UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF THE
REGIONAL ADMINISTRATOR

November 28, 2008

Margaret Mitchell
Forest Supervisor
Green Mountain National Forest
Manchester Ranger District
2538 Depot Street
Manchester Center, VT 05255

RE: Comments on the Deerfield Wind Project Draft Environmental Impact Statement, Towns of Searsburg and Readsboro, Vermont CEQ# 20080383

Dear Ms. Mitchell:

The Environmental Protection Agency-New England Region (EPA) has reviewed the United States Forest Service's (FS) Draft Environmental Impact Statement (DEIS) for the Deerfield Wind Project. We submit the following comments on the DEIS in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

According to the DEIS, Deerfield Wind LLC has requested authorization to construct a commercial wind energy facility on approximately 80 acres of land within the Green Mountain National Forest (GMNF). The DEIS considers four alternatives (including the No-Build). Deerfield Wind proposes to build a 17-turbine, 34 to 35.7 MW facility with wind turbines on two separate ridge lines east and west of Route 8 in the Towns of Searsburg and Readsboro, Vermont. The eastern project area is adjacent to the existing 11-turbine/six MW Green Mountain Power wind facility which has been in operation since 1997 on 35 acres of privately held land adjacent to the GMNF. The Deerfield project would require approximately 4.3 miles of new roads for construction and maintenance of the wind turbines and approximately 5.4 miles of new transmission lines and a substation to deliver power to the existing 69 KV transmission line north of the project site. Other alternatives considered in the DEIS include a smaller 14-turbine array with a reduced footprint on the western portion of the project site and a 7-turbine array on the eastern project site only.

According to the DEIS, portions of the eastern and western projects are in areas identified by the Vermont Agency of Natural Resources (VTANR) as "necessary bear habitat" due to the number and density of bear scarred beech (BSB) trees. American Beech is an important source of food for many species, most notably black bears preparing for hibernation. The DEIS also notes that VTANR "considers that removal of BSB for the proposed Deerfield Wind Project represents an

unacceptable loss of necessary bear habitat, especially when the scale of removal for this Project is compared to that for other development projects in Vermont. Furthermore, ANR views the concentration of BSB within the Project area to be among the highest known in the state and significant to bears regionally." (DEIS ES page 30).

In addition to the Forest Service review of the project under NEPA, the project is also being reviewed by the State of Vermont Public Service Board (PSB) under the VT Section 248 process. The Section 248 review by the PSB "establishes requirements for the approval of in-state electric transmission and generation construction projects, as well as other types of projects." (Citizens' Guide to the Vermont Public Service Board's Section 248 Process). Project proponents must receive a certificate of public good in order to advance a project. Issuance of the certificate is based on ten statutory criteria including site-specific environmental factors incorporated from VT Act 250. As of the date of this letter, the PSB review of the project is ongoing and is not scheduled to end until after the close of the comment period on the FS DEIS. During the course of our review of the DEIS for the purpose of preparing comments, we have reviewed portions of project testimony to the PSB in an attempt to better understand project issues, including those related to the potential for the project to cause impacts to black bear habitat.

EPA recognizes the environmental problems associated with the use of fossil fuel to generate electricity in New England. The region's need to invest in other cleaner sources of electricity, including renewables, is underscored by the renewable portfolio standards in many of the New England states. Consequently, EPA New England strongly supports an increase in the amount of electricity generated in the region from appropriately sited renewable energy projects. We are concerned, therefore, that the proponent's preferred alternative has the potential to cause significant adverse impacts to important black bear habitat in the project area and that the range of alternatives considered in the EIS is too narrow. These issues are discussed in the detailed comments in the attachment to this letter.

