STATE OF MAINE
BOARD OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DRAFT

IN THE MATTER OF

EVERGREEN WIND POWER II, LLC.	) SITE LOCATION OF DEVELOPMENT ACT
Oakfield, Aroostook County	) NATURAL RESOURCES PROTECTION ACT
OAKFIELD WIND PROJECT	)
L-24572-24-A-Z (denial)	) APPEAL
L-24572-TF-B-Z (denial)	) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. §§344 (2-A) and 341-D (4) and Chapter 2, §24 (B) of the Department of Environmental Protection's regulations, the Board of Environmental Protection has considered the appeals of the Martha A. Powers Trust, Brian Raynes, and Daniel Koerschner (collectively "appellants"), the material filed in support of the appeal, the response of the applicant, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROCEDURAL HISTORY:

On April 7, 2009, EVERGREEN WIND POWER II, LLC., (applicant) filed a Site Location of Development Act (Site Law) application and a Natural Resources Protection Act (NRPA) application for a permit to construct a wind energy development known as the Oakfield Wind Project, in the Town of Oakfield.

The applicant proposes to construct a 51-megawatt (MW) wind energy generation facility, which is an expedited wind energy development as defined by the Wind Energy Act, 35-A M.R.S.A. § 3451 (4). The proposed project consists of 34 General Electric 1.5 wind turbines (1.5 MW each) with associated turbine pads. The turbines will be constructed in a northern and a southern array along Sam Drew Mountain and other ridges in the Oakfield Hills. The proposed project also includes 15.3 miles of access roads and crane path, an electrical collector line totaling approximately 12 miles, an electrical collector substation occupying 0.56 acres, four permanent 80 meter meteorological towers, and an 8,380 square foot operations and maintenance building.

During the Department's review of the application, the Martha A. Powers Trust, Brian Raynes, and other interested parties submitted comments that described specific concerns associated with the proposed project. On July 16, 2009, the Department held a public meeting in the Town of Oakfield pursuant to 38 M.R.S.A. § 345-A (5) to provide all interested parties with an opportunity to provide information and ask questions of the Department regarding the project. The Department approved the applications in Department Order #L-24572-24-A-N/L-24572-TF-B-N, dated January 21, 2010.

On February 22, 2010, the appellants filed timely appeals of the Department's decision to the Board, and a request for a public hearing on the noise issue. Brian Raynes joins and adopts the appeal filed by the Powers Trust. The appeal filed by Daniel Koerschner is based solely on the issue of impact to property values, which is also raised in the Powers Trust appeal.

2. STANDING:

The appeals were filed in the names of a family trust and two individuals who own property in Oakfield and the adjoining T4 R3 WELS, all in the vicinity of the Oakfield Wind Project.

The Martha A. Powers Trust owns property in Oakfield, Island Falls, and T4 R3 WELS, and controls the eastern portion of Pleasant Lake in T4 R3 WELS where it maintains family camps. The Board finds that the Martha A. Powers Trust is an entity with standing as defined in Chapter 2, Section 1(B) and may bring this appeal before the Board.

Brian Raynes and Daniel Koerschner are owners of property in the Town of Oakfield and described specific concerns regarding the Oakfield Wind Project. The Board finds that these individuals have demonstrated standing as aggrieved persons as defined in Chapter 2, Section 1(B) and may bring this appeal before the Board.

The trust and individuals listed above will collectively be referred to as "appellants" or by their individual names. The findings set forth above are made only in regard to the appellants' administrative standing before this Board. Since the identified appellants properly demonstrated their standing, the Board proceeds to the merits of the appeals.

3. FINDINGS & CONCLUSIONS OBJECTED TO:

The appellants object to the Department findings and conclusions relating to the following:

A. Financial capacity
B. Noise
C. Scenic character
D. Decommissioning

4. BASIS FOR APPEAL:

The appellants assert that the Department erred in its findings that:

A. The applicant demonstrated adequate financial capacity to comply with Department standards;
B. The applicant made adequate provisions to ensure that noise standards pursuant to the Site Location of Development Rules, Chapter 375(10) were met and that noise from the proposed project will not result in unreasonable adverse effects on existing uses and the natural environment;

C. The proposed project will not have an unreasonable adverse effect on the scenic character of scenic resources of state or national significance; and
D. The applicant demonstrated an adequate decommissioning plan and a means to execute the plan.

