines have a full rated sound level output of 106.5 dBA with a manufacturer uncertainty value of 2.0 dBA. The Siemens turbines have a full rated sound level output of 107.0 dBA with a manufacturer uncertainty value of 1.5 dBA. In addition, the applicants added 1 dBA to the turbine sound power output to compensate for any uncertainty in the model. The initial model was run for each turbine type with all 62 turbines operating at full sound power output. The applicants reported that the predicted hourly nighttime sound levels at the nearest protected locations would be 39.6dBA for the Vestas and Siemens turbines. Noise reduced operations (NRO) were not included in this initial model. In addition, the applicants have acquired a sound easement for receptor B1, which allows for a maximum sound level of 51.1 dBA.

In response to concerns voiced at the public meeting, the Department requested that the applicants reanalyze the sound model for the project, incorporating into the model a ground absorption coefficient of 0.3 instead of 0.5 to better reflect the predictable worst case sound levels that protected locations may experience as set forth in Chapter 375(10)(I)(7)(c). In addition, the Department requested the applicants change the sound model uncertainty factor from 1 dBA to 2 dBA. In a letter dated March 11, 2014, the applicants objected to the requested modeling assumptions as inconsistent with the requirements of Chapter 375(10). The applicants revised the modeling analysis to include the Department's requested assumptions. In order to have the predicted sound levels below the limit in the noise easement, the applicants incorporated NRO 1 for turbine 39 during the nighttime (7:00 p.m. to 7:00 a.m.) in the model for the Vestas turbines. NRO reduces the amount of noise that a turbine emits, but reduces the amount of electricity that they produce. The resulting predicted sound levels for each receptor are shown in the table below.

Receptor	Distance to Nearest Turbine	Vestas V112	Siemens SWT-113	Nighttime Sound Limit
B1	1,410 feet	50.9 dBA*	51.1 dBA	51.1
B2	6,250 feet	41.4 dBA	41.7 dBA	42
B3	6,860 feet	36.9 dBA	37.3 dBA	42
B4	6,640 feet	38.4 dBA	38.6 dBA	42
B5	6,975 feet	38.8 dBA	39.0 dBA	42
B6	4,675 feet	36.6 dBA	36.6 dBA	42
*Includes turbine 39 in NRO 1				

The applicants concluded that the proposed project will result in sound levels below the required daytime sound level limit of 55 dBA and the nighttime (7:00 p.m. to 7:00 a.m.) sound level limit of 42 dBA at all protected locations without a noise easement. In addition, the use of NRO 1 on either of the Vestas turbines will reduce the predicted sound level to 50.9 dBA as required in the noise easement for the parcel identified as receptor B1.

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 April 2013 sound level assessment states that both proposed Vestas V112 turbines carry Sound Level Performance Standard warranties certifying that they will not produce a tonal sound as it is defined by the Department's Noise Regulations. The study also states that information provided by Siemens states that the SWT-113 turbines are not anticipated to produce a tonal sound. In its review of the applicant's sound level assessment on behalf of the Department, Tech Environmental, Inc. confirmed that an analysis of the sound power octave band spectrum for the Vestas V112 and Siemens SWT-113 turbines revealed 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 added to the average 10-minute sound level ($Leq_{A\ 10\ min}$) measurement interval in which greater than 5 SDRS events are present.

The April 2013 sound level assessment submitted by the applicants summarized measurements of operating wind turbines in Maine and data from published literature that indicates that sound level fluctuations during the blade passage of wind turbines typically range from 2 to 5 dBA, with an occasional event reaching 6 dBA or more. The applicants' report states that SDRS events that would invoke the 5 dBA penalty are not likely to occur in more than one-third of the measurement intervals, meeting the "worst-case" test protocol criteria. The applicants state that conservative assessment of the 5 dBA penalty to one-third of the compliance measurement intervals will result in an added 1.7 dBA to the measured average $Leq_{A\ 10\ min}$. Based on the applicants' sound level assessment and the assessment of the Department's noise consultant, it appears that the proposed project is unlikely to generate SDRS that will result in sound levels above the applicable limits. Compliance testing for SDRS will be incorporated into the post-construction noise monitoring program (discussed in Section 5.E. below) after project completion and will provide assurance that SDRS is not occurring at a rate that will result in sound levels above the applicable limits.

D. Peer Review and Analysis. Tech Environmental, Inc. reviewed Section 1, Project Description, as well as Section 5, Noise of the project application. Section 5 contains the report by Bodwell EnviroAcoustics, LLC, and entitled "Sound Level Assessment Bingham Wind Project." Tech Environmental, Inc. also reviewed a letter dated April 21, 2014 from Bodwell EnviroAcoustics, LLC, which includes the revised sound model. Tech Environmental, Inc. concluded that both Vestas V112 and the Siemens SWT-113 turbine maximum sound power levels with conservative uncertainty factors were used in the analysis; the acoustic models and their assumptions are appropriate; the sound receiver locations are appropriate; the decibel contour maps adequately cover the potential impact area; and Chapter 375(10) requirements have been properly interpreted and applied for by the applicants.

E. Post-construction Monitoring Program. In its review, Tech Environmental, Inc. stated that to ensure that the sound level predictions submitted by the applicants are accurate for the type of wind turbines installed, and to ensure compliance with the Department's Noise Regulations, including the provisions regarding SDRS and tonal sound, it recommended that the Department require post-construction sound monitoring for the project at Receptor B2 and Receptor B5 or B4. Post construction monitoring may take place at other locations approved by the Department. Tech Environmental, Inc. also recommended that at least six of the twelve test periods to be used in the compliance test report represent nighttime (7:00 p.m. to 7:00 a.m.) conditions during which the sound level limit is 42 dBA. In addition, the compliance test report must include a complete presentation of the data and calculations for the SDRS analysis.

The applicants must demonstrate compliance with the Department's Noise Regulations once during the first year of operation and every fifth year thereafter until the facility is decommissioned. The results of the post-construction monitoring program must be submitted to the Department within 60 days of completion. 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 for review.

F. Sound Complaint Response and Resolution Protocol. The applicants propose to implement a formal protocol for responding to sound complaints. Prior to the start of commercial operation, the applicants must submit to the Department for review and approval a sound complaint response and resolution protocol. The proposed protocol must meet all applicable standards of Chapter 375(10)(I)(7)(j). The applicants 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 completing the investigation.

Based on the applicants' submissions and the review of those submissions by the Department's noise consultant, the Department finds that the proposed project will meet all applicable standards of Chapter 375(10), including tonal sound and SDRS, and that the applicants have made adequate provisions for the control of excessive environmental noise from the proposed project provided that turbine 39 operates in NRO 1 during the nighttime (7:00 p.m. to 7:00 a.m.) if the Vestas turbine option is utilized. To ensure that the project operates in compliance with the permit and the Department's regulations, the

Department finds that the applicants must submit to the Department for review and approval a sound complaint response and resolution protocol and implement the post-construction monitoring program described above. The applicants 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 its investigation within three business days of completion; and the applicants 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 applicants 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 applicants must submit, for review and approval, a mitigation plan that proposes actions to bring the project into compliance. The Department will review any such mitigation plan and may require additional mitigation or alternative measures. 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, 38 M.R.S.A. § 484(3), and the NRPA, 38 M.R.S.A. § 480-D, both have standards pertaining to scenic impacts that must be satisfied in order to obtain a permit for a wind energy development. The Site Law requires an applicant to demonstrate that the developer has made adequate provision for fitting the development harmoniously into the existing natural environment and that the proposed project will not adversely affect existing uses or scenic character. Pursuant to the NRPA, an applicant must demonstrate that a proposed project will not unreasonably interfere with existing scenic, aesthetic or recreational uses of a protected natural resource. The WEA further specifies those standards and states that when expedited wind energy developments are being evaluated:

> [T]he [Department] shall determine, in the manner provided in subsection 3, 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.A. § 3452(1).

The proposed project contains "generating facilities" including wind turbines as defined by 35-A M.R.S.A. § 3451(5) and "associated facilities" such as buildings, access roads, and collection lines, as defined by 35-A M.R.S.A. § 3451 (1). With regard to the associated facilities, the WEA, 35-A M.R.S.A. § 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 in 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.

In a letter to the applicants dated June 7, 2013, the Department determined that the associated facilities would be reviewed in accordance with the WEA, 35-A M.R.S.A § 3452(2).

The WEA, 35-A M.R.S.A. § 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.

To address the scenic impact criteria, the applicants submitted a Visual Impact Assessment (VIA) entitled "Visual Assessment," prepared by Landworks. 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 applicants also submitted a user intercept survey authored by Kleinschmidt Associates, LLC. The applicants identified twelve SRSNS within eight miles of the proposed generating facilities. The anticipated scenic impacts from the proposed project are discussed below.

The applicants conducted a VIA within an eight-mile radius of the proposed generation facility portion of the project. The applicants' VIA for the generating facility and associated facilities addressed the criteria set forth in 35-A M.R.S.A. § 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.A. § 3451(9). The following is a description of what constitutes each type of SRSNS and the applicants' assessment of potential impacts to each of the SRSNS within eight miles of the proposed generating facilities:

1) National Natural Landmarks: A federally designated wilderness area or other comparable outstanding natural and cultural features, such as the Orono Bog or Meddybemps Heath.

The applicants did not identify any national natural landmarks within eight miles of the project.

2) Historic Places: Properties listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended.

The applicants identified four places listed on the National Register of Historic Places located within eight miles of the project. Three of the places, the Bingham Free Meetinghouse, Caratunk Falls Archeological District, and Concord Haven, will not have any views of the project. The fourth place, the Arnold Trail located in Bingham, Concord Township, Embden, Moscow, Pleasant Ridge Plantation, and Solon, will have views of the turbines. The VIA states the closest turbine visible from the Arnold Trail is turbine #1 (T1), which is approximately four miles away. Approximately 9% of the trail located within eight miles of the project will have views of up to ten turbines. The applicants concluded that the proposed project should not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of these historic places.

3) National or state parks: The applicants identified that a portion of the Appalachian National Scenic Trail (Appalachian Trail) is located within eight miles of the project. The applicants concluded that the proposed project will not be visible from the section of trail located within eight miles of the project due to the topography and intervening vegetation. The applicants concluded that the proposed project should not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of Appalachian Trail.

The applicants did not identify state parks within eight miles of the project.

