

| Inland Fisheries and Wildlife Division Comments | |
|---|--------------------------------|
| Regions F&G | |
| Applicant's Name: Evergreen Windpower II, LLC | |
| Project #: L-24572-24-E-A | Regulatory Agency: MDEP |
| Project Type: Windpower Facility | Project Manager: Jessica Damon |
| Comments Due Date: 11/15/2011 | Date Comments Sent: 11/15/11 |
| Project Location | |
| Town: Oakfield, T4R3 WELS | County: Aroostook |
| Waterbody: | |
| Wildlife and Fisheries Biologist(s): Beth Swartz, John DePue, Charlie Todd, Mark Caron, Rich Hoppé, Tom Hodgman, Steve Walker | |

The following is a synthesis of input received from MDIF&W biologists in response to Stantec's memo of October 21, 2011 regarding MDIF&W recommendations for the proposed Oakfield Wind Project. MDIF&W responses follow the numbered heading scheme included with Stantec's memo.

II. Comment: Vernal Pools (page 1): The applicant has confirmed our assessment and there are no remaining questions or concerns.

III. Comment: River Crossings (page 2): As noted in our comments of August 18, 2011, MDIFW has identified six proposed transmission line crossings where state-listed aquatic species have been documented above and/or below the crossings and recommends the applicant follow crossing standards as outlined in DEP's draft *Minimum Performance Standards for Electric Utility Line Corridors* (http://www.maine.gov/dep/blwq/topic/site_storm_revisions/site_rules/fourth_informal_draft/APPENDIX_A_2_cl.pdf) for streams containing Threatened or Endangered Species. Specifically, these recommendations include but are not limited to: maintain a 100 foot natural riparian buffer on both sides of the stream, avoid placement of structures within the riparian buffer, and no application of herbicides within 25 feet of the stream. These are also consistent with performance standards recommended and implemented for other recent ROW projects in order to avoid/minimize take and harassment of state-listed species, thus precluding the need for additional mitigation actions (e.g., Maine Power Reliability Program's Vegetation Management Practices, October 2009).

Stantec has since clarified that - with the exception of Macwahoc Stream - similar or stricter crossing standards are already proposed for each of these waterbodies in order to accommodate other natural resource concerns (e.g., Atlantic Salmon, deer travel corridors). Consequently, as currently proposed, crossings at the Penobscot River, East and West Branch Mattawamkeag River, Wytovitlock Stream, and Molunkus Stream will simultaneously satisfy our concerns for any state-listed aquatic invertebrates which may be present at these sites. However, the crossing at Macwahoc Stream remains classified under the project's general "Standard Stream" performance standards - i.e., 25 foot buffer (no clearing/no

structures) and limited clearing with structures within 25-100 feet of the stream. Given documentation of a state-threatened freshwater mussel (brook floater) and insect (Tomah mayfly) upstream of the crossing, and records of the brook floater lower in the watershed, MDIFW recommends Macwahoc Stream either receive DEP's minimum performance standards referenced above or crossing standards similar to what the applicant currently proposes for Atlantic Salmon habitats (i.e., 100 foot natural buffer with limited removal of capable vegetation, no structure placement, and no herbicide use). Should the applicant demonstrate that project constraints prevent application of more restrictive buffer standards at this site, MDIFW recommends a permit approval incorporate mitigation measures to address potential impact to the above referenced state-listed aquatic species.

IV. Comment: Rare Animal Form (page 2): wood turtle RAF received by MDIFW; thank you. IFW would still appreciate a MARAP card (see attached) be submitted for the Maritimes Garter Snake observed during 2008 wetland delineations.

V. Comment: Mitigation and Compensation (page 2): MDIFW reiterates its comment that the four potential vernal pools identified by the applicant on the 2,100 acre mitigation parcel should not be considered as compensation for any lost vernal pool values without field verification of both status and level of biological significance. [This comment was not addressed by the applicant.]