The appellants also assert that the proposed wind energy development will have an unreasonable adverse impact on the value of their property.

5. REMEDY REQUESTED:

The appellants request that the Board reverse the January 21, 2010, Department decision approving a permit for the construction of the Oakfield Wind Project. The appellants further request that the Board declare that Chapter 375, Section 10 is inadequate for protection against the noise impacts from wind power projects, hold a public hearing on the noise issue, and review the impacts of noise for this project without the limitations of those rules.

6. REQUEST FOR A PUBLIC HEARING:

The permit applications were filed on April 7, 2009 and the Department received no request that a public hearing be held. However, due to the amount of public interest in wind projects in general, and in accordance with 38 M.R.S.A § 345-A(5), the Department conducted a public meeting in the Town of Oakfield to provide all interested parties an opportunity to provide information to or ask questions of the Department.

During the nine month period of the review of the applications, the appellants had the opportunity to present information and argument to the Department and availed themselves of that opportunity through submittal of comments and documents during the review process. Appellants submitted information related to specific design details of the project, financial condition of the applicant, noise impacts of the project, scenic issues, decommissioning plans, and the impact of wind power projects on property values.

Evidentiary public hearings are discretionary in appeals to the Board. The Board finds that the record in these applications is adequately developed with regard to the statutory criteria, and that the appellants did not demonstrate that a public hearing is warranted due to conflicting technical evidence on a licensing criterion or in order for the Board to understand the evidence.

7. DISCUSSION AND RESPONSE TO APPEAL:

A. FINANCIAL CAPACITY:

Appellants Powers Trust and Brian Raynes contend that the applicant has not demonstrated adequate financial capacity to construct the proposed wind energy development. The appellants submitted opinions which allege that the applicant's

financial condition is precarious, and argue that the applicant should have been required to submit additional evidence of financial capacity.

The Site Law requires that an applicant demonstrate financial capacity to develop the project consistent with State environmental standards and the provisions of the Site Law. The Site Law allows a permit to be issued with a condition that prior to any alterations to the site, the permit holder provide evidence of a line of credit or a loan by a financial institution authorized to do business in Maine or evidence of some other form of financial assurance allowed under the Board's regulations. Chapter 373(1) sets forth several forms of financial capacity demonstration which may be acceptable, but does not limit an applicant to the listed forms.

The applicant submitted a letter from HSH Nordbank (HSH), dated March 13, 2009, which states that HSH has arranged over $900 million in financing for First Wind Holdings, LLC (First Wind), including an approximately $267 million turbine supply loan a portion of which was used to purchase the turbines for the Oakfield project. According to the application, the applicant is a wholly-owned project subsidiary of First Wind. The March 13 letter also states that HSH is a likely candidate to provide financing for the remainder of the Oakfield project, subject to various reviews and approvals.

In its January 21, 2010, decision the Department found that the applicant demonstrated adequate financial capacity to comply with Department standards provided that prior to construction of the project, the applicant submitted final evidence that the applicant has been granted a line of credit or a loan by a financial institution authorized to do business in this State, or evidence of another form of financial assurance determined by the Department to be adequate pursuant to Chapter 373(1).

The Board has considered the information in the permitting record, including the appeals, the applicant's response to the appeal, and all other information submitted regarding the financial capacity of the applicant. The Board finds that the evidence submitted by the applicant adequately meets the Site Law standard for financial capacity provided that the applicant submits to the Department for review and approval final documentation of financial capacity prior to construction.

