



DEPARTMENT ORDER

IN THE MATTER OF

ROXWIND LLC) STORMWATER MANAGEMENT LAW
Roxbury, Oxford County) NATURAL RESOURCES PROTECTION ACT
ROXBURY WIND PROJECT) FRESHWATER WETLAND ALTERATION
L-27863-ES-A-N (approval)) SMALL-SCALE WIND ENERGY DEVELOPMENT
L-27863-NJ-B-N (approval)) WATER QUALITY CERTIFICATION
L-27863-TG-C-N (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 35-A M.R.S. §§ 3452, 3456, and 3459; 38 M.R.S. § 420-D; 38 M.R.S. §§ 480-A–480-JJ; Section 401 of the Federal Water Pollution Control Act (33 U.S.C. § 1341); and Chapters 2, 3, 310, 315, 335, 500, and 501 of Department rules, the Department of Environmental Protection has considered the application of ROXWIND LLC with the supportive data, agency review comments, written public comments, the testimony and evidence submitted at the public hearing, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to construct a small-scale wind energy development consisting of four turbines, an access road, a crane road, an underground collector line, and an above-ground transmission line. The applicant initially proposed to use four GE 3.8-130 turbines, “or similar” turbines, with a hub height of 85 meters, resulting in a tip height of 150 meters. The application stated that “[b]y using the term ‘or similar,’ the applicant is referring to similarly configured wind turbines with, at a maximum, 150-meter tip heights.” The applicant subsequently changed the turbine specifications to GE 3.8-137 turbines, with a hub height of 81.5 meters, which results in the same 150-meter tip height as the original proposal, with no change in output capacity. The applicant has proposed a stormwater management system for the project that includes a treatment swale, culverts, ditch turnouts, level spreaders, and plunge pools. The project will be constructed on a 1,283-acre parcel of land and is shown on set of plans, the first of which is entitled “Roxbury Wind Project,” prepared by Stantec Consulting Services, Inc. (Stantec), and dated March 3, 2018, with a latest revision date on any of the sheets of October 12, 2018. The project site is located off Horseshoe Valley Road, on North Twin Mountain, in the Town of Roxbury.

The applicant’s parcel is bisected by an existing power transmission corridor right-of-way which is owned by the Central Maine Power Company (CMP). The applicant originally described two possible alternatives for delivering the power from the proposed facility to the electrical grid for consumption. In both alternatives, the collector line that connects the turbines to each other will be underground. After collection, in the first option, the power would be transmitted by a new transmission line supported on new electrical transmission poles located along one side of the existing CMP right-of-way to an existing transformer located off Roxbury Notch Road, which is also known as State

Route 120. In the second option, the power will be transmitted by a new transmission line located on the existing electrical transmission poles within the CMP right-of-way. In a supplementary filing, the applicant stated that the first option would be implemented and provided engineering drawings and a vegetation management plan. The proposed new transmission line would be 4,300 feet long, with 2,520 feet constructed immediately adjacent to the existing CMP corridor, and 1,780 feet requiring a new 38-foot wide corridor to be cut.

The applicant is also seeking approval to alter 11,774 square feet of freshwater wetlands under the Natural Resources Protection Act (NRPA). The applicant has also filed an Incidental Take Plan signed by the Commissioner of the Department of Inland Fisheries and Wildlife to mitigate any impacts to endangered bats.

B. Current Use of the Site: The site of the proposed project is currently a combination of vacant fields and woodland. There is an existing logging road which will be improved as part of the proposed access road. The parcel is identified as Lots 33, 34, and 35 on Map 2 of the Town of Roxbury's tax maps.

C. Public Interest: The Department received a timely request for a public hearing on the proposed project from Friends of Maine's Mountains (FOMM), a group that advocates on land use issues in Maine. Under provisions of the Department's Rules, Chapter 2 §7, the Commissioner granted the request on June 8, 2018. One request for intervenor status was received, from FOMM, which was untimely by one day. In the First Procedural Order, the Presiding Officer granted the petition to intervene despite the late filing, in deference to the extenuating circumstance of the death of the petitioner's primary contact person. A pre-hearing conference was held on September 28, 2018. The Second Procedural Order established that the project's scenic impacts and the applicant's decommissioning proposal would be the issues addressed at the hearing.

The Department's third-party reviewer for the applicant's visual impact analysis (VIA), LandWorks, asserted in its report that the Rumford Whitecap Mountain Reserve is a scenic resource of state or national significance (SRSNS), as defined by 35-A M.R.S. §3451(9). This contention was refuted by the applicant in pre-hearing filings. In the Sixth Procedural Order, the Presiding Officer found that Rumford Whitecap Mountain and Rumford Whitecap Mountain Preserve do not meet the Department's definition of a SRSNS, as they are not natural or cultural features comparable to either a national natural landmark or a federally designated wilderness area. The Intervenor formally objected to this finding, and the Presiding Officer allowed testimony on the issue for the record at the hearing.

The applicant and the intervenor pre-filed direct and rebuttal testimony in advance of the hearing. The public hearing was held at the Roxbury Town Office on January 7, 2019. Approximately 35 members of the public attended, along with representatives from the applicant and the intervenor. Because the intervenor's witness on decommissioning failed to attend the hearing, that witness' pre-filed written testimony was stricken. Scenic impact testimony revolved primarily around the views from Rumford Whitecap Mountain

Preserve, and decommissioning testimony was primarily concerned with salvage value and cost estimates. Ten members of the public testified at the hearing, and written testimony or comments were received from four members of the public. Both parties submitted post-hearing briefs.

After analysis of the evidence in the record, and upon request of the applicant, the Department re-opened the record to allow the applicant to submit additional evidence on which alternative the applicant proposed for the transmission line and details on the possible impacts of that alternative. The Intervenor was given an opportunity to submit responsive evidence and comment but did not do so.

A draft of this Order was published for public review and comment on July 26, 2019. Comments were received from the applicant, the intervenor, and from three members of the public. The Department reviewed all comments received and updated the Order accordingly.

2. STORMWATER STANDARDS:

The proposed project will result in approximately 18.4 acres of disturbed area, of which 9 acres will be developed area, and 2.99 acres will be impervious area. It lies within the watersheds of the Ellis River and the Swift River, both of which drain to the Androscoggin River. The applicant submitted a stormwater management plan based on the Basic, General, and Redistribution of Stormwater Discharges Standards contained in the Department's Rules, Chapter 500. The proposed stormwater management system consists of a treatment swale, culverts, ditch turnouts, level spreaders, and plunge pools.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant 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 Best Management Practices (BMPs), which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and adequately revised in response to the comments of, the Department's Bureau of Land Resources (BLR). To prevent erosion during winter construction, the applicant proposes to construct the access road in segments of 500 feet or less for any portion of the road that is constructed between November 1 and April 15, with each segment being grubbed, constructed, and stabilized before earthwork is commenced on the adjacent segment. Nonadjacent segments may be constructed simultaneously during winter months, but the applicant must require the third-party inspector to approve the work on one segment before work begins on an adjacent segment during winter months. No such restriction is proposed for road construction during the rest of the year.

Erosion control details must be included on the final construction plans, and the erosion control narrative must be included in the project specifications to be provided to the

construction contractor. Prior the start of construction, the applicant must conduct a pre-construction meeting. This meeting must be attended by the applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector. Given the nature of the project site, the applicant must retain the services of a third-party inspector in accordance with the Special Condition for Third-Party Inspection, which is attached to this Order.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short-term and long-term maintenance requirements. This plan was reviewed by the BLR. The Department finds that the maintenance plan is appropriately based on the standards contained in Appendix B of Chapter 500. The applicant will be responsible for the maintenance of all project facilities including the stormwater management system. Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

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

Based on BLR'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(B) provided that any portion of the access road built from November 1 to April 15 is constructed in segments of 500 feet or less and the third-party inspector approves the work on one segment before work begins on an adjacent segment; the applicant conducts a pre-construction meeting as described above; and the applicant retains the services of a third-party inspector in accordance with the Special Condition for Third-Party Inspection.

B. General Standards:

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. For the non-linear portion of the project, the turbine pads, this mitigation is being achieved by using BMPs (meadow buffers) that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area. Given the small area of the impervious pads and the short flow path for runoff (100 feet or less), the proposed treatment measure for the pads is acceptable under the Department's rules, Chapter 500, Appendix F(6). The Department finds that a formal deed restriction of the meadow buffers is not necessary since any future development on the buffer areas is very unlikely due to their adjacency to the wind turbines, however, the buffers must be clearly shown on the as-built plans for the facility. The remainder of the proposed project meets the definition of "a linear portion of a project" in Chapter 500, and the applicant is proposing to provide runoff volume control to no less than 75% of the volume from the impervious area and no less than 50% of the volume from the developed area of that part of the project.

