

# Final Environmental Impact Statement

MARBLE RIVER WIND FARM  
CLINTON AND ELLENBURG, NEW YORK

CO-LEAD AGENCIES  
TOWN OF CLINTON & TOWN OF  
ELLENBURG

PREPARED FOR

Marble River, LLC  
52 James Street, 4<sup>th</sup> Floor  
Albany, New York 12207

PREPARED BY

ESS Group, Inc.  
401 Wampanoag Trail, Suite 400  
East Providence, Rhode Island 02915

And

Environmental Design and Research, P.C.  
217 Montgomery Street, Suite 1000  
Syracuse, New York 13202

Project No. A456.000

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**SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT  
Marble River Wind Farm**

**Co-Lead Agencies  
Town of Clinton  
Town of Ellenburg**

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**TABLE OF CONTENTS**

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
1.0 INTRODUCTION.....	1
1.1 State Environmental Quality Review Process .....	1
2.0 PROJECT MODIFICATIONS AND SUPPLEMENTAL INFORMATION.....	3
2.1 Revised Project Layout/Details.....	3
2.2 Supplemental Existing Conditions Information.....	3
2.2.1 Wetlands.....	3
2.2.2 Ecological Resources .....	4
2.2.3 Cultural Resources .....	6
2.2.4 Miscellaneous .....	7
2.3 Revised Impact Analysis.....	7
2.3.1 Soils .....	7
2.3.2 Wetlands.....	7
2.3.3 Ecological Resources .....	7
2.3.4 Cultural Resources .....	8
2.4 Supplemental Mitigation Measures .....	9
2.4.1 Wetlands.....	9
2.4.2 Ecological Resources .....	9
2.4.3 Cultural Resource Avoidance.....	10
2.5 Supplemental Alternative Analysis.....	10
3.0 COMMENT MATRIX.....	10
4.0 PUBLIC RESPONSE SUMMARY .....	59
4.1 Response Summary Ordered by Subject .....	59
4.2 Response Summary Ordered by Source .....	113
4.3 Response Summary – No Response Necessary.....	119
5.0 REFERENCES .....	130
6.0 ACRONYMS AND ABBREVIATIONS .....	131

**TABLES**

Table 3.1	Marble River Comment Matrix
Table 4.1	Marble River Response Summary Ordered by Subject
Table 4.2	Marble River Response Summary Ordered by Source
Table 4.3	Marble River Response Summary – No Response Necessary

**FIGURES**

Figure 1	Project Layout (Revised)
Figure 2	Access Road to Wind Turbine 209



## TABLE OF CONTENTS (Continued)

### APPENDICES

#### DISK 1

Appendix A	Wetland Delineation Report
Appendix B	Final Wetland Impact Summary Tables
Appendix C	Alternative Analysis
Appendix D	Wetland Quality Functional Assessment
Appendix E	Proposed Wetland Mitigation Plan; Mitigation Figures
Appendix F	Invasive Species Management Plan
Appendix G	2007 Rare Plant Survey
Appendix H	2007 Breeding Bird and Area Search Surveys
Appendix I	Post-Construction Avian and Bat Fatality Study Protocol
Appendix J	Elevation and Substation Grading Figure
Appendix K	Addendum Phase 1B Archeological Survey and Phase 1B-2 Archeological Investigations
Appendix L	NYPA Operating Coordination Procedures
Appendix M	Model Conservation Easement
Appendix N	Agency Correspondence
Appendix O	Maple Ridge Movie

#### DISK 2

Appendix P	Public Hearing Transcript and Comments
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<b>Firms Involved in the Preparation of the Final Environmental Impact Statement on Behalf of Marble River, LLC</b>	
<b>ESS Group, Inc.</b> 401 Wampanoag Trail, Suite 400 East Providence, RI 02915 Steve Wood (401) 330-1206	<b>Tetra Tech EC, Inc.</b> 1000 The American Road Morris Plains, New Jersey 07950 Richard Delahunty (973) 630-8402
<b>Environmental Design &amp; Research, Landscape Architecture, Environmental Services, Engineering and Surveying, P.C.</b> 217 Montgomery Street Suite 1000 Syracuse, NY 13202 John Hecklau (315) 471-0688	<b>Stantec Consulting (formerly Woodlot Alternatives)</b> 30 Park Drive Topsham, Maine 04086 Derek Hengstenberg (207) 729-1199
<b>John Milner Associates, Inc.</b> 1 Croton Point Avenue, Suite B Croton-on-Hudson, New York 10520 Patrick J. Heaton, RPA (914) 271-0897	<b>URS Corporation</b> 77 Goodell Street Buffalo, New York 14203 Mark DiPasquale (716) 856-5636



## **1.0 INTRODUCTION**

This Final Environmental Impact Statement (FEIS) is for a proposed action known as the Marble River Wind Farm (the Project). This FEIS has been prepared by ESS Group, Inc. (ESS) of East Providence, Rhode Island and Environmental Design & Research, P.C. (EDR) of Syracuse, New York on behalf of Marble River, LLC. The document is intended to facilitate the environmental review process in accordance with the New York State Environmental Quality Review Act (SEQRA) and provide a basis for informed public review and decision-making. The Town of Clinton Town Board and the Town of Ellenburg Town Board act as the co-Lead Agencies for the purpose of this coordinated SEQRA review. The FEIS builds upon the Supplemental Draft Environmental Impact Statement (SDEIS) and Draft Environmental Impact Statement (DEIS) and addresses Project changes that occurred after the SDEIS was released for public review and comment in July 2007. The FEIS also provides an extensive response to substantive comments and questions received throughout the entire SEQRA process. Information presented in the FEIS in terms of the Project layout, existing conditions, and associated impacts supersedes that presented in the SDEIS and does not, in general, reiterate information that remains accurate and unchanged from the SDEIS and DEIS. These three documents together provide a comprehensive analysis of the environmental impacts anticipated to result from the proposed Marble River Wind Farm. All references to sections, appendices and figures within this document pertain to this FEIS unless noted otherwise.

### **1.1 State Environmental Quality Review Process**

In November 2005, a Full Environmental Assessment Form that addressed the Marble River Wind Farm was submitted to the Towns of Clinton and Ellenburg pursuant to SEQRA, the formal submittal of which initiated the SEQRA process for the proposed action. On January 4, 2006, the Town of Ellenburg, as the co-Lead Agency, issued a positive declaration, requiring the preparation of the DEIS. On January 6th 2006, the Town of Clinton, as the co-Lead Agency, also issued a positive declaration, requiring the preparation of the DEIS. The Towns have subsequently agreed to act as co-Lead Agencies for the purpose of this coordinated SEQRA review. On March 30, 2006 the DEIS for the Marble River Wind Farm was submitted to both co-Lead Agencies for review and was subsequently accepted as complete on April 6, 2007. Upon Lead Agency acceptance of the DEIS, copies of that document (along with a copy of the public notice) were distributed to all interested and involved agencies (see DEIS Table 1) and made available to the public at the Clinton and Ellenburg Town Clerk's Offices, the Public Library, and Horizon's local office in Ellenburg, NY. Additional copies of the document were sent to the Northern Adirondack Central School District and the Chateaugay Central School. The entire DEIS was posted to the Project's website ([www.marbleriverwindfarm.com/documents/deis.cfm](http://www.marbleriverwindfarm.com/documents/deis.cfm)) to facilitate public review and comment on the document. The public comment period ran from April 6, 2006 to June 5, 2006 and public hearings were held at both the Churubusco Fire House, Clinton Mills Road, Churubusco, New York on May 25, 2006 for the Town of Clinton and the Ellenburg Town Hall in Ellenburg New York on May 25, 2006 for the Town of Ellenburg.

The SDEIS was accepted by the Lead Agencies on July 25, 2007 and a Notice of Completion of Public Comment Period were subsequently filed and published. The public comment period on the SDEIS ran until September 25, 2007. Public hearings on the SDEIS were held on August 27, 2007 at the Ellenburg Town Hall at 7 PM and the Churubusco Fire House at 5 PM. A summary list of all

comments received as part of this FEIS is included in Section 3.0, Comment Matrix. Comments in their entirety are listed in Appendix P. A Responsiveness Summary was subsequently prepared as part of this FEIS (Section 4.0) to address all substantive oral and written comments received on the DEIS and SDEIS.

Various plans and support studies have also been prepared in support of the Project, which provide detailed information on discrete topical areas in furtherance of the SEQRA evaluation. These studies include the following:

- Construction (Assembly & Installation) Details
- Construction Milestone Schedule
- Federal Aviation Administration (FAA) Lighting Plan
- Decommissioning Plan
- Community Relations and Complaint Resolution Plan
- Agricultural Protection Measures
- Wetland Delineation Report
- Hydrogeologic Evaluations
- Rare Plant Assessment Report
- Spring 2005 Radar, Visual, and Acoustic Survey of Bird and Bat Migration
- Fall 2005 Radar, Visual, and Acoustic Survey of Bird and Bat Migration
- Avian Risk Assessment
- Transportation Assessment Report
- Material and Equipment Delivery Route Assessment
- Phase IA Cultural Resources Survey
- Phase IB Archeological Survey
- Historic Architectural Survey
- Visual Impact Assessment
- Supplemental Visual Impact Assessment
- Shadow-Flicker Modeling
- Noise Impact Assessment
- Evaluation of Wind Power Project Impacts on Local Property Values
- Economic Impact Analysis (Multiplier Report)
- Microwave Path Report
- TV Broadcast Off-Air Reception Measurement Report
- 100 Mile Television Station Search Report
- Draft Fire Prevention and Control Plan
- Assessment of Safety Risks Arising from Wind Turbine Generator Icing
- Rules of Engagement for Local Snowmobilers (Safety Guidelines for Snowmobiles near Wind Turbines)

This FEIS has been prepared to comply with the requirements of SEQRA (6 NYCRR Part 617). The purpose of the FEIS is to incorporate information relative to the proposed Project's design and impacts that was made available subsequent to the issuance of the SDEIS. This additional

information is provided in Section 2.0 below. Section 4.0 of this FEIS contains responses to the comments and questions posed at public hearings and/or received in writing during the public comment periods for the Project.

The SEQRA process for the Marble River Wind Farm will conclude with the following actions and time frames:

- FEIS accepted by Lead Agencies
- Final notice of completion of FEIS
- Distribute FEIS and a copy of the public notice to the agencies listed in Table S2 of the SDEIS
- Ten-day public consideration period
- Lead Agency issues Findings Statement, completing the SEQRA process
- Involved agencies issue Findings Statements

## **2.0 PROJECT MODIFICATIONS AND SUPPLEMENTAL INFORMATION**

This section describes modifications that were made to the Project, as well as supplemental information regarding potential environmental impacts that has become available since the SDEIS was filed in July 2007.

### **2.1 Revised Project Layout/Details**

- The proposed Project includes only minor modifications to the layout presented/described in the SDEIS. These modifications include revised wind turbine generator (WTG) locations, associated roads and interconnects; a proposed overhead (OH) interconnect line; and proposed wetland mitigation areas. The revised Project layout is depicted in Figure 1.
- Elevation and Substation Grading Figure – A figure depicting the elevation and grading in the vicinity of the Project substation is included as Appendix J.

### **2.2 Supplemental Existing Conditions Information**

#### **2.2.1 Wetlands**

- Wetland Delineation Report

This report provides an updated and complete description of federal and state freshwater wetlands identified within the Marble River Wind Farm Project area (Appendix A). Included are descriptions of the area, methods used to determine the presence of wetlands, information reviewed (concerning wetlands, soils, and threatened and endangered species), field survey results (relating to delineated wetlands, surface waterbodies, vegetation, soils, and hydrology), and a summary of the New York State Department of Environmental Conservation (NYSDEC) wetlands and adjacent areas. This report supersedes the wetland delineation report included as Appendix E in the SDEIS.



The U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) has mapped 739 wetlands polygons within the Project area, totaling approximately 5,618 acres. Review of NYSDEC freshwater wetlands mapping indicates that 73 state-regulated wetland polygons are located within the Project area, totaling approximately 7,670 acres. A review of the USDA NRCS Soil Survey Geographic Database for Clinton County, New York indicated that 23 of 54 mapped soil units within the survey area were identified as wetland soils (hydric soils and soils with hydric inclusions).

Field delineations were conducted in 2005 from September 19 through November 7, in 2006 from May 2 to December 21, and in 2007 from May 2 to August 23. As described in the SDEIS, wetland delineation methods followed the three-parameter approach as described in the U.S. Army Corps of Engineers (USACOE) Wetlands Delineation Manual and the 1987 New York State Freshwater Wetlands Delineation Manual. This methodology uses vegetation, soils, and hydrology to determine the presence of wetlands and delineate their boundaries. TtEC delineated 434 wetland polygons in the Project area, totaling 140.94 acres of wetland. Predominant wetland covertypes delineated at the site included palustrine deciduous forest, palustrine scrub shrub, and palustrine emergent.

- **Wetland Quality Functional Assessment**

This assessment was conducted to identify and determine the relative importance of the specific functions and values of the wetlands located at the proposed Marble River Wind Farm in order to define the goals and objectives for the development of an appropriate mitigation plan (Appendix D).

The wetlands affected by the construction of the Project were numerically ranked based on two general categories: biological attributes and disturbance factors. Attribute scores (biological and disturbance) were tallied for each affected wetland and these biological and disturbance scores were used to determine appropriate mitigation ratios. Based on this analysis, a mitigation ratio of 1 to 1 was proposed for emergent site wetlands, 0.5:1 to 1.5:1 for scrub shrub wetlands, and 0.5:1 to 2:1 for forested wetlands (Appendix D).

### **2.2.2 Ecological Resources**

- **2007 Rare Plant Survey**

To determine the presence of any listed rare plant species in the Project area, a rare plant survey was conducted by TetraTech EC, Inc. (TtEC) during the 2007 growing season (Appendix G). The Rare Plant Assessment Report, described in Appendix F of the SDEIS, detailed the scope and plans for this survey, which was conducted June 18-23 and October 1-5, 2007. Rare species surveyed for include New England northern reed grass, northern reed grass, cloud sedge, ram's head ladyslipper, ovate spikerush, marsh horsetail, American shore-grass, riverweed, slender bulrush, veiny meadow-rue, Houghton's sedge, prairie redroot, golden corydalis, northern wild comfrey, northern tansy mustard, clustered sedge, spurred gentian, and melic-oats. More information on these species including scientific

names, habitat, plant associations, state status, and regional wetland indicator status is included in Appendix G.

No state threatened or endangered plants were detected within or adjacent to the proposed Project footprint. However, twenty (20) species listed by the state as “exploitably vulnerable” were determined to occur within the proposed limits of clearing. The New York State Natural Heritage Program’s exploitably vulnerable category contains plants that are likely to be picked for commercial and personal purposes. Such plants are not considered rare at this time, but are likely to become threatened in the near future if causal factors continue unchecked.

It should be noted that TtEC did find several unidentifiable early blooming species within the Project footprint, with orchids being of particular concern. Because these plants were observed past bloom, diagnostic characteristics associated with reproductive elements were not available for use in identification. Therefore, TtEC recommends that areas where potential orchid species were noted be revisited in the spring of 2008, prior to the start of construction.

- 2007 Breeding Bird and Area Search Surveys

A breeding bird and area search survey was conducted in the summer of 2007 in order to properly characterize the extent of breeding bird activity within the revised Project area (Appendix H). The 2007 breeding bird and area search survey was designed to expand upon and supplement the surveys conducted in 2005. The objective of the study was to determine whether, and to what extent, the wind turbines may disturb/displace nesting birds. Combined, both studies together represent a multi-year surveying effort which will establish baseline avifauna breeding data for future post-construction habitat displacement monitoring surveys.

Breeding bird surveys for the Marble River Wind Farm were initially conducted in the summer of 2005. In order to properly address changes in Project layout that have occurred subsequent to the 2005 study, systematic point counts and area searches to characterize species diversity and abundance of breeding birds were conducted in the vicinity of the proposed Project area in the early summer of 2007 (Appendix H). During this field effort, observations on species identification, abundance, nest building, courtship displays, and other behaviors were noted.

Surveys were conducted at the proposed Project area during the months of May and June 2007. Surveys consisted of point count field surveys, modeled on U.S. Fish and Wildlife Service Breeding Bird Survey methodology, and supplemental area searches, focused in areas potentially containing rare species that are not as effectively detected by point count survey methods. In total, 32 points and 32 area searches were conducted throughout the Project area. Surveys were conducted across a variety of habitats (i.e., field, forest, and wetland), under optimal weather conditions, and coincided with hours of peak bird singing activity, approximately 4:30 AM to 10:30 AM. Data collected during field surveys included

species composition and distribution, species richness, relative abundance, and frequency of breeding avian species over the entire survey area and by habitat type.

A total of 94 bird species was observed during the 2007 survey. No state or federally endangered bird species were observed during surveys within the Project area. However, several New York State threatened and special concern species were noted. State-listed threatened species include the pied-billed grebe (*Podilymbus podiceps*), northern harrier (*Circus cyaneus*), and upland sandpiper (*Bartramia longicauda*). Observed species of special concern include the grasshopper sparrow (*Ammodramus savannarum*) and vesper sparrow (*Pooecetes gramineus*). Sightings of sensitive species occurred in both field and wetland habitats and are illustrated on Figure 3 of Appendix H. No sensitive species were observed in forested portions of the study area. This result may be attributable to the fact that these areas have been historically logged and are heavily fragmented.