VII Comment: Recommendations to Reduce Bat Mortality:

In order to minimize risk of mortality to bats MDIFW stands by its recommendation that operational control measures be established for the Evergreen Wind Power Project in Oakfield/T4 R3 WELS. These measures should be employed from April 20th through October 15th, such that the applicant set the turbine cut-in speed to 5.0 m/s starting at one-half hour before sunset to one-half hour after sunrise. During this time frame when the wind speed is less than the 5.0 m/s threshold, turbine blades are not allowed to rotate thus reducing risk of fatality for bats. If at any point during this time period the wind speed increases to > 5.0 m/s the turbine blades are free to rotate. These curtailment measures are intended to be in place from day one of operation for the life of the project. MDIFW would consider not requiring post-construction bat mortality studies with the curtailment recommendations in place.

However, if the applicant agrees to develop a bat mortality study in consultation with MDIFW, BCI, and the Bat and Wind Energy Cooperative, then appropriate revisions to MDIF&W curtailment recommendations could be entertained. Using this approach, a detailed study design, which will follow a similar study for a wind energy project that is currently under construction in Sheffield, VT, will be submitted to LURC staff for review and approval prior to commencing turbine operation. Annual reports of the bat study results for the first two years will be submitted to LURC, MDIFW, and BCI for review. Without such a mutually

agreed to study design in place, MDIF&W cannot agree to changes in curtailment procedures as outlined above.

VIII. Comment: Turbine Pad Design and Post Construction Surveys:

- After further internal discussion, MDIFW concurs with the Applicant that turbine pad areas need to be re-vegetated as quickly as possible.
- MDIFW requests that the Applicant use a correction factor to be applied to each year of post-construction surveys based on the amount of vegetation cover. These are year-specific, site-specific correction factors that are sensitive to the variance in vegetation growth by year.
- Final methodology will be developed based on further discussion with the Applicant and MDIFW will not approve the permit until it is satisfied with the searcher methodology and statistical calculations used to quantify results.
- Assuming an April 20 to October 15 search window, MDIF&W is satisfied with searches taking place weekly from April 20 to May 31 and recommends that searches be daily from June 1 through September 30, with a return to a weekly schedule from October 1 through October 15

X. Comment: Vernal Pools (page 7): The applicant has clarified specifics for each of three turbine string SVPs that will be impacted and IFW has no remaining questions or concerns regarding these pools. To expedite review of future applications and eliminate the uncertainty and confusion caused by lack or complexity of information, IFW will request applicants provide a table documenting the specifics for each SVP/PVP – regardless of proposed percent impact - prior to beginning our review. The table, at a minimum, should include calculations for existing and proposed percent clearing/impacts, including all permanent, non-forested project footprints. The footprint of all existing forest management roads that are proposed for permanent use to access and maintain the industrial wind facility should be included in calculations of percent post-construction impacts. Use of such roads to access development infrastructure is not a forestry land use and thus is no longer eligible for forest management exemption under Chapter 335 of NRPA.

In regards to Stantec's response about our concerns for potential impacts to SVPs or other resources outside the project boundary but within 250 feet, MDIFW reminds the applicant of the scope of review outlined in Site Location Law's "No Adverse Environmental Effect Standard": "In determining whether a proposed development will have an adverse effect on the preservation of unusual natural areas **either on or near** the development site, the Board shall consider all relevant evidence to that effect (Chapter 375, Section 12c, Preservation of Unusual Natural Areas). Following a meeting earlier this spring regarding Oakfield vernal pools, MDIFW and Dale Knapp worked jointly to address Stantec's concerns about added survey burden and came to the following consensus:

- 1) For transmission line corridors where landowner permission to survey is only available for the 150 foot ROW swath, the applicant is only required to submit data for pools within the project footprint. It is encouraged that "off site" buffer area surveys be conducted as well (i.e., out to 250 feet from the ROW boundary) but DEP and IFW cannot require this on properties where landowner permission is not obtained.
- 2) For development sites, rather than adding a 250 survey buffer to an entire project boundary, a viable alternative would be to either a) ensure that all proposed project impacts are >250 feet from the project boundary; or b) assume worst case scenario (e. g., SVP depression just outside project boundary) and adjust impacts within 250 feet to be equal to or less than 25% of the critical terrestrial habitat zone; and c) when neither is possible, conduct targeted surveys of those sites to either clear the areas of any concerns or identify any potentially significant resources that may be present. [Where appropriate, this same strategy should apply to Roaring Brook Mayfly or other resources with a recommended 250 foot riparian buffer.]