The applicant proposes to convert the concentrated flow conveyed by the proposed ditches and culverts into sheet flow using eight stone-bermed level lip spreaders. The applicant demonstrated that the proposed spreaders' lip lengths are greater than the minimum length required by the standards in Chapter 500, Appendix F(3). The Department finds that the proposed project will meet the Chapter 500 standards for redistribution of stormwater discharges.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, the BLR. The BLR recommended that as-built plans be submitted to demonstrate the completed project's compliance with limitations on impervious area and other aspects of this Order; that the construction of the level spreaders and the grassed soil filter be overseen by an engineer; and that the Department be notified of the completion of the stormwater management system. After a final review, the BLR commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards and recommended that the applicant's design engineer or other qualified professional oversee each phase of the construction of the underdrained soil filter to ensure that it is installed in accordance with the details and notes specified on the approved plans. The Department will require that prior to constructing the soil filter, test results for each component of the filter media, including at a minimum sieve analysis and permeability testing, must be approved by the third-party inspector. Within 30 days after completing construction of the filter, the applicant must submit a log of inspection reports to the BLR that contains a list of the items inspected, photographs taken, and other relevant information.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500 provided that the construction of the level spreaders and the grassed soil filter is overseen by an engineer; that the components of the filter media are tested and approved by the third-party inspector; that the Department is notified upon completion of the stormwater management system; and that the applicant submits the as-built plans as specified above.

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 the Department, 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, for any new areas of impact, have been surveyed for potential impacts to environmental resources and do not impact any protected natural 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 applicant must submit as-built plans of the project to the Department for review. Any changes from the approved project design must be noted on the plans.

Based on the Department's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic and General Standards contained in Chapter 500§4(A), provided the applicant retains a third-party inspector, conducts a pre-construction meeting, retains an engineer to oversee construction of the approved stormwater management system, tests the components of the soil filter media, constructs the access road in 500-foot segments or less during winter months, notifies the Department upon completion of the stormwater management system, and submits as-built plans, all as described above.

3. SMALL-SCALE WIND ENERGY DEVELOPMENT:

A. CONTROL OF NOISE

1) Applicant's evidence: Pursuant to 35-A M.R.S. §3456, the applicant is required to demonstrate that the project will meet the requirements of the Department's noise control rules, Chapter 375 §10(I), adopted pursuant to the Site Location of Development Act, 38 M.R.S. §484(3)(B). The Town of Roxbury adopted a Natural Land Use Ordinance on January 15, 2009, which does not contain a quantifiable noise standard or sound level limits. The applicant stated that the project has been designed to comply with the Town of Rumford's Wind Energy Facility Ordinance, which was adopted in November of 2011; however, that Ordinance was repealed on June 14, 2016, and is no longer a consideration. The applicant stated that the proposed project has been designed to comply with the standards outlined in the Department's rules, Chapter 375 §10(I). The design considerations include equipping the turbine blades with a low-noise trailing edge to decrease the overall sound produced by the turbines during project operation.

As outlined in Chapter 375 §10(I)(2), the sound levels resulting from routine operation of a wind energy development are 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 between 7:00 p.m. and 7:00 a.m. the limit is 42 dBA within 500 feet of living and sleeping quarters at a protected location. At distances beyond 500 feet, the daytime hourly sound level limit applies regardless of the time of day.

To address the Department's criterion pertaining to the control of noise, 38 M.R.S. §484 (3), and the rules adopted thereunder, Chapter 375 §10, the applicant submitted a sound level assessment report as part of the application. The assessment was prepared by Epsilon Associates, Inc. (Epsilon). Modeling of sound levels expected from the project's operation was conducted to examine worst-case noise levels at protected locations in the vicinity of the project, and to compare the results with applicable regulatory limits. Epsilon's modeling concludes that during project operation, sound levels at protected locations due to operation of the project will range from 22 to 41 dBA; and sound levels within 500 feet of all protected locations except protected location #15 will be at or below 42 dBA. However, the modeled sound levels at the property line of protected location #15 are at or below 42 dBA.

In addition to modeling the expected sound levels from the development, Epsilon developed a Sound Level Compliance Measurement Protocol, included as Appendix F to Section 2 of the application. Under the provisions of Section 9(A) of the Town of Roxbury Natural Land Use Ordinance, and pursuant to 35-A M.R.S. §3456(3), the Town of Roxbury may enforce compliance with noise standards and the relevant conditions of this Order.

One member of the public submitted comments generally expressing concern about the noise from operation of the project, and one member of the public mentioned noise as a potential concern during testimony at the public hearing. Neither individual made specific claims or questioned the results of the applicant's sound level assessment.

Included with the applicant's change in turbine specifications was a letter from Epsilon, which states: "Since the two configurations have the same maximum sound power levels, these slight changes in wind turbine hub height and rotor diameter are expected to result in minimal changes in sound level impacts at nearby occupied receptors as compared to those presented in the March 20, 2018 report. Therefore, a revised sound report is not necessary as the conclusions remain the same."

2) Department Analysis: The Department hired an independent noise consultant, Tech Environmental Inc., to assist in its technical review of this aspect of the application. It is the opinion of Tech Environmental Inc. that the Sound Level Assessment Report included in the application is reasonable and technically correct according to standard noise assessment practices. The Department finds that the proposed change in turbine configuration will not significantly change the sound levels at protected locations.

Wind turbine noise predictive modeling utilizing ISO 9613-2 (1996) algorithms, such as the modeling used by Epsilon in the applicant's submission, is widely used in the international community. The method specified in ISO 9613-2 consists specifically of octave band algorithms (with nominal mid-band frequencies from 63 Hz to 8 kHz) for calculating the attenuation of sound. It is the Department's experience that appropriately corrected ISO 9613-2 algorithms provide reasonable estimates of "worst-case" wind turbine noise for comparison with Department Chapter 375 §10 noise regulations.

“Worst case” compliance measurement conditions occur during temperature inversions and increased wind shear/turbulence in the region affecting the wind turbine generators and receivers. The Epsilon model is based on CADNA/A software, with user input of the following prediction assumptions:

- mixed ground cover attenuation using a G-factor of 0.5,
- atmospheric attenuation based on 10°C, 70% relative humidity,
- no attenuation due to trees or other vegetation,
- all wind turbines operating at maximum sound power output, and
- all wind turbines operating simultaneously under moderate downwind conditions to maximize sound propagation.

An uncertainty factor of + 2.0 dBA was included in Epsilon’s analysis for maximum GE specification potential inaccuracy under stable atmospheric conditions and prediction methodology inaccuracies. According to the review by Tech Environmental Inc., this uncertainty factor will allow the model to accurately predict turbine sound levels for an inland wind project.

The Epsilon report states that Short Duration Repetitive Sound (SDRS) events are rare and cannot be predicted through preconstruction sound level modeling. In its review, Tech Environmental Inc. stated that sound testing at other Maine wind projects reveals SDRS events are uncommon, and their effect on the averaged 10-minute LAeq sound level used to assess compliance is typically less than 1 dBA. Given that there is no margin between projected maximum nighttime sound level at the Protected Location containing receptor #15 and the 42 dBA nighttime limit, Tech Environmental Inc. recommended that the applicant conduct compliance sound testing at that location in order to carefully document any SDRS events that may occur, and to verify full compliance.

The Epsilon report includes, in Appendix C, a tonality analysis for the three closest receptors to the project using one-third octave band predicted sound levels to determine potential for tonal sounds at protected locations due to operation of the project. The analysis specifically examines the three closest protected locations to the project, receptors #15, #14, and #13, and determined that no tonal sounds as defined in the Department’s rules, Chapter 375 §10(I)3, will be experienced at those locations. The Epsilon report goes on to state that if the closest locations will not experience tonal sounds, then the more distant locations will have even lower impacts, and thus also not experience tonal sounds. Tech Environmental Inc.’s review recommended that the Department require post-construction monitoring at two locations, receptors #15 and #30, to ensure compliance with regulatory limits.