4) Great ponds: A great pond is an 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 Office 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 Lakes Assessment" (MWLA) published by the Maine Land Use Regulation Commission in June, 1987.

There are no great ponds within eight miles of the generating facilities listed in the "Maine Finest Lakes" study. The applicants identified three great ponds within eight miles of the project that have been rated outstanding for scenic quality in the MWLA. The applicants identified the three SRSNS as Punchbowl Pond, Bald Mountain Pond, and Jackson Pond. According to the applicants' VIA, the project will be visible from two of the three great ponds within eight miles of the project, Punchbowl Pond and Bald Mountain Pond.

Punchbowl Pond

Punchbowl Pond is a 40-acre pond located in Blanchard Township located about 4.2 miles northeast of the project. The applicants describe the shoreline as undeveloped. The pond does not have a public boat launch. The pond is accessible only by a one-half mile-long foot trail. The logging road that leads to the trail is currently impassable by vehicle because of a broken bridge. There is one place along the shoreline of Punchbowl Pond, where primitive camping is evident. However, there are no public campsites and there is no development on the pond. Punchbowl Pond is rated as 'outstanding' for scenic quality in the MWLA.

The applicants' VIA indicates that the closest visible turbine is T57, which is approximately four miles away. Approximately 19% of Punchbowl Pond will have views of up to eight turbines during the daytime, and the turbines will be visible over a horizontal viewing angle of 15 degrees from the midpoint of the pond. The applicants' VIA indicates that up to four nacelles with red warning lights may be visible at night from approximately 2% of the pond. The applicants concluded that the proposed project should not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of Punchbowl Pond.

Bald Mountain Pond

Bald Mountain Pond is a 1,152-acre pond located in Bald Mountain Township, which located about 6.8 miles north of the project. There is a gravel surface public boat launch on the southeastern side of the pond. The applicants' description of the shoreline is undeveloped with the exception of a lean-to along the Appalachian Trail, on the northern side of the pond and a small campsite near the boat landing. The lean-to is approximately 7.9 miles from the closest turbine. Bald Mountain Pond is rated as 'outstanding' for scenic quality in the MWLA. The applicants conducted surveys of people using the lake. According to the survey, 81% of visitors thought the project would have no effect or a positive effect on their likelihood to visit the pond in the future.

The applicants' VIA indicates that the closest visible turbine is T54, which is approximately seven miles away. Approximately 11% of Bald Mountain Pond will have views of up to three turbines, and the turbines will be visible over a horizontal viewing angle of two degrees from the midpoint of the pond. The applicants' VIA also indicates that only one nacelle with red warning lights will be visible at night from approximately 4% of the pond. The applicants concluded that the proposed project should not have an unreasonable adverse effect on the

scenic character or existing uses related to the scenic character of Bald Mountain Pond.

Jackson Pond

Jackson Pond is a 32-acre pond located in Concord Township. The pond was rated as 'outstanding' for scenic quality in the MWLA. Because of intervening topography and vegetation, the project will not be visible from this pond. Therefore, the applicants concluded that the proposed project would have no unreasonable adverse effect on the scenic character or existing uses related to the scenic character of Jackson Pond.

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 listed in the 1982 "Maine Rivers Study" by the Department of Agriculture, Conservation and Forestry. The applicants identified four scenic river segments within eight miles of the project. These scenic river segments include the Kennebec River (including Wyman Lake), the East Branch of the Piscataquis River, the West Branch of the Piscataquis River, and the Piscataquis River.

Kennebec River

The segment of the Kennebec River within eight miles of the project is approximately nine miles long and is located in Embden, Solon, Concord Township, Bingham, Pleasant Ridge Plantation, and Moscow. The applicants' VIA indicates that the closest visible turbine is T1, which is approximately four miles away from this portion of the Kennebec River. Approximately 7% of the section of the river within eight miles of the project will have views of up to ten turbines. The applicants' VIA also indicates that five nacelles with red warning lights will be visible at night from approximately 8% of the river. The applicants concluded that the proposed project should not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of the Kennebec River.

Wyman Lake

The segment of Wyman Lake within eight miles of the project, located in Pleasant Ridge Plantation and Moscow is approximately seven miles from the closest turbine (T1) according to the applicants' VIA. Approximately 54% of the lake will have views of up to 12 turbines, and the turbines will be visible over a horizontal viewing angle of 17 degrees from the midpoint of the lake. The applicants' VIA also indicates that six nacelles with red warning lights will be visible at night from approximately 55% of the lake. The applicants conducted surveys of people using the lake. According to the survey, 82% of visitors thought the project would have no effect or a positive effect on their likelihood to visit the pond in the future.

East Branch of the Piscataquis River, West Branch of the Piscataquis River and the Piscataquis River

These three scenic river segments have been identified by the applicants as SRSNS. Because of intervening topography and vegetation, the project is not visible from these SRSNS. Therefore, the applicants concluded that the proposed project would have no unreasonable adverse effect on the scenic character or existing uses related to the scenic character of these SRSNS.

6) Scenic Viewpoints: A scenic viewpoint is an 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 designates by rule adopted in accordance with 35-A M.R.S.A. § 3457.

As stated above, the applicants identified that a portion of the Appalachian Trail is located within eight miles of the project. However, there are no designated scenic view points along this portion of trail within eight miles of the project. Therefore, because there are no scenic viewpoints, the applicants concluded that the proposed project should not have an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of Appalachian Trail.

7) Scenic Turnouts: A scenic turnout is an SRSNS if it has been constructed by the Department of Transportation pursuant to 23 M.R.S.A. § 954 on a public road designated as a scenic highway.

The applicants identified one scenic turnout within eight miles of the project. The scenic turnout is located on Route 201 in Solon and will not have a view of the project, therefore, the applicants concluded that the proposed project would have no unreasonable adverse effect on the scenic character or existing uses related of the scenic turnout.

8) Coastal Scenic Viewpoints: To qualify as an SRSNS, a scenic viewpoint located in the coastal area, as defined by 38 M.R.S.A. § 1802((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.

The applicants did not identify any coastal scenic viewpoints within eight miles of the turbines.

B. Public Comment: The Department received public comments on the project during the two public meetings and throughout the review process. The majority of the comments received regarding the scenic character of the project had to do with the impact of the project on Kingsbury Pond and other ponds in the area that do not meet

the definition of a SRSNS. In addition, the Department heard concerns about the potential scenic impact to interested parties' houses and private properties. However, these areas also do not meet the definition of a SRSNS and are not regulated under the WEA.

C. Peer Review of the Visual Impact Assessment: The Department hired Scenic Quality Consultants, an independent scenic consultant, to assist in its review of the evidence submitted on scenic character. Scenic Quality Consultants visited to project site on July 22, 2013 and July 23, 2013. Scenic Quality Consultants provided the Department with comments dated August 23, 2013. Scenic Quality Consultants ranked twelve SRSNS in a table entitled "Review of the Bingham Wind Project Visual Impact Analysis, Part 2: Independent Analysis", dated August 23, 2013. The twelve SRSNS were evaluated by Scenic Quality Consultants based on the 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. Scenic Quality Consultants rated each criterion for each of the twelve SRSNS with ratings between "none" to "high." Scenic Quality Consultants then determined an overall scenic impact to those SRSNS based on their 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. A summary of Scenic Quality Consultants' conclusions can be found on the table below.

Scenic Resources of State or National Significance	Overall Scenic Impact
Historic Sites	
Arnold Trail to Quebec	Low
Bingham Free Meetinghouse	None
National Park/Designated Pedestrian Trail	
Appalachian National Scenic Trail	None
Great Ponds	
Bald Mountain Pond	Low
Jackson Pond	None
Punchbowl Pond	Medium
Segment of a Scenic River	
Wyman Lake	Low
Kennebec River	Low
Piscataquis River	None
East Branch of The Piscataquis River	None
West Branch of The Piscataquis River	None
Scenic Turnout on a Scenic Highway	
Old Canada Scenic Byway (Route 201) Turnout	None

None of the SRSNS reaches an overall scenic impact of a "High" in Scenic Quality Consultants' judgment. It was Scenic Quality Consultants' opinion that while the

Bingham Wind Project will have an adverse scenic impact, it does not reach the level of unreasonably adverse.

D. Department Analysis and Findings: In its analysis, the Department considered the evidence pertaining to scenic impacts submitted by the applicants and by members of the public, information gathered during two public meetings, the comments of its independent scenic consultant and the evidence gathered by Department staff. The Department visited the project area, including Bald Mountain Pond and Wyman Lake on July 23, 2013. The Department compared the current view of the project area from the scenic resources to the projected photo simulation.

In making its determination of whether the proposed project would cause an unreasonable adverse effect on scenic character or existing uses related to scenic character, the Department evaluated the relevant evidence in the record regarding each of the statutory criteria in 35-A M.R.S.A. § 3452(3) for each of the SRSNS. For the Bingham Free Meeting house, Appalachian Trail, Jackson Pond, Piscataquis River, East Branch of the Piscataquis River, West Branch of the Piscataquis River, and the Old Canada Scenic Byway Turnout, the Department considered the evidence in the record that there will be no visibility of the generating facilities from these SRSNS. The Department determined that since there was no visibility of the generating facilities from these seven SRSNS, the proposed project will not cause an unreasonable adverse effect on scenic character or existing uses related to scenic character for any of these SRSNS.

For the Arnold Trail, Bald Mountain Pond, Kennebec River, and Wyman Lake the Department concurred with Scenic Quality Consultants' assessment and determined the scenic impact of the project will be low because of the distance to the proposed turbines (3.5 to 5.8 miles to the closest turbine) and the number of visible turbines from the SRSNS. Therefore, the Department concluded that the overall scenic impact to Arnold Trail, Bald Mountain Pond, Kennebec River, and Wyman Lake will be low and will not constitute an unreasonable adverse effect on scenic character or existing uses related to scenic character for any of these SRSNS.

For Punchbowl Pond, the Department concurred with Scenic Quality Consultants' assessment and determined that the scenic impact of the project will be medium because of the distance of the proposed turbines (4.2 miles to the closest turbine) and number of turbines visible from the Pond. The Department concluded that the scenic impact to Punchbowl Pond is medium and the proposed project will not constitute an unreasonable adverse effect on the scenic character or existing uses related to scenic character for this SRSNS.