We believe that resolution of both of these issues may be possible, but that to do so will require the serious consideration of a scaled back, or potentially phased project with significant mitigation as well as consideration of alternative wind power development sites at another location(s) within or outside of the GMNF. In addition, we recommend that the FS strongly consider extending/reopening the comment period on the DEIS until such time as the PSB proceedings are complete. This step will allow time for the FS and others to consider the input of the State of Vermont and then apply that information to the alternatives provided in the DEIS. This step is especially critical given the significant level of objections expressed on the record by the VTANR regarding the potential for impacts to black bear habitat for all of the build alternatives under consideration. At a minimum, we believe that the FS should commit to fully consider the decision of the PSB prior to recommending a preferred alternative and issuing a FEIS for the proposed project. In addition, we believe the FS should provide agencies and others who comment on the DEIS with the opportunity to supplement their comments for full consideration by the FS once additional information from the PSB process is available.

Depending upon the PSB decision, next steps in the FS process could include issuance of a FEIS with a preferred alternative or development of a Supplemental DEIS that more fully considers and evaluates refinements to current alternatives, phased alternatives or new project alternatives.

EPA appreciates the opportunity to comment on the DEIS and we encourage the FS to work closely with appropriate state and federal agencies and experts to develop strategies to address the issues in this letter. In the absence of a hard look at additional alternatives (on and off the GMNF) we do not believe the range of alternatives in the DEIS is complete. Of the alternatives studied in the DEIS we recommend Alternative 3 (the Eastern project site only) as the preferred alternative due to a reduced potential to impact regionally significant bear habitat. If pursued, it will require the development of a comprehensive mitigation and monitoring program to address concerns of the state and federal experts regarding bear habitat impacts. We have rated Alternative 3 as EC-2 "Environmental Concerns—Insufficient Information", in accordance with EPA's national rating system, a description of which is attached to this letter. Based on information in the DEIS and submitted by VTANR it is clear that the Proposed Action (the proponent's alternative) and Alternative 2 (reduced turbines in the Western project site only) are both more damaging to bear habitat than Alternative 3. If the state's objections related to bear impacts are not satisfactorily addressed, EPA would likely object to the Proposed Action and Alternative 2. We may offer supplemental comments regarding those alternatives following the close of the PSB process.

Please feel free to contact Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you would like to discuss these comments in greater detail.

Sincerely,

Robert W. Varney
Regional Administrator

Attachment

cc:

Bob Bayer, Project Coordinator, Green Mountain National Forest
Vern Lang, United States Fish and Wildlife Service
Forrest Hammond, Vermont Agency of Natural Resources

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC–Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3–Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Attachment: EPA Comments on the DEIS for the Deerfield Wind Project

Background

EPA's 2005 scoping comments addressed the development of the statement of purpose and need, as well as the screening criteria for evaluation of alternatives, and highlighted the importance of interagency coordination to determine a reasonable range of alternatives. The scoping notice described the use of "public lands under the management of the Forest Service for construction and long-term operation of a wind energy facility" and explained that the project would involve construction of 20-30 turbines on GMNF lands. We noted that while the preparation of an EIS is triggered by the requirement for a FS special use permit to construct a wind energy facility on public lands, it was our impression that the underlying (and more general) purpose of the project was the generation of renewable energy destined for the regional power grid. Our comments recommended development of a purpose and need statement that allows for the consideration of renewable energy from sites on and off FS lands.

Regarding alternatives we suggested that the FS use the wind power siting analysis in the GMNF Forest Plan DEIS to inform the analysis of alternate locations for wind generation not adjacent to the existing wind generation facility. Our comments also noted that consideration of wind power development sites on private and public lands in the EIS would be consistent with the CEQ regulations implementing NEPA and would parallel policy described in the GMNF Forest Plan DEIS at page 3-283 that "[i]t is USDA Forest Service policy not to approve any discretionary use of NFS land that can be accommodated on private land." The Forest Plan DEIS also states (page 3-284), "[i]ncluded [in the Forest Plan] will be general requirements such as ensuring there are no available alternatives using private land...." We recommended that the EIS consider a range of alternatives include a number of wind projects of different sizes/generation capacities (both on and off the forest) that would supply power to the regional power grid. Finally, our scoping comments suggested that the criteria that would be used to screen and evaluate alternatives in the EIS be developed with the input of an interagency/cooperating agency work group.

Unfortunately, many of these recommendations that we made during the scoping process were not followed in the DEIS. We recommend that our concerns related to the range of alternatives and the screening criteria be addressed through the development of supplemental information. These issues are discussed more fully below.

