

## William Cundiff

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**From:** Robert Anders [lhanders3@aol.com]  
**Sent:** Friday, February 18, 2011 5:57 PM  
**To:** WCundiff@DouglasMa.org  
**Cc:** SZisk@douglasma.org; Mlajoie@douglasma.org  
**Subject:** Fwd: Douglas Woods MEPA Letter from Bowles 29Oct10  
**Attachments:** MEPA Douglas Woods Need for Full EIR BOWLES 29Oct10.pdf; ATT00133.htm

Begin forwarded message:

**From:** Kurt Tramosch <ktramp03@yahoo.com>  
**Date:** February 18, 2011 2:02:28 PM EST  
**To:** Chad Pepin <chad.pepin@gmail.com>  
**Cc:** Bob Anders <lhanders3@aol.com>  
**Subject:** Douglas Woods MEPA Letter from Bowles 29Oct10  
**Return-Path:** <ktramp03@yahoo.com>  
**Received:** from mtain-dc01.r1000.mx.aol.com (mtain-dc01.r1000.mx.aol.com [172.29.64.129]) by air-ma04.mail.aol.com (v129.4) with ESMTPT id MAILINMA044-b5234d5ec246286; Fri, 18 Feb 2011 14:02:30 -0500  
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**Received:** (qmail 58489 invoked by uid 60001); 18 Feb 2011 19:02:28 -0000  
**Received:** from [65.96.131.227] by web39324.mail.mud.yahoo.com via HTTP; Fri, 18 Feb 2011 11:02:28 PST  
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Chad -

Here is the letter from Sec. Bowles to Ame Pro Wind requiring a full EIR report on Douglas Woods. I'm surprised that it isn't posted on the Town's Douglas Wind Farm Reports webpage...especially since a week earlier there is a letter from NHESP addressing MEPA process.

That must be where APW panicked since that Oct 25th meeting was cancelled.

k





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October 29, 2010

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Douglas Woods Wind Farm  
PROJECT MUNICIPALITY : Douglas and Webster  
PROJECT WATERSHED : Blackstone River  
EEA NUMBER : 14647  
PROJECT PROPONENT : American Pro Wind, LLC  
DATE NOTICED IN MONITOR : September 22, 2010

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR). In accordance with Section 11.05(7) of the MEPA regulations, the Proponent has submitted an Expanded Environmental Notification Form (ENF) with a request that I grant a Waiver of the requirement to prepare an EIR or, alternatively, allow the Proponent to fulfill its EIR obligations under MEPA with a Single EIR. Based upon a review of the ENF and the comments received, I find that an EIR is required to ensure adequate evaluation of alternatives that can further avoid, minimize and mitigate project impacts, including impacts associated with land alteration, and impacts to state parkland and abutters. The Proponent must prepare a Draft and Final EIR.

The proposed Douglas Woods Wind Farm has the potential to generate 25 megawatts (MW) of clean, renewable energy and will support the Commonwealth's goal to develop 2,000 MW of wind energy by 2020. The Executive Office of Energy and Environmental Affairs (EEA) supports the development of wind power as a sustainable means to meet existing and

future energy needs, to create jobs and as part of the Commonwealth's efforts to position Massachusetts as a leader in the renewable energy field. However, environmental impact review of wind facilities requires that each site and project be carefully analyzed to ensure that the project will avoid, and where avoidance is not possible, minimize and mitigate potential environmental impacts. The selection of this particular site for wind development could result in a wind project with minimal environmental impacts; however, the location of many of the turbines in close proximity to residences and state parkland presents concerns which are reflected in comment letters received on the project from local residents, the Town of Webster, and the local Legislative delegation. These include concerns about potential impacts to Douglas State Forest, rare species, water quality, and quality of life issues, such as noise. I encourage the Proponent to carefully consider the comments provided on this project and to develop a Draft EIR that is supported by a well-reasoned alternatives analysis and responsive to the substantive issues and concerns expressed in the many comment letters.