The relative abundance of all bird species was greatest in forested habitat, slightly less in wetlands, and least in field habitats, which ranged in definition from fallow grasslands to active agricultural fields. The species encountered during the breeding bird surveys are generally considered common to the region and typical of the habitats in which they were observed.

### **2.2.3 Cultural Resources**

An addendum Phase IB Archeological Survey and Phase IB-2 Archeological Investigation (Appendix K) were conducted in May and June 2007 to properly address changes to the Project layout which occurred subsequent to the original Phase IB fieldwork as presented in the SDEIS, Appendix J.

The supplemental Phase IB-2 archeological report (Appendix K) was conducted in the spring of 2007 subsequent to and in support of previous Phase IB survey work (conducted in 2006). The supplemental Phase IB-2 archeological survey fieldwork included the excavation of 1,001 shovel tests (equivalent to approximately 62.5 acres) along OH line ROWs, proposed wetland mitigation areas and in the vicinity of the Clinton Mills Historic Archeological Site. Locations of all Supplemental Phase IB-2 Survey Areas are depicted in Appendix K, Figure 1.

No Native American prehistoric artifacts were recovered during the supplemental Phase IB survey. Historic-period artifacts were found scattered in a proposed wetland mitigation area (Clookey Farm Wetland Mitigation Area). The artifacts were initially considered field scatter from historic manuring practices, but after the SHPO reviewed these findings they concluded that they were more likely a sheet midden (see Appendix N – Office of Parks, Recreation and Historic Preservation [OPRHP] Correspondence dated 10/22/2007). The SHPO subsequently determined that, given the intensity of the studies performed that immediate region, no additional studies are warranted. No foundations or other possible structural remains were observed in the vicinity of these finds.

The supplemental survey was particularly focused in the area of the Clinton Mills Historic Archeological Site. The Project facilities that were originally proposed within two areas of this site and included: 1) installation of a section of OH electrical line and road widening along Rogers Road, and 2) development of an access road and UG interconnect to WTG 209 in the southern portion of the Clinton Mills Historic site.

#### **2.2.4 Miscellaneous**

- New York Power Authority (NYPA) Operating Coordination Procedures

These procedures outline the division of responsibility for the operation of Transmission Owner's Attachment Facilities (owned by NYPA) and Applicant's Attachment Facilities associated with the Marble River Wind Farm (Appendix L).

- Agency Correspondence

Documentation of agency correspondence subsequent to the SDEIS approval is located in Appendix N.

### **2.3 Revised Impact Analysis**

#### **2.3.1 Soils**

Temporary and permanent soil impacts for the revised Project layout total 702 and 133 acres, respectively. The revised Project layout is depicted in Figure 1.

#### **2.3.2 Wetlands**

The Project will result in the following wetland impacts: Total Wetland Disturbance – 74.46 acres; Temporary Disturbance – 65.52 acres; and Permanent Loss – 8.94 acres. Additional information regarding wetland impacts is provided in the Final Wetland Impact Summary Tables located in Appendix B.

#### **2.3.3 Ecological Resources**

- Forested Areas

The Project will result in 347 acres of permanent forest loss and conversion to successional communities. Forest impacts include approximately 71 acres lost (i.e., converted to built facilities) and 276 acres converted to successional communities (within the turbine workspaces and along the OH line right of way [ROW]). Forested areas that will be allowed to regenerate include 129 acres along road edges, the underground (UG) interconnect, and from other temporary construction-related disturbances.

- 2007 Rare Plant Survey

No state listed threatened or endangered plant species are located within the Project area, and therefore no impacts are anticipated. According the TtEC, many of the exploitably

vulnerable species found in the Project area are associated with wetland habitats, as and such, will incur minimal impacts. As described in the DEIS and SDEIS, Project layout was designed to minimize impacts to streams and wetlands. Furthermore, most impacts to wetlands will be temporary, with soils stockpiled and restored following construction, conserving existing seedbanks.

- 2007 Breeding Bird and Area Search Surveys

As described in the DEIS, species-specific behavioral patterns may influence the Project's impact on breeding birds. Breeding behaviors of northern harriers and upland sandpipers may pose a heightened risk of mortality due to their seasonal activity within the turbine zone and the proximity of proposed turbines to these sensitive species locations. Conversely, the vesper and grasshopper sparrow generally forage and breed at ground level and therefore impacts to these species, if any, would likely be in the form of habitat displacement or loss. Pied-billed grebes were detected in close proximity to wetland habitats in the northern part of the Project area, approximately 2,250 feet from the nearest proposed turbine location. This separation distance may minimize the likelihood for disturbance and displacement effects. Furthermore, waterbirds (i.e., ducks, geese, and shorebirds) have not been found to be at high risk of collision with wind turbines (Kerlinger pers. comm.). Because grassland and wetland habitats in the proposed Project do provide suitable habitat for some sensitive species, wind turbines in these areas have been carefully sited to avoid impacts to the maximum extent practicable.

#### **2.3.4 Cultural Resources**

An addendum Phase IB Archeological Survey and Phase IB-2 Archeological Investigation (Appendix K) were conducted in May and June 2007 to properly address changes to the Project layout which occurred subsequent to the original Phase IB fieldwork as presented in the SDEIS, Appendix J.

The results of the survey indicate that the installation of the OH electrical line and road widening at Rogers Road would not have impacted the significant features or deposits within the Clinton Mills Site. Shovel tests along either side of Rogers Road recovered scattered deposits of architectural debris and household refuse which were not considered significant. Intact and filled foundations and structural remains were identified beyond the limits of disturbance that will result from road widening in this area.

Survey results did indicate that remains of two nineteenth-century map-documented foundations and associated deposits of domestic refuse existed within or adjacent to the proposed UG interconnect route and access road to WTG 209. Surveys also suggested that the un-surveyed areas in the immediate vicinity may also contain similar deposits.

## **2.4 Supplemental Mitigation Measures**

### **2.4.1 Wetlands**

- Wetland avoidance and minimization discussion (See Section 7.1 of Appendix C)

This section of the Alternatives Analysis details the specific methodology implemented by the Applicant in order to reduce impacts to wetland resource areas. Table 6 of Appendix C details the measures undertaken since April 2007 to decrease the potential permanent and temporary wetland impacts by 4.36 acres and 4.61 acres, respectively.

- Proposed Wetland Mitigation Plan; Mitigation Figures

This proposal details the Applicant's plan to compensate for the discharge of fill material into waters of the United States, and NYSDEC wetlands and adjacent areas (Appendix E). The plan includes compensation for the loss of functions and values associated with the permanent alteration of forested wetland canopy removal as a result of maintaining an OH electric collection line. The Applicant conducted a functional assessment of the impacted wetlands and calculated proposed compensatory mitigation acreage (Appendix D). As such, the Applicant proposes to develop their mitigation sites over 5 areas totaling 25.44 acres of wetlands and 2,243 linear feet of surface waterbodies (Appendix E).

- Model Conservation Easement

Legally binding document intended to preserve wetland mitigation property (Appendix M).

### **2.4.2 Ecological Resources**

- 2007 Rare Plant Survey

Since no state listed threatened or endangered plant species were found within the Project area, no mitigation is necessary. However, as described in Section 2.2.3 above, several orchid species found during the rare plant surveys were past bloom, and therefore unidentifiable. Because all native orchids are protected in New York State, TtEC recommends that areas where potential orchid species were noted be revisited in the spring of 2008, prior to the start of construction.

- Invasive Species Management Plan

This plan details the management strategy to prevent expansion of invasive species within the Marble River Wind Farm area (Appendix F).

- Post-Construction Avian and Bat Fatality Study Protocol

This protocol is intended to establish the approach and methods that will be used by a qualified expert to prepare a detailed scope of work for a post-construction avian and bat fatality monitoring study at the operational Marble River Wind Power facility (Appendix I).

This outline is also intended to be reviewed by regulating agencies for the purposes of approving a detailed scope of work for the post-construction monitoring study program.

### **2.4.3 Cultural Resource Avoidance**

Based on the cultural survey results, the access road design and UG interconnect to WTG 209 was modified to avoid disturbing archeological features identified during the Phase IB-2 investigation. Project facilities in this area are depicted in Figure 2 and Appendix J, Figure 7. The degree of movement of the proposed access road and interconnect in this area was minor but effective in avoiding the specified structures and associated artifact deposits. The revised layout of Project facilities in this area are depicted in Figure 2 (Access Road to Wind Turbine 209) and Appendix J, Figure 7. Layout modifications in the vicinity of WTG 209 result in a temporary and permanent wetland impact of 0.499 and 0.185 acre, respectively, as indicated the table below.

Wetland ID	Original (acres)		Revised (acres)	
	Permanent	Temporary	Permanent	Temporary
IC363-A	0.0000	0.0000	0.0027	0.0082
IC360-A	0.0000	0.2470	0.0577	0.2384
IC361-A	0.0000	0.0187	0.0586	0.0702
AR1108-A	0.0000	0.0000	0.0659	0.1818
AR1305-A	0.0096	0.0745	0.0000	0.0000
AR1107-A	0.0082	0.0085	0.0000	0.0000
Sum	0.0178	0.3486	0.1850	0.4999
<b>Total Impacts</b>	<b>0.3664</b>		<b>0.684</b>	
<b>Increase</b>	<b>0.31709</b>			

### **2.5 Supplemental Alternative Analysis**

The Supplemental Alternatives Analysis in Appendix C provides an evaluation of potential alternatives to the proposed project including geographic location, energy production technologies, alternative turbine technologies, project size and facility layout. In addition, it describes the evolution of the design and layout of the Project to reduce impacts to resource areas through avoidance and minimization strategies. Section 7.0 of the Alternative Analysis describes the specific measures undertaken to reduce impacts to wetland, cultural, and visual resources. A Wind Resources Map is included as Figure 4 of Appendix C.

### **3.0 COMMENT MATRIX**

The following table is a summary list of all comments received throughout the FEIS process for the Marble River Wind Farm. A Public Hearing transcript and copies of all comments in their entirety are included in Appendix P.



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
1	1	NY State Department of Agriculture and Markets (NYSDAM)	Pp. 19 & 20 show min. burial depth of 36". Department recommends 48".
1	2	NYSDAM	Does not discuss decompaction. Should include soil decompaction to 18" depth where cable installed and where topsoil is temporarily removed.
2	1	NY State Department of Public Service(NYSDPS)	Ellenburg Local Law requires a 1.5 x height setback from electric transmission lines. Turbines 67, 70R, 89R and 96S appear to be 500 feet from the NYPA line which, given structure heights of 400 feet doesn't meet the setback requirement. Setback should
2	2	NYSDPS	Underground cable should minimize visual and land use effects and simplify vegetation management. Additionally, analysis of the impacts and line locations should be required if proposal changes to overhead lines.
2	3	NYSDPS	Final design and specifications should be documented in final construction plans and provided to towns for review and approval prior to issuance of building permit.
2	4	NYSDPS	Substation and interconnection design and specifications should be reviewed and approved by NYPA before submittal to Town.
2	5	NYSDPS	DEIS states the identification of any adverse effects within the project area or visual study area and mitigation measures will be included in FEIS. Therefore DEIS isn't complete in addressing impacts to historic structures.
2	6	NYSDPS	PSC will not be able to respond to SEQR findings until complete informational and analysis and determination of effects on cultural resources made by OPRHP.
2	7	NYSDPS	DEIS should acknowledge requirement for visual analysis in Clinton Local Law No. 1 §17 B (color photo of WECS site from 2 locations showing existing condition and any visual screening).
2	8	NYSDPS	Shadow flicker analysis results should supplement DEIS for analysis of mitigation measures in FEIS.
2	9	NYSDPS	Cumulative visual assessment doesn't address potential visual effects on historic resources as the historic resource potential has not been evaluated in the combined project (MR and Noble) area. Should supplement DEIS with impacts, mitigation and offsets.



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
2	10	NYS DPS	Individual locations may warrant further considerations. Example App. K, figure 18, VP179 - potential significant change in landscape from single turbine. Alternative layouts and individual turbine locations must rely on further documentation and resource information (historic) not yet provided to minimize adverse impacts.
2	11	NYS DPS	Overhead lines warrant additional evaluation of line clearance, VMP, cost over life of facility. If significant lengths supplement DEIS w/ 1) advantage/disadvantage on maintenance of OH v. UG, 2) thermal limits of UG lines, 3) cost estimate and justification of UG lines including environmental cost of construction and maintenance and VMP over facility life, 4) site specific impact analysis on land use, visual ecosystem, and cultural for OH v. UG
2	12	NYS DPS	Consideration of minimizing number of interconnections to NYPA 230kV facility is likely to include one interconnect for MR and Nobel projects. Engineering, environmental, visual and cost warrant evaluation in rating and ranking alternatives.
2	13	NYS DPS	NYPA should determine optimal location.
2	14	NYS DPS	Additional analysis required if new transmission line is required to meet interconnection point.
2	15	NYS DPS	Additional consideration of alternatives will be required on completion of interconnection studies in cumulative consideration of the 4 projects (MR, Noble - Clinton, Nobel- Ellenburg and Noble-Altona) representing 500 MW on the Plattsburg-Willis circuits.
3	1	NY State Department of Environmental Conservation (NYSDEC) (Ellenburg)	The project sponsor, Marble River, LLC, proposes construction of up to 21 WECS in Clinton and up to 95 WECS in Clinton for a total of 116.
3	2	NYSDEC (Ellenburg)	DEC initially recommended that a single lead agency be designated and that a single EIS be prepared to address the entire 116 WECS project. DEC continues to recommend that a single FEIS be prepared that addresses all proposed wind projects in the general area.
3	3	NYSDEC (Ellenburg)	DEC is particularly concerned about potential cumulative impacts associated with wildlife resources, wetlands and water resources and the visual landscape.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
3	4	NYSDEC (Ellenburg)	DEC recommends that the FEIS contain a plan for post construction mortality monitoring for birds and bats. Protocol should be submitted to DEC for review and comment. (See letter for suggested study topics.)
3	5	NYSDEC (Ellenburg)	Cumulative wetland impacts for all proposed wind projects in Clinton and Ellenburg should be discussed in the FEIS.
3	6	NYSDEC (Ellenburg)	Before DEC can consider a permit request, wetland delineations must be verified by staff.
3	7	NYSDEC (Ellenburg)	DEC policy is not to permit wetland impacts, even with mitigation, until other alternatives have been explored, including avoidance, minimization or reduction of impacts. Generally applicants required to examine alternative project designs that avoid and reduce wetland impacts; develop plans to create or improve wetlands and wetland functions to compensate for unavoidable impacts to wetlands; demonstrate overriding economic and social needs for the project that outweigh the environmental costs of impacts to wetlands.
3	8	NYSDEC (Ellenburg)	Details to clearly define temporary impacts to wetlands need to be provided.
3	9	NYSDEC (Ellenburg)	Simple regrading to preexisting contours may not be enough to restore the wetland, planting may be required and not natural re-vegetation. Concern about invasive.
3	10	NYSDEC (Ellenburg)	Construction impacts can result from improper handling of concrete, if not adequately contained in forms and runs off into wetlands/streams. Or trucks rinsed in areas where concrete slurry affects water resources. Construction methods to properly manage concrete delivery and use should be discussed in the FEIS.
3	11	NYSDEC (Ellenburg)	Mitigation to offset permitted temporary and permanent wetland impacts must be developed with ACOE/DEC.
3	12	NYSDEC (Ellenburg)	Mitigation must be conducted concurrently with other construction.
3	13	NYSDEC (Ellenburg)	Consideration regarding future recurrences of "temporary" wetland impact during decommissioning or during routine maintenance, when large trucks and cranes may need to access all or portions of the project site, permanent roads may need to be temporarily widened or vegetation removed.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
3	14	NYSDEC (Ellenburg)	Decommissioning plan should include requirements for permits that may be needed.
3	15	NYSDEC (Ellenburg)	An analysis, including existing and proposed Visuals of the Gulf State Unique Area should be included in the FEIS.
3	16	NYSDEC (Ellenburg)	FEIS should include a cumulative assessment of impacts from all proposed wind projects in Clinton, Ellenburg, Altona and Beekmantown. (Particularly Adirondack Park and Lyon Mountain Visuals)
3	17	NYSDEC (Ellenburg)	DEC recommends that the no significant adverse visual impacts determination be revisited following review of the Gulf State Unique Area and cumulative assessment of the Lyon Mountain Visual-shed. Visual offsets per DEC policy may be required.
3	18	NYSDEC (Ellenburg)	Compliance with NYSHPA of 1980, Section 14.09 is necessary if any state agency approvals are required and compliance with the NHSPA Section 106 required if federal approval. FEIS should identify extent of any state or federal involvement and the status and result of any historic preservation studies.
3	19	NYSDEC (Ellenburg)	DEC recommends an environmental consultant be retained to monitor construction activities.
3	20	NYSDEC (Ellenburg)	FEIS should include a plan for mitigation of potential environmental impacts during construction.
4	1	NYSDEC (Clinton)	Same letter and comments as Ellenburg Letter (Item 3, above)
5	1	Noble & Marble River DEIS	Sign-in sheet for Ellenburg, NY, Public Hearing on Noble & Marble River DEIS.
6	1	Noble & Marble River DEIS	Speakers sign-in sheet for Ellenburg, NY, Public Hearing on Noble & Marble River DEIS.
7	1	Clinton County Farm Bureau	Resolution supporting the establishment of wind turbines on member farms.
8	1	New York Farm Bureau	Policies encouraging development of more energy from wind and solar sources.
9	1	Town of Ellenburg, NY	Comments made by Kirby Selkirk on behalf of the Clinton County Farm Bureau in support of wind farm project. Stated siting policies that should be followed.
10	1	Letter from Glenn & Faye Fountain, Residents of Plattsburgh, NY	Letter from residents supporting Marble River
11	1	Letter from Norbert & Kathleen Kanzler, Residents of Ellenburg, NY	Letter from residents supporting Marble River