Alternatives

The purpose of the proposed action "is to evaluate an application for land use authorization to construct and operate a 17-turbine wind energy facility on Forest Service lands in Searsburg and Readsboro, Vermont." (DEIS page 4). Other than the No Action alternative, the alternatives analyzed in depth in the DEIS are focused exclusively on development adjacent to the existing wind power facility designed to leverage the existing infrastructure to help reduce the need for

new infrastructure with the goal of reducing project impacts and cost. Use of existing infrastructure makes sense if the resulting site development does not lead to severe and avoidable impacts.

We question the rationale provided in the DEIS for dropping other FS sites for detailed evaluation. In one instance the DEIS notes that sites were dropped because the necessary infrastructure would be costly and would cause new impacts when compared to a facility sited adjacent to the existing facility. In another, the DEIS notes (DEIS page 36) that the initial screening analysis considered areas within the GMNF for development and that, "no extensive site-specific testing or ecological surveying has been done to determine wind resources or estimate risk of environmental impacts, nor have any definitive proposals for development of these areas been accepted. Therefore, opportunities for wind energy development in these areas were not ripe for consideration at this time, and they were eliminated from detailed analysis in this DEIS." These reasons for elimination are difficult to understand, especially given that the analysis (DEIS page 32) allows for consideration of FS land alternatives near the existing facility that "may not be completely economically viable from the Proponent's perspective" because that analysis would allow significant issues to be addressed and would "adequately disclose and compare impacts across the range of alternatives." In our view, elimination of an alternative can only occur after a determination is made that it either does not meet the purpose and need or will be too environmentally damaging. In our opinion, the DEIS does not demonstrate that either of these conditions has occurred.

Therefore, the detailed analysis of alternatives in the EIS should be supplemented to include an additional representative wind power development scenario for the best available site(s) under FS jurisdiction as well as site(s) outside the GMNF, consistent with the direction of the Forest Plan. This step will provide a more complete range of alternatives and will help to explain whether a project can be constructed with less impacts than those associated with the alternatives already considered. The analysis should provide enough information to allow for a comparison of the relative environmental impacts, benefits and costs across all alternatives. We encourage the FS to build the analysis off preliminary work associated with the development of the GMNF Forest Plan. That work screened for compatible GMNF management areas, the availability of wind, and proximity to transmission line. Based on those screening factors, the DEIS (DEIS page 37) notes that 28,700 acres of the GMNF offer the estimated wind resources required for commercial wind facility development.

If after the supplemental analysis, wind power development on another site on or off the GMNF is determined to not meet the underlying purpose and need or found to be more damaging than the alternatives already under consideration, we would support additional discussion of the alternatives now included in the DEIS. Of these, Alternative 3 (eastern project site only) appears to have the most promise, especially given the input on the record from VTANR, if acceptable monitoring and mitigation can be developed to satisfy the expert state and federal agencies to address black bear issues.

Moreover, should Alternative 3 be selected as the preferred alternative, we encourage the FS to work with the state and federal agencies with expertise on bear issues to evaluate whether or not it would be possible to develop a monitoring/mitigation program to evaluate whether future construction and operation of the facility on the western ridge would be possible.

Finally, given the limitations of the alternatives analysis and the ongoing PSB process we think it is prudent that the FS has not identified a preferred alternative at this point in time.

Screening

We note that the initial screening process did not include environmental sensitivity criteria and that all of the alternatives considered in the EIS have the potential to cause significant adverse impacts to black bear habitat (with the proponent preferred alternative having the greatest potential for impact). This situation may have been avoided with the addition of environmental criteria, or at a minimum it may have helped the FS to develop additional alternatives for consideration that may have also reduced impacts. We encourage the FS to apply environmental screening criteria to the supplemental alternatives analysis called for above.