### Project Description

As described in the Expanded ENF, the project consists of the construction of a commercial scale wind energy facility on a 298-acre site in Douglas. The Expanded ENF indicates that the project will include 11 wind turbines with a nameplate capacity of 2.5 MW. Three rotating 50-meter wind blades will be affixed to the top of 100-meter towers. The maximum height of each turbine will be 495 feet (from ground level to tip of blade). The facility will have the capacity to generate up to 27.5 MW and to produce between 61 and 65 million kilowatt (KW) hours of electricity per year. The electricity produced by the project will be placed in the regional electrical grid for sale, purchase and use by others. The project will include a 4,800 square foot (sf) operations and maintenance building (O&M), a switchyard and 3.2 miles of underground electric cable lines (or lines buried in berms where ledge exists) to connecting the turbines to the switchyard. Access to the site is proposed via Webster Street (Route 16). The main access drive will intersect with Old Douglas Road. Interior access will consist of approximately 17,000 linear feet (lf) of gravel access roadways. During construction, the project requires 34-foot wide roadways to accommodate clearances for the construction crane and turbines. Upon project completion, gravel and crushed stone roadways will be maintained at a width of 18 feet and the remainder of the disturbed area, as well as crane construction areas, will be re-vegetated.

Associated off-site infrastructure is proposed in Webster. It will include 3.5 miles of new 34.5 kilovolt (kV) overhead transmission line from the project site to the National Grid East Webster substation located off Worcester Road. The work will be conducted by National Grid and is proposed in existing public roads and utility rights-of-way (ROW). The East Webster Substation will be upgraded and equipped to receive the 34.5 kV line. In addition, the project will identify transportation routes that can provide clearances necessary for the crane and turbine deliveries and the project may include roadway improvements to address constrictions.

### Project Site

The project site is predominantly undeveloped forest land. It includes several wetland resources areas located in the lower elevations of the site. The site includes rock outcrops and

ledge, depth to bedrock is shallow and it contains minimal topsoil. The Town of Webster and existing residences are located along 5,000 linear feet of the project's western boundary. The remainder of the site is adjacent the Douglas State Forest, which is managed by the Department of Conservation and Recreation (DCR). The site has been designated as a Chapter 43D Priority Development Site for the Town of Douglas. A 60 meter meteorological tower was erected at the site to collect wind data. The Expanded ENF describes the site as providing a marginal wind resource and projects that the average wind speed at 100 meters height is 6.8 meters/second. Approximately 21 acres of land were altered prior to the MEPA filing to construct access roads and install the meteorological tower.

### Jurisdiction and Permitting

The project is undergoing MEPA review and is subject to preparation of a mandatory Environmental Impact Report (EIR) pursuant to 301 CMR 11.03 (1)(a)(1) because it includes state funding and consists of alteration of 50 or more acres of land. The project requires a Heavy Load Permit from the Massachusetts Department of Transportation (MassDOT) and Section 72 Approval – Public Convenience and Necessity from the Department of Public Utilities (DPU). Off-site work associated with preparation of one of the transportation route alternatives may require review and approval by MassDOT. In addition, it requires a Request for Airspace Review from the MassDOT Aeronautics Division. The project will require a National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities from the United States Environmental Protection Agency (EPA) and a Determination of No Hazard from the Federal Aviation Administration (FAA). MassDOT and FAA have issued Determinations of No Hazard.

The project requires an Order of Conditions from the Douglas Conservation Commission and the Webster Conservation Commission (and a Superseding Order of Conditions in the event a local Order is appealed). In addition, it requires height and use variances from the Douglas Zoning Board of Appeals (ZBA) and Site Plan Review by the Douglas Planning Board. The height and use variances were issued on May 13, 2009.

The project has received state funding. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations. In this case, potential impacts include greenhouse gas emissions (GHG), land alteration, wetlands, drainage, noise, visual impacts, transportation, archaeological resources and construction period impacts.

### Environmental Impacts

Potential environmental impacts are associated with the construction of the facility, the transport of construction materials including the turbines, and off-site infrastructure work. The project will alter up to 75 acres of land, create 0.2 acres of impervious surfaces, include work within the buffer zone to wetlands and construction related traffic impacts.