Information and survey results for these types of situations should somehow be conveyed in the application materials so that IFW will not have cause to question whether potential resources outside the project boundary were addressed.

Special Considerations:

- The above conditions for bats do not relieve the applicant of any liability for take should one or more species of bats be listed as Endangered or Threatened by either federal or state wildlife agencies. An Incidental Take Plan may be advised by agencies.
- MDIFW has reviewed the preliminary risk assessment for take of bald eagles by the Oakfield windpower project and served as technical advisor for potential research and mitigation considerations. The U.S. Fish and Wildlife Service (a federal agency) has sole authority for take evaluations under the Bald Eagle – Golden Eagle Protection Act, review of the suggested Eagle Conservation Plan, and approval of an Adaptive Management Plan for windpower facilities. These are the now the primary legal standards for bald eagles.

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The Maine Department of Inland Fisheries and Wildlife (MDIFW) submits the following comments regarding the appeal of the Maine Department of Protection Order for Oakfield Wind Project Expansion by Protect our Lakes and Donna Davidge as received February 16, 2012 by our office.

Wildlife

A. Post-construction Monitoring of Bat Mortality:

Our recommendation that Evergreen Windpower II, LLC develop a bat mortality study in consultation with MDIFW, BCI, and the Bat and Wind Energy Cooperative, was offered because Evergreen Windpower II, LLC questioned the efficacy of curtailment in Maine and proposed to significantly deviate from MDIF&W's curtailment recommendation. Evergreen Windpower II, LLC has agreed to seasonal curtailment procedures for the life of the project and as such has satisfied MDIF&W concerns regarding bat mortality. As supported by the scientific literature, the curtailment mitigation procedures recommended by MDIF&W and agreed upon by Evergreen Windpower II, LLC, should significantly reduce bat mortalities at the project site and uses the best available science to protect bat species. The intention of the bat mortality study proposed for the Bull Hill Wind Project is to test different curtailment protocols on bat mortality in Maine. An intensive mortality study is not necessary at the Oakfield Wind Project because curtailment measures are in place that will significantly reduce bat mortalities at the project.

B. Eagle Mortality:

The Site Location of Development Permit administered by Maine DEP uses a standard of "no significant adverse impact" for most resource concerns. There is no related prohibition for incidental take of wildlife unless such deaths / injuries affect species listed as Endangered or Threatened under state or federal law. Worst-case scenario models for potential take of bald eagles (offered by the applicant and reviewed by both wildlife agencies = MDIFW & USFWS) is not at a level that can be construed as a significant adverse impact given that > 2,000 bald eagles are present in Maine. Therefore, the only legal consideration for a potential take of bald eagles is

under the authority of the U.S. Bald Eagle – Golden Eagle Protection Act, a federal law for which MDIFW has no authority to implement or enforce prohibitions. USFWS has sole authority for that statute and related policies.

MDIFW does review “Site Law” permits for potential impacts to bald eagle nests. However, the ¼-mile (= 1320 foot) radius is the limit of concern applied for such reviews. This is the review policy applied throughout 35 years of bald eagle management in Maine. The ¼-mile radius was the legal standard for bald eagle nests mapped as Essential Habitat under the Maine Endangered Species Act from 1990 to 2009. Installation of turbines as close as ~ 1 mile from the bald eagle nest in Oakfield (site # 344B) do not intersect with the ¼-mile review policy for bald eagle nests that MDIFW conducts for Site Law permits. Again, the only potential legal standards applicable to a concern for development > ¼-mile distant from a bald eagle nest lie with the federal law (Bald Eagle – Golden Eagle Protection Act) administered by USFWS. MDIFW makes no inferences about the applicability of those prohibitions and policies, but encourages concerned parties to consult USFWS.

Wetland Impacts

Vernal Pools as Compensation:

MDIFW has no additional or revised comments from those provided previously to MDEP on this matter.