B. NOISE:

Appellants Powers Trust and Brian Raynes contend that the Department erred in its conclusion that the noise generated from the proposed project will not have an unreasonable adverse effect on the surrounding environment, based on the following contentions:

A. The sound model used to develop the sound level study for the proposed project was not designed for wind turbines;
B. The sound level study submitted by the applicant failed to use line source calculations;

C. The applicant's sound level study failed to adequately consider short duration repetitive sounds (SDRS) and apply a 5 dBA penalty;
D. The Stetson Wind compliance report which the applicant submitted as additional evidence of the effectiveness of their noise modeling was flawed;
E. The Department failed to consider the health effects of nighttime noise; and,
F. The Department should not have allowed the applicant to rely on noise easements without requiring proof of disclosure of potential health effects.

To assess whether a proposed project has made adequate provision to control excessive environmental noise, the Department has adopted regulations which provide acceptable noise level limits in various settings. Chapter 375 §10 sets forth hourly sound pressure level limits (L_{Aeq-Hr}) at facility property boundaries and at nearby protected locations. Chapter 375 §10 (G) (16) defines protected locations as "any location accessible by foot, on a parcel of land containing a residence or approved subdivision...." In addition to residential parcels, protected locations include but are not limited to schools, state parks, and designated wilderness areas.

The hourly equivalent sound level resulting from routine operation of a development is limited to 75 dBA at any development property boundary as outlined in Chapter 375 § 10 C (1) (a) (i). The hourly equivalent sound level limits at any protected location varies depending on local zoning or surrounding land uses and existing (pre-development) ambient sound levels. At protected locations within commercially or industrially zoned areas, or where the predominant surrounding land use is non-residential, the hourly sound level limits for routine operation are 70 dBA daytime (7:00 a.m. to 7:00 p.m.) and 60 dBA nighttime (7:00 p.m. to 7:00 a.m.). At protected locations within residentially zoned areas or where the predominant surrounding land use is residential, the hourly sound level limits for routine operation are lower, 60 dBA daytime and 50 dBA nighttime. However, where the daytime pre-development ambient hourly sound level is equal to or less than 45 dBA and/or nighttime ambient hourly sound level is equal to or less than 35 dBA, lower limits known as "Quiet Location" limits apply. For such Quiet Locations, the hourly sound level limits for routine operation are 55 dBA daytime and 45 dBA nighttime. In all cases, nighttime limits at a protected location apply at the property line of a protected location or up to 500 feet from sleeping quarters when the property line is greater than 500 feet from a dwelling.

The applicant submitted a sound level study entitled "Sound Level Assessment", completed by its noise expert, Resource Systems Engineering (RSE), dated April 2, 2009. The sound level study was conducted to model expected sound levels from the proposed Oakfield Wind Project and to compare the model results to operational standards pursuant Chapter 375 (10), the Site Law Rules. In recognition of the rural nature of the site, the applicant opted to forgo pre-development monitoring and apply the quiet limits of 55 dBA daytime and 45 dBA nighttime at all nearby protected locations pursuant to Chapter 375 §10 (H) (3) (1).

The applicant's acoustic model was developed using the CADNA/A software program performing calculations in accordance with the generally recognized standard for estimating the propagation of sound in the environment promulgated by the International Standards Organization (ISO) as Chapter 9613-2, *Attenuation of Sound During Propagation Outdoors*. CADNA/A uses three dimensional terrain, proposed wind turbine characteristics, locations, and environmental factors to calculate outdoor sound propagation from the wind turbines. RSE calculated sound levels for simultaneous operation of the General Electric 1.5 wind turbines at 36 potential turbine locations. (While the applicant proposes to erect 34 turbines the plans include two alternate turbine locations.) Calculations were based on the apparent sound power spectrum produced at full sound power provided by the manufacturer. The wind turbines were treated as point sources at the hub height of 80 meters above base/grade. The sound level modeling that was conducted by RSE included the following assumptions: all wind turbines operating at full sound power output, downwind conditions in all directions simultaneously, moderate ground absorption, no attenuation of sound by foliage, and the addition of a 5 dBA uncertainty factor applied to the turbine manufacturer's specifications (uncertainty factor of 2 dBA based on GE Energy specifications and measurement by RSE of similar turbines during full operation, and an additional 3 dBA to allow for the accuracy of the sound level modeling calculations and measurements). The results of the acoustic model were plotted on a plan that shows residential parcels in the vicinity of the project where the most restrictive sound level limits apply in relation to the predicted sound output expected to be generated by the facility.