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
12	1	Letter from Anthony C. Cassani of Ellenburg, NY	Letter from residents supporting Marble River
13	1	Article: Democrat & Chronicle	Article discusses concerns of property owners vs. public benefit of wind projects
13	2	Article: Democrat & Chronicle	Article discusses concerns of property owners vs. public benefit of wind projects
13	3	Article: Democrat & Chronicle	Article discusses concerns of property owners vs. public benefit of wind projects
13	4	Article: Democrat & Chronicle	Article discusses concerns of property owners vs. public benefit of wind projects
14	1	Statement by Pamela Foringer of Fenner, New York	Personal Statement describing negative impacts of wind farm
14	2	Statement by Pamela Foringer of Fenner, New York	Personal Statement describing negative impacts of wind farm
14	3	Statement by Pamela Foringer of Fenner, New York	Personal Statement describing negative impacts of wind farm
14	4	Statement by Pamela Foringer of Fenner, New York	Personal Statement describing negative impacts of wind farm
14	5	Statement by Pamela Foringer of Fenner, New York	Personal Statement describing negative impacts of wind farm
15	1	Article: Albuquerque Tribune	Article discusses complaints of neighbors of wind farms
15	2	Article: Albuquerque Tribune	Article discusses complaints of neighbors of wind farms
15	3	Article: Albuquerque Tribune	Article discusses complaints of neighbors of wind farms
15	4	Article: Albuquerque Tribune	Article discusses complaints of neighbors of wind farms
16	1	Online Article: stuff.co.nz (New Zealand)	Article about Windflow Technology shutting down turbines at night because noise of turbines was disturbing area residents
17	1	Article: Dominion Post (New Zealand)	Article discussing complaints of neighbors because of wind turbine noise
18	1	Story of Darrell Fox	Illinois homeowner negatively impacted by wind farm
18	2	Story of Darrell Fox	Illinois homeowner negatively impacted by wind farm
18	3	Story of Darrell Fox	Illinois homeowner negatively impacted by wind farm
19	1	Online Article: TVNZ (New Zealand)	Online article regarding noise complaints regarding New Zealand wind farm
20	1	Letter from Chuck Shick	Comments on noise of wind farm
21	1	Letter from David Brierly (U.K.) to Powergen UK	Letter from neighbor of wind farm complaining of ceaseless noise
22	1	Letter to the Editor (Press Republican, UK)	Letter to editor from David Brierly (see above) regarding how noise of wind turbines destroys quality of life

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
23	1	Statement/Unknown Author	Statement of complaint regarding wind farms
24	1	Survey: Agricultural Resource Center, WI	Problems of residents regarding blinking lights of wind turbines
25	1	Letter to the Editor (Caledonian Record, Vermont)	Letter to the editor opposing wind farm development
25	2	Letter to the Editor (Caledonian Record, Vermont)	Letter to the editor opposing wind farm development
25	3	Letter to the Editor (Caledonian Record, Vermont)	Letter to the editor opposing wind farm development
26	1	Online Article: Zwire.com	Article discussing problems associated with wind farms
26	2	Online Article: Zwire.com	Article discussing problems associated with wind farms
26	3	Online Article: Zwire.com	Article discussing problems associated with wind farms
26	4	Online Article: Zwire.com	Article discussing problems associated with wind farms
27	1	Letter from Catharine Lawton of West Bend, WI	Collection of blurbs regarding problems with wind farms
27	2	Letter from Catharine Lawton of West Bend, WI	Collection of blurbs regarding problems with wind farms
28	1	Online Article: socme.org (UK)	Statement of neighbor of wind farm complaining of negative health effects
29	1	Survey: Agricultural Resource Center, WI	Comments regarding problems with shadows from blades
30	1	Survey: Agricultural Resource Center, WI	Comments regarding sleep problems associated with wind farms
31	1	Online Article: Newsquest Media Group	Article reporting on meeting regarding wind farm problems, particularly health issues
32	1	E-mail from Rev. Kathleen Danley to Calvin Luther Martin	Request for information on health effects related to wind farms
33	1	Article: Malone NY Telegram	Article entitled "The Dark Side of Wind Power"
33	2	Article: Malone NY Telegram	Article entitled "The Dark Side of Wind Power"
33	3	Article: Malone NY Telegram	Article entitled "The Dark Side of Wind Power"
33	4	Article: Malone NY Telegram	Article entitled "The Dark Side of Wind Power"
34	1	Letter to the Editor: Scranton Times Tribune	Letter describing negative impacts of wind farms
34	2	Letter to the Editor: Scranton Times Tribune	Letter describing negative impacts of wind farms
34	3	Letter to the Editor: Scranton Times Tribune	Letter describing negative impacts of wind farms
34	4	Letter to the Editor: Scranton Times Tribune	Letter describing negative impacts of wind farms
35	1	Ouest France	Written in French
36	1	Article: Hawke's Bay Today (New Zealand)	Article discussing complaints of neighbors regarding wind farms

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
36	2	Article: Hawke's Bay Today (New Zealand)	Article discussing complaints of neighbors regarding wind farms
37	1	E-mail from Katherine Bush to Calvin Luther Martin	E-mail discussing video of Gordon Yancey, owner of Flatrock Inn in Loweville, NY, about problems with wind farms
38	1	Survey: Agricultural Resource Center, WI	Survey results regarding health in regard to wind farms
39	1	NewWind Energy	Incentive flyer supporting wind energy
40	1	Online Article: Healthlink.org	Internet article supporting wind energy
41	1	Online Article: Healthlink.org	Statistics and historical timeline regarding wind energy
42	1	Online Article: Healthlink.org	Pros and cons of wind energy; addresses myths and misconceptions
43	1	Online Article: Healthlink.org	Pro wind energy
44	1	Citizens of Ellenburg, NY	Signatures of citizens supporting the Noble Ellenburg Windpark
45	1	Letter: New York State Electric & Gas (NYSEG) to Francis LaClair	Thank you for supporting development of wind energy
46	1	Letter: NYSEG to Francis LaClair	Thank you for continued support of wind energy development
47	1	Report: ECONorthwest	Report entitled "Economic Impacts of Wind Power in Kittitas County (WA)"
48	1	NYSEG	NewWind Energy flyer
49	1	Article: Yes2Winds	Article on health issues related to wind farms. Greenpeace support
49	2	Article: Yes2Winds	Article on health issues related to wind farms. Greenpeace support
50	1	Online Article: Sierra Club	Article entitled "Clean Power Comes on Strong: Wind Power"
51	1	Online Article: Union of Concerned Scientists	Discusses environmental benefits of renewable energy
52	1	Report: UWIG	Report entitled "Utility Wind Integration State of the Art" – brief summary of wind energy issues
53	1	Citizens of Ellenburg, NY	Signatures of citizens supporting the Noble Ellenburg Windpark
54	1	Report: Renewable Energy Policy Project	Report entitled "The Effect of Wind Development on Local Property Values"
55	1	Report written by Ben Hoen/Bard College	Report entitled "Impact of Windmill Visibility on Property Values in Madison County, NY"
55	2	Report written by Ben Hoen/Bard College	Report entitled "Impact of Windmill Visibility on Property Values in Madison County, NY"
56	1	Summary of Report by Ben Hoen/Bard College	Summary of above report "Impact of Windmill Visibility on Property Values in Madison County, NY"
56	2	Summary of Report by Ben Hoen/Bard College	Summary of above report "Impact of Windmill Visibility on Property Values in Madison County, NY"

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
57	1	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	2	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	3	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	4	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	5	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	6	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
57	7	Index of documents/Town of Ellenburg, NY	Index of documents in support of rejecting the Draft Environmental Impact Statement given to the Town of Ellenburg by Noble Environmental, LLC. NO AUTHOR NOTED
58	1	Report written by Nina Pierpont, M.D., Ph.D.	Report entitled "Health Effects of Wind Turbine Noise"
58	2	Report written by Nina Pierpont, M.D., Ph.D.	Report entitled "Health Effects of Wind Turbine Noise"
59	1	Testimony of Nina Pierpont, M.D., Ph.D.	Testimony before the NY State Legislature Energy Committee on "Wind Turbine Syndrome"
60	1	Article by Nina Pierpont, M.D., Ph.D.	Article entitled "Noisy Wind and Hot Air"
60	2	Article by Nina Pierpont, M.D., Ph.D.	Article entitled "Noisy Wind and Hot Air"
61	1	Nina Pierpont, M.D., Ph.D./Letter to the Editor	Letter to the Editor regarding health issues caused by wind turbines, in response to Denise Raymo article
61	2	Nina Pierpont, M.D., Ph.D./Letter to the Editor	Letter to the Editor regarding health issues caused by wind turbines, in response to Denise Raymo article
62	1	Letter written by Nina Pierpont, M.D., Ph.D.	Letter regarding her being consulted by a Nova Scotia family suffering from poor health subsequent to installation of wind turbines near their home



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
62	2	Letter written by Nina Pierpont, M.D., Ph.D.	Letter regarding her being consulted by a Nova Scotia family suffering from poor health subsequent to installation of wind turbines near their home
63	1	C.V. of Nina Pierpont, M.D., Ph.D.	C.V. of Nina Pierpont, M.D., Ph.D.
64	1	Online Article: University of New South Wales (Australia)	Article entitled "What is a Decibel?"
65	1	Article by Calvin Luther Martin, Ph.D.	Article entitled "The Strange Case of Dr. Geoff Leventhall" regarding scientific disagreements over whether or not there is evidence of negative health impacts of wind turbines
65	2	Article by Calvin Luther Martin, Ph.D.	Article entitled "The Strange Case of Dr. Geoff Leventhall" regarding scientific disagreements over whether or not there is evidence of negative health impacts of wind turbines
66	1	Letter to the Editor: Malone (NY) Telegram	Letter from Dr. Geoff Leventhall clarifying his opinions re health effects of wind turbines
67	1	Report by Professor Peter Styles, et al, Keep University, Scotland	Report entitled "Microseismic and Infrasound Monitoring of Low Frequency Noise and Vibrations from Windfarms/Recommendations on the Siting of Windfarms in the Vicinity of Eskdalemuir, Scotland"
68	1	Report by Andrew Miskelly BCompSci	Report entitled "Why the Taralga Windfarm Environmental Impact Statement – Noise Impact Assessment is critically flawed"
69	1	Presentation by Oguz A. Soysal, Ph.D.	Presentation entitled "Acoustic Noise Generated by Wind Turbines" – presented at the Lycoming County, PA Zoning Board Hearing 12/14/05
70	1	Article: Journal of Sound and Vibration by G.P. van den Berg	Article entitled "Effects of the wind profile at night on wind turbine sound"
71	1	Presentation by G.P. van den Berg	Presentation entitled "Do wind turbines produce significant low frequency sound levels?"
72	1	Article: Frequency Noise, Vibration and Active Control by G.P. van den Berg	Article entitled "The Beat is Getting Stronger: The Effect of Atmospheric Stability on Low Frequency Modulated Sound of Wind Turbines"
73	1	Doctoral Thesis of G.P. van den Berg	Doctoral thesis entitled "The sound of high winds: the effect of atmospheric stability on wind turbine sound and microphone noise"
74	1	Summaries of various articles	List of scientific article summaries
74	2	Summaries of various articles	List of scientific article summaries
75	1	Article: Noise & Health, 2004, 6:23 35-57	Article entitled, Hearing at Low and Infrasonic Frequencies"
75	2	Article: Noise & Health, 2004, 6:23 35-57	Article entitled, Hearing at Low and Infrasonic Frequencies"
76	1	Article: Noise & Health, 2004, 6:23 87-91	Article entitled "Effects of Low Frequency Noise on Sleep"



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
76	2	Article: Noise & Health, 2004, 6:23 87-91	Article entitled "Effects of Low Frequency Noise on Sleep"
77	1	Article: Noise & Health, 2003, 5:20, 35-46	Article entitled "A Descriptive Cross-Sectional Study of Annoyance from Low Frequency Noise Installations in an Urban Environment"
77	2	Article: Noise & Health, 2003, 5:20, 35-46	Article entitled "A Descriptive Cross-Sectional Study of Annoyance from Low Frequency Noise Installations in an Urban Environment"
78	1	Article: Noise & Health, 2001, 4:13, 33-49	Article entitled, Low Frequency Noise "Pollution" Interferes with Performance"
78	2	Article: Noise & Health, 2001, 4:13, 33-49	Article entitled, Low Frequency Noise "Pollution" Interferes with Performance"
79	1	Testimony of Nina Pierpont, M.D., Ph.D.	Testimony before the State of New York Supreme Court, Clinton County regarding vibroacoustic disease
79	2	Testimony of Nina Pierpont, M.D., Ph.D.	Testimony before the State of New York Supreme Court, Clinton County regarding vibroacoustic disease
80	1	Article: Journal of the Acoustical Society of America	Article entitled "Sources and effects of low frequency noise"
80	2	Article: Journal of the Acoustical Society of America	Article entitled "Sources and effects of low frequency noise"
81	1	Article: Noise & Health, 2004, 6:23, 3-20	Article entitled "Vibroacoustic Disease"
81	2	Article: Noise & Health, 2004, 6:23, 3-20	Article entitled "Vibroacoustic Disease"
82	1	Scientific Article (Portugal) by Mariana Alves-Pereira	Article entitled "Vibroacoustic Disease: Biological effects of infrasound and low frequency noise explained by mechanotransduction cellular signaling"
82	2	Scientific Article (Portugal) by Mariana Alves-Pereira	Article entitled "Vibroacoustic Disease: Biological effects of infrasound and low frequency noise explained by mechanotransduction cellular signaling"
83	1	Proceedings of the Institute of Acoustics	Report entitled "Vibroacoustic Disease I: The Personal Experience of a Motorman"
83	2	Proceedings of the Institute of Acoustics	Report entitled "Vibroacoustic Disease I: The Personal Experience of a Motorman"
84	1	Article: Aviation, Space and Environmental Medicine, Vol. 70, No. 3, Section II	Article entitled "Echocardiographic Evaluation in 485 Aeronautical Workers Exposed to Different Noise Environments"
84	2	Article: Aviation, Space and Environmental Medicine, Vol. 70, No. 3, Section II	Article entitled "Echocardiographic Evaluation in 485 Aeronautical Workers Exposed to Different Noise Environments"
85	1	National Academy of Medicine (France)	Report of the National Academy of Medicine (France) regarding wind turbines and their effect on health

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
85	2	National Academy of Medicine (France)	Report of the National Academy of Medicine (France) regarding wind turbines and their effect on health
86	1	Article written in French	Article written in French
86	2	Article written in French	Article written in French
87	1	Article written in French	Article written in French
87	2	Article written in French	Article written in French
88	1	Internet article written by Prof. Terry Matilsky	Article on ice/debris breaking off of wind turbine blades
89	1	Calvin Luther Martin, Ph.D.	Article entitled "Underground Stray Voltage from Wind Turbines? A Correction and Comment"
89	2	Calvin Luther Martin, Ph.D.	Article entitled "Underground Stray Voltage from Wind Turbines? A Correction and Comment"
90	1	Article: New Scientist	Article entitled "Wind turbines send wildlife diving for cover"
91	1	Article: Heartland Institute	Article entitled "Wind Farm Proposed for Vt. National Forest" – discusses problems with wind farms
91	2	Article: Heartland Institute	Article entitled "Wind Farm Proposed for Vt. National Forest" – discusses problems with wind farms
91	3	Article: Heartland Institute	Article entitled "Wind Farm Proposed for Vt. National Forest" – discusses problems with wind farms
92	1	Letter from Robert Larivee, Ph.D.	Letter to County Commissioners regarding the personal impact wind farms have had on author's health/wellbeing (Pennsylvania)
92	2	Letter from Robert Larivee, Ph.D.	Letter to County Commissioners regarding the personal impact wind farms have had on author's health/wellbeing (Pennsylvania)
93	1	Letter from Karen Ervin (Pennsylvania)	Letter to "Interested Parties" regarding impact of wind farm on community (Pennsylvania)
93	2	Letter from Karen Ervin (Pennsylvania)	Letter to "Interested Parties" regarding impact of wind farm on community (Pennsylvania)
93	3	Letter from Karen Ervin (Pennsylvania)	Letter to "Interested Parties" regarding impact of wind farm on community (Pennsylvania)
93	4	Letter from Karen Ervin (Pennsylvania)	Letter to "Interested Parties" regarding impact of wind farm on community (Pennsylvania)
93	5	Letter from Karen Ervin (Pennsylvania)	Letter to "Interested Parties" regarding impact of wind farm on community (Pennsylvania)
94	1	Letter from Rodger Hutzell, Jr. (Pennsylvania)	Letter describing negative impacts of wind farms
94	2	Letter from Rodger Hutzell, Jr. (Pennsylvania)	Letter describing negative impacts of wind farms