The Epsilon report includes a Sound Level Compliance Measurement Protocol as Appendix D. The Compliance Protocol provides for monitoring at protected locations #15 and #30, with measurements to be conducted by qualified personnel with full membership in the Institute of Noise Control Engineering. If landowner permission to

operate the testing equipment at either or both of these locations cannot be obtained, the applicant will establish monitoring locations, acceptable to the Department, as close as possible to the recommended positions. The Compliance Protocol requires compliance data to be submitted to the Department once during the first year of project operation; once during each successive fifth year of project operation for the life of the project; in response to a complaint regarding noise from the project; and when requested in the context of any subsequent enforcement by the Department; and for validation of calculated sound levels when requested by the Department. Given the relevant provisions under Section 9 of the Town of Roxbury's Natural Land Use Ordinance, compliance data must also be provided to the Town of Roxbury in all of the above circumstances, as well as when requested in the context of any enforcement action taken by the Town for a violation of noise restrictions.

In Section 2 of the application, the applicant states that prior to the start of construction, the applicant will notify abutters, the Town, and the Department of the details of its sound complaint response procedure, including a 24-hour contact to register complaints, and the information required from a complainant. Details of the complaint response procedure including a sample data collection sheet must be submitted to the Department for review and approval prior to the start of construction.

Based on the submitted sound assessment, and the review by Tech Environmental Inc., the Department finds the applicant will meet the requirements in the Department's Rules, Chapter 375 §10(I), for control of noise resulting from operation of the project provided that the turbine blades are equipped with a low-noise trailing edge; that prior to the start of construction, the applicant submits an acceptable sound complaint response procedure, including a sample data collection sheet, to the Department for review and approval, and notifies abutters and the Town of the complaint response procedure, including the 24-hour contact number and the information required from a complainant; that post-construction monitoring is conducted at receptors #15 and #30, or as close as possible thereto; that compliance data is submitted to the Department and the Town once during the first year of project operation and once during each successive fifth year of project operation for the life of the project; that compliance data is also submitted to the Department and the Town in response to a complaint regarding noise from the project, and in support of any subsequent enforcement by the Department or the Town, and for validation of calculated sound levels when requested by the Department or the Town.

B. SHADOW FLICKER

Under the provisions of 35-A M.R.S. §3456(1)(B), the applicant must obtain certification from the Department that the proposed wind power project generating facilities have been designed to avoid unreasonable adverse shadow flicker effects. Shadow flicker caused by wind turbines is the alternating changes in light intensity caused by moving blades casting shadows on the ground and on stationary objects, such as a window at a dwelling. Shadow flicker is not the sun seen through a rotating wind turbine rotor nor what an individual might view or experience when moving through the shadows of a wind energy project. The spatial relationships between a wind turbine and a receptor, as well as wind

direction and sun direction, are key determining factors influencing shadow flicker duration. Shadow flicker can be a nuisance to people living near a wind energy development. Shadow flicker frequency due to wind turbines is generally on the order of the rotor frequency, typically 0.6-1.0 Hz, which is below the 10 Hz threshold generally held in the literature to be the level of intensity that can cause harm to humans.

At the time the application for the proposed project was received by the Department, Maine had no set regulatory limits on exposure to shadow flicker; however, the industry commonly uses 30 hours per year as a limit to reduce nuisance complaints. The applicant submitted a report on projected shadow flicker impacts from the proposed project as part of the application. The report, entitled "Shadow Flicker Assessment Report," prepared by Epsilon Associates, Inc. (Epsilon), and dated March 6, 2018, utilized a shadow calculation model from WindPRO 3.1.633 to determine the cumulative annual exposure to shadow flicker for residences within 1.5 miles of the project.

Twenty-six residences were identified within 1.25 miles of the project. The maximum annual exposure to shadow flicker for any evaluated residence was determined to be 27.35 hours, based on the WindPRO modeling, which is below the recommended maximum allowable amount. An updated shadow flicker report was submitted by the applicant on November 30, 2018, also prepared by Epsilon, addressing the modified turbine design. The updated report determined the maximum annual exposure to be 27 hours and 51 minutes for the modified turbines, which is below the recommended maximum.

The Department finds the proposed project has been designed to avoid unreasonable adverse shadow flicker effects.

C. PUBLIC SAFETY

The NRPA criteria for small scale wind energy developments, as set forth in 38 M.R.S. §480-II(2)(A), require an applicant to demonstrate that the proposed project will be constructed with setbacks and other considerations adequate to protect public safety, including, but not limited to, a fire protection plan. In making a finding pursuant to this paragraph, the Department is required to consider the recommendation of a professional licensed civil engineer as well as any applicable setback recommended by a manufacturer of any equipment to be installed on or in support of the small-scale wind energy development. The Department requires that an applicant submit documentation in the form of a site plan that demonstrates that the wind turbines have been sited with appropriate safety related setbacks from adjacent properties and adjacent existing uses. The Department's recommended minimum setback is a distance of not less than the normal setback requirements for that zoning classification as dictated by the local municipal zoning ordinance, or 1.5 times the maximum turbine blade height, whichever is greater. Roxbury has no local ordinance requirements for wind turbine setbacks.

The proposed turbines are 150 meters tall at the tip of a fully extended blade. This results in a recommended minimum setback of 225 meters, or 738 feet. The applicant has stated

that Turbine #1 is the only turbine that is less than 738 feet from a property line, being 618 feet from the property line of the abutter to the north, which is approximately 1.25 times the tip height. The applicant submitted a document from the turbine manufacturer titled "Setback Considerations for Wind Turbine Siting," copyright dated 2017. The document discusses various possible events that may present a hazard in the vicinity of a turbine, including falling objects, tower collapse, blade failure, and ice throw. The manufacturer's recommended setback distance is 1.1 times the rotor tip height, or 170 meters, whichever is greater. The proposed turbines have a tip height of 150 meters, so the manufacturer's minimum recommended setback in this case would be 170 meters, or 558 feet. The applicant also submitted a letter signed by Mr. and Mrs. Bryant Hodgkins, owners of the affected property, acknowledging their acceptance and approval of the reduced safety setback from their property line. The applicant states that a formalized agreement with the landowners of that property waiving any objection to the applicant's proposed reduction of the normally required setback, and acceptance of the proposed setback of 1.25 times the tip height, will be recorded in the Oxford County Registry of Deeds for the Eastern District, in South Paris, Maine. Taking into consideration the manufacturer's recommendations and the letter from the affected property owners, the Department finds that the proposed setback of 618 feet is adequate to protect public safety, provided that prior to the start of construction of Turbine #1, the applicant submits a copy of the recorded waiver agreement with the abutter to the north of Turbine #1, to the Department.

As part of the application, the applicant submitted a draft Fire, Health and Safety Plan, prepared by Solaya energy, dated February 22, 2018. The plan includes detailed descriptions of hazards that may be encountered while working on the turbines and the site, and mitigation protocols to minimize danger to workers and the public. The plan also includes fire prevention protocols, evacuation routes, and fire emergency procedures. The applicant states that it plans to conduct "refresher" response training for the Roxbury Fire Department after construction of the project, to supplement the training that was provided after development of the nearby Record Hill Wind Project, and to familiarize the Fire Department with the specific layout and equipment at the RoxWind project.

Section 2.3.4 of the plan requires a fire extinguisher to be within 50 feet of any use of 5 gallons or more of a flammable or combustible liquid and requires extinguishers to be inspected quarterly and to undergo a maintenance check every year. Section 4.1 states that each turbine will be equipped with two fire extinguishers; one in the tower base and one in the nacelle but does not mention inspection or maintenance of these extinguishers. The Department finds that the fire extinguishers in the turbines should be inspected and maintained with the same frequency as the other fire extinguishers at the site.

The plan includes an emergency contact calling sequence for technical operations support and a list of local emergency service providers. The contact information for the technical operations support groups is not provided in the draft submitted by the applicant. There is no indication of how the contact information will be made available at the site. The Department finds that in an emergency situation, it may be critical for any on-site employee to have rapid access to emergency contact information. The Department finds

that every employee on site should be provided with a copy of the Fire, Health and Safety plan, including the emergency contact calling sequence with appropriate contact information, as well as contact information for local emergency service providers. The Department further finds that the emergency contact information should also be posted at the entrance to the project, on all turbines, and in a safe location in all nacelles.

In response to concerns regarding steep slopes in certain areas along deep cuts that will be needed for the access road, the applicant proposes to construct a “boulder fence” along the top of the cut between Turbines #2 and #3, where the cut is the deepest. The boulder fence will consist of large boulders ranging in size from 0.75 cubic yards to 1.5 cubic yards spaced at eight-foot intervals. The third-party inspector may require additional areas to be similarly protected if road construction results in steep, dangerous slopes.