The results of the applicant's sound level study indicate that sound levels at full sound power production of the Oakfield Wind Project will be in compliance with the 45 dBA hourly equivalent nighttime limit at the closest protected locations, and since the predictions are for less than or equal to 45 dBA at all protected locations at all times, those same results indicate that sound levels will be in compliance with the 55 dBA hourly equivalent daytime limit.

The Department retained the services of a third party noise expert, EnRad Consulting (EnRad), to review the sound level study that was submitted by the applicant and the evidence and arguments submitted by others. In comments dated December 18, 2009, EnRad stated that the Oakfield Wind Project noise assessment is reasonable and technically correct according to standard engineering practices and the Department Regulations pertaining to control of noise, Chapter 375 (10).

The appellants contend that the applicant should have used a line source analysis instead of a point source analysis in its noise assessment. A line source is defined as a source of noise that emanates from a linear geometry and is comprised of multiple point sources. Roadway noise is an example of a linear source of noise. A point source is a single localized source. During the Department's review process, interested parties contracted E-Coustic Solutions, a noise assessment firm, to review the applicant's sound level study. The appellants point to this review in support of their argument. Appellants assert that if

the applicant's sound level study had used line source calculations rather then point source calculations, then the Department's noise limit would be exceeded.

Enrad has reviewed the appellants' arguments and commented that point source analysis is appropriate for a wind energy project such as this. Enrad commented in part that point source models appropriately represent sound pressure levels, tonal, and short duration repetitive sound for the proposed wind turbine project for the purpose of MDEP compliance. The Board has reviewed this argument in the recent Record Hill Wind Project appeal and found that the use of a point source analysis was acceptable in that licensing decision. The Board finds that the applicant's point source analysis is an acceptable method of analyzing potential noise impacts for this project.

The appellants argue that the applicant's sound level study did not account for potential short duration repetitive sounds (SDRS). In a review of the applicant's sound level study by E-Coustic Solutions opines that many current studies of SDRS from wind turbines show that SDRS are commonly in the range of 5-6 dBA and can frequently exceed 10-15 dBA.

Chapter 375 (10) requires a penalty of +5 dBA to be incorporated into a sound level prediction model if SDRS are predicted to occur. SDRS are a sequence of sound events, each clearly discernible, that cause an increase of 6 dBA or more in the sound level observed before and after an event. SDRS events are typically less than 10 seconds in duration and occur more than once within an hour. SDRS is commonly associated with the thumping noise associated with operation of turbine blades. The applicant's analysis of the sound to be generated by the Oakfield Wind Project concluded that operations of the proposed project are not expected to result in the 6 dBA increase required to be SDRS as defined in Chapter 375 §10(G)(19). In its review EnRad concurred with this analysis. The Department is also requiring the applicant to conduct compliance monitoring to ensure that this analysis is accurate.

In the Department's decision, the Department requires the applicant to conduct sound compliance monitoring and requires the applicant to submit a revised operations plan for review and approval if the applicant's post-construction compliance data indicates that the proposed project is not in compliance with Department noise standards. The applicant would be required to consider various mitigation measures capable of achieving compliance with Department noise standards. Among other strategies, the applicant must consider and analyze potential turbine shutdown scenarios to achieve compliance with the terms of the Department permit. The Board finds that the condition in the permit, together with the normal legal requirement that a permit holder comply with the permit issued, will provide an adequate safeguard that the noise level limits are not exceeded.

The appellants argue that the Department failed to consider the health effects of nighttime noise. The appellants point to a Technical Assistance Bulletin published by the Maine State Planning Office in 2000 which states that prolonged noise exposure is a serious threat to human health, especially when resulting in sleep interruption and especially

during the nighttime hours. That Bulletin includes a recommended nighttime residential review standard of 45 dBA, consistent with Chapter 375.