E. Night Lighting: The applicants propose to install a radar-activated lighting system once such a system is approved by the Federal Aviation Administration (FAA) and is commercially available. The FAA has not yet approved radar-activated lighting systems for use on wind power projects, but has been working on technical rules for these systems for some time. While the Department finds that the project as proposed will not have an unreasonable adverse effect on the scenic character or existing uses related to scenic character, the Department is sensitive to the interested persons' concerns with impacts to the night sky from lighting of the turbines. To potentially reduce these impacts, the Department is requiring as a condition to this Order that,

within six months of FAA's final approval of the specifications for radar-activated lighting for use on wind turbines, the applicant must submit an application to the FAA to install such a system. Within one year of FAA's approval of a radar-activated lighting system at the project site, the applicants must install and operate the warning lights in accordance with that approval.

Based on the evidence in the record, the Department finds that the proposed project will not have an unreasonable adverse effect on scenic character or existing uses related to scenic character of the SRSNS within eight miles of the generating facilities, provided the applicants meet the conditions described above for night lighting.

7. WILDLIFE AND FISHERIES:

Applicants for Site Law, Chapter 375(15), or NRPA, 38 M.R.S.A. § 480-D(3), permits are required to demonstrate that the proposed project will adequately provide for the protection of wildlife and fisheries and will not cause unreasonable harm to 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. The applicants retained Stantec Consulting (Stantec) to conduct wildlife surveys; wetland delineations; rare, threatened and endangered plant and animal surveys; and vernal pool surveys. The applicants consulted with the Department and other federal and state natural resource agencies during the preparation of the applications.

A. Deer Wintering Area: The transmission line portion of the project will impact 21.54 acres of mapped deer wintering area (DWA) in four separate DWA's. DWA's #084029, #084031, and #084033 are located in Parkman and DWA #080604 is located in Kingsbury Plantation. The applicants propose to minimize impacts to DWA #084033 by utilizing single pole structures and only clearing a 21-foot wide section of the corridor. Vegetation on either side of the transmission line will be managed so that blow downs will not be able to hit the lines, resulting in a V-shaped vegetation profile. The details of this are shown on the plan entitled "V Style Clearing" prepared by SGC Engineering, LLC and dated August 14, 2013. To minimize impacts to DWA #084031, the applicants propose to utilize H-frame utility pole structures and incorporate the V-style clearing method around the pole structures. The use of H-frames will allow the applicants to elevate the transmission line higher off the ground, allowing it to maintain additional tree cover under the line, thereby reducing impacts to the DWA. The proposed transmission line will also impact the periphery of both DWA #084029 and #080604.

MDIFW reviewed the application materials and commented that the applicants have minimized impacts to mapped DWA's to the greatest extent possible; however MDIFW commented that the applicants should compensate for lost DWA functions and values as a result of the project. After consulting with MDIFW, the applicants propose to compensate for lost DWA functions and values by purchasing a 90-acre parcel adjacent to the MDIFW's Cambridge Wildlife Management Area in the Town of Cambridge. The parcel contains approximately 60 acres of conforming DWA. The details of the proposed parcel can be seen on the plan entitled "Mitigation Parcel" prepared by Stantec and dated July 1, 2014. The applicants propose to transfer ownership of the parcel to MDIFW. MDIFW has agreed to accept this parcel. Prior

to the start of construction, the applicants must purchase and transfer the 90-acre parcel to MDIFW and submit evidence to the Department of that transaction. In addition, within 60 days of recording, the applicants must submit a recorded book and page from the registry of deeds.

B. Birds and Bats: The applicants retained Stantec to conduct bird and bat surveys to identify species that occur in the area of the proposed project; the extent that they use the project site; and potential impacts from the proposed project. The applicants conducted the following studies: aerial Bald Eagle surveys (fall 2009, spring 2010 and spring 2011), nocturnal radar migration surveys (spring 2010, fall 2010 and fall 2011), acoustic bat surveys (spring, summer and fall 2010), diurnal raptor migration surveys (spring and fall 2010) and breeding bird surveys (spring 2010).

1. Birds: The applicants' migration studies indicate that this site has high passage rates for birds. MDIFW reviewed the project and acknowledged that there were high migration rates at the site, but MDIFW does not expect the project to create an adverse effect on birds. However, MDIFW recommended that if the permit is granted, the Department require post-construction monitoring of the project's impacts to birds to ensure that there is no adverse impact. The applicants have developed the framework for a post-construction mortality study in conjunction with MDIFW, which will include three years of surveys and is further discussed below.

2. Bats: The results of the applicants' acoustic bat surveys indicate that the majority of the bat calls were of the Genus *Myotis*, which is a typical result of pre-construction surveys. The applicants also state that based on post-construction bat mortality studies at wind facilities across the United States, including in Maine, bats of the Genus *Myotis* are one of the least common bats to be killed by wind turbines.

   MDIFW commented that the northern long-eared bats (*Myotis septentrionalis*) and the little brown bat (*Myotis lucifugus*) are listed as state species of special concern and are currently being considered for listing under the United States Endangered Species Act by the United States Fish and Wildlife Service (USFWS). Widespread deaths among these species are occurring primarily due to White Nose Syndrome. MDIFW has also initiated the rulemaking process to list the northern long-eared bats, little brown bat and the eastern small footed bat (*Myotis leibii*) as either threatened or endangered under the Maine Endangered Species Act. MDIFW expressed concern that the project will result in an unreasonable level of bat mortality. MDIFW recommended that "Wind turbines only operate at cut-in wind speeds exceeding 5.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period April 20 – June 30; 6.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period July 1 – September 30; and 5.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period October 1 – October 15. Cut-in speeds are determined based on mean wind speeds measured at the hub heights of a turbine over a 10-minute interval. Turbine blades will be feathered during these low wind periods to minimize risks of bat mortality. These cut-in speeds are independent of ambient air temperature."

During the course of the Department's review of this project, the Department reviewed numerous peer reviewed scientific papers regarding mitigation strategies to reduce bat mortality at wind farms across the United States. The Department also consulted with MDIFW regarding anticipated bat mortality at the proposed project and possible mitigation strategies. The Department discussed the likelihood of bat mortality at this proposed project with both the applicants and MDIFW. MDIFW stated that for future wind projects, it is currently recommending operation only at cut-in speeds of 6.0 m/s at nighttime during mid-April to mid-October; however, because this application has been in process for some time, MDIFW is comfortable with its previous recommendation. After considering all the information in the record, and given that MDIFW has begun the rulemaking process to list the northern long-eared bats, little brown bat and eastern small footed bat as either state threatened or endangered species, the Department determined that MDIFW's recommendation was not protective enough of bat species and that to provide an adequate amount of protection for these species, turbine operations at this facility must be curtailed as follows:

> Wind turbines must operate only at cut-in wind speeds exceeding 6.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period of April 20–October 15. Cut-in speeds are determined based on mean wind speeds measured at the hub heights of a turbine over a 10-minute interval. Turbine blades will be feathered during these low wind periods to minimize risks of bat mortality. These cut-in speeds are independent of ambient air temperature.

3. Post-Construction Monitoring: The applicants propose to conduct post-construction monitoring for bird and bat mortality. The applicants have provided the framework for the monitoring, which was reviewed by MDIFW. The framework is entitled "Proposed Bingham Wind Project Post-Construction Monitoring Program" prepared by First Wind and last revised on September 23, 2013. The surveys will occur in year one and two of operation with a third year of monitoring occurring between years three and five of operation. The monitoring goals for the third year will be determined based on what is learned from years one and two. Prior to the start of operation, the applicants must develop a post-construction bird and bat mortality study in consultation with MDIFW for operational years one and two and submit it to the Department for review and approval. Prior to the third anniversary of the commencement of operation of the facility, the applicants must submit a post-construction bird and bat monitoring plan to take place between years three and five of operation to the Department for review and approval. The study must be designed in consultation with MDIFW. If the Department determines that one or more turbines are causing an unreasonable adverse impact on bats or birds as determined by the Department in consultation with MDIFW, the applicants must modify operations of specific turbine(s) or the entire facility to limit impacts on the affected specie(s) in accordance with a plan reviewed and approved, and, if applicable, as modified, by the Department. The Department will notify the applicants in writing of the basis for its determination. Within 60 days of receiving written notice, the applicants must submit an application for a permit modification or amendment in accordance with Chapter 2 which includes a written plan that details the specific measures to reduce the impacts to the species of concern for

Department review and approval. The plan may include but is not limited to modified operations, such as additional nighttime curtailment or reduced/suspended operations during high risk periods, use of detection/deterrence methods to limit impacts to affected species, or habitat management. The plan must include a schedule for implementation. If the application is approved, the applicants shall comply with the terms and conditions of the permit. If the application is not submitted within the time prescribed, or is wholly or in part denied, returned, or withdrawn, then within thirty (30) days of failing to submit within the time prescribed, denial, return, or withdrawal, the applicants must cease operation of the one or more turbines resulting in the unreasonable adverse impact on bats or birds.

C. Atlantic Salmon Habitat Streams: There are 28 streams in the project area designated as critical habitat for Atlantic salmon. The applicants do not propose to directly alter any streams during the construction of this project. The applicants propose to place a 100-foot buffer around all designated Atlantic salmon streams. These buffers are further described in Section 10(B).

D. Rare, Threatened, and Endangered Species:

1. Golden and Bald Eagles: Both the Golden and Bald Eagle are protected under the federal law, the Bald and Golden Eagle Protection Act. The USFWS has the authority for oversight and implementation of that law; however under the Site Law and the NRPA the applicants must demonstrate that the proposed project will adequately protect wildlife.

   The applicants conducted aerial Eagle surveys in the vicinity of the project. MDIFW reviewed the applicant's aerial survey and Department records, which include the results from a statewide Eagle survey from 2013, done by MDIFW and USFWS. Golden Eagles are listed as endangered under the Maine Endangered Species Act. Golden Eagles have home ranges of approximately 2,000 square miles. MDIFW commented that there is no evidence that Golden Eagles are nesting in the project area and only a small number of transient Golden Eagles may visit the area in any given year. Based on the lack of nesting Golden Eagles in the area, and the small number likely to be present, MDIFW does not believe that the project will impact Golden Eagles. MDIFW stated that should the activity level of Golden Eagles increase in the project area, MDIFW has the ability to advocate that the applicants obtain an incidental take permit under Maine's Endangered Species Act.