The Department finds that the proposed project will be constructed with setbacks and other considerations adequate to protect public safety, provided that the boulder fence is constructed as described above; that the final Fire, Health and Safety Plan clearly requires maintenance of the fire extinguishers located in the towers, and all on-site personnel and remote monitors are given copies of the Fire, Health and Safety Plan; that the Emergency Contact Sequence with call numbers and contact information for emergency service providers is posted on all turbines, in all nacelles, and at the entrance to the project; and prior to the start of construction of Turbine #1, the applicant submits a copy of the recorded setback waiver agreement to the Department.

D. BEST PRACTICAL MITIGATION

Under provisions of 38 M.R.S. §480-II(2)(B), an applicant for a permit to construct a small-scale wind energy development must demonstrate that the proposed project will be constructed using the best practical techniques to mitigate impacts to endangered and threatened species, essential wildlife habitat, and other protected resources from all aspects of construction and operation. As part of the application, the applicant submitted a Rare Species Survey Report prepared by the applicant’s consultant, Stantec Consulting Services, Inc. The report did not identify any threatened or endangered species in the project vicinity. However, in response to concerns expressed by the Maine Department of Inland Fisheries and Wildlife (MDIFW), and given the project’s location in bat habitat, the applicant prepared and submitted an Incidental Take Plan (ITP), signed by both the applicant and the Commissioner of the MDIFW, dated October 11, 2018. The ITP specifies operational protocols that minimize the risk to the eastern small-footed bat and the little brown bat, which are listed at the state level as threatened and endangered species, respectively. The ITP requires operational curtailment of the project’s turbines under the following conditions:

Commencing daily one-half hour before dusk and concluding one half hour after dawn of the following day, when ambient air temperatures are at or above 32 degrees Fahrenheit:

- A) April 15 – July 15: Cut-in wind speed is increased from manufacturer’s designed speed to 6 meters per second (m/s)
- B) July 16 – September 15: Cut-in wind speed is increased to 6.9 m/s

- C) September 16 – September 30: Cut-in wind speed returns to 6 m/s
- D) October 1 – April 14: No adjustments to cut-in wind speed, wind turbines operate as designed by manufacturer.

The ITP specifies that all wind speeds must be measured at the hub height at each wind turbine and averaged over five-minute intervals, and that the ambient air temperature must be measured at ground level at a central location within the wind farm. If the measured air temperature is at or above 32 degrees Fahrenheit, that temperature will be applied to each turbine. Each turbine must be curtailed individually when all of the curtailment parameters are met at that turbine's location, and the blades will be feathered while the curtailment parameters persist.

The ITP provides that no formal monitoring or mortality searches are required, but any incidentally discovered mortalities of birds or bats will be recorded and reported to the MDIFW. Whenever possible, any carcass discovered (especially bats) should be collected, stored in a plastic bag, and frozen with a label noting the date and time of the discovery, and the nearest turbine number. MDIFW authorizes the salvage and temporary possession of such specimens via issuance of a "Scientific Collection Permit" that requires annual reporting of all specimens. MDIFW will provide a sample template for logging fatalities. Encounters of more than two bat carcasses or 10 bird carcasses during any operator inspection should be reported to MDIFW and the Department within 24 hours.

The ITP provides that the project may operate without curtailment when ISO-NE, the operator of the electrical distribution grid in New England, determines that there is a capacity shortage. Annual reporting of operational compliance with curtailment protocols is required, and the ITP is subject to review and potential modification by MDIFW every five years, or by request of either MDIFW or the applicant.

The Department finds that the ITP is the Best Practical Mitigation for mitigating impacts to threatened and endangered species due to construction and operation of the project, provided that prior to operation of the project, the applicant submits a copy of the Scientific Collection Permit to the Department and submits copies of any reports of incidental mortalities discovered and annual operating compliance reports to both MDIFW and the Department. Any changes to the ITP or the curtailment protocols resulting from MDIFW's review of the ITP as described above must be submitted to the Department for review and approval prior to implementation.

E. SCENIC IMPACTS

- (1) Applicant's Evidence: Under provisions of 38 M.R.S. §480-II(2)(C), an applicant for a permit to construct a small-scale wind energy development must demonstrate that the proposed project will not significantly compromise views from a SRSNS, as considered under the criteria and methodologies set forth in the Wind Energy Act (WEA), 35-A M.R.S. §3452. Section 3452(1) requires the Department to "determine, in the manner provided in subsection 3, whether the development significantly

compromises views from a [SRSNS] such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character” of the affected resource. Section 3452(3) further provides that a finding by the Department that the development’s generating facilities (turbines) are a highly visible feature in the landscape is not a solely sufficient basis for determining that a wind energy project has an unreasonable adverse effect on the scenic character and existing uses related to scenic character of a SRSNS. Section 3452(3) requires the Department to consider insignificant the scenic impacts of the development’s generating facilities located more than eight miles, measured horizontally, from a SRSNS.

To address the scenic impact criteria, the applicant submitted a Visual Impact assessment (VIA) entitled “Visual Impact Assessment, RoxWind Project,” prepared by Terrence J. DeWan and Associates (TJD&A) and dated March 20, 2018. The VIA examined the potential scenic impact of the proposed turbines on SRSNS within eight miles of the proposed project using the evaluation criteria contained in the WEA. The VIA also examined the potential for scenic impacts from associated facilities of the project, including access roads and ridgeline roads, electrical collector lines, crane pads and assembly areas, and a meteorological (MET) tower. The VIA concluded that “[b]ased on the proposed visual impact, the RoxWind Project will not significantly compromise views from [SRSNS], as considered under the criteria and methodologies set forth in Title 35-A, Section 3452.”

Under the provisions of 35-A M.R.S. §3452, the Department must consider the significance of the affected SRSNS; the existing character of the surrounding area; the expectations of the typical viewer; the purpose and context of the project; the extent, nature and duration of public uses of the affected SRSNS and the potential effect of project views on its continued use and enjoyment; and the scope and scale of the effect of views of the project on the affected SRSNS. In applying these criteria, the Department must consider the primary impact, as well as the cumulative impact or effect, of the project under both day and night conditions. In evaluating cumulative impacts associated with sequential observation, the Department must consider the distance between affected viewpoints on a linear SRSNS, and other forms of development along the linear route that affect the expectation of the user of the SRSNS.

Title 35-A §3451(9) defines a SRSNS as:

“an area or place owned by the public or to which the public has a legal right of access that is:

- A. A national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature, such as the Orono Bog or Meddybemps Heath;
- B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox;
- C. A national or state park;

D. A great pond that is:

(1) 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

(2) One of the 280 great ponds in the State's unorganized or deorganized areas designated as outstanding or significant from a scenic perspective in the "Maine Wildlands Lakes Assessment" published by the Maine Land Use Regulation Commission in June 1987;

E. A segment of a scenic river or stream identified as having unique or outstanding scenic attributes listed in Appendix G of the "Maine Rivers Study" published by the former Department of Conservation in 1982;

F. A scenic viewpoint 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 section 3457;

G. A scenic turnout constructed by the Department of Transportation pursuant to Title 23, section 954 on a public road that has been designated by the Commissioner of Transportation pursuant to Title 23, section 4206, subsection 1, paragraph G as a scenic highway; or

H. Scenic viewpoints located in the coastal area, as defined by Title 38, section 1802, subsection 1, that are ranked as having state or national significance in terms of scenic quality in:

(1) 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

(2) A scenic inventory developed by or prepared for the Executive Department, former State Planning Office or the Department of Agriculture, Conservation and Forestry in accordance with section 3457."

The VIA identified 19 SRSNS within eight miles of the project, including 13 properties listed on the National Register of Historic Places; two great ponds rated as having outstanding or significant scenic quality in the "Maine's Finest Lakes" study; two segments of scenic rivers identified as having unique or outstanding scenic attributes listed in Appendix G of the "Maine Rivers Study"; one scenic viewpoint located on state public reserved land that the Department of Agriculture, Conservation and Forestry has designated by rule; and one potential comparable outstanding natural feature as defined under 35-A M.R.S. §3451(9)(A). The VIA stated that the project's generating facilities (turbine blades and/or nacelles) will potentially be visible from two of the historic properties (the Rumford Commercial Historic District, and the Rumford Municipal Building), will be partially visible from one great pond (Joe's Pond), and will be fully visible from the Rumford Whitecap Mountain Preserve, which is not specifically

designated as a SRSNS. In response to an inquiry from the Department, TJD&A conducted field work and provided photographs and photosimulations for areas along the Swift and Ellis Rivers. This additional analysis showed one viewpoint along the Swift River from which all four project turbines would be visible. It was determined that the project would not be visible from the Ellis River. The VIA determined that the project's associated facilities would not be visible from any SRSNS within the viewshed of the project.