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
94	3	Letter from Rodger Hutzell, Jr. (Pennsylvania)	Letter describing negative impacts of wind farms
95	1	Excerpts of Letter from Dick Bowdler to Susan Sliwinski and comments	Comments regarding setbacks and wind turbine noise
96	1	Letter from Dick Bowdler (New Acoustics, Ltd.) to Susan Sliwinski	Comments regarding setbacks and wind turbine noise, NYSDEC Policy: Assessing and Mitigating Noise Impacts
97	1	Correspondence/ Miscellaneous	Problems due to wind turbines
97	2	Correspondence/ Miscellaneous	Testimony before the State of New York Supreme Court, Clinton County regarding vibroacoustic disease (Pierpont, 2006).
98	1	Archives from The Press Republican - Plattsburgh, NY	Article abstracts on earthquakes in New York State
99	1	Online Article: CNN.com/U.S.	Article on earthquake in Northeast/Plattsburgh, NY
100	1	The Geological Society of America	Earthquake data "Geographic Information as a research and teaching tool"
101	1	Article: Clarkson Integrator	Earthquake in northern New York
102	1	Article: The Press Republican - Plattsburgh, NY	Earthquake in northern New York
103	1	Letter to the Editor (U.K.) This is South Wales	Letter to the Editor describing problems with wind turbines
103	2	Letter to the Editor (U.K.) This is South Wales	Letter to the Editor describing problems with wind turbines
104	1	Statement of Residents of Upper Lachlan, Australia	Statement entitled: "Factual Information about Wind Turbine Noise"
104	2	Statement of Residents of Upper Lachlan, Australia	Statement entitled: "Factual Information about Wind Turbine Noise"
104	3	Statement of Residents of Upper Lachlan, Australia	Statement entitled: "Factual Information about Wind Turbine Noise"
105	1	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	2	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	3	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	4	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	5	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	6	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
105	7	Statement of Mr. Arlin Monfils (Wisconsin)	Statement entitled: "Problems associated with wind turbines"
106	1	Survey: Agricultural Resource Center (WI)	Results of survey on noise of wind turbines

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
107	1	Personal Statement of Paula Stahl (West Virginia)	Personal Statement describing negative impacts of wind farm
107	2	Personal Statement of Paula Stahl (West Virginia)	Personal Statement describing negative impacts of wind farm
107	3	Personal Statement of Paula Stahl (West Virginia)	Personal Statement describing negative impacts of wind farm
107	4	Personal Statement of Paula Stahl (West Virginia)	Personal Statement describing negative impacts of wind farm
108	1	Personal Statement of Linda Cooper (West Virginia)	Personal Statement describing negative impacts of wind farm
108	2	Personal Statement of Linda Cooper (West Virginia)	Personal Statement describing negative impacts of wind farm
108	3	Personal Statement of Linda Cooper (West Virginia)	Personal Statement describing negative impacts of wind farm
108	4	Personal Statement of Linda Cooper (West Virginia)	Personal Statement describing negative impacts of wind farm
109	1	E-mail from Angela Kelly	E-mail discussing noise problems from wind farms in France
110	1	NYSDEC	Report entitled "Assessing & Mitigating Noise Impacts"
111	1	Report: Casella Stanger (U.K.)	Report entitled "Low Frequency Noise"
111	2	Report: Casella Stanger (U.K.)	Report entitled "Low Frequency Noise"
112	1	World Health Organization	Report entitled "Guidelines for Community Noise"
112	2	World Health Organization	Report entitled "Guidelines for Community Noise"
113	1	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
113	2	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
113	3	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
113	4	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
113	5	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
113	6	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	1	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	2	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	3	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	4	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	5	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	6	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
114	7	Testimony of Jon Boone (Maryland)	Testimony of Jon Boone before the Public Service Commission of Maryland regarding construction of wind farm in Garrett County, Maryland
115	1	Excerpt from REPP Report	Excerpt from report entitled "The Effect of Wind Development on Local Property Values"
115	2	Excerpt from REPP Report	Excerpt from report entitled "The Effect of Wind Development on Local Property Values"
116	1	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
116	2	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
116	3	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
116	4	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
116	5	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
116	6	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
116	7	Report from Eleanor Tillinghast, Green Berkshires, Inc.	Report entitled "Wind Turbines Don't Make Good Neighbors" – Some Problems of Wind Projects in the Berkshires
117	1	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	2	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	3	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	4	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	5	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	6	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
117	7	Excerpts from the final report of the Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee	Problems of wind farms discussed
118	1	Article: aweo.org	Article by Eric Rosenbloom states that wind farms are "useless" due to a variety of impacts
119	1	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	2	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	3	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	4	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	5	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	6	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
119	7	Article by Eric Rosenbloom	Article entitled "A Problems With Wind Power"
120	1	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
120	2	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
120	3	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
120	4	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
120	5	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
120	6	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
120	7	Report: Archives & Collections Society (Canada)	Policy Comments on Point Petre Commercial Wind Turbine Generating Plant – comments on problems caused by wind farms
121	1	E-mail from Bob Bittner (Illinois)	E-mail discussing personal impact of wind farm on resident of Tiskilwa, Illinois
121	2	E-mail from Bob Bittner (Illinois)	E-mail discussing personal impact of wind farm on resident of Tiskilwa, Illinois
121	3	E-mail from Bob Bittner (Illinois)	E-mail discussing personal impact of wind farm on resident of Tiskilwa, Illinois
121	4	E-mail from Bob Bittner (Illinois)	E-mail discussing personal impact of wind farm on resident of Tiskilwa, Illinois
121	5	E-mail from Bob Bittner (Illinois)	E-mail discussing personal impact of wind farm on resident of Tiskilwa, Illinois
122	1	Article: Herald Sun (Australia)	Article entitled “Blot on the Landscape” re wind farm problems
122	2	Article: Herald Sun (Australia)	Article entitled “Blot on the Landscape” re wind farm problems
122	3	Article: Herald Sun (Australia)	Article entitled “Blot on the Landscape” re wind farm problems
123	1	Online article: smh.com.au	Refers to article entitled “Court Bid to Halt Wind Farm” – in Australia
124	1	ReMax	Report entitled “Report on a Sample of Properties Inspected Near a Proposed Wind Farm at Esgairwen Fawr Nr Lampeter”
125	1	Letter to Editor: Caledonian Record, Jon Boone	Letter to the editor regarding problems with wind farms
125	2	Letter to Editor: Caledonian Record, Jon Boone	Letter to the editor regarding problems with wind farms
125	3	Letter to Editor: Caledonian Record, Jon Boone	Letter to the editor regarding problems with wind farms
126	1	Internet Article: stuff.co.nz (New Zealand)	Article entitled “Meridian Pays Family to Move” (due to problems caused by wind farm)

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
126	2	Internet Article: stuff.co.nz (New Zealand)	Article entitled "Meridian Pays Family to Move" (due to problems caused by wind farm)
127	1	Survey: Agricultural Resource Center (WI)	General comments from neighbors of wind farms
127	2	Survey: Agricultural Resource Center (WI)	General comments from neighbors of wind farms
127	3	Survey: Agricultural Resource Center (WI)	General comments from neighbors of wind farms
128	1	Survey: Agricultural Resource Center (WI)	Results of survey question: How close to the wind turbines would you consider buying or building a home?
128	2	Survey: Agricultural Resource Center (WI)	Results of survey question: How close to the wind turbines would you consider buying or building a home?
128	3	Survey: Agricultural Resource Center (WI)	Results of survey question: How close to the wind turbines would you consider buying or building a home?
128	4	Survey: Agricultural Resource Center (WI)	Results of survey question: How close to the wind turbines would you consider buying or building a home?
129	1	Article: www.cambridge-news.co.uk (U.K.)	Property values impacted by wind farms, Article "Prices Falling"
130	1	Letter from Maturen & Associates, Inc. (Michigan)	Letter from real estate appraiser regarding "Impact of Wind Turbine Generators on Property Values"
130	2	Letter from Maturen & Associates, Inc. (Michigan)	Letter from real estate appraiser regarding "Impact of Wind Turbine Generators on Property Values"
130	3	Letter from Maturen & Associates, Inc. (Michigan)	Letter from real estate appraiser regarding "Impact of Wind Turbine Generators on Property Values"
130	4	Letter from Maturen & Associates, Inc. (Michigan)	Letter from real estate appraiser regarding "Impact of Wind Turbine Generators on Property Values"
131	1	Article: The Australian (Australia)	Article entitled "Clouds gathering over wind farm plan"
132	1	Letter from from Neil Harvey, published in the Western Morning News	"Correction" from Mr. Harvey published in the Western Morning News regarding the impact of wind farms on property values
133	1	Article: Hexham Courant (U.K.)	Article entitled "Couple Hit by Winds of Change" – discusses problems with wind farms
133	2	Article: Hexham Courant (U.K.)	Article entitled "Couple Hit by Winds of Change" – discusses problems with wind farms
133	3	Article: Hexham Courant (U.K.)	Article entitled "Couple Hit by Winds of Change" – discusses problems with wind farms
133	4	Article: Hexham Courant (U.K.)	Article entitled "Couple Hit by Winds of Change" – discusses problems with wind farms



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
134	1	Letter from Suzan Askins of Steuben County, NY to Calvin Luther Martin, Ph.D.	Homeowner upset over wind farm
135	1	Article: Times Online (U.K.)	Article entitled "Wind Farms ruin peace, says judge"
135	2	Article: Times Online (U.K.)	Article entitled "Wind Farms ruin peace, says judge"
135	3	Article: Times Online (U.K.)	Article entitled "Wind Farms ruin peace, says judge"
135	4	Article: Times Online (U.K.)	Article entitled "Wind Farms ruin peace, says judge"
136	1	The Westmorland Gazette	Article entitled "Windfarm blows house value away"
136	2	The Westmorland Gazette	Article entitled "Windfarm blows house value away"
136	3	The Westmorland Gazette	Article entitled "Windfarm blows house value away"
136	4	The Westmorland Gazette	Article entitled "Windfarm blows house value away"
137	1	Personal Statement of Patricia Leviker, Lowville, NY (as told to Calvin Luther Martin, Ph.D.)	Problems of homeowner near Tug Hill, NY, windplant
137	2	Personal Statement of Patricia Leviker, Lowville, NY (as told to Calvin Luther Martin, Ph.D.)	Problems of homeowner near Tug Hill, NY, windplant
137	3	Personal Statement of Patricia Leviker, Lowville, NY (as told to Calvin Luther Martin, Ph.D.)	Problems of homeowner near Tug Hill, NY, windplant
138	1	E-mail from Barbara Kramer of Ellenburg, NY to Calvin Luther Martin, Ph.D.)	Re: Maple Ridge Windplant, Lowville, NY
138	2	E-mail from Barbara Kramer of Ellenburg, NY to Calvin Luther Martin, Ph.D.)	Re: Maple Ridge Windplant, Lowville, NY
138	3	E-mail from Barbara Kramer of Ellenburg, NY to Calvin Luther Martin, Ph.D.)	Re: Maple Ridge Windplant, Lowville, NY
138	4	E-mail from Barbara Kramer of Ellenburg, NY to Calvin Luther Martin, Ph.D.)	Re: Maple Ridge Windplant, Lowville, NY
139	1	Letter from Russell Bounds, Realtor, to Maryland Public Service Commission	Impact of wind farms on property values
140	1	Testimony of Russell Bounds, Realtor, before the Maryland Public Service Commission	Impact of wind farms on property values
141	1	Report produced by LJK Wireless Communications Engineering	Report entitled "Wind Farms and Their Effects on Public Safety Radio Systems"

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
141	2	Report produced by LJK Wireless Communications Engineering	Report entitled "Wind Farms and Their Effects on Public Safety Radio Systems"
142	1	Survey: Agricultural Resource Center (WI)	Comments of residents on problems with communication resulting from wind turbines
143	1	Article by David Brandes, Lafayette College	Article entitled "Windpower and Raptors: An Unsolved Issue"
144	1	Article: Inside Bay Area	Article entitled "Judge Oks Wind Farm Suit"
145	1	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
145	2	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
145	3	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
145	4	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
145	5	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
145	6	Testimony of H. Sterling Burnett, Ph.D. to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	Presentation entitled "Wind Power: Not Green but Red"
146	1	Article: West Virginia Gazette	Article entitled "Study: Bats Killed at Wind Turbine Sites"
147	1	Article: Charleston Gazette (West Virginia)	Article entitled "Investigating a Turbine Tragedy: Bat Deaths Could Threaten Green Image of Wind Power"
148	1	Article: Post-Gazette (Pittsburgh, PA)	Article entitled "Windmills a Fatal Attraction for Bats"
149	1	Article: Statesman	Article entitled "Windmills Prove Deadly to Bats"

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
150	1	Report of U.S. Government Accountability Office (GAO)	Summary of report entitled "Wind Power: Impacts on Wildlife and Government Responsibilities for Regulating Development and Protecting Wildlife"
151	1	Article: Recorder Publishing of Virginia, Inc.	Article entitled "Wind Assessments Found Lacking"
152	1	Report of U.S. Government Accountability Office (GAO) to Congressional Requesters	Report entitled "Impacts on Wildlife and Government Responsibilities for Regulating Development and Protecting Wildlife"
153	1	Online article: kirbymtn.blogspot.com (by Eric Rosenbloom)	Article entitled "Chautauqua Wind: Threat to Birds, No Benefits"
154	1	Report by Nina Pierpont, M.D., Ph.D. and Calvin Luther Martin, Ph.D.	Report entitled "Migration Patterns and Routes of the Greater Snow Goose"
155	1	Online article: Scotsman.com (Scotland)	Article entitled "Migrating Geese Force Energy Firm to Scrap Plans for Wind Farm"
156	1	Letter from U.S. Department of the Interior, Fish & Wildlife Service, to Highland New Eind Development, LLC	Re: Highland New Wind Development, LLC, Highland County, Virginia – impact on wildlife
157	1	Letter from U.S. Department of the Interior, Fish & Wildlife Service, to Patrick McCarthy	Re: Proposed Nobel Wind Power Projects in Altona, Ellenburg & Clinton, Clinton County, New York
158	1	Article: Ecological Monographs 60(2), 1990, pp. 213-238	Article entitled "Structure and Organization of an Amazonian Forest Bird Community"
159	1	Article: Ecology 84(11), 2003, pp. 3024-3032	Article entitled "Climate and Food Synchronize Regional Forest Bird Abundances"
160	1	Article: The Auk 118(3): 589-609, 2001	Article entitled "Thirty-year Bird Population Trends in an Unfragmented Temperate Deciduous Forest: Importance of Habitat Change"
161	1	Article by Mark Duchamp	Article entitled "Chilling Statistics" re windfarm impact on wildlife
162	1	Online article: Safewind: Wind Farms, Wildlife and the Environment	"Do Wind Turbines Kill Birds?", etc.
163	1	Letter from Edward B. Arnett of Bat Conservation International	Comments on an unidentified DEIS.
164	1	Proceedings: Onshore Wildlife Interactions with Wind Developments – Research Meeting V, Landsdown, VA (11/3-4/05)	NWCC meeting No. 5 to bring community If stakeholders up to date on research on avian, bat and other wildlife studies.
165	1	Michael Filion	Statement that 12 letters and 52 postcards have been received for, one against and one had question on DEIS
166	1	Cassandra Burl	Submits a letter (no other info)
167	1	Kirby Selkirk	Representing Clinton County Farm Bureau - Submits a resolution in favor of WTGs on member farms dated 5/11/06