   There are nine Bald Eagle nests located within 18 miles of the project, with the closest one being approximately five miles away from the closest turbine. MDIFW commented that based on the abundance and distribution of Bald Eagles in Maine, it does not anticipate adverse impacts to Bald Eagles as a result of this project.

2. Northern Spring Salamander: The Northern Spring Salamander is a State Species of Special Concern. The applicants surveyed the streams in the project area and identified occurrences of Northern Spring Salamander in seven streams, and identified 20 streams that could potentially contain the salamander. MDIFW

commented that the buffers proposed by the applicants, further discussed in Section 10(D), offer sufficient protection to the species.

3. Roaring Brook Mayfly: The Roaring Brook Mayfly is designated as an Endangered Species under the Maine Endangered Species Act. The applicants found three streams in the project area that contain habitat suitable for the mayfly. These three streams also contain habitat for the Northern Spring Salamander. The applicants were unable to find any occurrences of Roaring Brook Mayfly in these streams. MDIFW disagrees with the applicants that the species is not present; however, MDIFW stated that the precautions the applicants are taking for the Northern Spring Salamanders will also protect Roaring Brook Mayflies.

4. Northern Bog Lemming: The Northern Bog Lemming is designated as a Threatened Species under the Maine Endangered Species Act. Seven wetlands within the project footprint were searched to determine the presence of the species. Only one of the wetlands searched contained evidence of the presence of Bog Lemmings. The applicants did not conduct any trapping and were unable to determine if the evidence was from a Northern or Southern Bog Lemming. However, the observation was treated as being from a Northern Bog Lemming. The proposed project will not impact this wetland. MDIFW concurred with the applicants' assertion that there will be no adverse impact on the Northern Bog Lemmings as a result of the proposed project.

5. Canada Lynx: Canada Lynx is designated as a State Species of Special concern. The applicants conducted snow track and remote camera surveys to determine if Canada Lynx are using the project area. Both the applicants and MDIFW documented use of the area by lynx. MDIFW stated that there are no anticipated impacts to the species from the construction or operation of the proposed project.

6. Great Blue Heron: Great Blue Herons are designated as a State Species of Special Concern. The applicants' aerial surveys were unable to locate any heron rookeries. MDIFW does not anticipate an adverse impact on the species as a result of the proposed project.

E. Inland Waterfowl and Wading Bird Habitat: The proposed transmission line portion of the project will impact 3.13 acres of a mapped Inland Waterfowl and Wading bird Habitat (IWWH). The applicants propose to mitigate for impacts to the IWWH through a contribution to the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Program (MNRCP) in the amount of $183,958. Prior to the start of construction, the applicant must submit a payment in the amount of $183,958, payable to "Treasurer, State of Maine," and directed to the attention of the ILF Program Administrator at Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333.

F. Significant Vernal Pools: The applicants conducted vernal pool surveys in 2010, 2011 and 2012. The applicants identified four significant vernal pools (SVP) within the project site. Two pools (SVP_50KN_N and SVP_108SK_N) occur in the same wetland complex and are located approximately ten feet apart. The applicants propose to alter the critical terrestrial habitat associated with these pools for the clearing associated with the collector line. The applicants do not propose to impact

any of the SVP depressions. The applicants submitted Permit by Rule (PBR) Notification form #55938 for the impacts associated with SVP_50KN_N and SVP_108SK_N. The applicants propose to alter the critical terrestrial habitat of SVP_07AN_N for the clearing associated with the transmission line. The applicants submitted PBR #55937 for impacts associated with SVP_07AN_N. Lastly the applicants' submitted PBR #55936 for impacts associated with SVP_53KN_N. During the course of the Department's review it was determined that PBR #55936 was not necessary because the vernal pool was not located on land controlled by the applicants (§480-BB(2)(A)). All three PBR's were for Chapter 305 Permit by rule standards Section 19 impacts and were accepted by the Department on May 3, 2013.

G. Water Quality Study Plan: MDIFW expressed concern regarding the potential effect of stormwater runoff on streams in the vicinity of the project. MDIFW acknowledged that they do not have the expertise to evaluate any impact and deferred to the Department's stormwater management rules, which are further discussed in Finding 12. In response to MDIFW's concerns, the applicants developed a water quality study plan in consultation with MDIFW. The purpose of the plan is to help assess pre- and post-development conditions of the streams near the project. The applicants must implement the water quality plan and submit the results to the Department and MDIFW for review. The details of the proposed plan can be seen in the document entitled "Proposed Water Quality Assessment Plan for the Bingham Wind Project" prepared by Stantec Consulting Services, Inc. and dated July 2014.

The Department finds that the applicants have made adequate provision for the protection of wildlife and fisheries provided that the applicants submit and implement post-construction bird and bat monitoring plans, modify turbine(s) operations if the facility causes an adverse impact on birds or bats, implement the water quality study plan, submit the recorded book and page from the registry of deeds for the purchase and transfer the DWA mitigation parcel to MDIFW, make a payment of $183,958 to the MNRCP, and curtail turbine operations all as described above.

8. HISTORIC SITES:

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

Based on the information in the application and MHPC's review, the Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites.

9. UNUSUAL NATURAL AREAS:

The applicants conducted field surveys in the area of the proposed project to determine whether there are any rare plant species or rare and exemplary natural communities. The field studies did not locate any such species or communities.

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. In

addition, the applicant's consultant surveyed the proposed project site and confirmed that no unusual features exist on-site.

During the course of the Departments review of the application, interested parties asserted that there are lady's-slippers and other rare plants located within footprint of the project. The Department requested information on the location of these rare plants from the interested parties. The interested parties have not been able to supply the Department with the location of any rare plants. Furthermore, there are four known species of lady's-slippers in Maine; only two are considered rare.

Based on the information in the application and MNAP's review, the Department finds that the proposed development will not have an adverse effect on unusual natural areas either on or near the development site.

10. BUFFER STRIPS:

The applicants propose to maintain stormwater management buffers and buffers for natural resource protection. All buffers will be vegetated. The applicants propose to implement vegetation removal practices during and after project construction to preserve and maintain buffers. These practices include no cutting, limited and selective clearing, and mechanized clearing. Herbicides will be used to remove capable species from the safety zone associated with the above ground portions of the transmission line when not located within the designated buffer areas. Capable species are plants that are capable of growing to a point that is within the safety zone of the transmission line. The locations of the proposed buffers are shown on project plans submitted with the application.

A. Stormwater Buffers: The applicants propose to maintain stormwater buffers along the access road and around the turbine pads. The proposed stormwater and phosphorus treatment measures, including the proposed buffers, are more fully described in Finding 12.

B. Atlantic Salmon Stream Buffers: There are 28 streams that contain, or have suitable habitat to contain, Atlantic salmon along the transmission and collector line. Buffers proposed around these streams will be 100 feet wide and only plants that are capable of growing within 15 feet of the conductor within the next three to four years will be removed. The applicants propose to place the poles as close to the edge of these buffers as practical, thereby elevating the height of the conductor above the stream to the greatest extent practicable and reducing the number of plants that must be removed. Capable species within the buffer will be topped unless the plant is dead, dying or topping the plant will not result in sufficient foliage to sustain it. No other vegetation will be removed in these buffers. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment.

C. Stream Buffers: There are 20 streams located within the transmission corridor that are not subject to any specific buffer requirements based on habitat. For those streams, the applicants propose that the initial clearing will extend to 25 feet from the stream. Within 25 feet of those 20 streams, trees above two inches diameter at breast height (dbh) will be cut at ground level. All other vegetation will remain. During the operation phase of the project, the buffers around these streams will revert to 100 feet

wide. Any maintenance clearing will consist of removing all capable species that are eight to ten feet in height or taller, at the time the maintenance work is occurring, by cutting the trunks at ground level. All other vegetation will remain. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment.

D. Northern Spring Salamander Streams: There are 27 streams located within the transmission corridor that contain, or have suitable habitat to contain, Northern Spring Salamanders. The applicants propose buffers around these streams that will be 250 feet wide and within those buffers only plants that are capable of growing within 15 feet of the conductor within the next three to four years will be removed. Poles will be placed as close together as possible to increase the height of the buffer along these streams. Capable species within the buffer will be topped unless the plant is dead, dying or topping the plant will not result in sufficient foliage to sustain it. No other vegetation will be removed. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment.

E. Significant Vernal Pool Buffers: The applicants propose to maintain a 100-foot buffer around all significant vernal pool depressions. Within the buffer, the applicants proposed to remove all capable species that are eight to ten feet in height or taller, by cutting the trunks at ground level. All other vegetation will remain. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment. In addition, no tracked or wheeled equipment will operate within 250 feet of a significant vernal pool between April 1 and June 30.

F. Bog Lemming Habitat: The bog lemming habitat occurs in one wetland along the collector line. Buffers proposed by the applicants around this habitat will be 250 feet wide and only plants that are capable of growing within 15 feet of the conductor within the next three to four years will be removed. Capable species within the buffer will be topped unless the plant is dead, dying or topping the plant will not result in sufficient foliage to sustain the plant. No other vegetation will be removed in these buffers. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment.

G. Inland Waterfowl and Wading Bird Habitat: Within a mapped IWWH, the applicants propose to remove plants that are capable of growing within 15 feet of the conductor within the next three to four years. Capable species within the buffer will be topped unless the plant is dead, dying or topping the plant will not result in sufficient foliage to sustain it. All other vegetation will remain. Initial clearing and vegetation maintenance will be completed by hand-cutting or by using low-ground-pressure tree harvesting equipment. The applicants propose to leave two to three dead, standing trees per 500 linear feet of transmission line where possible to help create nesting habitat for waterfowl. In addition, no clearing within the IWWH will occur between April 15 and July 15.

H. Vegetation Management Plan (VMP). The applicants submitted a Post-Construction Vegetation Plan for the proposed project, prepared by Stantec, and dated April 2013, which describes the plan for routine maintenance activities along the right-of-way to

prevent vegetation from getting too close to the electrical transmission line conductors. The plan summarizes vegetation management methods and procedures that will be utilized by the applicants for all overhead collector lines. The plan describes restrictive maintenance requirements for the natural resources described above. The plan also includes procedures for managing or removing osprey nests built on power line structures, describes a system for identifying restricted areas, and summarizes training requirements for construction personnel.