The VIA rated the significance of the SRSNSs from which the project's generating facilities would be visible. The Rumford Municipal Building and the Rumford Commercial Historic District in which it resides are rated as having Medium scenic significance due to the Historic District's emphasis on the overall physical setting of the buildings in the District. However scenic quality is not a reason for the inclusion of either the Municipal Building or the Historic District on the National Register of Historic Places. Joe's Pond was rated as having Medium scenic significance due to its rating as "significant" (as opposed to "outstanding") in the "Maine's Finest Lakes" study. The Swift River was not rated in the VIA, but in the applicant's pre-filed direct testimony for the public hearing for this application, it is rated as having Medium significance.

The VIA considered the character of the surrounding area of the affected SRSNSs. The character of the area surrounding each of the four affected SRSNSs was rated Medium in all cases. The VIA discussed the purpose and context of the proposed development as represented by the significance of the project's contribution to the State's clean energy goals, and the likelihood that it will be seen as part of a cluster of wind energy developments, due to the presence of three other projects in the vicinity. The VIA also examined the extent, nature and duration of existing uses of the affected SRSNSs, and the effect on the public's continued use and enjoyment of the affected SRSNSs. The VIA determined current use levels for all affected SRSNSs to be low, and similarly rated the likely effect of the proposed project on their future use and enjoyment as low. The scope and scale of the potential effect of views of the project on the affected SRSNSs was assessed to be low, due to limited visibility and limited areas of project visibility. The overall conclusion of the applicant's VIA was that the project would not have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the affected SRSNSs.

Rumford Whitecap Mountain Preserve

The Rumford Whitecap Mountain Preserve (RWMP) is a 752-acre parcel on Rumford Whitecap Mountain, including much of the bald summit and some of the south- and east-facing slopes. The main parcel was purchased in 2007 by the Mahoosuc Land Trust (MLT) using matching funds from the Land for Maine's Future program, and it is maintained as a publicly accessible hiking trail and mountaintop destination. The trail has not been designated as a scenic resource under 35-A M.R.S. §3457 by the Department of Agriculture, Conservation and Forestry. According to the VIA, when the parcel was purchased by the MLT in 2007, the 360-degree scenic views from the open summit were considered important to its value. Since the 2007 purchase, the Record Hill

Wind project has been reviewed, approved, and constructed, and currently all 22 of the Record Hill Wind turbines are visible from the RWMP at distances between 4.6 and 7.8 miles. During the review of the application for Record Hill Wind, the RWMP was not classified as a SRSNS, and the effects of views of the project on the scenic character or existing uses related to scenic character of the RWMP were not considered. During the Department's review of the Record Hill Wind application, no public comments were received from anyone asserting SRSNS status for the RWMP or requesting analysis of scenic impacts to the views from the summit.

Several interested persons submitted written comments expressing their concern regarding scenic impacts to RWMP from the proposed project and asserting that it should be protected as a SRSNS. In order for RWMP to be considered a SRSNS, it would have to meet the criteria in M.R.S. 35-A §3451(9)(A) cited above, since all of the other subcategories are specifically designated based on inclusion of a resource on a particular list. In response to questions on its direct testimony at the public hearing, TJD&A stated that "we included [RWMP] initially in our visual impact assessment at the request of the Department." In response to questioning on this, TJD&A stated that RWMP was included because the Department wanted to see what the project would look like from that viewpoint.

In the Third Procedural Order, the Presiding Officer granted the request of FOMM that scenic impacts and decommissioning should be issues addressed at the hearing. The applicant's pre-filed testimony included a discussion of scenic impacts to affected SRSNS within the eight-mile viewshed of the project, as well as a discussion of potential impacts to RWMP, and a statement that the status of RWMP as a SRSNS was not established. However, in its pre-filed testimony, the intervenor did not present testimony on the issue of scenic impacts.

In its review of the applicant's VIA, LandWorks stated that "the Whitecap summit should be reclassified or understood as a scenic resource of statewide significance". The LandWorks report discusses perceived inadequacies in the applicant's VIA regarding scenic impacts to RWMP, under standards that apply to SRSNSs. On November 30, 2018, the applicant submitted a memorandum arguing that RWMP does not qualify as a SRSNS under 35-A M.R.S. §3451(9)(A), because of RWMP's incompatibility with the standards necessary for a property to be listed as a National Natural Landmark or a federally designated wilderness area. In the Sixth Procedural Order, the Presiding Officer ruled that RWMP did not meet the definition of a SRSNS, and therefore scenic impacts to RWMP would not be considered in the Department's review of the project. The intervenor formally objected to the Presiding Officer's ruling on the SRSNS status of RWMP, and in light of this objection, the Presiding Officer allowed testimony and cross-examination on RWMP at the public hearing to more fully develop the record on this issue. In cross-examination of TJD&A, the intervenor primarily focused on the type and amount of analysis that TJD&A had presented in the VIA regarding RWMP. The intervenor suggested that RWMP was highly accessible and of high value as a recreational resource and stated that part of the MLT's purpose listed in its application for funding from the Land for Maine's Future program for the purchase of the RWMP parcel

was to protect the view from the summit; however, no supporting documentation was presented. At the public hearing, several members of the public testified about their enjoyment of the view from RWMP and the convenience of access. One witness testified regarding the use of grant funds from the Land for Maine's Future (LMF) program, administered by the Department of Agriculture, Conservation and Forestry (DACF), the application for which "stressed its significant scenic value as well as recreational opportunities." Members of the public testified that the non-remote location and relatively easy climb should increase the value of RWMP as a recreational resource and scenic destination. Members of the public also presented testimony about their personal experiences at the RWMP property, and their concerns regarding the effect that visibility of the proposed project would have on the view from the summit.

In its analysis, the Department concluded that one way that a feature or place, such as RWMP, can qualify as a SRSNS, is to be "A national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature, such as the Orono Bog or Meddybemps Heath" (35-A M.R.S. §3451(9)(A)). The Orono Bog is a designated national natural landmark. The Meddybemps Heath is a 2,500-acre domed bog, the second-largest in Maine after the 7,000-acre Great Heath. The statutory listing of Meddybemps Heath as an example of a "comparable outstanding natural and cultural feature" reflects its status as a unique natural feature. While Meddybemps Heath is scenic, the uniqueness of its character is primarily local and internal, related to its geology and its local biological richness and diversity, and not related to views of the surrounding terrain. Virtually identical views are available from the adjacent Meddybemps Lake, which is not classified as a SRSNS under 35-A M.R.S. §3451(9). No other examples of comparable features under 35-A M.R.S. §3451(9)(A) are given. Two of the primary characteristics of a federally designated wilderness area are remoteness and lack of human influence on the terrain. Public testimony on RWMP indicates that its most desirable characteristics include its accessibility and its popularity. Several members of the public emphasized that MLT made the effort to acquire additional land to secure a trail corridor, and one person testified that he volunteers annually to maintain the trail at RWMP. Based on the evidence in the record, the Department finds that the combination of an annually-maintained trail and a high amount of human traffic are not compatible with a remote area without human influence. The national natural landmarks program is meant to preserve natural areas illustrative of biological and geological character. Red pine woodlands, such as that found in the RWMP, are preserved in at least three conservation areas in Maine, including Albany Notch in the White Mountain National Forest; Norumbega Mountain in Acadia National Park; and the Tunk Lake Area in the Donnell Pond Public Reserved Lands.

The Department finds that the RWMP is not a SRSNS, and therefore the applicant is not required to demonstrate that the proposed project will not have an unreasonable adverse effect on its scenic character, or existing uses related to its scenic character.

(2) Department's Analysis: As part of the application review process, the Department hired a third-party independent consultant, LandWorks, a firm qualified in scenic impact analysis, to provide a peer review of the applicant's VIA to make a

determination as to its technical correctness according to standard VIA practices; and to review the applicant's scenic resource and related uses inventories and assess their completeness. The report filed by LandWorks on November 7, 2018, states “[o]verall, the report appears to be compliant and comprehensive for the broad review of scenic resources and their analysis under the provisions of the Maine Wind Energy Act.” The report goes on to list five issues that LandWorks identified as being inadequately addressed, including:

- A) there is inadequate reference or discussion with regard to the scenic resource guidance and information provided in the Roxbury Town Plan;
- B) there is a need for some additional analysis with regard to the potential impacts on users of the Swift River scenic resource;
- C) there is a need for some additional analysis with regard to the visual effects of the associated facilities;
- D) there is insufficient analysis of the potential impacts of the project to users of the Whitecap Mountain scenic resource; and
- E) there is insufficient analysis of the cumulative impact posed by the addition of this project to the overall panorama of the summit vista on Whitecap Mountain.

