



December 16, 2003

Ellen Roy Herzfelder, Secretary
Executive Office of Environmental Affairs
Attn: Arthur Pugsley, EOE #13143
251 Causeway St., Suite 900
Boston, MA 02114

Attention: MEPA Unit

Re: **Hoosac Wind Project, Florida and Monroe**

Dear Secretary Roy Herzfelder:

On behalf of the Massachusetts Audubon Society, I submit the following comments on the Environmental Notification Form (ENF) for the Hoosac Wind Project. We urge that a full Environmental Impact Report (EIR) be required for this project. Although the proponent provided many items of supplemental information on request to various parties, these submittals are not organized into a comprehensive document such as would be provided by an EIR, nor do they address certain important aspects of the project's direct and indirect environmental impacts.

Mass Audubon supports the development of renewable energy sources including wind power. As this rapidly growing industry develops in Massachusetts, a planning program or criteria for siting of windfarms (especially those utilizing state financial assistance such as Massachusetts Technology Collaborative (MTC) grants and renewable energy tax credits) is needed in order to locate projects in areas where the environmental impacts will be minimized. Energy conservation and efficiency are also important components of environmentally sound energy policy.

This is the first large-scale land-based wind power project proposed in Massachusetts. The project site is located on high ridges in a remote area characterized by large blocks of forest that provide important habitat for interior forest breeding birds and other wildlife. Twenty turbines, each extending to a height of 329 feet, will be constructed, along with 4.4 miles of new gravel roads, 9.65 miles of electric transmission lines, and several support buildings. Impacts to living resources have not been adequately addressed in the ENF, particularly the direct risks of avian and bat collisions with the towers or turbine blades, and the indirect impacts of habitat fragmentation. Impacts that should be evaluated further in an EIR include fragmentation of important forest habitat; direct mortality impacts to both resident and migrating songbirds, hawks, bats, and other wildlife; effects on rare species; construction of overhead power lines along a road within Monroe State Forest; construction of roads on steep grades in relatively pristine watersheds; and wetlands impacts.



Although the ENF states that no mandatory Environmental Impact Report (EIR) thresholds are exceeded, the estimate of 48 acres of land alteration is close to the 50-acre threshold, and the total area altered should be closely reviewed to determine whether this threshold might actually be exceeded.

The project is receiving state financial assistance through a contractual guarantee for sale of renewable energy credits through MTC. Therefore, the Massachusetts Environmental Policy Act (MEPA) review for this project should be broad, encompassing all aspects of the project's environmental impacts. The EIR should include analysis of geographic planning and/or site selection criteria that the state and MTC could apply to guide development of wind energy projects to locations that are viable from a wind resource standpoint while also avoiding and minimizing environmental impacts as much as possible.

Wildlife and Habitat Impacts

The project site is located within a remote, rural landscape characterized by large blocks of contiguous forest. The significance of this forested landscape has been recognized by many agencies and groups. A large area around the site is the target of a major forest protection initiative under discussion among EOEAs and many nonprofit groups. The site is designated in the Biomap as Supporting Natural Landscape. It is adjacent to several state forest parcels that protect significant blocks of land including some of the largest remaining stands of old growth forest in the state. The ridges where the turbines are proposed are among the highest elevational features in the area, falling off rapidly on steep slopes drained by coldwater streams.

Large blocks of forest provide important habitat for a host of wildlife species, including various species of birds such as certain warblers and thrushes. Many of these interior nesting migratory (neotropical) songbirds are experiencing severe population declines throughout their ranges, and habitat fragmentation is a particular concern for these species. The proposed construction of 4.4 miles of new roads into what is now interior forest will fragment and degrade a far greater amount of forest habitat than the direct footprint of the project. There will be a large increase in forest edges and reduction in remaining forest patch size, making remaining forest habitat less suitable for area-sensitive species. Cowbird parasitism of bird nests is also likely to increase, reducing nesting success for birds that do continue to breed in the area. Large forest blocks are also important for species other than birds, such as certain mammals, amphibians, and reptiles that require large areas of habitat uninterrupted by roads and human disturbances.

Mass Audubon's Important Bird Area (IBA) program designates especially significant bird habitats across the state. The project site is located near the Hoosic Plateau IBA, which encompasses much of the state forest lands in the area (Monroe, Savoy, Mohawk Trail, and Dubuque State Forests). This IBA supports strong breeding populations of a wide variety of neotropical migrant birds. Three state-listed bird species have been documented breeding in locations near the project site – Mourning Warbler, Blackpoll Warbler, and Sharpshin Hawk. Based on the habitat characteristics of the project site, it is likely that these species also breed there. While the proponent's bird surveys did not locate these species breeding on the site, that survey only involved observations on four days during one spring breeding season. This in no way rules out the possibility that these species are indeed breeding on the site. Additional pre-construction surveys should be conducted in coordination with the Massachusetts Natural Heritage and Endangered Species Program.