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
167	2	Kirby Selkirk	Submits a narrative of supporting info for the resolution
167	3	Kirby Selkirk	Submits policies of New York Farm Bureau on siting energy facilities and request Ag and Markets be included in all of the regulations governing construction and in discussions with Noble
167	4	Kirby Selkirk	Submits study on Impacts of Windmill Visibility on Property values in NY and states it finds no measurable effect (Study title not mentioned)
168	1	Norbert Kanzler	Supports wind. Will provide economic benefit and reduce greenhouse gas emissions
169	1	Dan Haas	Noble Rep. Submits Utility Integration Group Study prepared by APPA/EEI/Rural Electric Coop and lists some of the benefits found in the study
170	1	Anne Britton	Opposed to wind power. States Noble DEIS should not be accepted as it doesn't address public health and safety including ice throw, fires, seismic risk, state and federal wetland laws, wildlife/game protection, and USFW recommendation for multi year/season studies. Also DEC noise compliance, indifference to NY noise standards, quality of low frequency noise assessment and flicker at 82 homes, 60% of which are not lease holders.
170	2	Anne Britton	Submits document with index.
171	1	Bernie Soltysik	Concern over loss of property value
171	2	Bernie Soltysik	Concern about abandonment of wind turbines
171	3	Bernie Soltysik	Quote NY Times 5/17/06 re: tax breaks for WTG including PTC and Goldman Sachs is in the market through purchase of Zilkha (now Marble River).
171	4	Bernie Soltysik	Quotes from Rockefeller University - "...to get more wind need to cover more land which is destructive of the environment"
172	1	Glen Fountain	Favors wind power. Cheaper energy and less pollution. Owns 400+ acres.
173	1	Jim Sacckeri	Favors wind power. Cites less pollution. Encourages Board to approve DEIS. Owns Lawrence Valley Dairy Farm.
174	1	Dareth Glance	Favors wind power. Lessens reliance on fossil fuels. Reduces environmental and human health (respiratory) impacts. Minor impacts to wetlands. Insignificant impacts to bats/birds. Director Citizens Community for the Environment.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
174	2	Dareth Glance	Submits comments on the Noble Clinton Windpark.
175	1	Mark Lyons	Dir. Project Development for Noble. Submits 55 signatures and 2 letters (Mary Lamb and Paul Miller) in support.
175	2	Mark Lyons	Submits Paul Miller letter, assistant director of Madison County planning department. Cites economic benefits, and minimal noise and no negative wildlife/domestic animal impacts. In 5 yrs experience, no H&S or negative property value impacts.
175	3	Mark Lyons	Submits 3 studies which state that property values are not negatively impacted by wind mills/turbines; Ben Hogan (Bard College) manuscript, 2003 Renewable Energy Policy Project, 2002 report (not named) from Kitteris County Oregon.
176	1	Richard Harriman	Supports wind. Good for economy, tourism.
177	1	Toby LeClaire	Consider SW corner of town where 81 turbines within 2 miles will be situated. Concern of noise impacts.
177	2	Toby LeClaire	Concern over visual impacts, particularly in areas away from village
177	3	Toby LeClaire	Submits Decommissioning report for both facilities. Concern over estimates of decommissioning cost.
178	1	Amy Filion	Concerned snowmobiling and four-wheeling may be "ruined" due to fences around turbines.
178	2	Amy Filion	Concerned about noise and flicker effect.
178	3	Amy Filion	Concerned that homeowners may opt to sell and leave.
178	4	Amy Filion	Mentioned Town of Malone where ordinance passed banning wind turbines
179	1	William Poupore	Supports Marble River and Noble Wind Projects. Cites clean power.
180	1	Judy Baker	Requests explanation of Decommissioning Plan (unclear if Noble or MR)
181	1	Kerby Selkirk	Submits Clinton County Farm Bureau comments.
182	1	Bruce Breault	Comments on the positive real estate impact from Noble DEIS
183	1	Dan Haas	Managing Director of Noble. Submits UWIG/APPA/EEI/NRECA Report 5/06. Cites decrease in consumer energy cost, system stability and reliability improvements, reduction of fossil fuel dependence and hedge against fuel price risk and future emissions restrictions.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
184	1	Dan O'Neil	Supports wind power. Cites wind farms as source of income to community, especially farmers.
185	1	Anne Britton	Chairperson - Bangor, NY. Opposes wind project. States Noble DEIS fails to address public H&S and environmental issues in Ellenburg.
185	2	Anne Britton	States Noble DEIS does not adequately address ice throw, turbine fires, seismic risks, wetland impacts, wildlife impacts, noise, flicker and cumulative impacts.
185	3	Anne Britton	Submits an Index and copies of documents.
186	1	Gerald Tourville	Supports wind project. Cites beneficial economic impacts, reduction in taxes, and offset of global warming.
187	1	Norbert Kanzler	Supports wind power. Cites tax advantage and diminishes noise and avian impacts.
188	1	Amy Phillion	Supports wind power but not here. Concerned about fires. Shadow, flicker and noise not adequately addressed in DEIS.
189	1	Glen Fountain	Supports wind project in Churubusco. Cites reduction in pollution.
190	1	Gerard Labarron	Supports wind project. Cites reduction in pollution and less dependence on foreign oil.
191	1	Patricia Cantler	Supports wind project. Cites less pollution, additional employments opportunities.
192	1	Joseph Kramer	Supports wind power. States DEIS report incomplete with regard to noise, wildlife impacts, future water contamination. Concerned about property devaluation, noise, contamination, flicker, shadows and radio waves.
193	1	Peter Silvester	Concerned that taxes from wind project will compromise current state and federal funding.
193	2	Peter Silvester	Not clear when lease holders will receive moneys they were promised.
193	3	Peter Silvester	Concern over limited jobs available from wind farms (not a big economic boost)
193	4	Peter Silvester	Unsure if tax break will be realized.
193	5	Peter Silvester	Concern over Decommissioning timeframe (15 yrs). Suggest Decommission moneys be set aside today.
193	6	Peter Silvester	Inquires if environmental studies have been done for entire season and migrating birds, deer and turkeys properly investigated.
194	1	Mark Lyons	Dir. Project Development for Noble. Submits 158 signatures in support.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
194	2	Mark Lyons	Addresses Decommissioning Plan. States project has posted security for Decommissioning.
194	3	Mark Lyons	Addresses impacts on state aid and PILOT
194	4	Mark Lyons	States economic impact to local economy is on order of \$100 million over 20 yrs.
194	5	Mark Lyons	Submits 3 studies which state that property values are not negatively impacted by wind mills/turbines; Ben Hogan (Bard College) manuscript, 2003 Renewable Energy Policy Project, 2002 report (not named) from Kitteris County Oregon.
195	1	Town of Altona	Town of Altona, Clinton County. Notice of Joint Public Hearing on DEIS of Noble and MR on May 26, 2006
196	1	Dan Grue	Letter to Larry Ross, Town Sup. Of Altona. Submission of wind turbine photos from Maple Ridge.
197	1	Dareth Glance, Citizens Campaign for the Environment	Comments on the Proposed Noble Altona Windpark
198	1	Deborah Drake	Letter to Larry Ross, Town Sup. Of Altona. Does NOT support Noble Altona project.
199	1	Unknown	Article "What the North Country Needs to Know about Wind Power" by Schleede
200	1	Andrea Norcross	Jericho NY resident opposes wind project in town (Noble)
201	1	Cynthia Baker	Town of Altona resident opposed to wind farm (Noble)
202	1	Nina Pierpont, PhD	Review of Noble Environmental DEIS for Altona, NY
203	1	Vanessa Hoffmen, Cornell Daily Sun	Article "Cornell Studies Pros Cons to Wind Power"
204	1	emediawire	Article "Environmental Father Figure Blames Peers for Wrecking the Environment"
205	1	Scripps Howard News Service	Article "Neighbors Complain of Wind Farm Nuisances"
206	1	Unknown	Article "Wind Farm Resistance, What's all the fuss about?" Part I
207	1	Unknown	Article "Wind Farm Resistance, What's all the fuss about?" Part II
208	1	Unknown	Transcript "Remarks of Senator Alexander; Windmill Legislation Introduction"
209	1	Denise Raymo	Article "Wind-farm Law Passes"; Town of Malone restrictions
210	1	Sue Sliwinski	Testimony, Susan Sliwinski of Sardinia NY
211	1	Joanna Lake, orig. published in Vt Free Press	Article "Industrial Wind, Corporate Vandalism"



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
212	1	WOW, RAW, North Country Advocates	Article "Wind Energy's Colossal Profits at the Taxpayer's Colossal Expense"
213	1	Unknown	Article "Living in Drydan" Wind Farm discussion at April Town Board Meeting
214	1	Glenn Schleede	Article "Big Money" Discovers the Huge Tax Breaks and Subsidies for Wind Energy while Tax Payers and Electric Consumers Pick up the Tab"
215	1	David Roberson	Article "Questioning the Faith of Wind Power"
216	1	UK article	Article "Wind Power Facts"
217	1	Series of UK abstracts	Series of Articles, Most from UK
218	1	Series of Article excerpts	Series of Articles, Health and Safety related
219	1	Robert Larivee	Excerpt of Article quoting Robert Larivee
220	1	stopillwind.org	Article "Wind Technology is Noiseless and Creates Few Disturbances"
221	1	Nina Pierpont, PhD	Article "Health, Hazard and Quality of Life Near Wind Power Installations"
222	1	National Wind Watch	Article "NWW's Submitted comments to house of representatives appropriations subcommittee on energy and water development"
222	2	National Wind Watch	Article "NWW encourages funding to research impacts of commercial wind energy"
223	1	Wendy Lamare, Larry Ross	Town Board of Altona documentation that it received Documents in Support of Rejecting Noble DEIS
224	1	Kenneth Lamb	Letter from Kenneth Lamb to Noble in support of Noble
225	1	Mary Lamb	Letter from Mary Lamb to Noble in support of Noble
226	1	Mary Lamb	Letter from Mary Lamb to Town of Clinton in support of windfarms
227	1	Kenneth Lamb	Letter from Kenneth Lamb to Town of Clinton in support of windfarms
228	1	John Osakawicz	Letter from John Osakawicz to Michael Filion, Town of Clinton in support of MR
229	1	Wetland Hunting Club (David Roach), Rick Lashway, Martin Lavin, Chad Spoor, Fayette, Cole, Newton, Brierre, Richard Cole	Letter from Wetland Hunting Club (David Roach), Rick Lashway, Churubusco Lodge Inc (Martin Lavin), Chad Spoor, Hugh Fayette, Richard Cole, James Newton, George Brierre, Richard Cole to Michael Filion, Town of Clinton in support of wind farms
230	1	John Pollic	Letter to Town of Clinton Board Members in support of Marble River
231	1	Elaine and I. Pat Dupras	Letter to Michael Filion, Town of Clinton and Board Members in support of Marble River
232	1	Glenn and Faye Fountain	Letter to Town Board members in support of Marble River



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
233	1	Greg Sands	Letter to Town Board members in support of Marble River
234	1	Dennis Moore	Letter to Town Board members in support of Marble River
235	1	Gerald Miller	Letter to Town Board members in support of Marble River
236	1	Casandra Burl	Town of Clinton resident, supporter of wind farms
237	1	Anthony C. Cassani	Letter from Churubusco resident in support of wind farms
238	1	Ross and Carol Poupore	Letter to Town Board Members in support of Marble River
239	1	Dinah Miller	Letter to Clinton Town Board, Opposes Wind Farm. Commenter expresses concern regarding the following issues: noise, international border with Canada and national security, telecommunications, changing number of turbines, setback distances, municipal compensation, native Indian burial grounds, seismic activity.
240	1	Martin Garell, Prof of Physics	Letter to Michael Filion, Town of Clinton, Several problems in EIS for Marble River
241	1	Paul Miller, Asst. Director Madison County Planning Department	Letter to Michael Filion, Town of Clinton, supports wind farms, experienced no negative impacts
242	1	Edward Bennett, President of New York Interfaith Power and Light	Letter to Michael Filion, Town of Clinton, supports wind farms
243	1	Martin Lavin	Letter to Michael Filion, Town of Clinton, Supports Marble River
244	1	Valerie Ayers	Letter to Town of Clinton, Town Board Officials. Opposes Windfarms (mentions Noble only)
245	1	Alfred Oddie	Letter to Michael Filion, Town of Clinton, Opposes Windfarms
246	1	Larisa Washburn, Environmental Advocates of New York	Letter to Michael Filion, Town of Clinton, Supports Noble Clinton Windfarm
247	1	Environmental Advocates of New York	Article "Wind Power, Clean, Safe, Secure Energy for New York State"
248	1	Larisa Washburn, Environmental Advocates of New York	Letter to James McNeil, Town of Clinton, Supports Noble Clinton Windfarm
249	1	Dianne LaBarre Vaincourt	Letter to Town of Ellenburg Town Board, Supports wind energy
250	1	Edward Bennett, President of New York Interfaith Power and Light	Letter to James McNeil, Town of Ellenburg, supports wind farms
251	1	William F. Scott, Sup. of Schools	Letter to James McNeil, Town of Ellenburg, Requests setback of min. of 2,500ft. from school, church, hospital, nursing home

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
252	1	Daryl Lawrence	Letter to Town Board Members (Ellenburg), Issues with Noble Wind
253	1	Valerie Ayers	Letter to Town of Ellenburg, Town Board Officials. Opposes Windfarms (mentions Noble only)
254	1	Joseph Kramer	Letter to Town Board of Ellenburg, Mentions Noble only
255	1	Dareth Glance, Citizens Campaign for the Environment	Letter to James McNeil, Town of Ellenburg from Citizen Campaign for the Environment (CCE) in support of Noble
256	1	Anne Sylvester	Letter to Town Board of Ellenburg, unclear which project referring to
257	1	Group of Concerned Citizens from Town of Ellenburg	Letter from Group of Concerned Citizens from Town of Ellenburg, unclear which project referring to, submit Town of Malone Chapter 78
258	1	Unknown	Series of Articles / Letters USFW Review Avian Risk Assessment
259	1	John R. Hatfield of NYSEG	Letter to Francis LaClaire, Thank you for Supporting Wind Energy
260	1	John R. Hatfield of NYSEG	Letter to Francis LaClaire, Important Wind Energy Update
261	1	Judy Baker	Submits section of Noble's and Marble River's Decommissioning Plan
262	1	Fenner Renewable Energy Education Center (FREE)	Article "Fenner renewable Energy Education Center" Capital Campaign 2006
263	1	Cynthia Cole	Reprint of letter from Cynthia Cole to John Servo of Advocates for Prattsburgh, unclear which project referring to
264	1	John Servo, Advocates for Prattsburgh	Reprint of letter from John Servo of Advocates for Prattsburgh to Rob Price, Stueben Courier Advocate
265	1	Journal of Anxiety Disorders	Journal article "Neurological basis for balance - anxiety links" Balaban and Thayer
266	1	Journal of Anxiety Disorders	Journal article "A Clinical taxonomy of Dizziness and Anxiety in the Otoneurological Setting" Furman, Jacob
276	1	not given	Index of Documents, Windplant Article 78 Petition
277	1	Leventhall for DEFRA	A Review of Published Research on Low Frequency noise and Its Effects
278	1	Journal Article 11th Annual meeting	Article "Low Frequency Noise and Vibration and Its Control, Maastricht the Netherlands"
279	1	Series of Noise/Health Articles Abstracts	Series of Noise/Health Article, (e.g., "Projections from the parabrachial nucleus..." Balaban CD)

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
280	1	IEEE Proceedings, MacQueen; Terry Matilsky from Rutgers	Article "Basic Kinematics, and Comments on Inclusions of Drag Coefficients and Risk Assessments"
281	1	Pamela Foringer	Article "Our Fenner Wind Farm Story"
282	1	Catherine S. Maier	Letter to Ed "Don't Let Wind Turbines Happen Here" Sheffield
283	1	Arthur Giacalone	Email from Arthur Giacalone to Anne ?, submits "suspect" excerpt from REPP Report submitted on 11/9/05 to Town of Clinton
284	1	<a href="http://www.aweo.org">www.aweo.org</a>	Article "A Problem with Wind Power" Rosenbloom
285	1	US Dept. of Interior Fish and Wildlife	US Dept. of Interior Fish and Wildlife, Letter to McBride from Mayne re: Highlands New Wind Development
286		US Dept. of Interior Fish and Wildlife	US Dept. of Interior Fish and Wildlife, Letter to McCarthy from Stillwell re: Species in Town of Clinton and Ellenburg
287	1	NYSDPS	Confirmation of turbine setbacks from NYPA electric transmission lines should be provided.
287	2	NYSDPS	No scale or legible elevation information is provided on substation plan and elevation profile figures (Appendix A sheets 2 through 5) and the text does not explain the proposed setback separation from existing electric transmission lines.
287	3	NYSDPS	Plan Figure Sheet 4 of 5 does not provide section or elevation locations as per the figures on sheet 3 of 5.
287	4	NYSDPS	Substation Plan does not provide depiction of the length of access road to an intersecting public roadway. Substation access road location, grade and curvature design information should be provided.
287	5	NYSDPS	DPS requests consultation with the developer to review substation facility siting and design criteria.
287	6	NYSDPS	Specifications for electric collection system line clearances are not given. Vegetation maintenance/management of the system is not mentioned, unless it is part of 'best practices', briefly mentioned (Section 2.7). Clearance distances should be specified.
287	7	NYSDPS	The details of the 'two-phase' construction (page 11-12, Appendix A) are vague. What is to happen, where and when cannot be determined.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
287	8	NYS DPS	Appendices B, C, and D are missing and appear to be parts of Appendix A.
287	9	NYS DPS	The water quality classification DD does not appear in the regulations (Sect 3.2.1.1). The statement that NYSDEC does not regulate class D and DD waters is incorrect. NYSDEC regulates all surface waters, though standards vary with class.
287	10	NYS DPS	Discussion of archeological resource evaluation indicates that a supplemental Phase 1B survey is being conducted to address project layout changes. DPS advises that the survey should be provided to reviewing agencies for consideration and consultation as soon as possible and prior to issuance of the FEIS.
287	11	NYS DPS	The SDEIS is not consistent in addressing the proposed placement of the 34.5 kV line at the historic Ogdensburg & Lake Champlain railroad. The rationale for proposing overhead placement versus underground installation of the 34.5 kV line at the historic Ogdensburg & Lake Champlain railroad should be provided (Section 3.7.2 and 3.7.3).
287	12	NYS DPS	Discussion of overhead collection line installation (Section 2.6.6) states "In wetland locations a gravel pad will be required around each pole for access of equipment along with spur lines from the access road to the structure pads." This statement and definition of spur lines should be clarified. Further, indicate whether the gravel pads and fill are temporary or permanent installations.
287	13	NYS DPS	Mitigation of operations on avian and bat wildlife species should include a commitment to adoption of an adaptive management strategy as appropriate to minimize adverse effects.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
287	14	NYSDPS	NYS Route 11 is a designated Scenic Byway. The EIS indicates several areas of potential project effect along this route, including new access road installations, clearing and grading and utility relocations for construction deliveries, and new overhead installation of multiple-circuit 34.5 kV electric collection lines. Consideration of design and restoration methods to minimize the effects of this construction on the Scenic Byway corridor should be required. Alternatives should be addressed, including: underground placement of the 34.5 kV lines at the Route 11 approach and crossing; increased setback of pole structures from the roadway; alignment shifts to avoid linear "tunnel" view down electric line corridor from Route 11; restoration of stone walls and installation of landscape plantings at access road intersections with Route 11; and potential offsets due to multiple effects on the Scenic Byway corridor.
287	15	NYSDPS	Section 5.2.2 should contain cites to Appendix K and relevant figures therein.
287	16	NYSDPS	The Visual Impact Assessment (Appendix K) suggests that visual impacts of the project from Lyon Mountain should not be significant. The cumulative effect of the project in addition to the several other wind energy projects proposed or in development which will be in view from this location may be significant. This location will likely be unique in the State (and the greater region) in that it will provide a sweeping view of potentially over 450 large scale wind turbines. The assessment should indicate whether or not the addition of the Marble River project turbines is likely to significantly increase visual contrast above that anticipated from the projects already approved.
288	1	Toby and Cindy LeClair	Sound measuring is one concern that needs to be addressed. Cites Pierpont study which states, "at least 2miles distance between a turbine and a residence. Anything less than 2 miles could be subjected to illnesses - vertigo, nausea."