The Expanded ENF indicates that measures to avoid, minimize and mitigate environmental impacts include: siting of the turbines to provide adequate setbacks from the

property line and residences; development of a shadow flicker mitigation plan; identification of appropriate transportation routes for delivery of crane and turbine equipment; avoidance of direct wetland impacts and development of a stormwater management system.

### Waiver and Single EIR Request

The MEPA regulations at 301 CMR 11.11(1) state that I may waive any provision or requirement in 301 CMR 11.00 not specifically required by MEPA and may impose appropriate and relevant conditions or restrictions, provided that I find that strict compliance with the provision or requirement would:

- (a) result in an undue hardship for the Proponent, unless based on delay in compliance by the Proponent; and
- (b) not serve to avoid or minimize Damage to the Environment.

In addition, the MEPA regulations at 301 CMR 11.11(3) state that, in the case of a waiver of a mandatory EIR review threshold, I shall at a minimum base the finding required in accordance with 301 CMR 11.11(1)(b) stated above on a determination that:

- (a) the project is likely to cause no Damage to the Environment; and
- (b) ample and unconstrained infrastructure facilities and services exist to support the project, when subject matter jurisdiction is broad in scope, or those aspects of the project within subject matter jurisdiction, when jurisdiction is limited to the subject matter of state agency permits.

The Expanded ENF indicates that the requirement to file an EIR will constitute an undue hardship because it will result in the delayed implementation of a renewable energy source and will prevent the project from starting construction prior to December 31, 2010, a criteria for qualifying for funds from the American Recovery and Reinvestment Act (ARRA). It indicates that the preparation of an EIR will not serve to minimize Damage to the Environment because project impacts are limited to tree clearing and access road construction and all impacts are disclosed in the Expanded ENF.

The MEPA regulations indicate that I may allow a Single EIR provided that I find that the expanded ENF:

- describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed
- demonstrates that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

Based on a review of the Expanded ENF, consultation with state agencies and a review of comment letters, the Proponent shall prepare and submit for review a Draft and Final EIR. I do not find that the requirement to file an EIR will result in an undue hardship. Although the

Proponent was aware that MEPA review was required and participated in a pre-filing meeting with MEPA in January 2009, the Expanded ENF does not indicate why the project and permitting schedule did not include adequate time for MEPA review or provide any justification for the delay in filing.

In addition, the Expanded ENF does not include the most critical piece of the MEPA process - an alternatives analysis - without which a project cannot demonstrate that the planning and design of the project incorporates all feasible means to avoid potential impacts. The Expanded ENF indicates that alternative sites and layouts were considered, but it does not identify, describe or analyze any alternatives and associated environmental impacts. Without an alternatives analysis for this project, which will alter up to 75 acres of land surrounded by the Douglas State Forest and containing many wetland resource areas, I do not agree that preparation of an EIR would not serve to minimize Damage to the Environment or that the Expanded ENF meets the criteria for a Single EIR. A thorough analysis of project alternatives is likely to identify changes to the project and proposed mitigation that can significantly reduce land alteration, potential impacts to state parkland and impacts that the Town of Webster and residents of Webster have identified as significant concerns.

The Proponent shall prepare a Draft EIR in accordance with the Scope included below. I acknowledge that the Expanded ENF provides a significant amount of useful information and analysis including a detailed project description, analysis of the project's impacts and identification of mitigation for project impacts. For this reason, the Scope will not require reiteration of all of the information in the Expanded ENF.

## SCOPE

### General.

The Draft Environmental Impact Report (DEIR) should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope.

### Project Description and Permitting

The Draft EIR should identify all state permits and approvals required for the project (including off-site infrastructure), describe any changes to the project since the filing of the Expanded ENF and provide an updated description of how the project will meet regulatory standards and requirements. In addition, the Draft EIR should indicate if the project will be constructed in phases and, if so, identify the phasing for all elements of the project. The Draft EIR should include existing and proposed condition plans at a reasonable scale including grading, wetland resources, vernal pools, water supplies and associated buffer zones and proximity to abutters.