The applicants must permanently mark the locations of all buffers on the ground prior to the start of construction in any area.

The Department finds that the applicants have made adequate provision for buffer strips provided that the applicants permanently mark the location of the buffers as described above.

11. SOILS:

The applicants submitted a Class L soil survey for the turbines 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 Department's Division of Environmental Assessment (DEA).

The applicants also submitted a geotechnical report, which was prepared by S.W. Cole Engineering, Inc. and dated January 13, 2014. DEA reviewed the report and commented that it was consistent with Department requirements.

The applicants anticipate that blasting will be required to facilitate the construction of the access road, turbine foundations and other portions of the project. DEA reviewed a blasting plan submitted by the applicants outlining the proposed procedures for removing bedrock. The DEA commented that the blasting plan was consistent with Department requirements.

If a rock crusher is to be utilized on site, the applicants must insure that the crusher is licensed by the Department's Bureau of Air Quality and will be operated in accordance with that license.

Interested parties raised general concerns regarding the suitability of the soil types that the development will be built on. The interested parties did not provide any specifics on why the soils were not suitable for development. In the early stages of the application process, the interested parties also raised concerns regarding the limited amount of geotechnical information regarding the site. The applicants subsequently submitted a full geotechnical report for the proposed project. This report was reviewed by DEA and found to be adequate for the development.

The Department finds that based on the reports, 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.

12. STORMWATER MANAGEMENT:

The proposed project includes approximately 83.78 acres of impervious area and 88.61 acres of developed area. It lies within the watersheds of Fall Brook, Gulf Stream, Withee Pond, Rift Brook, Smith Pond, Mayfield Pond, Kingsbury Pond, Baker Flowage, Thorn Brook, Kingsbury Stream, Hilton Pond #1, Gales Brook, Carlton Stream, and the Piscataquis River. The applicants submitted a stormwater management plan based on the Basic, General, Phosphorus, and Flooding standards contained in Department *Stormwater Management* rules (Chapter 500), 06-096 CMR 500. The proposed stormwater management system consists of 231 stormwater management buffers, 70 ditch turnouts, 50 level spreaders, one wet pond, and two underdrained soil filters.

A. Basic Standards:

1. Erosion and Sedimentation Control: The applicants submitted an Erosion and Sedimentation Control Plan 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 Bureau of Land and Water Quality (BLWQ).

   Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor. Prior the start of construction, the applicants 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 all of the third-party inspectors. Given the size and nature of the project site, the applicants must retain the services of three third party inspectors in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order. The applicants may alter the number of third party inspectors needed for the project with prior Department approval.

2. Inspection and Maintenance: The applicants submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by, and revised in response to the comments of, DLRR. The applicants will be responsible for the maintenance of all common facilities including the stormwater management system.

3. Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

The following minor adjustments may be made during project construction without advance notice to the Department provided they do not impact protected natural resources and are reflected in the final as-built drawings: changes that result in a reduction in environmental 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 natural 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 drainage culvert locations based on field topography.

Within 90 days of the commencement of project operations, the applicants must submit as-built plans of the project to the Department for review. Any changes from the approved project design shall be noted on the plans.

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

B. General and Phosphorus Standards:

1. General Standard:

The applicant's stormwater management plan includes general treatment measures that will 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 will be 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, substation and the DRD enclosure. The proposed access road and turbine pads meet the definition of "a linear portion of a project" in Chapter 500. The applicants propose to control runoff volume from no less than 75% of the impervious area and no less than 50% of the developed area in the linear portions of the project.

2. Phosphorous Standard:

Because portions of the proposed project are located in the watersheds of Withee Pond, Smith Pond, Hilton Pond #1, Kingsbury Pond, and Mayfield Pond, stormwater runoff from the project site will be treated to meet the Phosphorus

standard outlined in Chapter 500(4)(C). The applicants' 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 the five watersheds listed above, the applicants will reduce the phosphorous export from the site to below the allowable amounts through the construction of ditch turnouts, level lip spreaders, and the utilization of stormwater buffers. The applicants also reduced the phosphorous export by re-vegetating 0.41 acres of roadway, and through the use of manmade pervious surface in the proposed substation yard.

Watershed	Allowable Phosphorous Export (Pounds Per Year)	Phosphorous Export Without Treatment (Pounds Per Year)	Phosphorous Export With Treatment (Pounds Per Year)
Withee Pond	0.38	0.945	0.189
Smith Pond	0.211	0.403	0.121
Hilton Pond #1	0.944	1.173	0.77
Kingsbury Pond	3.398	6.668	3.236
Mayfield Pond	5.165	16.605	5.121

The forested and meadow buffers will be protected from alteration through the execution of a deed restriction. The applicants propose to use the deed restriction language contained in Appendix G of Chapter 500. Within 90 days of the commencement of operation, the applicants must record all deed restrictions for stormwater buffers, including plot plans and submit the recorded deeds to the Department within 60 days of recording.

The stormwater management system proposed by the applicants 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 General and Phosphorus Standard contained in Chapter 500(4)(B) and Chapter 500(4)(C) provided that the design engineer or a third-party engineer oversees the construction of the proposed stormwater management structures in accordance with the details and notes specified on the approved plans.

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

Based on the stormwater system's design and DLRR's review, the Department finds that the applicants have made adequate provision to ensure that the proposed project will meet the General and Phosphorus Standard contained in Chapter 500(4)(B) and Chapter 500(4)(C) provided that the applicants retain the design engineer or a third-party engineer to oversee the construction of the stormwater management structure and submits inspection logs as described above.

C. Flooding Standard:

The applicants analyzed the cover change (undeveloped to impervious) in the watersheds within the turbine series and the transmission line. That analysis

indicated that the potential runoff increase will be insignificant. The applicants request a waiver of the flooding standard pursuant to Chapter 500(4)(E)(2)(b) for the turbine series and the transmission line.

The runoff from the turbine sites will be dispersed into 209 different stormwater management buffers. Furthermore, all of the culverts proposed within the turbine series and the transmission line have been sized to convey the 25-year peak flow rate in its watershed.

For the substation, DRD and the O&M building, the applicants propose 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.

DLRR commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500(4)(E). In addition, DLRR recommended approval under the insignificant increase in runoff waiver provision in Chapter 500 (4)(E)(2)(b) for the turbine series and the transmission line.

Based on the system's design and DLRR's review, the Department finds that the applicants have made adequate provision to ensure that the proposed project will 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 will meet the Chapter 500 standards for easements and covenants provided that the applicants record all deed restrictions for stormwater buffers prior to the operation of the facility and submits the recorded deeds to the Department within 60 days of recording.

13. GROUNDWATER:

There are several significant sand and gravel aquifers located in and around the project site. The closest significant sand and gravel aquifer to any turbine is 895 feet away. The proposed O&M building will be located over a significant sand and gravel aquifer. The applicants also propose to locate a well to supply water to the building within the aquifer. A portion of the collector line will also be located over a separate significant sand and gravel aquifer.

The applicants submitted a construction Spill Prevention Control and Countermeasure (SPCC) plan that they intend to use. The SPCC plan includes general operational requirements, storage and handling requirements, and training requirements to prevent spilling of oil, hazardous materials, or waste. The plan also sets out spill reporting and cleanup requirements should such an event occur.

DEA reviewed the proposed project and commented that the project should not pose a risk to the sand and gravel aquifers provided that prior to the operation of the facility the applicants submit an operational SPCC plan to the Department for review and approval.

The Department finds that the proposed project will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur and the proposed project will not unreasonably deplete ground water resources. Therefore, the Department further finds that the proposed project will not have an unreasonable adverse effect on groundwater quality and quantity provided that prior to operation of the facility, the applicants submit an operational SPCC plan to the Department for review and approval. The Department may require changes to any SPCC plan or handling or storage procedure based on review of the SPCC plans or inspections of the site.

14. WATER SUPPLY:

When completed, the project is anticipated to use approximately 345 gallons of water per day for the O&M building. Water for the development will be supplied by an individual well. The applicants submitted an assessment of groundwater supplies that are available on the project site. This assessment was prepared by a well driller and was reviewed by, and revised in response to comments from, DEA.

The applicants also state that non-potable water will be needed for dust abatement during project construction. This water will not be withdrawn from groundwater sources or from rivers or streams. The DEA reviewed the project and commented that the locations of water sources for dust-control should be stable under the anticipated truck traffic; possible sources of water include concrete or asphalt boat ramps, bridges, or similar locations. The applicants agreed to utilize only stable locations when filling water trucks to suppress dust. In addition, DEA requested that the applicants submit a list of sites that it will use for non-potable water withdrawal.

The Department finds that the applicants have made adequate provision for securing and maintaining a sufficient and healthful water supply provided that the applicants submit a list of sites that they will use for non-potable water withdrawal.

15. WASTEWATER DISPOSAL:

When completed, the project is anticipated to discharge 345 gallons of wastewater per day from the O&M building. Wastewater will be disposed of by an individual subsurface wastewater disposal system. The applicants submitted a HHE-200 form for the proposed disposal system prepared by a licensed site evaluator. This information was reviewed by DEA, which commented that the subsurface wastewater disposal system will be located in close proximity to a significant sand and groundwater aquifer; however there should be no adverse effect on groundwater provided that the applicants properly operate and maintain the wastewater disposal system.

Based on DEA's comments, the Department finds that the proposed wastewater disposal system will be built on suitable soil types provided that the applicants properly operates and maintains the subsurface wastewater disposal system.

16. SOLID WASTE:

When completed, the proposed project is anticipated to generate 150 cubic yards of general office solid waste per year. All general solid wastes from the proposed project

will be disposed of at the Bingham Transfer Station, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

The applicants propose to sell any marketable timber/pulp from the project site. Stumps will be left in place, used to make erosion control mix, or will be deposited in a stump dump. Any stump dumps will be operated in compliance with Maine Solid Waste Management Rules.

The proposed project will generate approximately 1,725 cubic yards of construction debris and demolition debris. All construction and demolition debris generated will be disposed of at the Crossroads Landfill, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

Approximately 50 large tires from large trucks or skidders will be disposed of at BDS Waste Disposal. BDS is licensed to handle the tires, and is currently in substantial compliance with Maine Solid Waste Management Rules.