The LandWorks statement regarding inadequate reference to local standards is based on LandWorks' conclusion that the Roxbury Comprehensive Plan's inclusion of an assessment and inventory of local scenic resources requires the applicant's VIA to address, or at least acknowledge, the findings in the Roxbury Comprehensive Plan relating to local scenic resources. The Department notes that its authority to regulate scenic impacts from small-scale wind energy developments extends only to SRSNSs as defined under 35-A M.R.S. §3451(9). The Department further notes that the RoxWind small-scale wind energy development requires a permit from the Roxbury Planning Board. The Department concludes that any compliance issues regarding Roxbury's ordinance or other relevant locally enforceable standards not addressed under the Wind Energy Act are appropriately addressed at the local level.

The LandWorks statement that the analysis of the potential impacts on users of the Swift River scenic resource is inadequate is supported by reference to the viewshed map, which “shows three extended areas of visibility along the river;” as well as LandWorks' statements that more information regarding user expectations and duration and nature of uses is necessary. In response to a request from the Department, the applicant provided additional information regarding project visibility from the Swift River, which acknowledged that there would be one area of project visibility from the Swift River. In pre-filed testimony for the public hearing, TJD&A presented a more detailed analysis of the scenic impacts to the Swift River, concluding that the overall scenic impact to the Swift River would be Low. The analysis addressed the concerns expressed in the LandWorks report regarding user expectations and nature and duration of use. In cross-examination at the public hearing, the intervenors raised questions about nighttime impacts to users of the Swift River from lighting at the project. The applicant's witness stated that no evidence of nighttime use of the Swift River was found, and that they concluded that there is virtually no use of the river after dark. In response to Department

questioning, the applicant indicated that anyone on the river would have to turn their head 90 degrees to see the project from the point on the river where it is visible. The Department notes that air photographs show this portion of the river to be fast-moving, requiring a boater to concentrate on safe navigation more than scenic observation. The applicant's witness stated that reports on the use of the Swift River centered on the Coos Canyon area, including sightseeing and swimming and local boating. The applicant's witness also stated that the primary use of this portion of the river in the area of project visibility is white-water kayaking and canoeing during high water events. The witness stated that fishing was not a popular activity on the Swift River. One member of the public testified that there was a popular swimming spot on the river at Bunker Pond Road, however, according to the viewshed map in the applicant's VIA, the project is not visible from that area. The Department determined that the applicant has shown that potential impacts to the scenic character and existing uses related to scenic character of the Swift River are low.

LandWorks recommended additional analysis of the visual effects of the project's associated facilities. The LandWorks report stated that the VIA does not have "any discussion or representation in the VIA of clearing impacts or potential visibility of the clearing required for the turbines themselves," and the project plans "do not reflect an accurate postconstruction delineation of clearing effects from the road construction." One member of the public cited these statements in testimony expressing concerns about visual impacts at the public hearing. The LandWorks report noted that "the Executive Summary provides a brief overview of the associated facilities and references Photosimulation 2 in Appendix B (p.3), however, Photosimulation 2 does not note any additional information related to the associated facilities." Based on the layout of the proposed project and analysis of Photosimulation 2, the Department finds credible the statement in the applicant's VIA that the associated facilities will not be visible from any SRSNS.

Under the provisions of 35-A M.R.S. §3452(2), the Department determined that reviewing the visual impacts of the associated facilities under the standards in the WEA would not result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities. Therefore, the Department evaluated the effect of the project's associated facilities on scenic character and uses related to scenic character in accordance with 35-A M.R.S. §3452(1), which requires evaluation of impacts to the scenic character and uses related to scenic character of affected SRSNSs. Photosimulation 2, referenced above, which shows views of the project from Joe's Pond; and Photosimulation 3, which shows views of the project from the Swift River, clearly show that while the towers and/or blades are visible, North Twin Mountain itself, on which the project and associated facilities are located, is not visible, and therefore the associated facilities are also not visible, as stated in the applicant's VIA. Therefore, the Department determined that no additional analysis of the visual effects of the project's associated facilities is necessary.

Based on the Department's review of the evidence and arguments from the applicant, the evidence and arguments from the intervenor, the public testimony and written comments,

and the LandWorks review, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the other affected SRSNS within the viewshed of the project.

4. WETLAND ALTERATION:

The applicant proposes to directly alter 11,084 square feet of freshwater wetlands, cross four streams, relocate approximately 250 feet of a stream channel, and fill in an associated braided channel, to construct the proposed wind energy development. In a supplementary submission, the applicant stated that construction of the transmission line would impact an additional 690 square feet of forested freshwater wetlands that have already been altered by logging activities and by construction and maintenance of the existing CMP transmission corridor. These wetlands would be altered by cutting of vegetation, bringing the total area of wetlands to be altered to 11,774 square feet. No poles will be located within wetland areas.

The freshwater wetland alteration proposed includes the filling of 10,809 square feet of freshwater wetlands. This includes the filling of eight wet meadows that have been previously altered by logging activities and construction and maintenance of the existing CMP transmission line. Fill will also be placed in one forested wetland. The applicant also proposes to alter an additional 275 square feet of one forested wetland and one forested/wet meadow wetland by clearing vegetation that has been previously altered by logging activities. The applicant proposes to install four culverts at stream crossings along the proposed access road. The applicant also proposes to relocate a stream channel and fill in a portion of braided stream channel for the purposes of building the access road. The stream channel to be relocated and the portion of the braided channel that will be relocated have been previously altered by the existing access road.

The *Wetlands and Waterbodies Protection Rules*, Chapter 310, interpret and elaborate on the 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 would 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.

A. Avoidance. An applicant must submit an analysis of whether there is a practicable alternative to the project that would be less damaging to the environment and this analysis is considered by the Department in its assessment of the reasonableness of any impacts. The applicant stated that the purpose of this project is to harvest the wind resource available on North Twin Mountain by converting it to electricity for sale on the grid. The applicant submitted an alternatives analysis for the proposed project completed by Stantec Consulting Services Inc. and dated May 2018. This analysis described multiple factors that were considered in the selection of the site, including taking advantage of existing transmission infrastructure; compatibility with existing land uses; and environmental impacts. The analysis also discussed resource impact avoidance and minimization measures undertaken during project design, including utilization of the

existing land management road and transmission corridor, relocation of Turbine #3, and relocation of a road segment to avoid wetland impacts. The risk of erosion to the proposed access road was reduced by filling a braided stream channel and diverting its flow to the main stream channel which will flow beside the access road instead of across it. In light of these considerations, the applicant determined that there is no practicable alternative to the proposed project that avoids impacts to the resources.

B. Minimal Alteration. In support of an application and to address the analysis of the reasonableness of any impacts of a proposed project, an applicant must demonstrate that the amount of freshwater wetland to be altered will be kept to the minimum amount necessary for meeting the overall purpose of the project. In this case, the applicant has proposed placing the turbines such that impacts to wetlands are minimized and has located the access road to similarly avoid and minimize wetland and stream impacts. Additionally, locating the transmission line adjacent to the existing CMP corridor further reduces the project's impacts on freshwater wetlands by avoiding the need to cut an entirely new corridor. The stream channel relocation eliminates the need for a long culvert and returns the stream flow to its original channel. The Department finds that the applicant minimized environmental impacts to the greatest extent practicable.

C. Compensation. Department staff visited the site of the proposed project on June 11, 2018 and examined the streams and wetlands that would be affected by the project. The streams and wetlands on the site have been previously altered through road-building and timber harvesting activities on the parcel over many years.

In accordance with the Department's Rules, Chapter 310 § 5(C)(6)(a), the proposed amount of freshwater wetland alteration does not currently trigger the need for the submission of a functions and values assessment or compensation.

During the site visit, Department staff noted that the lack of ongoing maintenance of the existing access road has led to significant erosion of the road, stream bed and native soils in several areas. In several places, including some of the proposed stream crossings, stream flow has diverted into these erosional channels. In accordance with Chapter 310 §5(C)(7), the Department waives the requirement for a functional assessment and compensation of the streams to be impacted, based on the Department's determination that the impacts to the functions and values of the streams affected by the project will not be significant, and that the streams have already been significantly impacted by historical timber harvesting activities at the site. For these reasons, the Department determined that compensation for stream impacts as a result of the project is not required.

