



## **1.0 EXECUTIVE SUMMARY**

This Draft Environmental Impact Statement (DEIS) is for a proposed action known as the Marble River Wind Farm (the Project). Provided below is a brief description, along with summaries of the regulatory process; the Project's purpose, need, and benefit; its potential environmental impacts; and proposed mitigation measures. Alternatives to the Project and its effect on use and conservation of energy are also reviewed.

### **1.1 Project Description**

Marble River, LLC (the Applicant) is proposing to develop a wind-powered electric generating facility of up to 109 turbines each generating a capacity of 2.0 megawatts (MW). The proposed Project is located in the Towns of Clinton and Ellenburg in Clinton County, New York. Approximately 89 of the turbines are proposed to be located in the Town of Clinton and 20 in the Town of Ellenburg. In addition to the wind turbines, the Project will involve construction of 41 miles of gravel access roads, 55 miles of underground electric collection cable, an Operation and Maintenance building and a new substation to the north of Star Road at the Town of Ellenburg/Clinton town line adjacent to an existing 230 kV electric transmission line.

The Project will be developed on leased private land. Construction is scheduled to start in the Spring of 2007 and be completed by the Fall of 2007. Initial general land clearing may start earlier, after all required permits and approvals are received, in order to commence road construction as early as possible, after the 2007 spring thaw. Initial soil investigation to support the civil design will also be conducted in 2006. A more comprehensive soil investigation program will be completed by the contractor in late 2006 or early 2007.

The wind turbines and associated components operate in an almost completely automated fashion. The wind turbine blades rotate at relatively slow speeds ranging from 9 to 19 revolutions per minute. The wind turbines proposed for the Project have a minimum wind speed requirement of approximately 6.7 miles per hour (mph) to operate and will shut down when wind speeds reach 47 mph. Each wind turbine has a computer to control critical functions, monitor wind conditions, and report data.

### **1.2 Project Applicant**

Marble River, LLC is the Applicant for the Project. The Project name is the Marble River Wind Farm. The Project's mailing address is:

Marble River, LLC  
3 Columbia Place  
Albany, New York 12207  
(518) 426-1650

### **1.3 Summary of Project Purpose and Need**

The purpose of the proposed Project is to create a wind-powered electrical-generating facility that will provide a significant source of renewable energy to the New York power grid. The Project will facilitate compliance with the objectives of New York State Public Service Commission (PSC) Order 03-E-0188 issued on September 24, 2004, which established the New York State Retail Renewable Portfolio Standard (RPS). The purpose of the RPS is to increase to 25 percent by the end of 2013 the proportion of electricity from renewable energy sources used in New York State. Implementation of the RPS is the responsibility of the New York State Energy Research and Development Authority (NYSERDA) as agent for the New York State Department of Public Service. The Project also responds to objectives identified in the 2002 State Energy Plan (New York State Energy Planning Board, 2002), and the Preliminary Investigation into Establishing a Renewable Portfolio Standard in New York (NYSERDA, 2003). These objectives include stimulating economic growth, increasing energy diversity, and promoting a cleaner and healthier environment. The benefits of the proposed action include positive impacts on socioeconomics (e.g., increased tax revenues to local municipalities and lease revenues to participating landowners and reduced consumption of imported oil and expensive natural gas for power generation in the state), air quality (through reduction of emissions from fossil-fuel-burning power plants), and climate (reduction of greenhouse gases that contribute to global warming). By eliminating pollutants and greenhouse gases, the Project will also benefit ecological and water resources as well as human health.

### **1.4 Summary of Proposed Alternative**

The Applicant is proposing a wind-powered electric generating project in the Towns of Clinton and Ellenburg in Clinton County, New York. The Project will occur on approximately 19,310 acres of leased land located off of State Routes 11, 189, and 190, Gagnier Road, Clinton Mills Road, Campbell Road, Patnode Road, Lagree Road, Looby Road, Whalen Road, Merchia Road, Robare Pond Road, Liberty Pole Road, Soucia Road, Rogers Road, Number 5 Road and Moore Road. The land is primarily forest and agricultural use, but also includes significant wetland acreage. Farms and rural residences occur along the public roads within the Project area.

The Project will include up to 109 turbines, of which 89 are located in the Town of Clinton and 20 in the Town of Ellenburg. Each wind turbine will include a 90-meter (295-foot) diameter, three-bladed rotor mounted on a 78-meter (256-foot) tall steel pole tower (total maximum height not to exceed 125 meters [410 feet]). Other Project components include approximately 41 miles of gravel access roads, 55 miles of underground electric line, and a new substation off of Patnode Road in the Town of Clinton.

One Point of Interconnection (POI) Station, approximately 267 feet by 690 feet in size, is proposed to be located at the New York Power Authority (NYPA) 230 kV transmission line easement area. Neighboring this station to the north, the Applicant proposes to construct two 34.5 kV collector stations, each approximately 136 feet by 173 feet.

### 1.5 Summary of Environmental Effects

In accordance with requirements of the SEQRA process, potential impacts arising from the proposed action were evaluated with respect to an array of environmental and cultural resources. The analysis of potential impacts is summarized below.