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
288	2	Toby and Cindy LeClair	Setbacks should be top priority before allowing MR to start project. For not for noise, then for rights of residences living near a residence that is getting a turbine. The distance of 500' from a neighbors property line is not sufficient. It kills any future plans a property owner may have to construct any type of dwelling on THEIR OWN land. Takes away landowner rights to their own land.
288	3	Toby and Cindy LeClair	Town Board should look to other towns like Tug Hill as to turbine effects. Bat and geese migration and hunting impacts.
289	1	Churubusco Lodge	Letter of support for Project. Cites improved town economics, power supply, and environmental benefits
290	1	Dinah Miller	Town Law #1 does not use correct sound filters to measure correct noise frequencies turbines create. Town Board failed to correct this even after several scientists and doctors submitted proof.
291	1	Gilles and Amy Filion	Not measuring the sound the wind turbines generate with the correct measuring filters
291	2	Gilles and Amy Filion	Cites Pierpont study which states that turbines should be at least 2 miles from a residence. May result in vertigo and nausea from vestibular disturbance
291	3	Gilles and Amy Filion	Concern with flicker effect
291	4	Gilles and Amy Filion	Concern with lights at night
291	5	Gilles and Amy Filion	Concern with setbacks and property value. Setting turbines to be within 500ft of property line will prevent owner from building house in back of property. Make property "dead land". Also make impossible to sell property.
291	6	Gilles and Amy Filion	Cites Tug Hill example. Maple Ridge Project has not resulted in low enough taxes, and residents are fighting about noise generated from turbines. Concern that Tug Hill is becoming a junk yard
292	1	NYSDEC	There is no calculation of DEC adjacent area wetland impacts.
292	2	NYSDEC	There is no calculation of the area of forest-conversion impact in the SDEIS discussion.
292	3	NYSDEC	The revised calculations do not include DEC-regulated adjacent area impacts.
292	4	NYSDEC	DEC site visit conducted on August 22, 2007, it was stated that access roads would not be constructed.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	5	NYSDEC	It is unclear from this description whether the proposed gravel pads around OHC poles will continue to be included without the installation of access roads, or whether this is a temporary or permanent feature.
292	6	NYSDEC	DEC recommends that a more detailed description of potential impacts to freshwater wetlands be included in the SEQR review before a Final Environmental Impact Statement is issued and SEQR Findings made
292	7	NYSDEC	The total area estimates for wetland impacts included in the DEIS, SDEIS and supplemental materials need to be described in greater detail. The SDEIS states that impact estimates were based on engineering site plans, yet details of these site plans are absent from the SDEIS.
292	8	NYSDEC	Agency review must be able to determine that impacts have been avoided, minimized or reduced to the maximum extent, alternative project designs have been explored, or if other alternatives may potentially be feasible. For DEC-regulated wetlands, details regarding impacts to adjacent areas must also be provided. Areas of impact must include all project components and modifications identified above
292	9	NYSDEC	DEC recommends that information regarding potential wetland impacts be formatted so that wetland and adjacent area impacts are broken down first by wetland (including wetland name and agency jurisdiction) and then further broken down by type of impact (road, tower, transmission line, etc.). Preliminary plans of each area of impact should be provided that includes a written description of the impacts, both temporary and permanent, to the wetland and adjacent area. This description should include the name, size and class of the wetland, the type of habitat impacted, the type and size of impact, a discussion of the restoration planned after construction, a justification of the impacts, and the steps taken for avoiding and minimizing these impacts. See NOBLE example.



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	10	NYSDEC	The DEIS and SDEIS do not provide detailed analysis that demonstrate avoidance and minimization of wetland impacts have been conducted to the maximum extent. Department prefers that specific avoidance measures, including but not limited to WTG, access road, underground or overhead interconnect, or other project component re-alignment, elimination, or modification, be described in detail in the FEIS, demonstrating how the modification reduced the area of impact or avoided lost function in wetland and DEC adjacent areas. See NOBLE example.
292	11	NYSDEC	The project sponsor proposes to utilize a model to determine the mitigation ratios based on the existing wetland functions and values of the wetlands that will be impacted. This model needs to be fully explained and justified in the FEIS. The functions and values the regulated adjacent area provides to the wetland must also be accounted for in the outcome of this model. This assessment must also provide the basis for which forest canopy removal without replacement is categorized as a temporary impact, how this loss of wetland function and value is treated in the model and how it will be mitigated for.
292	12	NYSDEC	The FEIS should include, at a minimum, a concept plan that describes proposed mitigation development for the identified parcels, including grading, planting and management of the mitigation areas, the area and functional replacement values that the mitigation sites will provide, and how the mitigation conforms to DEC wetland mitigation guidelines.
292	13	NYSDEC	Unless there was an imminent threat to the integrity of the tamarack spruce bog in Clinton, further protection in the form of purchase or easement is not likely to be more protective than the existing status of this resource as a regulated wetland area. Therefore, DEC is unlikely to consider this option a priority in the proposed mitigation plan.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	14	NYSDEC	For any proposed wetland compensatory mitigation sites, a legal mechanism to secure long term access and management of the property should be discussed (e.g., ownership, permanent easement, transfer to third-party conservancy organization). For DEC permits, the structure of this agreement will be required to be in a form acceptable to the Department.
292	15	NYSDEC	An Invasive Species Control Plan (ISCP) to minimize the spread of invasive propagules throughout the project development area, and particularly in regulated wetland and stream areas, should be included in the FEIS. The ISCP will be a requirement of any permits issued by DEC. The goal of the ISCP is an overall 0% net increase in the area coverage of invasive species in the project development area. Post-construction monitoring and periodic management, including invasives control and re-planting of preferred indigenous species to ensure survival, is a necessary component of the ISCP to ensure the success of the plan.
292	16	NYSDEC	All overhead transmission lines should be constructed and maintained to conform with the Avian Power Line Interaction Committee's Guidelines to minimize the impact of these structures on birds. The FEIS should reflect the developer's commitment to following these Guidelines.
292	17	NYSDEC	DEC looks forward to reviewing the results of the BBS conducted in May and June 2007 in the northeastern and southern parts of the site, to be presented in the FEIS.
292	18	NYSDEC	The possibility of a migratory corridor for eagles existing in Franklin and eastern Clinton Counties cannot be discounted. DEC recommends that the design for a post-construction mortality survey to be conducted at the Marble River project include surveys to more fully characterize eagle migration patterns through the project area and an analysis of potential risk to eagles from project operation.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	19	NYSDEC	An impact monitoring plan for pied-billed grebes should be included in the post-construction mortality monitoring study, incorporating techniques such as follow-up BBS that include targeted pied-billed grebe surveys within potential nesting habitat. The results of the 2007 BBS will help to further determine any areas of interest for this species within the project area.
292	20	NYSDEC	The discussion of construction, operational and displacement/disturbance impacts to wildlife described in the DEIS do not include 13.6 miles of overhead collection line running through forested wetland. This issue needs to be properly evaluated for all aspects of the project.
292	21	NYSDEC	Resolve inconsistencies in the reported number of acres of wildlife habitat that will be lost as a result of project development. Report the actual number of acres that will be developed. It should also be noted that the total number of acres proposed to be developed and lost as wildlife habitat increased from 134 as reported in the DEIS, yet the overall project size decreased from 19,310 acres to 18,520 acres (Section 2.4, page 10 of DEIS, and Section 2.4, page 7 of SEIS).

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	22	NYSDEC	<p>There are no data or other information provided to support the conclusion that “the total of 163 acres of wildlife habitat that will be lost due to Project development are not significant from the local or regional perspective.” This is particularly true in light of the proposal for 13.6 miles of overhead collection line that will be placed in contiguous intact forest and could have an adverse effect on forest interior bird species. No overhead lines were proposed in the DEIS. No studies have been done to evaluate the current status of forest interior birds and bats or the potential impact a swath of cleared land through the forest would have. A thorough investigation into the use of this forested area by birds and bats needs to be conducted before any construction activity takes place. Additionally, a post-construction monitoring plan should include a study to monitor the effects (habituation/avoidance, introduction of non-native species, predators, and nest parasites (such as cowbirds) of this fragmentation on forest interior species.</p>
292	23	NYSDEC	<p>Proposed project will result in permanent loss of 103 acres of forest habitat...this is an increase in 29 acres over the 74 acres proposed to be lost in DEIS. DEC considers conversion of forest to shrub-scrub to be a permanent loss. 136 “converted” acres may still be viable as wildlife habitat, it is no longer suitable for forest-dependant species and should be included in Table 3.3.2.2.1.1-1 as permanent forest acreage lost as a result of project development. In the same table, 381 acres of forest are listed as having a “temporary disturbance.” What constitutes a “temporary disturbance” to forest habitat is not defined. Disturbance to a forest habitat cannot be considered temporary, as the cutting of trees inherently eliminates the forest. Any construction activities that result in “forest disturbance” should be considered permanent loss of forest habitat, not a temporary loss.</p>

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
292	24	NYSDEC	Confirm DEC interpretation: Based on the values provided in Table 3.3.2.1.1-1 and Section 3.3.2.2, it appears that approximately 103 acres of forest will be developed into unsuitable wildlife habitat, 136 acres converted to scrub-shrub habitat in the overhead line right-of-way, and 381 acres of forest otherwise "disturbed," for a total of 620 acres of forest permanently lost due to project development.
292	24b	NYSDEC	This report, however, does not provide further analysis that allows the reviewers to make decisions on the severity of potential visual intrusion by the project on a property by property basis in relation to their existing settings. The study concludes that "visual intrusion of a single turbine into the setting associated historic property is treated as sufficient reason to consider the property adversely affected" (Chapter 4.0, pg 12), and appears to jump directly to the conclusion that it is necessary to take additional measures to offset or compensate for these impacts that can not be eliminated.
292	25	NYSDEC	DEC recommends that the FEIS describe how mitigation determinations will be made at individual identified sensitive resources in accordance with the full menu of mitigation options in the DEC Visual Policy. Where it is determined that direct mitigation is not practicable, options available for employing offsets should be identified and described.
292	26	NYSDEC	Further discussion of the consultation process with OPRHP should be included in the FEIS, including correspondence from OPRHP that results in an impact or effect determination, the basis for making this determination, and the range of mitigation measures that will be considered. It should be noted that for a DEC permit application to be considered complete, an impact or effect determination must be made in accordance with the New York State Historic Preservation Act (SHPA) of 1980, Section 14.09, or with Section 106 of the National Historic Preservation Act (NHPA).

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	1	United States Fish and Wildlife Service (USFWS)	We did not find information on construction staging areas or the installation of 3 permanent meteorological towers in the SDEIS. This information should be provided so that all environ impacts are disclosed.
293	2	USFWS	Neither town impact summary includes wildlife, though tables listing impacts to vegetation communities indicate that wildlife habitat will be disturbed to a greater degree than other land use types.
293	3	USFWS	Wetlands are not listed on vegetation community impact tables which is a prominent omission. This information would be added to the tables.
293	4	USFWS	The proposed alternative description in Section 1.) differs from that in the summaries of each town, found at the beginning of the document. Discrepancies involving UEL and No of step up substations should be clarified.
293	5	USFWS	SDEIS did not disclose how many miles of new road will be required. It appears that new roads...and transmission corridors...will be built through significant areas of forest habitat and will result in a loss of habitat, diminished value of remaining habitat, and fragmentation of interior forest core areas.
293	6	USFWS	Access roads for other projects in the State are generally graded to a final width of 16 feet. A temporary width of 40 feet is used for most. The project sponsor would attempt to minimize habitat disturbance as much as possible and only clear what is needed.
293	7	USFWS	No specifics are provided on one (1) public road that may need to be improved. Also, on Pg 13. it is indicated that wider roads may be needed where turning radii is insufficient.
293	8	USFWS	Concern about widening roads near wetlands. The EIS should present the route needed for construction, and associated potential impacts to wetland and upland habitat should be provided.
293	9	USFWS	SDEIS indicates that 35 foot wide cleared area needed for underground cable, but DEIS indicated cleared area of 15 wide necessary. This should be clarified and narrowest area needed should be employed.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	10	USFWS	Not mentioned how buried cables cross waterbodies. We recommend that water body crossings be accomplished by directional drilling under aquatic areas.
293	11	USFWS	Section 3.0 does not indicate why total area of land disturbance from 723 to 845 acres is needed. More thorough explanation should be provided.
293	12	USFWS	Page 19. indicates that some temporary road widening and intersection work may become permanent if requested by local highway department. We question how, from a permitting perspective, the sponsor will be able to request stream and wetland permits for these projects when it is unknown of the impacts will be permanent or temporary.
293	13	USFWS	Page 20 indicates 61 stream crossings. It is not clear what the amount of stream loss would be, but this information should be clearly stated.
293	14	USFWS	On Page 26, it is stated that there will be 95 water body crossings, but it is not clear how many of these are streams or what are the other 34 water body types?
293	15	USFWS	Not clear if wetland boundaries were completely identified. In report it is mentioned that wetland impacts were estimated in areas outside of field survey limits, will be re-evaluated once all field delineations are complete and identifying wetlands by desktop review of maps. Project approval should be not be given until all aquatic habitat have been properly delineated and impacts have been avoided and minimized to the maximum extent practical.
293	16	USFWS	Pg 23 lists 158 total acres of wetland delineated in potential impact area. Pg 26 reports 68.4 and 15.5 acres will be permanently impacted for a total of 83.96 acres.
293	17	USFWS	Not clear if indirect impacts from changes in hydrology, topography, or others factors considered.
293	18	USFWS	While the report indicates that specific engineering plans were used to identify impacts, several references in the report indicate that impacts could change due to a variety of factors.