The Department finds that the applicant has avoided and minimized wetland and waterbody impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project, provided that the applicant adheres to the vegetation management plan submitted to the Department.

5. DECOMMISSIONING:

In order to facilitate and ensure appropriate removal of the wind generation equipment when it reaches the end of its useful life or if one or more of the project turbines ceases generating electricity, the Department requires applicants to demonstrate, in the form of a decommissioning plan, the means by which decommissioning will be accomplished. The applicant submitted a decommissioning plan which includes a description of the conditions that will trigger decommissioning, a description of the work required, an estimate of decommissioning costs, 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 an expected operational life of 25 years; however, other factors may trigger the requirement for decommissioning before 25 years have passed. The applicant's proposal is that the wind generation facility will be decommissioned when it ceases to generate electricity for a continuous period of twelve months. If a force majeure event causes the project to fail to generate electricity for 12 months, the applicant's decommissioning plan does not require decommissioning of the project. The applicant's decommissioning plan does not address the case where one or more turbines may fail to produce electricity for an extended period. The Department finds that the applicant's plan is lacking in that it fails to address the scenario where one or more turbines ceases to operate for an extended period of time. As it has for other wind energy projects, to protect public safety and restore the impacted resources, the Department will impose a condition on this approval requiring the Decommissioning Plan to include a provision that the operator of the project must decommission any individual turbine that fails to generate electricity for a period of 12 consecutive months, unless the Department grants an extension of this period in response to a request from the operator that shows cause to believe that the turbine in question will be repaired and operating within 18 months of the turbine's failure.

Decommissioning of the entire facility will begin if twelve consecutive months of no generation occurs at the wind generation facility, absent a force majeure event or other permission granted by the Department. Decommissioning of a single turbine must 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. The Department considers a force majeure to mean fire (other than a fire in a turbine, or a fire caused by operation of the project), earthquake, flood, tornado, or other acts of God and natural disasters; and war, civil strife or other similar violence. In the event of a force majeure event which results in the absence of electrical generation by one or more turbines for twelve months, by the end of the twelfth month of non-operation the applicant 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 work necessary for decommissioning is described in an estimate from Baldwin Energy for the cost of the decommissioning, submitted as part of the application. The estimate includes the cost of road preparation and return to original condition; the use of two cranes; tower, nacelle and hub disassembly and removal; foundation removal to a depth of 24 inches; and site cleanup. The applicant is responsible for the grading and reseeding of all earth disturbed during construction and decommissioning, and restoration of any disturbed wetlands or critical habitat. Decommissioning must also include removal of the new poles and restoration of any wetlands disturbed by construction and maintenance of the new transmission line.
- C. Financial Assurance. In its application submission for the proposed project, the applicant estimated that the current cost for decommissioning the project will be \$824,000, and that the salvage value of the turbines at the end of their useful life will be \$150,000 each. In pre-filed testimony for the public hearing, the applicant's witness for decommissioning revised the salvage value of the turbines to a total of \$671,904 for the project, or \$167,976 per turbine, however the applicant did not revise their proposed financial assurance in consideration of this revision. At the public hearing, in cross-examination of the applicant's witness on decommissioning, the intervenor raised questions about the salvage value of the metal in the tower sections, based on the presumption that the metal was anodized. The applicant was requested to provide information regarding the anodization of the tower metal, and in response submitted documentation from the manufacturer indicating that the metal is not anodized. The applicant proposes to provide financial assurance for the decommissioning costs in the form of a performance bond, surety bond, or letter of credit, or other form of financial assurance acceptable to the Department. The applicant proposes to provide assurance for \$224,000, which the application indicates is the estimated cost of decommissioning the entire project, less the salvage value of the turbines. The applicant proposes to have the financial assurance mechanism in place prior to construction of any components that would be removed during decommissioning.
- D. Intervenor's Evidence: A witness for the intervenor submitted pre-filed testimony addressing the decommissioning of the project, however the witness failed to attend the hearing. Under the Department's Chapter 3, Rules Governing the Conduct of Licensing Hearings, all witnesses providing sworn testimony, including pre-filed written testimony, must be present at the hearing and subject to cross-examination by the parties. Because the witness was not present at the public hearing, that witness' pre-filed written testimony was stricken from the record. In cross-examination of the applicant's witness on decommissioning, the intervenor raised questions regarding the salvage value of turbine components, and elicited testimony regarding the quality of the metal in the towers discussed above. After consideration of the points raised in the discussion, the Department finds that the applicant's figures are reasonable.

- E. Single Turbine Decommissioning. The contract proposal from Baldwin Energy contained in the application estimates that it will cost approximately \$224,000 to decommission the entire project, based on a cost of \$56,000 per turbine, net of salvage value of \$150,000 per turbine. The contract proposal states that crane costs associated with decommissioning would be approximately \$285,000. The cost for crane work includes mobilization, rigging, setup, assembly, disassembly, operators, and demobilization.
- F. The Department understands that the cost of bringing the cranes to the site, setting them up, tearing them down, and removing them are independent of the number of turbines being decommissioned. Based on the applicant's submissions, and the testimony at the public hearing, the Department estimates the cost of decommissioning a single turbine to be approximately \$200,000, net of salvage value, which is less than the applicant's proposed financial assurance for decommissioning the project. In the event that a single turbine is required to be decommissioned as described above, the applicant 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 applicant cannot demonstrate the ability to replenish the decommissioning fund once the turbine is removed, the applicant must decommission the entire project as described above.
- G. The Department notes that the anticipated life of this project is 25 years, and that during that time the various factors contributing to the cost to decommission the project will likely fluctuate in price, perhaps significantly. Therefore, as a condition of this Order, the Department will require the operator to re-evaluate the decommissioning cost and financial assurance at the end of operation years five, ten, fifteen, and twenty, and every five years thereafter, should the project continue to operate; and must update the financial assurance accordingly. Proof of acceptable financial assurance must be submitted to the Department for review and approval prior to the start of construction.
- H. Notification. The applicant must notify the Department within two business days of any catastrophic turbine failure. Catastrophic turbine failure includes 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 that the operator anticipates will result in a turbine being off-line for a period greater than six months.

The Department finds that the cost to decommission a single turbine from the project would be approximately \$200,000, net of salvage value. The Department finds that the applicant's plan to decommission the project is adequate, provided that the applicant implements the proposed decommissioning plan using the Department's definition of "force majeure;" submits financial assurance in the amount of \$224,000; submits a single turbine decommissioning plan, and at the time of decommissioning, submits a plan for

continued beneficial use of any wind energy development components proposed to be left on-site; and re-evaluates the decommissioning cost and financial assurance at the end of operation years five, ten, fifteen, and twenty, and every five years thereafter for the life of the project and updates the financial assurance accordingly, all as described above.

The intervenor submitted comments on the draft Order objecting to the applicant's use of salvage value towards meeting part of the funding requirement for decommissioning the project, arguing that salvage value and decommissioning costs will change over time. The Department finds that this issue is adequately addressed by the requirement that the applicant re-evaluate decommissioning costs every five years and update the financial assurance such that the revised decommissioning costs are covered.

6. OTHER CONSIDERATIONS:

The Department finds, based on the design, proposed construction methods, and location, the proposed project will not inhibit the natural transfer of soil from the terrestrial to the marine environment, will not interfere with the natural flow of any surface or subsurface waters, and will not cause or increase flooding. The proposed project is not located in a coastal sand dune system, is not a crossing of an outstanding river segment, and does not involve dredge spoils disposal or the transport of dredge spoils by water.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. § 420-D, and Chapters 500–502 of the Department's rules:

- A. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic Standards for: (1) erosion and sediment control; (2) inspection and maintenance; (3) housekeeping; and (4) grading and construction activity, provided that any portion of the access road built during winter months is constructed in 500-foot segments or less; the applicant conducts a pre-construction meeting; and the applicant retains a third-party inspector, all as described in Finding 2.
- B. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 General Standards provided that the applicant retains an engineer to oversee construction of the approved stormwater management system, tests the components of the soil filter media, notifies the Department upon completion of the stormwater management system, and submits as-built plans, all as described in Finding 2.
- C. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 standards for: (1) easements and covenants; (2) management of stormwater discharges; (3) discharge to freshwater or coastal wetlands; (4) threatened or endangered species; and (5) discharges to public storm sewer systems.