The Draft EIR should identify and quantify impacts associated with all aspects of the project including proposed infrastructure improvements in Webster and roadway improvements along the proposed delivery routes. It should depict maximum anticipated impacts associated with turbine delivery, including land clearing, sign removal/relocation, alterations to curbs and

temporary grading. It should identify whether changes will be temporary or permanent in nature and identify restoration plans, where appropriate.

### Greenhouse Gas Emissions

This project is subject to the MEPA Greenhouse Gas Policy and Protocol (the Policy) because it requires an EIR. The Policy requires projects to quantify carbon dioxide (CO<sub>2</sub>) emissions and identify measures to avoid, minimize or mitigate such emissions. The Policy includes a de minimis exemption which indicates that some projects that require an EIR will have little or no GHG emissions, and that the Policy shall not be applied to such projects. The Expanded ENF asserts that the project's GHG emissions are negligible and the Policy should not be applied to this project. Comments from MassDEP support this assertion. The project will generate clean, renewable energy that will offset, to an overwhelming degree, any GHG impacts associated with its operation. Therefore, I agree that this project falls within the Policy's de minimis exemption.

### Alternatives Analysis

The Expanded ENF indicates that numerous alternative sites and alternative site layouts were considered for the project. The proposed site was selected based on electrical demand, size and location of the upland areas, reasonable acquisition cost, adequate wind resource, community support and minimal potential environmental impacts. The Draft EIR should include analysis of alternatives that, first, can avoid and minimize project impacts, and, for those impacts that cannot be avoided, provide adequate mitigation. The analysis should emphasize reduction of land alteration, work within the buffer zone to wetlands and avoidance of noise and shadow flicker impacts on abutters. It should include an alternative that reduces the size of the project to eliminate impacts and an alternative site layout with larger offsets to affected properties. The Proponent should consider how the alternatives can minimize potential impacts to state parkland.

The Draft EIR should identify the impacts of each of the alternatives on land alteration, creation of impervious area and work within the buffer zone to wetlands. The analysis should clearly illustrate differences between the environmental impacts associated with each of the alternatives and the impact on energy capacity. In addition, it should update the noise and shadow flicker analysis for each alternative. It should provide the information in the body of the EIR as well as in a tabular format.

I note that the Proponent has considered guidance provided in the Department of Energy Resources (DOER)/EEA Model Wind Bylaw and assessed the project's consistency with the bylaw. However, this provides general guidance that may not be applicable for every site. Each project and project site is unique and should inform the project design. The project, as proposed, will provide a buffer between the project and the closest residence of 1,000 feet and, with the exception of Turbine #1 which is located at the entrance to the site, will provide a 150-foot buffer from the project property line. Although the project will increase noise levels at some residences, it will not increase ambient noise levels by 10 dBA and, therefore, is consistent with the standards included in the MassDEP Noise Policy.

The site will retain development potential upon completion of the facility. In the event that the Proponent is planning to further develop the site, these should be disclosed in the Draft EIR so that associated cumulative impacts can be assessed.

### Land Alteration

The Draft EIR should quantify land alteration and impervious surfaces for each alternative and each aspect of the project (i.e. transport and installation of turbines, turbine towers and foundations and access roads). It should provide a summary table of alteration for each of these and indicate whether the alteration is temporary or permanent in nature. It should describe how alterations have been quantified. The Draft EIR should evaluate all measures to reduce the amount of land alteration, including reductions in roadway widths, relocation of turbines and reductions in construction-related clearing.

Because the project site contains ledge, it may include significant amounts of blasting. Many comments on the project express concern with the potential impacts of blasting on water quality and water supply. The Draft EIR should identify where blasting is likely to be required and quantify it. The Draft EIR should address the requirements of a blasting plan and discuss measures to address concerns with potential impacts to water supply and water quality. It should indicate whether it will use blasting agents without perchlorate to minimize potential impacts on wetlands and water supply. In addition, the Draft EIR should address the Town of Webster's concerns with the potential impact of blasting on water supplies, including consideration of a hydrological study of the site, and address the assertion that project-related blasting impacted water supplies associated with an adjacent campground. I recommend that the Proponent consult with the Town of Webster regarding its concerns as it develops the Draft EIR.

