WHITE PINES WIND FARM PROJECT

Cadillac-Manistee Ranger District
Huron-Manistee National Forests

Introduction

The Forest Service has accepted an application for a special use authorization from White Pines Wind Farm LLC (White Pines), a subsidiary of BP Wind Energy North America Inc., for the installation and operation of 20 to 28 wind turbines and associated infrastructure to provide between 50 and 70 megawatts (MW) of wind energy on National Forest System (NFS) lands managed by the Huron-Manistee National Forests (Forest). The White Pines Wind Farm Project (the Project) would occupy approximately 75 acres of NFS land within a Project Area of about 10,000 acres on the Cadillac-Manistee Ranger District over its proposed 30-year life.

The attached map (Figure 1) shows the Project Area vicinity and the approximate location of the proposed activities. The proposed activities in the Project Area are located on National Forest System lands on the Cadillac-Manistee Ranger District of the Huron-Manistee National Forests in T20N, R17W, Sections 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 29, and 30; and T20N, R18W, Sections 12,13, 24, and 25; Grant Township, Mason County, Michigan.

Purpose and Need

The purpose of this project is to respond to an application for a special use authorization submitted by White Pines Wind Farm LLC to develop a wind farm on National Forest System lands within the Huron-Manistee National Forests. White Pines Wind Farm LLC proposes to generate 50 to70 MW of wind energy by constructing and operating between 20 and 28 wind turbines, in proximity to existing distribution facilities (utility grid), in an area with an adequate wind resource on National Forest System lands with consolidated ownership. The proposed project is needed to help meet Michigan's and the region's growing demand for reliable sources of clean, cost-effective, renewable energy. The project is consistent with the Huron-Manistee National Forests' Land and Resource Management Plan and with Forest Service objectives for management of special uses on National Forest System lands.

Proposed Action

White Pines is proposing to install and operate the Project on land located mostly within the boundaries of the Huron-Manistee National Forests. The Project proposes construction of the wind turbines and associated infrastructure in April 2010, with an anticipated in-service date of December 2010, and operation of the facility for an estimated service life of 30 years.

The vast majority of the Project's facilities and activities would occur on National Forest System lands on the Cadillac-Manistee Ranger District of the Forest. A portion of the Project's transmission line route would be located off of National Forest System lands. In addition, it would be necessary to expand the public road system to support development of the Project.

The Project would consist of the construction, installation, operation, and maintenance of 28 new state-of-the-art 2.5 MW wind turbines, which would have a combined power generating capacity of 70 MW (at peak capacity). The Project is proposing to use the Clipper Class II Liberty Series 2.5 MW Wind Turbine, which are manufactured domestically in Iowa. It is feasible that a higher megawatt turbine could become available and be utilized for this Project. If available in the future, turbines with a larger capacity would be located within the existing array plan footprint and would not affect the overall maximum Project power generating capacity of 70 MW.

Each turbine is comprised of three components – the tower, the nacelle, and the rotor blades. The turbines use a tubular steel tower, with a hub height of 262 feet. The tower is topped by the nacelle, which houses the turbine's mechanical components. The rotor, mounted on the nacelle, consists of three fiberglass blades 153 feet in length and has a rotor diameter of 315 feet. The total height of the wind turbines would be approximately 420 feet above a concrete foundation base. Each turbine would be anchored to a 60 foot diameter concrete foundation of which a 20-foot diameter pedestal would be visible above ground. A pad mounted step-up transformer would be located on each concrete foundation base to increase the voltage from each wind turbine generator to 34.5 kilovolt (kV). The area of the total disturbed footprint per turbine, including clearing and grubbing of vegetation, would have a radius of approximately 125 feet, for an aggregate footprint of about 1.1 acres per wind turbine foundation during construction. Subsequent to construction, the turbine footprint area would be reduced to less than 0.2 acres. Refer to Figure 1 for the locations of the proposed wind turbines (turbine locations are approximate).