BASED on the above Findings of Fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 35-A M.R.S. §§ 3452, 3456, and 3459;

38 M.R.S. §§ 480-A–480-JJ; Chapters 310 and 335 of the Department’s rules; and Section 401 of the Federal Water Pollution Control Act:

- A. The generating facilities will meet the requirements of the Department’s noise control rules, Chapter 375 §10(I) adopted pursuant to 38 M.R.S. §484(3)(B).
- B. The generating facilities will be designed and sited to avoid unreasonable adverse shadow flicker effects.
- C. The generating facilities will be constructed with setbacks adequate to protect public safety, provided that the boulder fence is constructed; that the final Fire, Health and Safety Plan clearly requires maintenance of the fire extinguishers located in the towers, and all on-site personnel and remote monitors are given copies of the Fire, Health and Safety Plan; that the emergency contact sequence with call numbers is posted on all turbines and at the entrance to the project; and prior to the start of construction of Turbine #1, the applicant submits a copy of the recorded setback waiver agreement to the Department as described in Finding 3(C).
- D. The proposed project will be constructed using the best practical mitigation techniques for mitigating impacts to endangered and threatened species, essential wildlife habitat and other protected resources from all aspects of construction and operation, provided that the project is operated in accordance with the curtailment protocol described in the Incidental Take Plan further described in Finding 3(D).
- E. The proposed activity will not significantly compromise views from any affected SRSNS and will not have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of any affected SRSNS.
- F. The applicant has made adequate provisions to achieve decommissioning of the wind power facility provided that the applicant implements the decommissioning plan using the Department’s definition of “force majeure”; submits a single turbine decommissioning plan; provides financial assurance of \$224,000 to the Department; and at the time of decommissioning, submits a plan for continued beneficial use of any wind energy development components proposed to be left on-site, all as described in Finding 7.
- G. The proposed activity will not cause unreasonable erosion of soil or sediment.
- H. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- I. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat; aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life provided that the applicant adheres to the vegetation management plan submitted to the Department.

- J. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- K. The proposed activity will not violate any state water quality law including those governing the classification of the State's waters.
- L. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- M. The proposed activity is not on or adjacent to a sand dune.
- N. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S. § 480-P.

THEREFORE, the Department APPROVES the above noted application of ROXWIND LLC to construct a small-scale wind energy development 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 order, the applicant shall take all necessary actions to ensure that its activities or those of its 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 applicant or project operator 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 have been completed in accordance with the approved plans.
5. Prior to the start of construction, the applicant shall submit evidence that the decommissioning plan has been fully funded in the amount of \$224,000 to the Department for review and approval. 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 applicant 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.

6. Prior to the start of construction in any area, the applicant shall clearly mark on the ground all visual screening buffers, stream buffers and other resource buffers, and the stormwater buffers in that area.
7. Prior the start of construction, the applicant 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.
8. Prior to operation of the development, the applicant must submit a copy of the Scientific Collection Permit issued by MDIFW, along with a copy of the sample template for logging fatalities, as described in Finding 3(D) above. Copies of any fatality reports logged or sent to MDIFW must also be submitted to the Department for inclusion in the project files.
9. Prior to the start of construction of Turbine #1, the applicant must submit a copy of the agreement between the applicant and the property abutter to the north of Turbine #1, as recorded in the Oxford County Registry of Deeds, waiving any objection to the smaller setback as described in Finding 3(C).
10. The applicants shall retain the services of a third-party inspector in accordance with the Special Condition for Third-Party Inspection Program, which is attached to this Order.
11. The applicant shall adhere to the vegetation management plan submitted to the Department.
12. Within 90 days of the commencement of project operations, the applicant 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.
13. Wind turbines shall be operated in accordance with the curtailment protocol outlined in the Incidental Take Plan as approved and signed by the Commissioner of Inland Fisheries and Wildlife. Any changes to the Incidental Take Plan must be approved by the Commissioner of the Maine Department of Inland Fisheries and Wildlife and must be submitted to the Department for review and approval prior to implementation.
14. Prior to the start of construction, the applicant shall notify abutters, the Town, and the Department of the details of its sound complaint response procedure, including provision of a 24-hour contact to register complaints, and a description of the information required from a complainant. Details of the complaint response procedure including a sample data collection sheet must be submitted to the Department for review and approval prior to the start of construction.
15. Sound compliance testing shall be at protected locations #15 and #30 during the first year of operation and every fifth year thereafter in accordance with section 3(A) of the Findings. Measurements must be conducted by qualified personnel with full membership in the Institute of Noise Control Engineering. If landowner permission to operate the

testing equipment at either or both of these locations cannot be obtained, the applicant will establish monitoring locations acceptable to the Department as close as possible to the recommended positions. The Compliance Protocol requires compliance data to be submitted to the Department in accordance with the Department's Rules, Chapter 375, § I(8)(e)(7 through 10): once during the first year of project operation; once during each fifth successive year of project operation; in response to a complaint regarding noise from the project and in support of any subsequent enforcement by the Department; and for validation of calculated sound levels when requested by the Department. The compliance test reports 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. Compliance data must also be provided to the Town of Roxbury in all of the above circumstances, as well as in support of any enforcement action taken by the Town for a violation of noise restrictions.

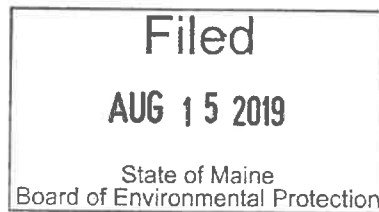
- 16. Prior to the start of construction, the applicant must submit a final Fire, Health and Safety Plan that clearly requires maintenance of the fire extinguishers located in the bases and nacelles of the towers. All on-site personnel and remote monitors must be given copies of the Fire, Health and Safety Plan. The Emergency Contact Sequence with call numbers must be posted at the entrance to the project and on all turbines as they are constructed.

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 14th DAY OF August, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *M.D.G.*
For: Gerald D. Reid, Commissioner



PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

ET/L27863ANBNCN/ATS#82946, 84132, 84133

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 permittee. 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. §420-D(8) and is subject to penalties under 38 M.R.S. §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 permittee, and the permittee 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. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.
- (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 are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
 - (c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.
 - (d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.
 - (e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.
- (9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department, and must reference the permit number.
- (10) 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.



Natural Resources Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 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 September 2016

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 Resources 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: <i>PM, Maine DEP (@maine.gov)</i>	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:		
<i>Original and all copies were sent by email only.</i>		



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: November 2018

Contact: (207) 287-2452

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) an administrative process before the Board of Environmental Protection (Board); or (2) 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. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 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. §§ 341-D(4) & 346; the *Maine Administrative Procedure Act*, 5 M.R.S. § 11001; and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 C.M.R. ch. 2.

DEADLINE 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 more than 30 calendar days after the date on which the Commissioner's decision was filed with the Board will be dismissed unless notice of the Commissioner's license decision was required to be given to the person filing an appeal (appellant) and the notice was not given as required.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017. An appeal may be submitted by fax or e-mail if it contains a scanned original signature. It is recommended that a faxed or e-mailed appeal be followed by the submittal of mailed original paper documents. The complete appeal, including any attachments, must be received at DEP's offices in Augusta on or before 5:00 PM on the due date; materials received after 5:00 pm are not considered received until the following day. The risk of material not being received in a timely manner is on the sender, regardless of the method used. The appellant must also send a copy of the appeal documents to the Commissioner of the DEP; the applicant (if the appellant is not the applicant in the license proceeding at issue); and if a hearing was held on the application, any intervenor in that hearing process. All of the information listed in the next section of this information sheet must be submitted at the time the appeal is filed.

INFORMATION APPEAL PAPERWORK MUST CONTAIN

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

1. *Aggrieved Status.* The appeal must explain how the appellant has standing to maintain an appeal. This requires an explanation of how the appellant 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.* The appeal must identify the specific findings of fact, conclusions regarding compliance with the law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing requirements that the appellant believes were not properly considered or fully addressed.
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 matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for public hearing must be filed as part of the notice of appeal, and must include an offer of proof in accordance with Chapter 2. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed evidence must be submitted with the appeal. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered in an appeal only under very limited circumstances. The proposed evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Specific requirements for supplemental evidence are found in Chapter 2 § 24.

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, and is made easily accessible by the DEP. Upon request, the DEP will make application materials available during normal working hours, provide space to review the file, and provide an 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 general questions regarding the appeal process.
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. Unless a stay of the decision is requested and granted, 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, and will provide 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, any materials submitted in response to the appeal, and relevant excerpts from the DEP's application review file will be sent to Board members with a recommended decision from DEP staff. The appellant, the license holder if different from the appellant, and any interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. The appellant and the license holder will have an opportunity to address the Board at the Board meeting. 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, the 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. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and 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. 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. § 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.