During the Department's review of the applications, interested parties stated concerns that low frequency sound emitted from wind turbines is linked to annoyance, sleep disturbance and other secondary adverse health effects. Low frequency noise is sound that is generally considered to be less than 20 Hz, the normal limit of human hearing. Low frequency noise vibrations are common in our background, particularly in neighborhoods near airports and trains, and they are emitted from many household appliances and vehicles.

The Department requested that the Maine Center for Disease Control (MCDC) review and comment on the evidence submitted by the interested parties concerning potential health effects of the noise generated by the project. In a report titled "Wind Turbine Neuro-Acoustical Issues" dated June, 2009, MCDC reviewed a variety of materials relating to the sound impacts of wind turbines and found no evidence in peer-reviewed medical and public health literature of adverse health effects from the kinds of noise and vibrations produced by wind turbines other than occasional reports of annoyances, and these are mitigated or disappear with proper placement of the turbines in relation to nearby residences. MCDC considered the interested parties' concerns and the evidence submitted and found that these submissions did not alter its opinion on this issue. EnRad also commented that infrasound has been widely accepted to be of no concern below the common human perception threshold for tonal sounds. Enrad noted that numerous national infrasound standards establish acceptable limits for industrial facilities, impact equipment and jet engines, but wind turbine infrasound levels fall below these limits.

Appellants also contend that the Department should not have allowed the applicant to rely on noise easements to exempt certain protected locations from meeting the standards without requiring a disclosure of potential health effects to the property owners granting such easements. Chapter 375(10)(C)(5)(s) exempts from regulation by the Department: sounds "received at a protected location when the generator of the sound has been conveyed a noise easement for that location." The exemption does not require a warning of potential health effects in the applicant's negotiation of noise easements. The easements explicitly state that they are for the purpose of allowing noise from wind turbines to be received on the subject properties. The Board finds that the Department Order appropriately allowed protected locations subject to these noise easements to be exempt from the regulatory noise standards.

And finally, the appellants contend that the Board should declare that Chapter 375, Section 10 is inadequate for permitting wind power projects and that this project should be reviewed without regard to those regulations.

The Board has considered the information contained in the permitting record, evidence admitted during the administrative appeal, the arguments of the appellants, and the licensee's response to the appeal. The Board finds MCDC's and EnRad's analyses to be

credible evidence on the prediction of whether the project will meet the Department's noise standards and on the general issue of whether the project will result in an unreasonable adverse effect on existing uses in the area. The applicant submitted a detailed sound level assessment model which uses the Department's most restrictive sound level limits and which meets standard industrial sound modeling protocols. Results of the applicant's sound level study indicates that the proposed development can be constructed such that it is in compliance with the 45 dBA sound level limit required pursuant to Chapter 375 (10) provided that they measure for potential SDRS that may be present due to excessive amplitude modulation in accordance with the conditions of the Department Order. After weighing evidence submitted by the appellants against the analysis of MCDC and EnRad regarding potential adverse health effects, the Board recognizes that noise emitted from the proposed project has a potential to be heard at an audible level from protected locations and the noise generated by the Oakfield Wind Project may be deemed as an annoyance depending on a person's level of sensitivity. However, after consideration of the evidence submitted by the applicant and appellants on noise and potential health effects, and the analyses of MCDC and EnRad, the Board finds that the applicant has made adequate provisions to ensure that noise standards pursuant to the Site Law Rules, Chapter 375 (10) will be met, that the proposed project will not have an unreasonable adverse health effect in the surrounding environment and protected locations, and that the project will not have an unreasonable adverse effect on the natural environment and existing uses.

C. SCENIC CHARACTER:

Appellants Powers Trust and Brian Raynes contend that the visual impact assessment submitted by the applicant relating to Pleasant Lake, which lies to the south of the southern end of the project, is inaccurate, inconsistent, does not fairly depict the extent of the visual impact of the project on Pleasant Lake, and does not provide adequate information to properly evaluate the visual impact. Appellants have emphasized the scenic characteristics of Pleasant Lake and the importance of protecting that scenic character. The appellants have criticized the applicant's visual simulations and offered their own visual simulation.