In addition to the turbines, the Project would consist of the following components:

- Approximately 9 miles of road reconstruction to existing roads (3 miles of Forest Service roads and 6 miles of County roads) and approximately 5 miles of new road construction would occur on NFS lands. During construction of the Project, these roads would be widened and cleared to approximately 40 feet to allow for equipment delivery and crane transport between turbine locations. However, to allow for the installation of the collection system and drainage, some of these roads may be cleared to approximately 80 feet. Road reclamation and revegetation would be performed at the end of construction to reduce access roads to standards mutually agreed upon with the appropriate road agencies (i.e., Forest Service and Mason County). Roads would remain accessible, to the extent practicable, to the public. The new roads for the Project would be permanent roads added to the road system on NFS lands.
- Installation of over 40 miles of 34.5 kV underground electrical interconnections between turbines to collect and deliver electricity to a new substation. Where practicable, the underground electrical collection system would be installed along the same right-of-way (RoW) corridor as the access roads. In addition, fiber optic communication lines would be installed along with the electrical collection system to monitor the operation of the wind farm. No additional clearing beyond that described for the roadway clearing would be required for the installation of the electrical collection system and fiber optic lines between turbines.

- A step-up transformer at each turbine location plus one transformer for the electrical substation site. Each step-up transformer would be located on the concrete foundation base.
- An electrical substation on a 5-acre parcel would be constructed on NFS lands within the Project Area to step up the electrical collection system voltage to the existing local transmission line voltage.
- An above ground, 138 kV transmission line to connect the proposed wind farm substation to the existing Pere Marquette-Stronach 138-kV transmission line running north-south and located east of the Project Area. The transmission line would have a RoW corridor of approximately 150 feet. Approximately 3 miles of the transmission line would be located on NFS lands and approximately 2 miles of the line would cross private lands.
- Three 199-foot tall meteorological monitoring towers have been constructed and are currently collecting data within the Project Area boundary. At the completion of the Project, 1 to 3 meteorological towers would remain within the Project Area during the life of the Project.
- Three temporary staging areas would be located within the Project Area for construction-related temporary facilities, which include a concrete batch plant and cleared areas for construction parking, equipment laydown, and construction management trailers. These areas, totaling approximately 10 acres, would be restored and revegetated upon completion of construction (temporary staging area locations are approximate).
- A second electrical substation would be needed at the end of the 138 kV transmission line to tie into the existing 138 kV overhead transmission line. This substation would be located on private land outside of the Project Area.

In addition to these facilities, the Project development process would also involve upgrading local transportation infrastructure to accommodate the expected size of construction materials. At this time, it is anticipated that the infrastructure upgrades would be minor in scale (e.g., increased turning radius at road intersections).

The Project Area boundary encompasses a total of approximately 10,024 acres, of which about 8,600 acres are within the NFS lands on the Cadillac-Manistee Ranger District of the Forest. The Project components described above would be sited within this Project Area boundary and would occupy a permanent footprint of approximately 75 acres of NFS lands.

Consideration of species management and habitat, water resources, cultural resources, visuals, public access and safety, maximization of existing facilities, and the layout of buried and above ground facilities have been incorporated as part of the Project design to the extent practicable and would be evaluated through the National Environmental Policy Act (NEPA) site-specific environmental analysis process.

The Proposed Action is only one approach to meeting the Purpose and Need objectives for this project. Using the comments received from our scoping process, we may develop additional alternatives to the one proposed.

Potential Issues and Existing Resources

We are anticipating issues, concerns, or potential impacts to the following resources. Some may be determined to be minor because they would not be affected by the Project design. Only issues and resources that would be impacted by an action alternative or vary greatly between alternatives would be used to evaluate the alternatives for this Project.

Visual Quality
Potential impacts to visual and aesthetic resources will be evaluated as part of the analysis. Measures to address impacts will be incorporated into the Project.

Noise
Potential impacts as a result of noise will be evaluated as part of the analysis. Measures to minimize impacts from noise will be incorporated into the Project.

Social Economics
The environmental analysis will address the effects of the proposed activities on social economics and evaluate the Project's cost and revenue impacts on local communities.

Recreation
Recreational resources will be addressed in the environmental analysis for the Project Area. Measures to address impacts will be incorporated into the Project.

Cultural Resources
Cultural heritage resource sites will be addressed in the environmental analysis for the Project Area. Recommended protection measures for these resources will be incorporated into the design of the Project.