### Wetlands and Drainage

The Expanded ENF identifies wetland resource areas located within the project site. It indicates that the project will require Orders of Conditions for work within the buffer zone to wetlands. No direct wetlands alterations are proposed. An Order of Resource Area Delineation (ORAD) was issued for the majority of the project site, although some parcels were not included. Potential impacts are associated with the installation of wind turbine pads, wind turbines and access roads. In addition, off-site work is associated with the installation of overhead wires within an existing utility right-of-way (ROW) from the site to the East Webster substation.

Measures to avoid, minimize and mitigate wetland impacts include the avoidance of direct alterations, implementation of an erosion and sedimentation control program during construction and development of a preliminary stormwater management plan. The stormwater management plan describes how the plan will conform to the stormwater management standards of the Wetlands Protection Act (310 CMR 10.00). It indicates that stormwater management for the roadways and crane pads will include water quality swales to collect stormwater and provide water quality treatment followed by detention basins to attenuate peak rates of runoff and provide additional water quality treatment. Stormwater will be discharged through an outlet and a level spreader. Stormwater management for the O&M building will include discharge of roof runoff to an infiltration basin.

The Douglas Conservation Commission and, potentially, the Webster Conservation Commission, will review the project's consistency with the Wetlands Protection Act and its performance standards, including the stormwater management standards. The Draft EIR should provide an update on wetlands permitting and identify any proposed changes to minimize associated impacts. It should include revised plans at a reasonable scale that clearly delineate all applicable resource area boundaries including wetlands and buffer zones, vernal pools and potential vernal pools and their proximity to project elements. BVW that have been delineated in the field should be surveyed, mapped and located on the plans.

The Draft EIR should identify changes to the proposed stormwater management plan and update project plans accordingly. The Expanded ENF indicates that all wetland areas will be afforded a 120-foot buffer; however, the 120-foot buffer is not depicted for each of the wetlands on project plans. Updated plans should reflect the 120-foot buffer. In addition, plans should clearly illustrate whether any work is proposed within the buffer zone of wetlands located in Webster. In addition, the Draft EIR should describe how solid waste and hazardous waste will be managed and stored on site and describe the project's pollution prevention plan.

The Town of Douglas provided a comment letter that indicates that site work completed to date resulted in wetland violations. This issue has been addressed by the Conservation Commission which levied a fine on the responsible contractor.

#### Rare Species/Wildlife

The project site is not mapped habitat for rare species. Comments from the Natural Heritage and Endangered Species Program (NHESP) note the presence of actual habitat for the Eastern Box Turtle, Wood Turtle and Marbled Salamander in the project vicinity and, to avoid potential impacts, NHESP suggests that the Proponent develop a plan to minimize risk of direct turtle mortality during land clearing and construction. In addition, they suggest that clearing and other alteration around vernal pools and potential vernal pools be minimized. Comments from DCR suggest construction period mitigation include an environmental monitor to ensure rare species are protected and open areas are adequately stabilized.

The project is not located on a ridgeline or within 0.5 miles of the coastline, typical project attributes that have prompted other wind projects to conduct pre and post-construction bird monitoring studies per NHESP's direction. Comments from NHESP request that the Proponent conduct post-construction monitoring of bird and bat mortality. The Draft EIR should include plans to minimize risks to rare species during construction and to conduct post-construction bird and bat monitoring.

#### State Parkland

The project site abuts the Douglas State Forest along approximately two miles of shared boundary. It is one of the most popular parks in central Massachusetts with a day use swimming and picnic area and boating access on Wallum Lake. Its extensive trail system connects with two long-distance trails, the north-south Midstate Trail and the east-west Southern New England

Trunkline Trail. In addition, the State Forest is included within land that has been identified as one of the top ten priority habitat areas statewide and the Commonwealth has invested nearly \$40 million dollars during the past decade on land protection efforts in this area. Recent acquisitions include an extensive trails system that is not connected to the system in the State Forest because they are interrupted by the project site.

The Expanded ENF notes that the project is surrounded by state parkland; however, it does not specifically identify or describe potential impacts to state parkland or propose any mitigation to address potential impacts. It provides a narrow setback to state parkland for several of the turbines and only a 50 foot setback for Turbine #1. The blades on this turbine are likely to rotate over the property line and extend into the State Forest.