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	19	USFWS	Given the extent of potential wetland loss, there should be additional efforts to avoid and minimize wetland impacts.
293	20	USFWS	We question whether the focus of the wetland work was to identify the various 19 state-listed plants. If not, it seems appropriate that additional field work is justified to specifically search for rare species.
293	21	USFWS	Two especially vulnerable natural community types, rich shrub fen and sandstone pavement barrens, were identified. Given the rarity and vulnerability of these communities, we recommend that no impacts be allowed in these unique habitats.
293	22	USFWS	We recommend that project approval not be provided until breeding bird 2007 survey is provided to our office and the NYSDEC for review.
293	23	USFWS	We find that the migrating raptor sampling time to be inadequate to determine abundance and behavior patterns.
293	24	USFWS	Although the numbers are relatively small, we are concerned about the elevated risk to raptors at this site. We recommend that more data be collected on raptor movements and use of the project area. Typically, we recommend that multiple years of data be collected over multiple seasons to account for variability in climate and migration. Surveys should span the migration season which typically encompasses March to May in the spring and August to November in the fall.
293	25	USFWS	Passage rates and flight altitude, however, are reported as mean values. We suggest that median values be reported to give a better picture of typical migration patterns.
293	26	USFWS	As with the raptor studies, we recommend multiple years of data collection to better understand the spatial and temporal use of the project area.
293	27	USFWS	Fall radar surveys were terminated in mid-October, while migration can last well into November. Therefore, a substantial portion of the migration season was missed by this study. The data presented may not be representative of the entire project area.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	28	USFWS	A statement is made that none of the water bodies in the project area are large enough or productive enough to attract significant numbers of birds during migration. However, no data is provided to substantiate that claim, and it appears no surveys for waterbirds was conducted. The report should provide more detail as to why the numerous wetlands, ponds, beaver impoundments, streams, and rivers do not provide sufficient habitat.
293	29	USFWS	Wintering birds were not surveyed, but Christmas Bird Count (CBC) data was referenced. Over 90 species were recorded, but it was not disclosed where and when...therefore, it appears the project area supports an unusually high number of species. Again, adequate surveys during this time period would provide a better picture of winter avian use.
293	30	USFWS	The SDEIS does not mention potential displacement of grassland nesting birds as a result of tall structures being placed within suitable habitat. If the habitat is limited for these species, that should be indicated in the report.
293	31	USFWS	It was not indicated if the wetland and forest complexes found in the northeast portion of the area were surveyed. If not, these areas should be surveyed, as we would expect large densities of bats in these areas.
293	32	USFWS	We did not find the detection rate listed for this project. This would allow a comparison with other acoustic data collected in the region. Similar surveys at other nearby wind projects have been conducted since the DEIS was produced.
293	33	USFWS	Concern over of migratory tree bats. The project sponsor should be particularly mindful of the fact that large numbers of bats have been killed by wind turbines in the East, and the potential cumulative impact on populations could be significant (Arnett 2005). However, from the data presented, it is not clear if there is an elevated risk to bats at this site.
293	34	USFWS	An important resource for planning power line corridors was produced by the Avian Power Line Interaction Committee (1996) and should be referenced.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	35	USFWS	We recommend that the transmission line be routed around larger tracts of forests and grasslands to protect existing habitat value, reduce fragmentation, and maintain interior core areas.
293	36	USFWS	No amphibian or reptile surveys were conducted by the project sponsor. The impact analysis indicates that no State- or Federally-listed species were observed, and the effect of the project on more common species will be minimal but, without surveys, it is unclear how this conclusion can be supported.
293	37	USFWS	Table 3.3.2.1.1.1 lists the impacts to vegetation communities but does not include wetlands. Therefore, we recommend this table be revised based upon the best available information about aquatic habitat in the project area.
293	38	USFWS	Large scale land clearing would occur to forests as 381 acres are temporarily impacted and 103 acres permanently impacted. This estimate does not include areas of habitat adjacent to construction zones which will be degraded by the presence of roads, turbines, overhead power lines, etc.
293	39	USFWS	While the report indicates that logging has disturbed some areas, it is not estimated what percent of the project area this entails.
293	40	USFWS	We encourage the project sponsor to move 'turbines and overhead power lines out of forested areas.
293	41	USFWS	The report indicates that avian collisions with turbines range from 1 to 7 birds per turbine, but recent data from a 5-month study at the nearby Maple Ridge wind project indicate that almost 10 birds were killed per turbine. However, a numerical estimate of annual bird and bat fatalities was not provided.
293	42	USFWS	The report should contain additional discussions to determine potential avoidance, minimization, and mitigation measures, including operational measures. While the project sponsor has offered some mitigation measures, we want to stress that additional pre-construction wildlife studies are warranted to determine the extent of impacts so that appropriate mitigation measures can be identified.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	43	USFWS	Mitigation for this project, if built, should include, but not be limited to, construction restrictions (time-of-year, habitat protection measures, etc.), development and implementation of post-construction monitoring plans, operational adjustments (such as shutdown or removal of turbines and feathering of blades during low wind speeds), invasive species management plan, and aquatic habitat restoration or creation for unavoidable impacts.
293	44	USFWS	We recommend that the project not be approved until an adequate post-construction monitoring protocol is provided to the NYSDEC and our office for review. The Service typically recommends that these studies be conducted over 3 years of project operation and be conducted at all times of the year and under varied weather conditions.
293	45	USFWS	If turbines will be located within blocks of grassland habitat, we recommend that information be gathered on displacement of grassland nesting birds, if applicable. To mitigate potential impacts to bats, turbines should not have a cut-in speed of less than 6 meters per second, and operation should be curtailed between July 15 and September 15 for 5 hours after sunset. A research project at the Mountaineer Wind Project in West Virginia showed that bats may not be killed by wind turbines when the blades are feathered during low wind periods (Amett, 2005).
293	46	USFWS	project approval should be conditioned upon an adaptive management plan to address wildlife mortality as a result of turbine operations
293	47	USFWS	A construction environmental monitoring program should be implemented for this project. We suggest that the program include a training component for workers on how to identify and handle injured or dead wildlife.
293	48	USFWS	We found no data or specific reference that the Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines" (Guidelines) (USFWS 2003). was used for this project. We again suggest that the project sponsor review this information during the design of this project.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	49	USFWS	An invasive species management plan should be developed and implemented by the project sponsor.
293	50	USFWS	Section 3.9 of the DEIS indicates that the project will improve air quality through the reduction of emissions at fossil fuel-burning power facilities. No data were provided to support this statement.
293	51	USFWS	The intermittent nature of wind results in electricity being generated only periodically and, therefore, other types of generating facilities must be operating to meet demand. Therefore, it seems inaccurate to state that this project will displace the use of fossil fuels at existing power plants.
293	52	USFWS	Stated that mercury found in areas of upstate New York as a result of coal combustion. While this statement is true, it should be noted that most sources of mercury deposition in this State come from coal-fuel power plants in the Midwest ('PA 2007); construction of this project will not lead to a reduction in mercury levels.
293	53	USFWS	The SDEIS does not include a cumulative impact analysis for wildlife. There are at least four projects being proposed in adjacent areas. Over 300 turbines may be built in Clinton County in the near future. We recommend that this information be provided prior to project approval. We note that the SEQRA process requires this analysis.
293	54	USFWS	Criteria and constraints considered for various project alternatives are found in the SDEIS but no update on why the project size changed, other than landowner agreements, was provided.
293	55	USFWS	Wind data were not provided for the project area and, therefore, we are unable to determine if alternative turbine locations are available.
293	56	USFWS	Likewise, no financial justification for the project size was provided. Some data should be supplied to indicate that 109 turbines are needed to make the project viable. Although the document states that efforts to avoid resources were undertaken, we did not find data to support this.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
293	57	USFWS	We find that the SDEIS does not contain adequate information regarding potential impacts of the project on wildlife, and additional environmental review is necessary. We find that there is insufficient or missing data regarding wind resource data and economic justification for the project size.
293	58	USFWS	It appears that additional information on streams, wetlands, and other habitat types is still outstanding.
293	59	USFWS	Significant data are lacking for reptiles and amphibians, and migrating, breeding, and wintering birds, as well as bats.
293	60	USFWS	Insufficient data were collected at the project site to determine the spatial and temporal use of the project airspace by flying animals. Our recommendation for wildlife studies at wind projects generally specifies that data be collected over multiple seasons and years to determine average annual conditions. Because of variability in migration and weather, collecting data for 1 year likely does not reflect typical wildlife use in the project area....insufficient data currently exists to adequately conduct a risk assessment and predict wildlife mortality for this project.
293	61	USFWS	Power projects that proceed to construction should be monitored for impacts to wildlife following construction and during turbine operation. Post-construction bat and bird mortality monitoring should occur for a minimum of 3 years. Proposals for conducting monitoring should be coordinated with both the Service and the NYSDEC to ensure they are comprehensive, accurate, and correctly timed. Information gained from post-construction monitoring will continue to aid the Service and project sponsors as we learn more about potential impacts, or lack thereof, to wildlife in the project area. We recommend that project approval not be given until after the details of the post-construction monitoring plan have been reviewed and approved by the Service and the NYSDEC.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
294	1	Conestoga-Rovers and Associates (CRA)	Town of Clinton/ Town of Ellenburg Summary: Under "Traffic and Transportation", third paragraph, the second sentence should be revised to: "Prior to the issuance of building permits for construction, Marble River will enter into a Road Use Agreement with the Town of Clinton/Ellenburg. In addition to the Town Road Use Agreement, Marble River must also, prior to the issuance of building permits, obtain all applicable road use permits from Clinton County and the NYSDOT.
294	2	CRA	Town of Clinton/Town of Ellenburg Summary: Under "Traffic and Transportation", fourth paragraph, the second last sentence should be revised to: A written request for deliveries during these hours must be submitted by Marble River to the Town and the Northern Adirondack School Committee Officials two days prior to delivery. Approval must be obtained in writing prior to the use of the roads during these hours. No deliveries or use of roads by heavy construction traffic or delivery are permitted during school bus pickup and drop off hours, unless written consent is provided by the Town and the Northern Adirondack School Committee Officials. Marble River will contact and the Northern Adirondack School Committee Officials to determine school bus pickup and drop off hours.
294	3	CRA	Town of Clinton Summary: Under "Land Use and Zoning", third paragraph, the last sentence is missing a closing parentheses.
294	4	CRA	Town of Clinton/Town of Ellenburg Summary, "Visual Resources", please confirm whether the SVIA considered a 5 mile radius, or, whether an expanded radius of 10 miles was used.
294	5	CRA	Town of Clinton/Town of Ellenburg Summary: Under "Noise", second paragraph, last sentence should be revised to: The modeling study demonstrates that the Town of Clinton/Ellenburg local law limit of 50 dBa at any participating and non-participating residence will not be exceeded and therefore the Project will be in compliance.
294	6	CRA	Town of Clinton/Town of Ellenburg Summary: Under "Socioeconomics", 4th bullet, the word "town" should be capitalized.



**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
294	7	CRA	Section 2.5.2: Under "Agricultural Protection Measures", a statement indicating that the Ag. & Mkts guidelines, entitled "Guidelines For Agricultural Mitigation For Windpower Projects" shall be followed to the extent practicable. Construction and restoration guidelines shall be conducted in accordance with Ag. & Mkts. Guidelines.
294	8	CRA	Section 2.5.4: A target burial depth of 48 inches or greater is required in cropland, hayland and improved pasture land. In unimproved grazing areas and land permanently devoted to pasture, a minimum target burial depth of 36 inches is required. Furthermore, in areas where the depth of soil over bedrock ranges from zero to 48 inches, buried collection cables must be buried entirely below the top of the bedrock, or at the depth specified for the particular land use, whichever is less. Under no circumstances shall the target burial depth be less than 24 inches, per Ag. & Mkts. Guidelines.
294	9	CRA	Section 2.6.3, Access Road Installation: Paragraph 2, fourth sentence, states that "Following removal of topsoil, subsoil will be graded, compacted and surfaced with a minimum of 4 inches of gravel or crushed stone.. ." The same section in the DEIS states 12 inches. Please confirm correct depth.
294	10	CRA	Paragraph 2, fifth sentence should be changed to read: "Geotextile fabric will be installed beneath all access roads. Where roads are reduced to a permanent width of 16 feet, only geotextile fabric in that portion of the road that is reduced in width will be removed from the road.
294	11	CRA	Paragraph 2, seventh sentence: States a permanent width of roads will be 34 feet. This should be changed to temporary width.
294	12	CRA	The last sentence of paragraph 2 should state that Site-Specific Stormwater Pollution Prevention Plans, approved by the NYSDEC shall be developed for the Project. All contractors shall be trained in the SWPPPs, and must follow the requirements of the SWPPPs.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
294	13	CRA	Section 3.1.2, paragraph 4, should state that final road improvements/reinforcement activities will be conducted in consultation with the Town Highway Superintendent and the Town Engineer/Representative. Actual improvements required for delivery vehicles and heavy construction traffic will be developed as part of the Road Use Agreement.
294	14	CRA	Section 3.2.2.1.1, paragraph 2, states a 50 foot buffer radius around proposed turbines, involving wetlands, will be impacted. Please clarify, as it is understood that NYSDEC regulations do not permit impacts within 100 feet of wetlands.
294	15	CRA	Section 3.2.2.2.1, states a Project Site area of 18,520 acres. This should be changed to Project Area (in place of Project Site).
294	16	CRA	Section 3.4.2.2: Third paragraph should have the following sentence added to the end: "This will be confirmed in consultation with the Towns and their designated representatives prior to the execution of the Road Use Agreement.
294	17	CRA	Section 3.4.2.2, fourth paragraph, should make reference to potential movement of road signs and overhead collection lines.
294	18	CRA	Section 3.4.2.2, fifth paragraph, last sentence should be revised to: "...on a road-by-road basis, in consultation with the Towns and their designated representatives..."
294	19	CRA	Section 3.4.3, 2nd paragraph after bulleted list (page 45). Change third sentence from "A road improvement plan..." to "The applicant will enter into a Road Use Agreement with the Town's, and post a Road Use Bond to cover the cost of road reconstruction following construction."
294	20	CRA	Section 3.4.3, 2nd paragraph after bulleted list (page 45). Change third sentence from "...will be developed for each town that defines..." to "The Road Use Agreement will, among other things, define the various upgrades required to accommodate construction and component delivery vehicles.

**Table 3.1 Marble River Comment Matrix**

Comment Letter ID	Comment ID	Commenter	Comment Summary
294	21	CRA	Section 3.4.3. last paragraph, second last sentence should be revised from ". . .the applicant will make efforts to avoid scheduling component deliveries.. ." to read - ". . .the applicant will avoid scheduling component deliveries and movement of overweight construction/project vehicles during school bus pickup and drop off hours."
294	22	CRA	Section 3.4.3, last paragraph - please add the following after the last sentence: "The applicant will not be permitted to use certain portions of the roads during school bus without advance warning and approval from the Town or school district officials".
294	23	CRA	Section 3.8.3 - this section should also discuss the Complaint Resolution Procedure (or similar) for dealing with complaints related to shadow flicker
294	24	CRA	Section 3.10.4 - unless otherwise stated in the DEIS, this section should also discuss the Complaint Resolution Procedure (or similar) for dealing with complaints related to noise.
294	25	CRA	Figure S5 does not provided topographic contours

#### **4.0 PUBLIC RESPONSE SUMMARY**

This Response Summary presents the formal response to oral and written comments received during the public comment period (including public hearings) for both the DEIS and SDEIS for the Marble River Wind Farm. Appendix P of the FEIS contains the comments received throughout the SEQRA process and includes the Town of Clinton and Ellenburg Public Hearing Transcripts. Transcripts and comment letters in Appendix P are designated with comment numbers that correspond to the response numbers in the following sections. Commenters may reference their specific comment/response by source (or author) by referring to Table 3.2. Comments which do not require a response are listed in Table 3.3. Responses to comments are presented according to subject matter in Section 4.1 below.

#### **4.1 Response Summary Ordered by Subject**

Many comments addressed similar questions or concerns. The following responses are presented according to primary subject matter as determined by the main issue(s) raised in the comment. Comments which addressed multiple issues with equal importance have been grouped under the subject "Miscellaneous/General". References to refer to other Responses are under the same subject heading unless noted otherwise.

**Table 4.1 Marble River Response Summary Ordered by Subject**

Source	Comment Number	Primary Subject
NY State Department of Agriculture and Markets (NYS DAM)	1.1	Agriculture
NYS DAM	1.2	Agriculture
Town of Ellenburg, New York	9.1	Agriculture
Selkirk, Kirby	167.3	Agriculture
U.S. Fish & Wildlife Service (USFWS)	293.6	Agriculture
Conestoga-Rovers and Associates (CRA)	294.7	Agriculture
CRA	294.8	Agriculture
CRA	294.9	Agriculture
CRA	294.10	Agriculture
NYSDEC (Ellenburg)	3.4	Biological Resources
Silvester, Peter	193.6	Biological Resources
NY State Department of Public Service (NYDPS)	287.6	Biological Resources
NYSDPS	287.13	Biological Resources
LeClair, Toby and Cindy	288.3	Biological Resources
NYSDEC	292.15	Biological Resources
NYSDEC	292.16	Biological Resources
NYSDEC	292.17	Biological Resources
NYSDEC	292.18	Biological Resources
NYSDEC	292.19	Biological Resources
NYSDEC	292.20	Biological Resources
NYSDEC	292.21	Biological Resources
NYSDEC	292.22	Biological Resources
NYSDEC	292.23	Biological Resources
NYSDEC	292.24	Biological Resources
USFWS	293.2	Biological Resources
USFWS	293.22	Biological Resources
USFWS	293.23	Biological Resources
USFWS	293.24	Biological Resources
USFWS	293.25	Biological Resources
USFWS	293.34	Biological Resources
USFWS	293.26	Biological Resources
USFWS	293.27	Biological Resources
USFWS	293.28	Biological Resources
USFWS	293.29	Biological Resources
USFWS	293.30	Biological Resources
USFWS	293.31	Biological Resources
USFWS	293.32	Biological Resources
USFWS	293.33	Biological Resources
USFWS	293.36	Biological Resources
USFWS	293.38	Biological Resources
USFWS	293.39	Biological Resources
USFWS	293.41	Biological Resources
USFWS	293.42	Biological Resources
USFWS	293.44	Biological Resources

**Table 4.1 Marble River Response Summary Ordered by Subject**

Source	Comment Number	Primary Subject
USFWS	293.45	Biological Resources
USFWS	293.46	Biological Resources
USFWS	293.49	Biological Resources
USFWS	293.48	Biological Resources
USFWS	293.53	Biological Resources
USFWS	293.59	Biological Resources
USFWS	293.60	Biological Resources
USFWS	293.61	Biological Resources
USFWS	293.50	Climate and Air Quality
USFWS	293.51	Climate and Air Quality
USFWS	293.52	Climate and Air Quality
NYSDEC (Ellenburg)	3.10	Construction
NYSDPS	287.7	Construction
USFWS	293.7	Construction
USFWS	293.9	Construction
USFWS	293.47	Construction
NYSDPS	2.6	Cultural Resources
NYSDEC (Ellenburg)	3.18	Cultural Resources
NYSDPS	287.10	Cultural Resources
NYSDEC	292.26	Cultural Resources
NYSDPS	2.15	Cumulative Impacts
NYSDEC (Ellenburg)	3.3	Cumulative Impacts
NYSDEC (Ellenburg)	3.14	Decommissioning
Soltysik, Bernie	171.2	Decommissioning
LeClaire, Toby	177.3	Decommissioning
Baker, Judy	180.1	Decommissioning
Silvester, Peter	193.5	Decommissioning
Baker, Judy	261.1	Decommissioning
NYSDPS	2.4	Layout and Design
NYSDPS	2.11	Layout and Design
NYSDPS	2.12	Layout and Design
NYSDPS	2.13	Layout and Design
NYSDPS	2.14	Layout and Design
NYSDEC (Ellenburg)	3.1	Layout and Design
NYSDPS	287.1	Layout and Design
NYSDPS	287.2	Layout and Design
NYSDPS	287.3	Layout and Design
NYSDPS	287.4	Layout and Design
NYSDPS	287.5	Layout and Design
NYSDPS	287.11	Layout and Design
NYSDEC	292.4	Layout and Design
NYSDEC	292.5	Layout and Design
USFWS	293.1	Layout and Design
USFWS	293.4	Layout and Design
USFWS	293.5	Layout and Design
USFWS	293.11	Layout and Design