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

17. FLOODING:

The applicants propose to place fill or clear vegetation within the 100-year floodplain as mapped by the Federal Emergency Management Agency in the following streams located in the organized territories:

- Carleton Stream: The applicants propose to clear 1.03 acres of vegetation and place approximately 3,518 square feet of fill within the floodplain. The clearing will be associated with the transmission corridor. The fill will be for a permanent access road and the placement of one utility pole.
- Unnamed tributary to Kingsbury Stream: The applicants propose to clear 0.08 acres of vegetation associated with the transmission corridor.
- Unnamed tributary to Gales Brook (Abbot): The applicants propose to clear 1.48 acres of vegetation associated with the transmission corridor and will fill 64 square feet of floodplain for the placement of four utility poles.
- Gales Brook: The applicants propose to clear 3.1 acres of vegetation and fill 20,340 square feet of the floodplain. The clearing will be associated with the transmission corridor. The fill will be for a permanent access road and the placement of two utility poles.
- Unnamed tributary to Gales Brook (Parkman): The applicants propose to clear 1.38 acres of vegetation associated with the transmission corridor and will fill 16 square feet of floodplain for the placement of one utility pole.
- Unnamed tributary to the Piscataquis River: The applicants propose to clear 0.08 acres of vegetation associated with the transmission corridor.

The construction of the generator lead will result in vegetation being cleared within the flood zone. This will not result in any alteration to existing topography or to natural drainages. In addition, the removal of vegetation should not result in any decrease in floodplain storage. The placement of fill within the floodplain for access roads and utility poles will result in the reduction of a small portion of each floodplain's capacity.

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

18. WETLAND IMPACTS:

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

- 414 wetlands were identified along the proposed access roads and the electrical transmission line. 66 of those wetlands met the definition of wetlands of special significance;
- 67 jurisdictional streams were identified, including 36 perennial streams, none of which will be permanently impacted. There will be 12 temporary timber mat stream crossings associated with the construction of the transmission line; and,
- 58 vernal pools were identified, including four that met the criteria of a significant vernal pool. One of the pools is not located on land controlled by the applicant and therefore is not regulated as described in Section 7(f). The remaining significant vernal pools will have impacts of less than 25% of the total canopy cover. The vernal pools are further discussed in Section 7.

The applicants propose to permanently fill 1.34 acres of freshwater wetland, temporarily fill 6.32 acres of freshwater wetlands and permanently convert 26.75 acres of freshwater wetland from forested to scrub shrub. Included in these impacts are 1,966 square feet of permanent fill within wetlands of special significance and 12 acres of wetland conversion within wetlands of special significance.

The Department's Wetlands and Waterbodies Protection Rules (Chapter 310), 06-096 CMR 310, interpret and elaborate on NRPA criteria for obtaining a permit. The rules guide the Department in its determination of whether a project's impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it will cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a NRPA permit that involves a wetland or water body alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternative analysis for the proposed project completed by Stantec. The applicants stated that the purpose of the project is to create a wind power generation facility at this site. The applicants originally designed the project to have 138 turbines; however after conducting natural resource studies, the applicants eliminated numerous turbines from the proposal because those additional turbines would have resulted in substantial wetland and stream impacts. The applicants further avoided wetland and other natural resource impacts by accessing the project from existing roads whenever possible. The applicants state that the proposed project avoids wetland and waterbody impacts to the greatest extent practicable while still meeting the project's purpose.

B. 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. The applicants state that wetland impacts have been minimized by placing most of the collector line underground, which allows them to minimize the width of the collector corridor. The applicants also minimized impacts by utilizing existing roads where possible; by crossing wetlands in narrow locations; and maintaining hydrology in the crossings by utilizing rock sandwiches or culverts. The applicants stated that the proposed project minimizes wetland impacts to the greatest extent practicable while still meeting the project's purpose.

C. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. The applicants conducted functions and values assessments of the various wetlands and waterbodies to be altered by the proposed project. Because of the range of wetland impacts, all different types of functions and values are represented. The applicants propose to make a contribution into the In-Lieu Fee (ILF) program of the Maine Natural Resource Conservation Program (MNRCP) in the amount of $600,087. Prior to the start of construction, the applicants must submit a payment in the amount of $600,087, payable to "Treasurer, State of Maine," and directed to the attention of the ILF Program Administrator at Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333.

The Department finds that the applicants have avoided and minimized wetland 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 provided that prior to project construction, the applicants submit the ILF payment as described above.

19. SHADOW FLICKER:

In accordance with 38 M.R.S.A. § 484(10), the applicants 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 applicants submitted a shadow flicker analysis with its application based on the Vestas V112 turbines, which is the tallest turbine proposed. The applicants used WindPRO, a wind modeling software program, to model expected shadow flicker effects on adjacent properties from the 63 proposed turbine locations. The applicants 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 applicants conduct a shadow flicker model out to a distance of 1,000 feet or greater from a residential structure, and the applicants' model did so. The applicants modeled 149 receptors. The applicant's analysis identified one receptor (Receptor A) which will receive shadow flicker from the project. Receptor A is located 2,200 feet from the closest turbine and is expected to receive two hours and fifty five minutes of shadow flicker yearly. 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. Based on the WindPRO analysis, no properties outside the project parcel will receive shadow flicker in excess of 30 hours per year.

The Department finds the shadow flicker modeling conducted by the applicants 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 will not unreasonably cause shadow flicker to occur over adjacent properties.

20. PUBLIC SAFETY:

The applicants propose to use Vestas V112-3.0, Vestas V112-3.3 or Siemens SWT 3.0-113 wind turbine generators. The Vestas' and Siemens' conformity with International Electrotechnial Commission standards has been certified by Det Norske Veritas. The applicants provided copies of the certifications for all three turbine options.

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 recommends 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 738 feet for the Vestas turbines, the tallest of the turbine options. A review of the application indicates that all turbines are set back more than 810 feet of the nearest non-participating landowner and more than 1,410 feet from the nearest residential structure.

Throughout the review process, the Department heard numerous concerns from interested persons regarding the risk of fire at the proposed development. The Vestas turbines will be equipped with an active fire suppression system in the nacelle. The Siemens turbines do not currently have a fire suppression system available; however the main electrical infrastructure is located at ground level and can be extinguished without the need for an active fire suppression system in the nacelle. In addition, the turbines proposed for the site will be monitored by the applicants 24 hours per day, seven days per week at its monitoring facility in Massachusetts and at the backup monitoring facility in California. The turbines will also be monitored by the manufacturer.

The applicants submitted letters from the Maine Forest Service and the Bingham Fire Department which indicate that the both agencies have the capability of extinguishing fires if they occur. The applicants submitted a template for both the Emergency Preparedness and Emergency Action and Fire Protection Plan. These templates are based on plans that are in use at its other facilities. The applicants propose to submit site specific copies of the Emergency Preparedness and Emergency Action and Fire Protection Plan once they are developed. The plans must be submitted to the Department prior to the commencement of operations at the facility. The applicants also propose to notify the Department within 48 hours of any fire event that causes one or more turbines to cease generating electricity.

The Department heard numerous concerns from interested persons regarding the risk of the project catching on fire. While the Department does not have specific review standards relating to the risk of a development catching on fire, the Department does have review standards relating to siting the development so that it has adequate setbacks to protect public safety. As stated above, the applicants will monitor the turbines 24 hours per day, seven days per week. Prior to the commencement of operations at the facility, the applicants will submit a site specific Fire Protection Plan to the Department. Based on the information submitted in the application, continuous monitoring of the turbines, the submission of a Fire Protection Plan and that either the turbines include fire suppression or the electrical components of the turbines are easy to access, the Department determined that the applicants have provided adequate assurances that the development will have setbacks adequate to protect public safety.

The Department finds that the applicants provided documentation for the Vestas and Siemens turbines 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 has been sited such that it will not present an unreasonable safety hazard to adjacent properties or adjacent property uses. The Department further finds that the applicants have submitted sufficient evidence which demonstrates that the proposed project will be sited with appropriate safety setbacks from adjacent properties and existing uses, provided that the applicant submits site specific copies of the Emergency Preparedness and Emergency Action and Fire Protection Plan prior to the commencement of operations and notifies the Department in the event of a fire as described above.

21. DECOMMISSIONING PLAN:

In order to facilitate and ensure appropriate removal of the wind generation equipment when it reaches the end of its useful life or if the applicants cease operation of the turbines, the Department requires applicants to demonstrate, in the form of a decommissioning plan, the means by which decommissioning will be accomplished. The applicants submitted a decommissioning plan which includes a description of the trigger for implementing the decommissioning, a description of the 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 applicants' proposal is that the wind generation facility, or any single turbine, will 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 applicants request that they be allowed to submit to the Department for review and approval reasonable evidence in support of a request that it not be required to decommission the project, or any single turbine, at that time.

Decommissioning of the entire facility will begin if twelve consecutive months of no generation occurs at the wind generation facility. Decommissioning of a single turbine will begin if 12 consecutive months of no generation occurs at that turbine. An exception to the requirement will be allowed for a force majeure event; however the Department finds that the applicants' proposed definition of "force majeure" is exceedingly broad. Instead, 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 applicants must demonstrate to the Department that the project, or any single turbine, will 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 applicants' proposal for the manner in which the turbines and other components of the proposed project will be dismantled and removed from the site. Subsurface components will be removed to a minimum of 24 inches below grade, generating facilities will be removed and salvaged, and disturbed areas will be re-seeded. At the time of decommissioning, the applicants must submit a plan for continued beneficial use of any wind energy development components proposed to be left on-site to the Department for review and approval.

C. Financial Assurance. The applicants estimate that the current cost for decommissioning the project will be $1,605,410 for the Vestas turbines and $1,722,410 for the Siemens turbines. The applicants propose financial assurance for the decommissioning costs will 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 applicants propose to have the financial assurance mechanism in place prior to construction and to re-evaluate the decommissioning cost and financial assurance at the end of years five, ten and fifteen. Proof of acceptable financial assurance must be submitted to the Department for review and approval prior to the start of construction.

D. Notification. The applicants 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 applicants anticipate will result in a turbine being off-line for a period greater than six months.

E. Single Turbine Decommissioning. The applicants estimate that it will cost approximately $141,293 to decommission a single turbine at the project. In the event that a single turbine is required to be decommissioned as described above, the applicants must submit a single turbine decommissioning plan to the Department for review and approval. The single turbine decommissioning plan should include civil plans for all earthwork, estimated decommissioning costs and a plan to replenish the decommissioning fund. In the event the applicants cannot demonstrate the ability to replenish the decommissioning fund once the turbine is removed, the applicants must decommission the entire project as described above.