Wetland and Waters Resources
Wetlands, streams, rivers, lakes, and other water resources in the Project Area will be identified. Potential effects and mitigation measures will be determined.

Wildlife, Fisheries, and Rare Species
The effects of the proposed activities on endangered, threatened and sensitive plant and animal species; and wildlife and fisheries will be evaluated as part of the analysis.

Vegetative Composition
The current vegetative composition and the expected changes as a result of implementing the proposed activities will be evaluated as part of the analysis.

Soil and Air
Potential impacts to soil and air resources will be evaluated as part of the analysis. Measures to minimize impacts to soil and air resources will be incorporated into the Project.

Old Growth
A portion of the Project Area occurs within the Forests' old growth design, including some of the proposed turbine locations. Potential impacts to old growth will be evaluated as part of the analysis.

Analysis Process

This analysis will follow the National Environmental Policy Act (NEPA) procedures and will be used to determine if there would be any significant environmental effects from the alternatives and to compare effects of the alternatives to provide for a choice among them. **Forest Supervisor Barry Paulson will use this analysis to decide whether to grant the authorization for the construction and operation activities as proposed, or as modified by an alternative to the proposed activities, or to defer granting of the authorization.**

The following steps would be followed in developing the Environmental Impact Statement (EIS). The steps shown in *italics* are the approximate formal public comment opportunities for your involvement in this project.

Step 1: Scoping September - October 2008
Public comment period (30 days). This is the time when people can comment on the proposed project, identify their issues and concerns, and recommend opportunities and options to consider in the analysis.
Forest Service develops issues based on comments from the public and then develops alternatives based on issues.

Step 2: Analysis – Draft EIS September 2008 – December 2009
Forest Service analyzes the effects of alternatives and publishes a Draft Environmental Impact Statement.
Public comment period (45 days) on Draft Environmental Impact Statement.
Forest Service analyzes comments on the Environmental Impact Statement and responds (changes to the Environmental Impact Statement may be based on comments).

Step 3: Decision – Final EIS and ROD December 2009
The Forest Service publishes the Final Environmental Impact Statement (FEIS). Forest Supervisor documents a decision in the Record of Decision (ROD) and notifies the public.
Formal 45-day appeal period.

Step 4: Implementation 2010 and beyond
If the decision allows installation and operation of the wind facility, installation would take about eight months to complete and operation of the wind farm would be about 30 years.

Step 5: Monitoring 2010 and beyond
Monitoring of project implementation and mitigation effectiveness would take place during and after the implementation stage.

PUBLIC COMMENT SHEET

White Pines Wind Farm Project
Cadillac-Manistee Ranger District
Huron-Manistee National Forests

We invite you to comment on the specific proposed activities as they relate to the White Pines Wind Farm Project. Please take a few minutes to make comments on our proposal. The interdisciplinary team will review all of the comments and incorporate them into the planning process. If you would like to give input beyond the comment sheet, or have questions regarding the proposal, please contact Patricia O'Connell, at the Cadillac-Manistee Ranger District; Telephone: 231-723-2211 ext. 3119, Fax: 231-723-8642. Send electronic comments to: comments-eastern-huron-manistee-manistee@fs.fed.us.

NAME:_____
ADDRESS:_____
_____
_____
PHONE: _____

Please indicate your interest in this project by checking the appropriate box(s) below:

- ❑ I would like a printed copy of the Draft Environmental Impact Statement (DEIS).
- ❑ I would like an electronic copy of the DEIS instead of a printed copy (printed copies are lengthy and bulky).
- ❑ I do not wish to receive the DEIS or future information and mailings on this project.
- ❑ Please remove my name from future mailing lists.

Comments should be received by **October 12, 2008** to be used in alternative development for this project. **If you do not respond, we will assume you are not interested in this specific project and your name will be taken off the mailing list for this project.** However, your name will **remain** on other project mailing lists unless you indicate otherwise and return this form. **Note: If requested, a copy of all comments, including names and addresses, will be made available to the public.**

Comments:

From:

Place Postage Here

TO: Cadillac-Manistee Ranger District
Huron-Manistee National Forests
412 Red Apple Road
Manistee, MI 49660

Attention: Patricia O'Connell