Subsequent to the submission of the application, it was discovered by the applicant that the portion of Pleasant Lake which lies within T4R3 WELS is listed in the "Maine Wildlands Lakes Assessment" as having significant scenic resources. "Significant" is the second potential scenic rating in the Wildland Lakes Assessment, below "outstanding" and above those lakes that are unrated for scenic resources. The applicant did not address this listing in the original application due to the fact that the copy of this list which was posted on the State's Wind Power Task Force website, and on which the applicant relied, was missing three pages. Pleasant Lake was listed on one of these missing pages. The applicant submitted an Addendum, Visual Assessment of the Proposed Oakfield Wind Project, prepared by LandWorks and dated June 30, 2009, to address this oversight. The western portion of Pleasant Lake is in the organized town of Island Falls and is not listed on the "Maine's Finest Lakes" report.

Title 35-A § 3452 (1) in pertinent part provides that:

> In making findings regarding the effect of an expedited wind energy development on scenic character and existing uses related to scenic character pursuant to…(the Site Law or the Natural Resources Protection Act), the primary siting authority shall determine, in a manner provided in subsection 3, whether the development significantly compromises views from a scenic resource of state or national significance. Except as otherwise provided in subsection 2, determination that a wind energy development fits harmoniously into the existing natural environment in terms of potential effects on scenic character and existing uses related to scenic character is not required for approval under…(the Site Law).

Title 35-A § 3452 (3) provides that:

> In making its determination pursuant to subsection 1, and in determining whether an applicant for an expedited wind energy development must provide a visual impact assessment in accordance with subsection 4, the Department shall consider:
>
> (A) The significance of the potentially affected scenic resource of state or national significance;
> (B) The existing character of the surrounding area;
> (C) The expectations of the typical viewer;
> (D) The expedited wind energy development's purpose and the context of the proposed activity;
> (E) The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and
> (F) The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape.
>
> A finding by the Department that the development's generating facilities are a highly visible feature in the landscape is not a solely sufficient basis for determination that an expedited wind energy project has an unreasonable adverse effect on the scenic character and existing uses related to scenic character of a scenic resource of state or national significance. In making its determination under subsection 1, the primary siting authority shall consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.

The proposed Oakfield Wind Project is a "grid scale wind energy development" as defined by 35-A M.R.S.A. § 3451 (6) and it is proposed for an expedited permitting area as defined by 35-A M.R.S.A. § 3451 (3). Therefore, the proposed Oakfield Wind Project

and its associated facilities must be reviewed pursuant to the expedited wind energy development standards outlined above and, to the extent applicable, 38 M.R.S.A. § 484 (3).

The applicant's June 30 Addendum to its Visual Impact Assessment characterized Pleasant Lake as follows:

> "Pleasant Lake is developed at the westerly end of the lake and primarily undeveloped in that portion of the lake which falls within T4R3 WELS. Low hills and ridges surround the lake, and the shoreline is wooded and has a landscape character typical of many similar lakes in this region of Maine. There are no identified state lands, parks or publicly conserved properties on Pleasant Lake and there is one public boat launch on the most westerly cove of the Lake, in Island Falls. Camps line the north and south shores in Island Falls, the portion of the lake in T4R3 WELS has one camp area on the north shore. There are a number of jeep trails, wood roads and logging areas around the perimeter of the lake."

The June 30 Addendum described views from the western end of the lake, in the vicinity of the public boat launch, as follows:

> "Limited views of 4 turbines may be possible above the treeline from the boat launch on the western edge of the lake, with the closest turbine, S17, being about 3.1 miles from the boat launch. The views of turbines S16 and S17 will be primarily of a portion of the turbines from the nacelles and above, and the views of turbines S13 and S14 will include a portion of the towers below the nacelles. It is possible that the very tip of a rotor of a fifth turbine, S15, may also be visible, but will be hard to discern given the distance and foreground vegetation. None of the associated project facilities are visible from any portion of the lake."