The Department received several comments stating that the applicants decommissioning plan is inadequate. The comments assert that the plan does not adequately address the cost of future labor and that the price of scrap metal fluctuates. The Department reviewed these comments and determined that the requirement for the applicants to reevaluate the cost to decommission the project and adjust the decommissioning fund appropriately every five years provides adequate assurances that the project will be able to be decommissioned.

Based on the applicants' proposal outlined above, the Department finds that the applicants' proposal will adequately provide for decommissioning, provided the applicants implement the proposed decommissioning plan using the Department's definition of "force majeure;" submit evidence of financial assurance for decommissioning costs; submit a single turbine decommissioning plan, and at the time of decommissioning, submit a plan for continued beneficial use of any wind energy development components proposed to be left on-site all as described above.

22. TANGIBLE BENEFITS:

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

A. Job Creation. The applicants state that its proposal will benefit the host communities and surrounding areas through construction-related employment opportunities. The applicants have indicated that they will 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 applicants estimate the project will create approximately 350 full-time jobs during project construction and six to ten permanent jobs for the operation and maintenance of the facility after construction.

B. Generation of Wind Energy. The applicants estimate that the proposed project will provide an approximate average output of 528,572 (Vestas V112-3.0), 540,153 (Vestas V112-3.3) or 546,373 (Siemens SWT 3.0-113) megawatt-hours per year.

C. Property Tax Payments. The applicants estimate that the project will result in estimated annual tax payments to the towns of Bingham ($270,955/year), Abbot, ($44,409/year) and Parkman ($117,414/year). The applicants estimate that the annual

tax payments for the unorganized territory will be $586,594/year for Kingsbury Plantation and $1,002,570 for Mayfield Township.

D. Community Benefits Agreement. The applicants proposed community benefit agreements with the Towns of Bingham ($106,900/year), Moscow ($20,000/year), Abbot ($20,000/year), and Parkman ($20,000/year). In addition, the applicants propose to make annual payments to Kingsbury Plantation ($176,000/year). All of the above payments will be made yearly for 20 years. 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 Bingham, Moscow, Abbot, Parkman, and Kingsbury Plantation as part of the Community Benefits Agreements total $5,530 per turbine per year for 20 years, which exceeds the $4,000 per turbine per year for 20 years required in 35-A M.R.S.A. § 3454(2).

E. Other tangible benefits. The applicants also propose to make annual payments to the Somerset Economic Development Corporation ($30,000/year), Moose Alley Riders ($10,000/year), New England Mountain Bike Association ($10,000/year), and Valley Riders ($10,000/year). These payments will be made yearly for 20 years.

F. Tangible benefit reporting. The applicants propose to submit a report to the Department regarding the tangible benefits realized from the project. The applicants propose that no later than 60 days after the first December 31 following commencement of commercial operation (denoted as Year 1 of operation), the applicants will report on the tangible benefits realized from the construction of the project and provide documentation of the project's community benefits packages and any payments made pursuant to such packages at the time of reporting. Biannually thereafter (*i.e.*, no later than 60 days following December 31 of Years 3, 5, 7, 9, 11, 13, 15, 17 and 19 of operation), the applicants will submit information on the tangible benefits realized from the operation and maintenance of the project including but not limited to reporting on payments made in connection with the community benefits package requirements set forth in 35-A M.R.S.A. § 3454.

During the review process interested parties commented that Mayfield Township should receive a community benefits agreement because the majority of the turbines are located within that township. Mayfield Township is an unorganized town and does not have a government structure capable of accepting and utilizing a community benefits agreement.

Based on the proposed employment opportunities, energy generation, property tax revenue and the community benefits agreements proposed by the applicants, the Department finds that the applicants have demonstrated that the proposed project will 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 the Towns of Bingham, Moscow, Abbot and Parkman, and to Kingsbury Plantation and that the applicants submit biannual reports on the tangible benefits, all as described above.

23. 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 LUPC's land use standards applicable to the project that are not considered in the

Department's review. The LUPC standards applicable to this project include land division history; vehicular circulation, access and parking; lighting; minimal dimensional requirements; vegetation clearing; signs; concept plan; and general criteria for approval.

In Commission Determination #SLC-3, dated September 9, 2013 and signed by LUPC Director Nicholas Livesay on behalf of the Commissioners, the LUPC certified that the project is an allowed use in the subdistricts affected and complies with LUPC standards applicable to that project that are not considered in the Department's review, subject to conditions of approval. The conditions of approval, detailed in 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 the NRPA, 38 M.R.S.A. § 480-A to 480-HH, and Section 401 of the Federal Water Pollution Control Act:

A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.

B. The proposed activity will not cause unreasonable erosion of soil or sediment.

C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

D. The proposed activity will 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 that the applicants operate the project in compliance with the turbine curtailment requirements and submit the results of the water quality study plan as described in Finding 7, permanently mark all buffers as described in Finding 10, and submits the ILF payments as described in Findings 7 and 18.

E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.

F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

G. The proposed activity will 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. § 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to the WEA, 35-A M.R.S.A.– §§ 3401-3404, 3451–3459, and Site Law, 38 M.R.S.A. § 481–490:

A. The applicants have provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that prior to the start of construction, the applicants submits evidence of final financial capacity to construct the project as described in Finding 3 and submits evidence that they have fully funded the decommissioning plan as described in Finding 21.

B. The proposed activity will not significantly compromise views from an SRSNS and will not have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the resource provided that the applicants submit an application to the FAA to use a radar-activated lighting system and install that system within one year of receiving FAA approval, as described in Finding 6. The applicants have made adequate provisions for air quality, water quality, control of noise and other natural resources in the municipality or in neighboring municipalities provided that the applicants operate turbine 39 in NRO 1 during the nighttime (7:00 p.m. to 7:00 a.m.) if either of the Vestas turbine option is utilized, submit and implement the post-construction sound level monitoring and complaint response protocol all as described in Finding 5; purchase and transfer the DWA mitigation parcel, submit evidence that the transfer has occurred, implement the turbine curtailment requirements and submit a post-construction bird and bat monitoring plan, all as described in Finding 7; prior to construction, permanently mark all buffers on the ground as described in Finding 10; and the applicants utilize rock crushers as described in Finding 11.

C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.

D. The proposed development meets the standards for stormwater management in 38 M.R.S.A. § 420-D and the standard for erosion and sedimentation control in38 M.R.S.A. § 420-C provided that the applicants retain three third party inspectors unless otherwise approved by the Department, conduct a pre-construction meeting, deed restrict the stormwater management buffers, hire an engineer to oversee the construction of the stormwater management system, submit the inspection logs, and submit as-built plans of the project to the Department, all as described in Finding 12.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that the applicants submit the operational SPCC plan.

F. The applicants have made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services provided that the applicants operate the subsurface wastewater disposal system properly, and submit a list of sites that it will use for non-potable water withdrawal.

G. The activity will 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 will not unreasonably cause shadow flicker effects to occur over adjacent properties.

I. The activity will not present an unreasonable safety hazard to adjacent properties or adjacent property uses provided that the applicants notify the Department within 48 hours of any fire event that causes one or more turbines to cease generating electricity and submits the Emergency Preparedness and Emergency Action and Fire Protection Plan prior to the commencement of operations at the facility as described in Finding 20.

J. The applicant has made adequate provisions to achieve decommissioning of the wind power facility provided that applicants implement the decommissioning plan using the Department's definition of "force majeure," submit a single turbine decommissioning plan, and at the time of decommissioning, submit a plan for continued beneficial use of any wind energy development components proposed to be left on-site all as described in Finding 21.

K. The activity will provide significant tangible benefits to the host community and surrounding area, provided that the applicants submit biannual reports on the tangible benefits realized from the operation and maintenance of the project as described in Finding 22.

THEREFORE, the Department APPROVES the application of BLUE SKY WEST, LLC and BLUE SKY WEST II, LLC to construct a wind power generation facility as described in Finding 1, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.

2. In addition to any specific erosion control measures described in this or previous orders, the applicants shall take all necessary actions to ensure that their activities or those of their agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. The applicants or other responsible party shall, within three months of the expiration of each five-year interval from the date of this Order, submit a report certifying that the items listed in Chapter 500, Appendix B(4) have been completed in accordance with the approved plans.

5. Prior to the start of construction, the applicants shall submit evidence that they have 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 to be adequate under Chapter 373(1), for review and approval by the Department.

6. Prior to the start of construction, the applicants shall submit evidence to the Department that the decommissioning plan has been fully funded, for review and approval by the Department. The financial assurance for the decommissioning costs must be in the form of (i) performance bond, (ii) surety bond, or (iii) letter of credit, or other form of financial assurance for the total cost of decommissioning acceptable by the Department. The financial assurance mechanism must be in place prior to the start of construction. The applicants must re-evaluate the decommissioning cost and update financial assurance to reflect the current decommissioning costs at the end of years five, ten, and fifteen.

7. Prior to the start of construction in any area, the applicants shall clearly mark on the ground all visual screening buffers, stream buffers and other resource buffers, and the stormwater buffers in that area. Additionally, within 90 days of the commencement of operations, the applicants shall record all deed restrictions for stormwater buffers and submit the recorded deeds along with plot plans to the Department within 60 days of recording.

8. Prior to the start of construction, the applicants shall submit a payment in the amount of $784,045.00 ($183,958 for IWWH impacts and $600,087 for wetland impacts), payable to "Treasurer, State of Maine," to the attention of the ILF Program Administrator at Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333.

9. Prior to the start of construction, the applicants shall purchase and transfer the 90-acre parcel referenced in Finding 7(A) to MDIFW. In addition, prior to the start of construction, the applicants shall submit evidence to the Department that the purchase and transfer has taken place.

10. Prior the start of construction, the applicants shall conduct a pre-construction meeting. This meeting shall be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspectors.

11. Prior to the start of construction, the applicants shall submit a list of sites that it will use for non-potable water withdrawal.

12. Prior to operation of the project, the applicants shall submit a finalized post-construction bird and bat post-construction monitoring protocol for year one and two of operation, which shall be established in consultation with MDIFW to the Department for review and approval.