Bear Habitat

As noted above, portions of the eastern and western project are in areas identified by VTANR as "necessary bear habitat" due to the number and density of bear scarred beech (BSB) trees. According to the DEIS, "[m]ature, nut bearing beech trees are an important element for black bears in both the Eastern and Western project sites and on surrounding GMNF lands. Hardwood stands in the region include numerous areas with concentrated BSB trees, demonstrating consistent, heavy use of the area by foraging bears." VTANR "considers that removal of BSB for the proposed Deerfield Wind Project represents an unacceptable loss of necessary bear habitat, especially when the scale of removal for this Project is compared to that for other development projects in Vermont. Furthermore, ANR views the concentration of BSB within the Project area to be among the highest known in the state and significant to bears regionally." VTANR has requested that the proponent withdraw the western component of the project as it would impact bears more than the eastern segment and even though "there would remain the potential for extensive impacts from the eastern portion alone, ...ANR believes that they might be avoided, minimized, or mitigated..." if the proponent develops a plan in cooperation with the VTANR. (PSB Docket 7250 page 13 of 21)

Direct impacts to black bears from the project will occur as a result of tree clearing for roads, power lines and wind turbine installation. The DEIS focuses on the removal of mature American Beech trees (including BSB) as these trees represent an important food resource. The Proposed Action will clear 85 acres of land resulting in the removal of 530-540 BSB; Alternative 2 would clear 75 acres and remove 380-390 BSB; and Alternative 3 would clear 40 acres and remove 50-55 BSB. The DEIS also notes that the project would result in indirect impacts including displacement of bears during construction and operation, and changes in bear behavior and

movement in response to the project. The potential for beneficial direct impacts through increased availability of other food sources in newly cleared areas is also noted in the EIS.

While the VTANR has characterized the impacts of the proposed action as an unacceptable loss, the FS analysis recognizes the "adverse loss of a large number of mast-producing BSB" but argues that the removal of up to 540 BSB "alone would most likely not result in a significant loss of available forage for black bears, or a significant impact to viability of the bear population in the area." (DEIS page 271). In response to what the EIS characterizes as limited scientific information that directly addresses the potential impact of the proposed action on black bears and the scientific uncertainty regarding conclusions on impacts, the FS established a "Bear Panel" for assistance characterizing areas of "scientific certainty or uncertainty about possible Project impacts and risks." The panel commented on the effect of construction and use of roads, direct loss of beech trees and beech mast, indirect loss of habitat due to disturbance, decreased remoteness of important black bear habitat, and the need for research and monitoring to reduce uncertainty and assess impacts. Appendix F of the DEIS presents a summary of the results of that consultation. Given the importance of this issue to decision-making we strongly recommend that this portion of the EIS be revised to include the actual responses provided by the expert panel, not just a summary. The summary provided in the EIS notes that the "Review Panel and consulted biologists all agreed that the actual impacts to black bears of a development like the Deerfield Wind Project are uncertain." The panel found that the "overall impact of the loss of beech within the footprint of the roads, turbine clearings, and other facility components likely would be minimal, relative to the amount of beech and beech mast available in other sections of the Project area and across the region." It goes on to note that actual impacts could only be understood through additional research and monitoring.

Despite the FS analysis and the input of the panel, the controversy and uncertainty regarding impacts remains. This controversy is has also been highlighted through the PSB testimony on the project. EPA strongly encourages the FS to continue to work closely with VTANR and other experts on bear issues and to reevaluate the project with respect to this issue following the close of the PSB process.

Water Quality

Application of established FS best management practices will be very important to help prevent water quality degradation due to erosion and sedimentation and impacts to streams and riparian areas at road crossings during construction. We encourage the FS to require that all new roads are built to the minimum width necessary to accomplish the specific objective they will serve, especially on straight stretches where the proper turning radius is not relevant. The FS should also explore whether the use of pervious paving materials could help to reduce stormwater runoff from roads.

In areas where land clearing is proposed for laydown, work sites, and facility installations the amount of clearing should also be minimized. The DEIS (DEIS page 15, section 1.4.1.6) notes

that a total of 4.1 acres will be cleared for a substation that will eventually occupy 0.3 acres. While we understand that some of this extra clearing is necessary for construction purposes, we also request clarification whether the clearing footprint can be reduced further throughout the project.