The avian studies submitted with the ENF are insufficient to reach a conclusion that there is little risk to birds from the project. Additional information is needed on actual bird activity at the site, during the spring, summer, and fall seasons. Risks to both breeding and migrating birds (and bats) should be evaluated based on site-specific information. Studies from other sites are not necessarily transferable to this site. Although the figure of one to two bird deaths per year per turbine is widely cited by the wind

energy industry, this is an average that may not be accurate for this site. Data from midwestern and western wind farms is not necessarily transferable to eastern ridgetop settings with different habitats, bird species, and migratory patterns. The Searsburg site is also sufficiently different from this location that its results cannot be transferred to this site with confidence, and it also is limited in time scope.

Migratory activity should be documented at the site through preconstruction studies using remote sensing techniques such as radar and/or acoustic studies. Many species of birds migrate along mountain ridges. The Federal Aviation Administration (FAA) generally requires aviation warning lights on structures of 200 feet or more. Many migratory birds such as warblers and thrushes migrate at night and are attracted to lights, especially during inclement weather. At such times, these nocturnal migrants can become disoriented and strike tall structures on which lights are mounted. The proponent has proposed an aviation lighting scheme that would not involve placing lights on all of the towers. However, it is unclear whether or not the FAA will accept this proposal or instead require lighting on each tower. Considering that these structures will be the highest points on the landscape for miles around, it seems likely that the FAA would consider them all to be hazards to aviation navigation and require lighting on each tower. Even if the requested waivers are granted, the lights that will be placed will nevertheless present a potential risk to birds. Hawks also migrate along ridges, during the daytime when they utilize thermals rising from the ground for lift. Hawk activity and migration in the vicinity of the project site should be better documented through field surveys, especially during the fall migration period. Risks to bats should also be evaluated particularly in light of the recent deaths of hundreds of bats at a new wind energy facility on Backbone Mountain in West Virginia. The ENF and studies submitted with it do not adequately address these avian and bat risks.

The EIR should include detailed protocols for post-construction monitoring of potential avian and bat mortality. Such studies should be conducted for a minimum of three years post-construction and longer if mortality occurs during the first three years.

Article 97

The project includes proposed construction of overhead power lines for several miles along Main Road, including the portion of that road that passes through Monroe State Forest adjacent to Dunbar Brook. The ENF does not provide details on this construction, such as information on whether or not any trees will need to be removed or trimmed. If an easement is needed across state forest land, or if there will be any alteration of vegetation or soils on state land in order to construct this power line, this should trigger Article 97 of the state constitution, requiring an alternatives analysis through MEPA and approval of both houses of the Legislature.

Road Construction, Wetlands Impacts

The proposed access roads will be constructed on steep slopes with road grades up to 15 degrees. To achieve grades accessible to the heavy construction equipment required to erect these 329-foot tall towers, significant amounts of cut and fill will be required. Removal of forest cover and grading of soils on such steep slopes will create challenges for erosion and sedimentation control. Road and other construction for the project should be phased to ensure that the amount of soil exposed at any one time is minimal, so that if problems are encountered due to inclement weather they can be better contained.

The proposed road surface will be gravel. The ENF does not characterize this surface as impervious, although the plans do show how water will be shed from the road and handled in swales, etc. Further information should be provided regarding potential water quality impacts of these gravel roads on the pristine mountain streams. Potential turbidity impacts (especially during construction) and temperature changes/loss of shading should be specifically addressed in further detail.

The roads will require numerous crossings of streams. The ENF and Notices of Intent for the project do not address habitat connectivity issues associated with culverting streams under roads. For example, amphibians that presently travel up and down the streambed may find the culverts to be an insurmountable barrier to their normal movements. Wildlife habitat connectivity within the streams should be addressed through detailed plans in the EIR.

The new gravel roads will open up the entire area to more human activity and disturbance. While authorized use may be limited to the project managers, it is likely that ATVs and snowmobiles will also utilize these new roads. The EIR should include plans for enforcement to prevent unauthorized use of these roads by any type of motor vehicle.

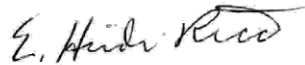
Provisions should be made to reduce the likelihood of introducing exotic invasive plants to streams, wetlands, and roadsides during construction (e.g. clean all equipment before it is brought to the area). Follow-up monitoring should also be conducted along roadsides, at stream crossings, and in the wetland replication area for two seasons following construction to identify and hand pull any invasives that may become established.

Conclusion

This is the first large-scale land-based wind power project in Massachusetts. The site contains important habitat for many species of wildlife. Construction and operation of the project is likely to have a host of direct and indirect impacts. These impacts and proposed mitigation should be evaluated in further detail in a comprehensive EIR.

Thank you for considering these comments.

Sincerely,



E. Heidi Ricci
Senior Environmental Policy Specialist

cc: Daniel Lovett, Hill Engineers, Architects, Planners Inc.
Pat Huckery, MNHESP
Vern Lang, U.S. Fish and Wildlife Service
Kathy Abbott, Dept. of Conservation and Recreation
Greg Watson, MTC