The Expanded ENF does not summarize results of the noise and shadow flicker analysis as it relates to state land nor does it describe how the project may impact parkland, wildlife or park users. DCR comments request the Proponent consider tailored trail easements across the project site to provide connections between newly acquired open space and the State Forest. In addition, DCR comments recommend the Proponent consider placing a Conservation Restriction (CR) on the site's undeveloped land to provide for its protection in perpetuity and offers assistance with such an effort.

Plans included in the Draft EIR should clearly identify open space resources, including trails in close proximity to the project site and proposed turbines. The Draft EIR should include a discussion of potential impacts to state parkland and consider mitigation identified by DCR including consideration of a CR, use of ice sensor technology on additional turbines to prevent impacts to park users and the Proponent should consult with DCR regarding the application of the EEA Article 97 Policy. In the event that the extension of the blades into state parkland is considered a change in use, the Draft EIR should identify the amount of impact and include an analysis of the project's consistency with the EEA Article 97 Policy. This analysis should include a demonstration that no other alternative with less environmental impact is feasible, and that any unavoidable impacts are mitigated to the maximum extent feasible. Mitigation may include provision of compensatory open space land and/or parkland (at a 1:1 basis, at a minimum, of replacement land to converted land) that could be permanently protected. Compensatory mitigation for previous projects reviewed by MEPA has been at a higher than 1:1 basis (and as high as 7:1).

The project provides an opportunity to highlight the benefits of wind energy. Collaboration between the Proponent and DCR could produce valuable educational efforts. I encourage DCR and the Proponent to consult regarding potential efforts such as interpretive displays and tours of the facility.

### Impacts to Abutters

The ENF includes analysis of several issues of concern to abutters including a noise analysis, shadow/flicker analysis and a visual photosimulation. The Expanded ENF suggests that potential impacts will be mitigated adequately; however, residents continue to express significant concerns in comment letters. The project presents an unusual case where the impacted residents

are located in Webster; however, the project is not required to conform to the Town of Webster's bylaws or regulations because it is located in Douglas. The Town of Douglas, through its height and use variance process, has identified impacts for which the Proponent should provide mitigation. I note that comments from Senator Moore and Representative Kujawski indicate that the potential impacts associated with this project should be fully addressed and I expect these comments may inform the analysis provided in the Draft EIR.

The noise analysis indicates that the project will increase the ambient L90 sound level by a range of 2.5dBA to 8.2 dBA at nearby residential properties depending upon the wind speed, background noise and location. The Expanded ENF indicates that the Nordex N100 Wind Turbines, proposed for this project, are not anticipated to produce any audible pure tones. Although noise levels will increase, the analysis demonstrates that the project can comply with the MassDEP Noise Policy because it will not increase noise levels at residences by more than 10 decibels. The Expanded ENF does not identify how the project could be designed to avoid these impacts in their entirety or reduce impacts for those properties disproportionately affected.

The Expanded ENF includes a shadow flicker analysis and proposes mitigation for affected residences. The height and use variances approved by the Douglas ZBA require that the Proponent develop a flicker mitigation plan for any residential location existing as of May 6, 2009 where estimated shadow flicker exceeds thirty *experienced* hours per year (hours residence is in use and the occupants are awake). The goal of the plan is to reduce shadow/flicker to 30 *experienced* hours per year or less.

The Expanded ENF indicates that, based on *expected* shadow flicker (which does not represent the worst case nor does it take into account site conditions that will reduce shadow flicker), 34 receptors were analyzed. It indicates that none of the receptors analyzed will receive greater than 30 minutes/day of *expected* shadow flicker. Of the 34 analyzed, 17 receptors are calculated to receive greater than 30 *expected* hours/year of shadow flicker and, therefore, are included in the proposed Flicker Mitigation Plan (page 7). Mitigation will include installation of a photo-voltaic light sensor and shadow impact switch off module on Turbines #1, #7, #8 and #9 that will automatically shut the turbines down during critical shadow flicker times when the sun is shining and wind conditions exist that will result in potential flicker affects. Turbines will shut off to reduce flicker to 30 hours/year or less at each of the locations. In addition, it will be programmed to limit *experienced* flicker hours per day to 30 minutes or less.