The June 30 Addendum goes on to assess the impacts of the project on views from the lake as follows:

> "Boaters will be able to see portions of the Oakfield Wind Project as it has been proposed, and the visibility will most likely be of 5 of the closest turbines, 1-1/2 to 2 miles distant depending on the vantage point. The turbines appear in a compact group and will only be visible over one small section of the shoreline (see Exhibit 1: Visual Simulation from Pleasant Lake). Thus, this will de-emphasize their presence and the turbines will not appear dominant nor will they compromise the experience of the lake to a substantial degree. There will remain many areas on the lake where those who wish to fish or boat out of sight of the turbines, or with a different orientation, may do so. Boaters and those fishing from boats can choose locations where, if they do not want to experience the turbines, they will not be visible, particularly along most of the north shore. They can anchor in particular locations where the orientation is away from the project.

In fact, given the east-west orientation of the lake, the eye is drawn in these two directions, and from the eastern end there appears to be a long distance view of Mt. Chase, which draws the eye and the viewer's attention. The large cove in the far northeastern portion of the lake will remain secluded and without any visibility of the project. As with Mattawamkeag Lake, the visibility of the turbines will be subject to atmospheric conditions."

The applicant's assessment also addresses project aesthetics and viewer expectations and concludes that the proposed project will not significantly compromise the views from Pleasant Lake.

The Board has considered the information contained in the permitting record, the arguments of the appellants, and the licensee's response to the appeal. The appellants have not disputed the fact that camps line the shores of the western end of Pleasant Lake, nor have they disputed the fact that views of the project from Pleasant Lake will be at a distance of from 1.5 to 2 miles. Moreover, the appellants have not disputed the fact that Pleasant Lake is classified as "significant" for scenic character in the Maine Wildlands Lakes Assessment and is not classified as "outstanding." In reviewing the criteria of 35-A § 3452 (3) as quoted above, the Board finds that these facts are important in determining if the proposed project significantly compromises views from a scenic resource of state or national significance. Specifically:

(A) Significance of the scenic resource: The Board finds that the fact that the eastern portion of Pleasant Lake did not achieve the highest rating of "Outstanding" and the western portion is not listed on the "Maine's Finest Lakes" reflects a lower significance than if it had achieved "Outstanding" or been placed on the Finest Lakes list.

(B) Character of the surrounding area: The Board finds that the developed nature of the western end of the lake is an important factor in the consideration of the character of the surrounding area.

(C) Expectations of the typical viewer: The Board finds that the developed nature of the western end of the lake also reduces the reasonable expectations of the typical viewer from the lake as a whole.

(D) The development's purpose and context: The Board finds that the turbines are central to the purpose of the project and the context has been adequately addressed by the applicant.

(E) The use and enjoyment of the scenic resource: The Board finds that the factors discussed above, as well as the directive of the law that the fact the wind turbines may become a "highly visible feature in the landscape" is not a solely sufficient basis for rejecting a project, argue against finding the potential impacts of this project unreasonable. The Board finds the applicant has adequately addressed this issue.

(F) The scope and scale of the potential effect: Again, considering the factors above and the evidence before it, the Board finds that the scope and scale of the potential effects are not unreasonable.

After weighing the evidence and reviewing the photo simulations provided by the applicant and the appellants, the Board finds that the applicant's visual assessments provide an adequate basis on which to determine compliance with the relevant standards

under the Wind Energy Act and finds that the project will not significantly compromise views from a scenic resource of state or national significance. The Board further finds the views of the Oakfield Wind Project from Pleasant Lake will not have an unreasonable adverse effect on the scenic character or existing uses related to scenic character of Pleasant Lake or other scenic resources of state or national significance.

D. DECOMMISSIONING:

Appellants Powers Trust and Brian Raynes contend that the Department Order should be reversed because it fails to require the decommissioning fund for the project to be fully funded prior to the operation of the wind energy facility. The appellants also object to the deduction for scrap value in estimated decommissioning costs. Further, the appellants contend that the applicant's financial condition is precarious raising the possibility that the applicant might fail financially before the first reassessment of salvage value.

Pursuant to 2007 Public Law, Chapter 661, Part B § Section B-13 (6), an applicant for a wind energy development is required to submit a decommissioning plan that includes a demonstration of current and future financial capacity that would be unaffected by the applicant's future financial condition to fully fund any necessary decommissioning costs commensurate with the project's scale, location and other relevant considerations, including, but not limited to, those associated with site restoration and turbine removal.