13. Prior to operation of the development, the applicants shall submit an operational SPCC plan for the on-going operation of the project to the Department for review and approval. The Department may require changes to any SPCC plan or handling or storage procedure based on review of the SPCC plans or inspections of the site.

14. The applicants shall retain the services of three third-party inspectors in accordance with the Special Condition for Third-Party Inspection Program, which is attached to this Order. The applicants may alter the number of third party inspectors needed with prior Department approval.

15. Within 90 days of the commencement of project operations, the applicants shall submit as-built plans of the project to the Department for review. Any changes from the approved project design shall be noted on the plans.

16. Prior to the operation of the facility, the applicants shall submit a site specific copy of their emergency preparedness and emergency action plan and a copy of its fire protection plans to the Department for review.

17. Prior to the third anniversary of the commencement of operation at the project, the applicants shall submit a finalized bird and bat post-construction monitoring protocol which will take place between years three and five of operation, which shall be established in consultation with MDIFW to the Department for review and approval.

18. Wind turbines shall operate only at cut-in wind speeds exceeding 6.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period April 20 to October 15 over the life of the project. Cut-in speeds are determined based on mean wind speeds measured at the hub heights of a turbine over a 10-minute interval. Turbine blades will be feathered during these low wind periods to minimize risks of bat mortality. These cut-in speeds are independent of ambient air temperature.

19. Sound compliance testing shall be completed at Receptor B2 and B4 or B5, or other locations approved by the Department, during the first year of operation and every fifth year thereafter in accordance with paragraph 5(E) of the Findings. At least six of the twelve test periods used in the compliance test report shall represent the nighttime period (7 pm to 7 am) during which the sound level limit is 42 dBA. The compliance test report shall include a complete presentation of the data and calculations for the SDRS analysis performed. The results of the monitoring shall be submitted to the Department within 60 days of the completion of monitoring for that specific year.

20. Prior to the start of commercial operation, the applicants shall submit to the Department for review and approval a sound complaint response and resolution protocol. The proposed protocol must meet all applicable standards of Chapter 375(10)(I)(7)(j).

21. The applicants 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 its investigation within three business days of completion; and the applicants 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 applicants 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 applicants must submit, for review and approval, a mitigation plan that proposes actions to bring the project into compliance. The Department will review any such mitigation plan and may require additional mitigation or alternative measures.

22. The applicants shall implement the decommissioning plan described in Finding 21.

23. Decommissioning of the facility shall begin if 12 consecutive months of no generation occurs at the wind generation facility. Decommissioning of a single turbine shall begin if 12 consecutive months of no generation occurs at that turbine. An exception to the

requirement will be allowed for a force majeure event. A "force majeure" event will consist of the following: 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 applicants must demonstrate to the Department that the project, or any single turbine, will be substantially operational and producing electricity within twenty-four months of the force majeure event. At the time of decommissioning, the applicants shall submit a plan for continued beneficial use of any wind energy development components proposed to be left on-site to the Department for review and approval. Additionally, if a single turbine or the entire project fails to generate electricity for 12 consecutive months for a reason other than a force majeure event and the applicants demonstrate to the Department's satisfaction that the turbine or the project will be substantially operational within 24 months, then the turbine or project will not need to be decommissioned.

24. The applicants shall 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 applicants anticipate will result in a turbine being off-line for a period greater than six months.

25. The applicants shall implement the water quality study plan described in Finding 7(G) and submit a copy of the results to the Department and MDIFW for review. The details of the proposed plan are in the document entitled "Proposed Water Quality Assessment Plan for the Bingham Wind Project" prepared by Stantec Consulting Services, Inc. and dated July 2014.

26. The design engineer or a third-party engineer shall oversee 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 applicants shall submit a log of inspection reports detailing the items inspected, photographs taken, and the dates of each inspection to the BLWQ for review.

27. The applicants shall submit an application to the FAA for a radar-activated lighting system within six months of FAA's adoption of the rules for these systems for wind power projects and must install and operate the system within one year of FAA's approval.

28. If a rock crusher is utilized on site, the applicants shall ensure that the crusher is licensed and operated in accordance with the statutes and rules administered by the Department concerning air emissions.

29. The applicants shall properly operate and maintain the subsurface wastewater disposal system.

30. The applicants shall operate turbine 39 in NRO 1 during the nighttime (7:00 p.m. to 7:00 a.m.) if either Vestas turbine option is utilized.

31. The applicants shall notify the Department within 48 hours of any fire event that causes one or more turbines to cease generating electricity.

32. The applicants shall summit biannual reports (i.e. no later than 60 days following December 31 of Years 3, 5, 7, 9, 11, 13, 15, 17 and 19 of operation) on tangible benefits realized from the operation and maintenance of the project.

33. If the Department determines that one or more turbines are causing an unreasonable adverse impact on bats or birds as determined by the Department in consultation with MDIFW, the applicants shall modify operations of specific turbine(s) or the entire facility to limit impacts on the affected specie(s) in accordance with a plan reviewed and approved, and, if applicable, as modified, by the Department. The Department will notify the applicants in writing of the basis for its determination. Within 60 days of receiving notice, the applicants shall submit an application for a permit modification or amendment in accordance with Chapter 2 which includes a written plan that details the specific measures to reduce the impacts to the species of concern for Department review and approval. The plan may include but is not limited to modified operations, such as additional nighttime curtailment or reduced/suspended operations during high risk periods, use of detection/deterrence methods to limit impacts to affected species, or habitat management. The plan shall include a schedule for implementation. If the application is approved, the applicants shall comply with the terms and conditions of the permit. If the application is not submitted within the time prescribed, or is wholly or in part denied, returned, or withdrawn, then within thirty (30) days of failing to submit within the time prescribed, denial, return, or withdrawal, the applicants shall cease operation of the one or more turbines resulting in the unreasonable adverse impact on bats or birds.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 8th DAY OF September, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Filed
SEP 08 2014
State of Maine
Board of Environmental Protection

BY: Michael Kuhn
For: Patricia W. Aho, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES…

DC/L25973ANBN/ATS#76039, 76041

Department of Environmental Protection

SITE LOCATION OF DEVELOPMENT (SITE) STANDARD CONDITIONS

A. **Approval of Variations from Plans**. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.

B. **Compliance with All Applicable Laws**. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. **Compliance with All Terms and Conditions of Approval**. The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

D. **Advertising**. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

E. **Transfer of Development**. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

F. **Time frame for approvals.** If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

G. **Approval Included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.

H. **Approval Shown to Contractors**. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised December 27, 2011

Natural Resource Protection Act (NRPA)
Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.

D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.

E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.

G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.

H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

Revised (4/92) DEP LW0428

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

(1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S.A. §420-D(8) and is subject to penalties under 38 M.R.S.A. §349.

(2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

(3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

(4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.

(5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

(6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the developer, and the owner and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

(7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the department.

(8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.

(a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the facilities.

(c) The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

(9) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

November 16, 2005 (revised December 27, 2011)

Special Condition
for
Third Party Inspection Program

DEPLW078-B2001 November 2008

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,

2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and

3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency except that the MDEP may accept subcontractors who worked for the project's primary consultant on some aspect of the project such as, but not limited to, completing wetland delineations, identifying significant wildlife habitats, or conducting geotechnical investigations, but who were not directly employed by the applicant, as Third Party inspectors on a case by case basis. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land and Water Quality or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following minimum qualifications:

1) a degree in an environmental science or civil engineering, or other demonstrated expertise,

2) a practical knowledge of erosion control practices and stormwater hydrology,

3) experience in management or supervision on large construction projects,

4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,

5) the ability to clearly document activities being inspected,

6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and

7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or

other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.

2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.

3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.

4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.

5) During construction, the inspector will monitor the contractor's construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.

6) During construction, the inspector will monitor the contractor's installation of any stream or wetland crossings.

7) During construction, the inspector will monitor the contractor's final stabilization of the project site.

8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor's activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.

9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas under construction. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph. *Note: the frequency of these inspections as contained in this condition may be varied to best address particular project needs.*

10) During construction, the inspector will prepare and submit weekly *(or other frequency)* inspection reports to the MDEP.

11) During construction, the inspector will notify the designated person at the MDEP immediately of any sediment-laden discharges to a protected natural resource or other significant issues such as the improper construction of a stormwater control structure or the use of construction plans not approved by the MDEP.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports *(or at another designated frequency)*, including photographs of areas that are under construction, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday *(or other designated day)* following the inspection week

(Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).

2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.

3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.

4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.

5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).

6) For each area open to construction, the report will list the date of initial soil disturbance for the area.

7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area -- e.g. "grubbing in progress", " grubbing complete", "rough grading in progress", "rough grading complete", "finish grading in progress", "finish grading complete", "permanent seeding completed", "area fully stable and temporary erosion controls removed", etc.

8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.

9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.

Third Party Inspection Form

This report is prepared by a Third Party Inspector to meet the requirements of the Third Party Inspector Condition attached as a Special Condition to the Department Order that was issued for the project identified below. The information in this report/form is not intended to serve as a determination of whether the project is in compliance with the Department permit or other applicable Department laws and rules. Only Department staff may make that determination.

TO: *PM, Maine DEP (@maine.gov)*	FROM:
PROJECT NAME/ LOCATION:	DEP #:
DATE OF INSPECTION:	DATE OF REPORT:
WEATHER:	CONDITIONS:

SITE CHARACTERISTICS:

# ACRES OPEN:	# ACRES ACTIVE:	# ACRES INACTIVE:
LOCATION OF OPEN LAND:	LOCATION OF ACTIVE LAND:	LOCATION OF INACTIVE LAND:
OPEN SINCE:	OPEN SINCE:	OPEN SINCE:

PROGRESS OF WORK:

INSPECTION OF:	**Satisfactory**	**Minor Deviation** (corrective action required)	**Unsatisfactory** (include photos)
STORMWATER CONTROL (VEGETATIVE & STRUCTURAL BMP'S)			
EROSION & SEDIMENTATION CONTROL (TEMPORARY & PERMANENT BMP'S)			
OTHER: (PERMIT CONDITIONS, ENGINEERING DESIGN, ETC.)			

COMMENTS/CORRECTIVE ACTIONS TAKEN (attach additional sheets as necessary):

Photos (must be labeled with date, photographer and location):

Cc:		
Original and all copies were sent by email only.		

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

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 <u>or</u> 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.