The Expanded ENF includes a photosimulation which consists of superimposing the project onto photos using proper scale, location, elevation to provide a visual representation of the proposed project. This simulation presents an adequate representation of how the project will appear from various vantage points.

The noise and shadow flicker studies should be updated based on the alternatives provided in the Draft EIR. The Draft EIR should identify measures that could further avoid, minimize and mitigate impacts. As with the noise analysis, the alternatives analysis should identify how the project can be designed to avoid all or some of the identified impacts and provide mitigation for impacts that cannot be avoided. In addition, it should identify how impacts

will be monitored during operation and address how changes to mitigation will be proposed if warranted.

### Traffic and Transportation

The Expanded ENF indicates that operation of the facility will generate 10 average daily vehicle (adt) trips. The delivery of construction and wind turbine equipment will require a Heavy Load Permit from MassDOT and, depending upon the identified route, it may require a Construction Permit from MassDOT and the Federal Highway Administration (FHWA). The construction period is identified as six to nine months. Approximately 60 to 120 daily trips are associated with construction workers and ten to 20 trips are associated with deliveries of construction materials. Delivery of the crane components and their supporting vehicles at the outset of the construction process will result in approximately ten to 20 deliveries. Delivery of the turbines and components will require 12 to 15 oversized deliveries.

The Expanded ENF includes a preliminary evaluation of transportation routes for the wind turbine equipment. It assesses the viability of routes for delivering the 50-meter blades and identifies potential challenges associated with the routes. The evaluation is based on field observations, available information and aerial photography. It assumes the transport tractor and load will be 182 feet long and 15 feet wide.

The evaluation indicates that the limiting factors on interstate roadways are available bridge clearances at overpasses, available bridge load carrying capacities and turning radii within the connecting interchanges. It indicates that the Massachusetts Turnpike (I-90) to I-395 south (Interchange 2) to Route 16 east appears to be a viable route based on roadway width and turning radii. It notes that bridge clearance constraints along I-90 need to be evaluated and that roadway features, including light fixtures, concrete barriers, vehicle signing and sign supports, present potential obstructions. These obstructions may need to be removed and/or relocated to accommodate vehicle movements. It indicates that either the I-395 southbound off-ramp or, alternatively, construction of a temporary crossover between I-395 north and south in the vicinity of the northbound off-ramp to Gore Road will provide access to Route 16.

The Draft EIR identifies efforts to mitigate construction-period traffic impacts. The Proponent will provide the Town of Douglas and the Town of Webster with a detailed traffic management plan as part of the construction permit application and will include the Towns in the planning for and notice of oversized vehicle permit applications; all oversized deliveries will be confined to Route 16 between the site and I-395 and access drive will be designed to accommodate turning movements of oversized vehicles.

The Expanded ENF includes determinations from the MassDOT Aeronautics Division and FAA indicating that the project will not present a hazard to air navigation. The FAA determination requires that the structure is marked and/or lighted in accordance with FAA obstruction marking and lighting requirements. The project description in the Draft EIR should include the amount and type of lighting that will be included. No additional information is required relative to aviation safety.

The Proponent should consult with MassDOT's Highway Division District 3 Office regarding the identification of transportation routes and additional information required for the Draft EIR and subsequent permit applications. The Draft EIR should identify the preferred route and describe and illustrate on plans any impacts associated with the work, such as wetland impacts or work within rare species habitat. The Draft EIR should include conceptual plans of sufficient scale (i.e. 1"=40') to clearly show the geometry of the access drives and haul routes where changes are proposed, including proposed lane widths and offsets, layout lines and jurisdictions, and land uses (including access drives).