The Site Law permit application form requests that applicants provide a demonstration that, upon the end of the useful life of the facility, the applicant will have financial assurance in place for 100% of the total cost of decommissioning, less salvage value. At the time of the filing of this application, the Site Law permit application form stated that an applicant could propose securing financial assurance in phases, provided that complete financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the equipment.

The applicant submitted documentation that states that the General Electric 1.5 turbines proposed for the Oakfield Wind Project are certified as having at least 20 years of expected operating life.

The applicant submitted a decommissioning plan which proposed that, on or prior to December 31 of each calendar year for years 1-7 commencing with project construction activities, an amount equal to $50,000 would be reserved in the form of a performance bond, surety bond, letter of credit, parental guaranty or other acceptable form of financial assurance, to a Decommissioning Fund. On or prior to December 31 of year 15 of the project's operation, the estimated cost of decommissioning, minus salvage value, would be reassessed and an amount equal to the balance of such updated estimated cost of decommissioning, less salvage value and less the amounts reserved in years 1-7, would be reserved for decommissioning and site restoration. The applicant's plan provided that financial assurance would be kept in place until such time as the decommissioning work

has been completed, but that to the extent available as liquid funds, the financial assurance could be used to offset the costs of the decommissioning.

The Department Order partially adopted the applicant's proposal, however it went beyond that proposal and required that the applicant reassess salvage value and overall decommissioning costs in year 7 as well as in year 15, and continue to make annual contributions to the decommissioning reserve in years 8-15 of operation in an amount commensurate with fully funding the decommissioning reserve by the end of year 15. If the decommissioning reserve shows a shortfall at the end of year 15 of operation based on revised estimates of salvage value and overall decommissioning costs, the applicant is required to make a lump sum payment in the amount of the shortfall to fully fund the decommissioning reserve by December 31 of year 15. These requirements were imposed as special condition 19 of the Department Order.

After considering the appellants arguments in this appeal, and the language the Legislature used in its direction to the Department on this issue in the Wind Power Act, the Board finds that the requirements for decommissioning funding contained in the Department Order are sufficient to provide financial assurance for decommissioning in accordance with the law. The Board has discussed the financial capacity of the applicant in section 7.A. above and found it sufficient to undertake this project subject to the condition in the Department Order as discussed. The Board further finds that the condition imposed by the Department Order provide a reasonable mechanism for reassessing salvage values as the end of the life of the project approaches and adjusting the reserve fund should salvage value expectations change.

8. OTHER CONSIDERATIONS:

All three appellants contend that the proposed wind energy development will have an unreasonable adverse impact on the value of their property. None of the applicable laws require that an applicant make a demonstration with regard to potential impacts of a proposed project on property values. The Board finds that the applicant is not required to demonstrate that its proposed project will have no impact on property values in order to receive approval.

Based on the above findings, the Board concludes that:

1. The appellants filed a timely appeal.

2. The Board denies the request for a public hearing for this appeal.

3. The applicant's proposal to construct a 51 MW wind energy development, known as the Oakfield Wind Project, in the Town of Oakfield meets the criteria for a permit pursuant to the Site Location of Development Act, 38 M.R.S.A. § 484, the Natural Resources Protection Act, 38 M.R.S.A §480-D, and the Wind Energy Act, 35-A M.R.S.A. §§ 3452-3455.

THEREFORE, the Board AFFIRMS the Department's approval of the permit applications filed by EVERGREEN WIND POWER II, LLC to construct a 51 MW wind energy development, known as the Oakfield Wind Project, in the Town of Oakfield, Maine, pursuant to Department Order #L-24572-24-A-N/L-24572-TF-B-N.

The Board DENIES the appeals of the Martha A Powers Trust, Brian Raynes, and Daniel Koerschner.

DONE AND DATED AT AUGUSTA, MAINE, THIS_____ DAY OF _____, 2010.

BOARD OF ENVIRONMENTAL PROTECTION

By: _____
Susan M. Lessard, Chair