<b>Environmental Factor</b>	<b>Potential Impacts</b>
Physiography, Geology, and Soils	Soil erosion Soil compaction Loss of agricultural land
Water Resources	Stream crossings Siltation/sedimentation Temporary Disturbance Wetland filling Permanent stream crossings
Biological Resources	Vegetation clearing Incidental wildlife injury and mortality Loss or alteration of habitat
Land Use and Zoning	Rezoning Adverse and beneficial impacts on farming Changes in community character and land use trends
Socioeconomics	Tax revenue/PILOT Revenue to participating landowners Expenditures on goods and services Tourism Short-term and long-term employment
Transportation	Road wear Traffic congestion/delays Road system improvements/upgrades
Cultural Resources	Visual impacts on architectural resources Disturbance of historic archaeological resources
Visual Resources	Visual change to the landscape Visual impact on sensitive sites/views Shadow-flicker impact on adjacent residents
Community Services, Public Utilities, and Infrastructure	Demands on police and emergency services Possible telecommunication interference
Climate and Air Quality	Construction vehicle emissions Dust during construction Reduced air pollutants and greenhouse gases
Noise	Construction noise Operational impacts on adjacent residents

The project is expected to result in positive, long-term impacts on agriculture, socioeconomics, and air quality within the Project area and surrounding region. The project will result in minor, generally short-term impacts to soils, vegetation, wetlands, wildlife habitat, and transportation facilities. The project could have long-term effects on community character, avian resources, ambient noise levels, television reception, and some historic and visual resources. However, other than the Project's visibility, operational impacts (e.g., noise, bird collisions, and shadow flicker) will be limited and minor.

Various measures will be taken to avoid, minimize and/or mitigate potential environmental impacts. General mitigation measures will include adhering to requirements of various local, state, and federal ordinances and regulations and entering into development agreements with adjacent landowners. The project developer will also employ environmental monitors to assure compliance with permit requirements and environmental protection commitments during construction. Specific measures designed to mitigate or avoid adverse potential environmental impacts during project construction and operation include:

- Siting the Project away from population centers and areas of residential development to the extent practicable
- Siting project components outside of areas of mature forest land to the extent practicable
- Locating access roads and turbines along field edges and in field corners to avoid or minimize disturbance of agricultural land
- Keeping turbines a minimum of 1,200 feet from nonparticipating residences to avoid significant noise and visual impacts
- Using existing roads for turbine access whenever possible to minimize disturbance to agricultural land, wildlife habitat, wetlands, and streams
- Utilizing construction techniques that minimize disturbance to vegetation, streams and wetlands
- Developing and implementing a sedimentation and erosion control plan
- Proposing a compensatory stream/wetland mitigation program
- Siting select turbines to avoid or minimize wetland, wildlife, or visual impacts
- Performing post-construction monitoring to improve understanding of possible avian impacts
- Implementing agricultural protection measures to avoid, minimize, or mitigate impacts on agricultural land and farm operations
- Upgrading public roads utilized during construction
- Developing and implementing a historic resource protection plan in concert with the New York State Historic Preservation Office (SHPO)

A discussion of mitigation measures is included by resource type in Section 3.0.

### **1.6 Summary of Alternatives Analysis**

The following alternatives to the proposed action are described and evaluated: no action, alternative project siting, alternative project size, alternative project design, alternative technologies, and alternative construction phasing. Analysis of these alternatives revealed that both the size of the Project and the configuration of the turbines as currently proposed are necessary to produce a commercially feasible project. A detailed discussion of alternatives is included in Section 8.0.

### **1.7 List of Required Permits and Approvals – Proposed Alternative**

Implementation of the Project will require certain permits and/or approvals from local, state, and federal agencies. The permits and approvals that are expected to be required are listed below.

Agency	Description of Permit or Approval Required
<b>Towns</b>	
Town of Clinton Town Board	Acceptance of DEIS, FEIS, and issuance of findings (as Co-Lead Agency under SEQRA).
Town of Clinton Town Board	Wind Energy Facility Permit approval under Local Law No. 1 of 2005.
Town of Clinton Town Board	Approval of height variance and turbine setback distance variance.
Town of Clinton Departments (Public Works, Codes, etc.)	Issuance of building permits. Review and approval of highway work permits.
Town of Ellenburg Town Board	Acceptance of DEIS, FEIS, and issuance of findings (as Co-Lead Agency under SEQRA).
Town of Ellenburg Departments (Public Works, Codes, etc.)	Issuance of building permits. Review and approval of highway work permits.
Town of Ellenburg Town Board	Creation of Wind Overlay Zone and Special Use Permit under Local Law No. 4 of 2005 and approval of turbine setback distance variance.
<b>Clinton County</b>	
Highway Department	Highway work permits.
Clinton County IDA	PILOT approval. Issuance of SEQRA Findings.
Clinton County Planning Board	Recommendation pursuant to General Municipal Law 239-m.
<b>New York State</b>	
Department of Environmental Conservation	Article 24 Permit for disturbances to state-regulated wetlands. Article 15 Permit for disturbance of protected streams. SPDES General Permit. Section 401 Water Quality Certification. Issuance of SEQRA findings.
Department of Transportation	Special Use Permit for oversize/overweight vehicles. Highway work permits.
Department of Agriculture & Markets	Submit Notice of Intent for work in an Agricultural District.
Public Service Commission	PSL §68 Certificate. Issuance of SEQRA findings.
New York State Energy Research and Development Authority (NYSERDA)	Renewable Portfolio Standard.
New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP)	Consultation.
<b>Federal Agencies</b>	
FAA	Lighting Plan, Notice of Proposed Construction or Alteration.
U.S. Army Corps of Engineers	Section 404 Individual Permit for placement of fill in federal jurisdictional wetlands/waters of the U.S. NEPA compliance.
Occupational Safety and Health Administration (OSHA)	29 CFR 1910 regulations (standard conditions for safe work practices during construction).