### Historic/Archaeological Resources

The Expanded ENF indicates that the proposed turbines are not located within two miles of any historical site or property (including those under consideration for designation) and the project does not contain any historic structures or archaeological sites listed in the State Register of Historic Places of the Inventory of Historic and Archaeological Assets of the Commonwealth. The Proponent filed a Project Notification Form (PNF) with the Massachusetts Historical Commission, and at its request, the Proponent has conducted an intensive (locational) archaeological survey. The survey identifies four archaeological sites that are potentially significant, a historic logging road and a bedrock outcrop with rock stacks. The Expanded ENF indicates that the potentially significant sites are all located outside of the turbine locations and proposed access roads and therefore, avoidance and protection during construction is recommended.

The Expanded ENF indicates that additional surveys will be performed to address changes in the project design and that an avoidance and protection plan will be developed. The Proponent will consult with MHC regarding development of mitigation. Comments from MHC acknowledge the Proponent's efforts to date and concur that the survey should be extended to areas of disturbance included in the revised project layout.

To facilitate coordinated review, the Draft EIR should summarize the results of additional archaeological surveys, provide updates on consultations with MHC and identify proposed mitigation.

### Construction Period Impacts

The Expanded ENF includes a separate section on construction period impacts including transportation impacts and development of a stormwater management plan. The Expanded ENF indicates that blasting will be employed during construction but does not provide any details regarding how it will be conducted or identify measures to avoid impacts to abutters and water supply. Comment letters identify blasting as a major concern. The Draft EIR should describe required blasting, describe measures to minimize impacts to abutters and identify measures to minimize potential contamination of wetlands and water supplies from blasting agents that contain perchlorate. I urge the Proponent to include a hydrogeological study of the site to address concerns that blasting will affect adjacent water supplies.

### Decommissioning

The Draft EIR should identify the decommissioning process for the facility. It should identify how adequate decommissioning will be guaranteed (e.g. through a bond or escrow account) and how the site will be stabilized to minimize erosion.

### Mitigation

The EIR should include a separate chapter that identifies all mitigation measures. This chapter should also include separate permit-specific updated draft Section 61 Findings for each State agency that will issue permits for the project, including MassDOT, the DPU and MassDEP if applicable. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and include a schedule for implementation.

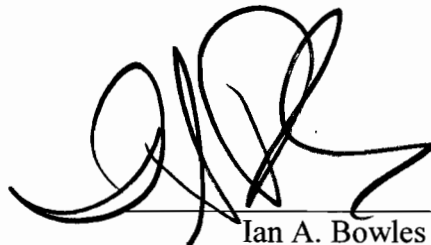
### Comments

The Draft EIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Draft EIR should include responses to comments. This directive is not intended to, nor shall it be construed to, enlarge the scope of the Draft EIR beyond what has been expressly identified in this certificate.

### Circulation

The Proponent should circulate the Draft EIR to those parties who commented on the Expanded ENF, to any state agencies from which the Proponent will seek permits or approvals and to any parties specified in section 11.16 of the MEPA regulations. A copy of the Draft EIR should be made available for review at the Douglas and Webster Public Library.

October 29, 2010  
Date



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Ian A. Bowles

## Comments received:

10/22/10 Department of Conservation and Recreation (DCR)  
10/22/10 Department of Fish and Game (DFG)/Natural Heritage and Endangered Species  
Program (NHESP)  
9/29/10 Massachusetts Historical Commission (MHC)  
10/18/10 Senator Richard T. Moore  
10/28/10 Representative Paul Kujawski  
10/19/10 Town of Douglas/Community Development Department  
10/22/10 Town of Webster/Office of the Town Administrator  
10/22/10 Michael Finamore, Fine Camp Inc.  
10/19/10 Ralph and Susan Parmenter  
10/20/10 Richard and Jane Foreman  
10/19/10 Scott and Ann McQuiston  
10/20/10 Michael Milas  
10/19/10 Walter F. Cain  
10/19/10 Kevin McMahan  
10/20/10 Sheldon K. Katz  
10/16/10 Edward A. Johns  
10/16/10 Karen Johns  
10/18/10 Roberto Perez  
10/18/10 John Cagnon  
10/20/10 Robert Anders  
10/21/10 Mark Lewandowski  
10/22/10 Will Toner  
10/22/10 Susan Mason

IAB/CDB/cdb