**Table 4.1 Marble River Response Summary Ordered by Subject**

Source	Comment Number	Primary Subject
USFWS	293.35	Layout and Design
USFWS	293.40	Layout and Design
USFWS	293.54	Layout and Design
USFWS	293.55	Layout and Design
Britton, Anne	170.1	Miscellaneous/General
Soltysik, Bernie	171.4	Miscellaneous/General
Britton, Anne	185.1	Miscellaneous/General
Britton, Anne	185.2	Miscellaneous/General
Kramer, Joseph	192.1	Miscellaneous/General
Miller, Dinah	239.1	Miscellaneous/General
Garell, Martin	240.1	Miscellaneous/General
Ayers, Valerie	244.1	Miscellaneous/General
NYSDEP	287.8	Miscellaneous/General
Filion, Gilles and Amy	291.6	Miscellaneous/General
USFWS	293.57	Miscellaneous/General
CRA	294.1	Miscellaneous/General
CRA	294.2	Miscellaneous/General
CRA	294.3	Miscellaneous/General
CRA	294.6	Miscellaneous/General
CRA	294.11	Miscellaneous/General
CRA	294.12	Miscellaneous/General
CRA	294.13	Miscellaneous/General
CRA	294.15	Miscellaneous/General
CRA	294.16	Miscellaneous/General
CRA	294.17	Miscellaneous/General
CRA	294.18	Miscellaneous/General
CRA	294.19	Miscellaneous/General
CRA	294.20	Miscellaneous/General
CRA	294.21	Miscellaneous/General
CRA	294.22	Miscellaneous/General
CRA	294.23	Miscellaneous/General
CRA	294.24	Miscellaneous/General
CRA	294.25	Miscellaneous/General
NYSDEC (Ellenburg)	3.11	Mitigation
NYSDEC (Ellenburg)	3.12	Mitigation
NYSDEC (Ellenburg)	3.19	Mitigation
NYSDEC (Ellenburg)	3.20	Mitigation
LeClaire, Toby	177.1	Noise
Filion, Amy	178.2	Noise
LeClair, Toby and Cindy	288.1	Noise
Miller, Dinah	290.1	Noise
Filion, Gilles and Amy	291.1	Noise
CRA	294.5	Noise
Filion, Amy	178.1	Recreation
Soltysik, Bernie	171.1	Socioeconomics and Property Values

**Table 4.1 Marble River Response Summary Ordered by Subject**

Source	Comment Number	Primary Subject
Filion, Amy	178.3	Socioeconomics and Property Values
Silvester, Peter	193.1	Socioeconomics and Property Values
Silvester, Peter	193.2	Socioeconomics and Property Values
Silvester, Peter	193.3	Socioeconomics and Property Values
Silvester, Peter	193.4	Socioeconomics and Property Values
Oddie, Alfred	245.1	Socioeconomics and Property Values
Sylvester, Anne	256.1	Socioeconomics and Property Values
Giacalone, Arthur	283.1	Socioeconomics and Property Values
NYSDPS	2.2	Visual Resources
NYSDPS	2.5	Visual Resources
NYSDPS	2.7	Visual Resources
NYSDPS	2.8	Visual Resources
NYSDPS	2.9	Visual Resources
NYSDPS	2.10	Visual Resources
NYSDEC (Ellenburg)	3.15	Visual Resources
NYSDEC (Ellenburg)	3.16	Visual Resources
NYSDEC (Ellenburg)	3.17	Visual Resources
LeClaire, Toby	177.2	Visual Resources
NYSDPS	287.14	Visual Resources
NYSDPS	287.15	Visual Resources
NYSDPS	287.16	Visual Resources
Filion, Amy	188.1	Visual Resources
Filion, Gilles and Amy	291.3	Visual Resources
Filion, Gilles and Amy	291.4	Visual Resources
Filion, Gilles and Amy	292.24b	Visual Resources
Filion, Gilles and Amy	292.25	Visual Resources
Filion, Gilles and Amy	294.4	Visual Resources
NYSDEC (Ellenburg)	3.5	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.6	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.7	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.8	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.9	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.13	Wetlands and Water Resources
NYSDPS	287.9	Wetlands and Water Resources
NYSDPS	287.12	Wetlands and Water Resources
Filion, Gilles and Amy	292.1	Wetlands and Water Resources
Filion, Gilles and Amy	292.2	Wetlands and Water Resources
Filion, Gilles and Amy	292.3	Wetlands and Water Resources
Filion, Gilles and Amy	292.6	Wetlands and Water Resources



**Table 4.1 Marble River Response Summary Ordered by Subject**

Source	Comment Number	Primary Subject
Filion, Gilles and Amy	292.7	Wetlands and Water Resources
Filion, Gilles and Amy	292.8	Wetlands and Water Resources
Filion, Gilles and Amy	292.9	Wetlands and Water Resources
Filion, Gilles and Amy	292.10	Wetlands and Water Resources
Filion, Gilles and Amy	292.11	Wetlands and Water Resources
Filion, Gilles and Amy	292.12	Wetlands and Water Resources
Filion, Gilles and Amy	292.13	Wetlands and Water Resources
Filion, Gilles and Amy	292.14	Wetlands and Water Resources
Filion, Gilles and Amy	293.3	Wetlands and Water Resources
Filion, Gilles and Amy	293.8	Wetlands and Water Resources
Filion, Gilles and Amy	293.10	Wetlands and Water Resources
Filion, Gilles and Amy	293.12	Wetlands and Water Resources
Filion, Gilles and Amy	293.13	Wetlands and Water Resources
Filion, Gilles and Amy	293.14	Wetlands and Water Resources
Filion, Gilles and Amy	293.15	Wetlands and Water Resources
Filion, Gilles and Amy	293.16	Wetlands and Water Resources
Filion, Gilles and Amy	293.17	Wetlands and Water Resources
Filion, Gilles and Amy	293.18	Wetlands and Water Resources
Filion, Gilles and Amy	293.19	Wetlands and Water Resources
Filion, Gilles and Amy	293.20	Wetlands and Water Resources
Filion, Gilles and Amy	293.21	Wetlands and Water Resources
Filion, Gilles and Amy	293.37	Wetlands and Water Resources
Filion, Gilles and Amy	293.56	Wetlands and Water Resources
Filion, Gilles and Amy	293.58	Wetlands and Water Resources
Filion, Gilles and Amy	294.14	Wetlands and Water Resources
NYSDPS	2.1	Zoning and Land Use
NYSDPS	2.3	Zoning and Land Use
Scott, William F., Superintendent of Schools	251.1	Zoning and Land Use
Group of Concerned Citizens from Town of Ellenburg	257.1	Zoning and Land Use
LeClair, Toby and Cindy	288.2	Zoning and Land Use
Filion, Gilles and Amy	291.2	Zoning and Land Use
Filion, Gilles and Amy	291.5	Zoning and Land Use

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
AGRICULTURE .....	65
BIOLOGICAL RESOURCES.....	67
CLIMATE AND AIR QUALITY .....	79
CONSTRUCTION .....	80
CULTURAL RESOURCES.....	82
CUMULATIVE IMPACTS.....	82
DECOMMISSIONING .....	83
LAYOUT AND DESIGN .....	84
MISCELLANEOUS/GENERAL .....	88
MITIGATION .....	94
NOISE.....	95
RECREATION.....	97
SOCIOECONOMICS AND PROPERTY VALUES .....	97
VISUAL RESOURCES .....	99
WETLANDS AND WATER RESOURCES.....	106
ZONING AND LAND USE.....	112

**AGRICULTURE**

Response 1.1: In conformance with the Department’s recommendations, the minimum burial depth of cable shall be 48 inches in agricultural areas where possible. The minimum burial depth of cable shall be 36 inches in all non-agricultural lands. In instances where bedrock is present at shallower depths, cable will be buried in a trench within the bedrock at no less than 24 below the surface.

Response 1.2: As stated in the DEIS, Appendix D, Agricultural Protection Measures, Restoration: “Following completion of construction (including erection), all disturbed agricultural lands excess gravel/fill will be removed from along the access roads, around towers, and in temporary parking and staging areas.” In addition, agricultural areas where the topsoil has been removed and subsoil has been compacted, the subsoil “will be decompacted with a deep ripper or heavy-duty chisel plow to a minimum depth of 18 inches” prior to topsoil replacement. The Applicant confirms that it will, at a minimum, adhere to NYSDAM decompaction guidelines.

- Response 9.1: County Farm Bureau comments in support of the Project are noted. As described in the DEIS, SDEIS, and previous responses, the Marble River Wind Farm components have been sited so as to minimize adverse impacts on agricultural land. Construction and restoration activities will be conducted to the maximum extent practicable in accordance with NYSDAM Agricultural Protection Guidelines and New York Farm Bureau Policies. Matthew Brower, a representative from the NYSDAM, consulted with the Applicant on the Project layout on May 10, 2006. The Applicant has not received any additional input from the NYSDAM since that initial consultation.
- Response 167.3: The Applicant acknowledges the comment that the New York Farm Bureau report found no measurable effects of windmill visibility on property values. The NYSDAM and Farm Bureau have been consulted during the course of the development and modification of the Marble River Wind Farm layout. Please see Response 9.1.
- Response 293.6: The Applicant has made every effort to minimize habitat disturbance by placing access roads along previously disturbed trails, roads, and logging roads (please see the wetland avoidance and minimization measures located in Section 7.1 of the Alternatives Analysis, Appendix C). The Applicant has suggested that permanent access roads in open agricultural fields will typically be graded to a width of 16 feet, but may reach up to 20 feet in a few circumstances in response to the terrain. This is a sufficient width to allow for routine maintenance over the Project life without disturbing additional habitat. The Applicant has proposed 34-foot permanent road widths in certain non-agricultural areas. The purpose of this requirement is to properly take into consideration the long-term maintenance requirements of the Project and assure that minimal additional temporary impact will be required during major maintenance/repair scenarios (i.e. blade or gearbox replacements, etc.).
- The rationale for a 75-foot temporary impact envelope allows for the implementation of best management practices as suggested by the NYSDAM. Specifically, a 75-foot temporary ROW allows for the proper separation of top soils during construction of a 34-foot road (which is the minimum width required to allow a crane to traverse the site).
- Response 294.7: The Applicant confirms that construction and restoration practices will adhere to NYSDAM Guidelines as presented in the report entitled "Guidelines for Agricultural Mitigation for Windpower Projects" to the extent practicable.
- Response 294.8: The Applicant confirms that it will adhere to all NYSDAM target burial guidelines to the maximum extent practicable. Please see Response 1.1.
- Response 294.9: Based on requirements from the wind turbine supplier and recommendations from the geotechnical engineer based on soil investigations, turbine access roads will be built as follows: following removal of the topsoil, the subsoil will be graded, compacted, covered with geotextile fabric and surfaced with a minimum of four inches of gravel or crushed stone.

Response 294.10: The Applicant confirms that in the SDEIS, Section 2.6.3, the fifth sentence of the second paragraph should read "Geotextile fabric will be installed beneath all access roads." Where roads are reduced to a permanent width of 16 feet, only geotextile fabric in that portion of the road that is reduced in width will be removed from the road.

### **BIOLOGICAL RESOURCES**

Response 3.4: SDEIS, Section 3.3.3.2 clarifies that "all study protocols for post-construction monitoring of avian impacts will be developed in consultation with the NYSDEC and the USFWS". (See Appendix I – Post Construction Avian and Bat Fatality Study Protocol). This study will compare the number of estimated collisions with passage rates determined by radar during peak bird and bat migration seasons at the Marble River Project area. Searcher efficiency measures and scavenger removal tests will be implemented to insure the integrity of and consistency of such studies.

Response 193.6: The Lead Agencies believe that all potential environmental impacts have been adequately studied and represented by the Applicant in the DEIS and SDEIS. Avian and bat studies are further detailed in Response 292.22.

Impacts to game species are further detailed in Response 288.3. Information on mammals may be referenced in the DEIS, Section 3.3.1.2.2. Due to a lack of existing published data regarding mammals within the Project area, EDR documented the occurrence of mammalian species through reconnaissance-level field surveys and evaluation of available habitat by EDR during the fall of 2005. Highly mobile species will likely avoid the Project area during construction due to increased human activity and the noise of mechanical equipment. However, as demonstrated on the DVD attached as Appendix O, operation of turbines does not appear to disturb/displace game species such as deer and Eastern wild turkey.

Literature suggests that both whitetail deer and Eastern wild turkeys are likely to benefit from the proposed Project. Johnson (1995) demonstrated that white-tailed deer prefer a mosaic of recently cleared areas and older forested areas. Recently cleared areas act as "edge habitat" which is often the preferred foraging area during spring and summer months. Likewise, Eastern wild turkeys forage in openings, such as pastures, hayfields, burned areas, and clear-cuts, that support low herbaceous or grassy ground cover and insects needed for brood-rearing (NHFGD, 2007). In addition, it is reported that Eastern wild turkeys prefer nest sites in edge habitat or recent clear cuts (Iowa DNR, 2007).

Response 287.6: Following ROW clearing, long-term vegetation management practices on the ROW of the proposed OH line will be consistent with those of the local electric utility (New York State Electric & Gas [NYSEG]). It is anticipated that ROW management will involve selective removal of tall-growing tree species to maintain a minimal clearance of 15 feet from the OH conductors. Vegetation management on the ROW will include

the periodic mechanical removal (cutting) of regenerating trees and/or selective application of herbicide to prevent their regrowth. While not anticipated as a necessary vegetation management procedure, any herbicides used during the course of ROW maintenance will be applied by New York State-certified applicators in accordance with all label restrictions and applicable NYS laws.

Response 287.13: The Applicant's experience in developing and implementing post-construction monitoring studies has been well documented at the Maple Ridge Wind Farm (Lowville, New York). The Applicant has included a Post-Construction Avian and Bat Fatality Study Protocol in Appendix I. Please see Response 3.4.

The Applicant agrees to implement a program of adaptive management should the results of post-construction avian and bat fatality monitoring study indicate that significant mortality is occurring and that changes in maintenance or operational procedures could serve to reduce this mortality. It is premature to discuss what form this adaptive management might take, but possible strategies could include selective operational changes, use of deterrents, and on-site habitat manipulation.

Response 288.3: As stated in the DEIS (Section 3.3.2.2.2; p. 72), there is not currently available a large resource of bat mortality data from operating wind power facilities. Results of post-construction avian and bat mortality monitoring studies at the Maple Ridge Wind Power Project on Tug Hill are still preliminary. Only partial data from the first year of post-construction monitoring is currently available. However, the preliminary bat mortality results are within the range of what has been documented in other wind turbine fatality studies conducted within the United States. Only two "incidental finds" of Canada geese were documented in the Maple Ridge mortality study (Jain et al., 2007). As demonstrated in the attached CD (Appendix O), operation of turbines does not appear to have a disturbance/displacement effect on game species such as deer and Eastern wild turkey. Please see Response 193.6 for further discussion on the potential impacts of the Project on deer and wild turkey.

Response 292.15: The Applicant has prepared an Invasive Species Management Plan as required by the joint wetland permit application and it is included in Appendix F of the FEIS. Please see Responses 292.18 and 292.19 regarding post-construction monitoring.

Response 292.16: As stated in the DEIS, Section 3.3.3.2, p. 77 "any new above-ground lines will follow Avian Power Line Interaction Committee Guidelines for insulation and spacing". This commitment is restated in the SDEIS, Section 3.3.3.2. The Applicant reiterates this commitment again in this response.

Response 292.17: The 2007 Breeding Bird and Area Search Survey is presented in Appendix H.

Response 292.18: The Applicant has acknowledged that the NYSDEC is including post-construction monitoring studies as a matter of policy, and while the FEIS and associated supporting studies conclude that this Project will have no significant adverse impact

on avian and bat species, the Applicant is committed to developing a post-construction monitoring protocol in accordance with NYSDEC policy. (See Appendix I of this FEIS for an avian protocol developed in conjunction with NYSDEC). Such coordination will assure that specific concerns of the NYSDEC such as potential impacts to golden eagles and pied-billed grebes are adequately evaluated. The Applicant conducted a comprehensive breeding bird survey at the Project area during 2007, over which period there was a single pied-billed grebe documented at one wetland sampling point. This data suggests that while the presence of the pied-billed grebe was affirmed, the studies did not detect a large existing concentration of the species (See Breeding Bird Survey - Appendix H).

Response 292.19: Pied-billed grebes were detected during point counts and area searches during the 2007 survey in the northern portion of the Project area in close proximity to, or in, wetland habitats. As stated in Responses 292.15, 292.18, and 292.19, the Applicant acknowledges that the NYSDEC is including post-construction monitoring studies as a matter of policy, and while the FEIS and associated supporting studies conclude that this Project will have no significant adverse impact on avian and bat species, the Applicant is committed to adhere to a post-construction monitoring protocols in accordance with NYSDEC policy. (See Appendix I of this FEIS for an avian protocol developed in conjunction with NYSDEC).

Response 292.20: Potential ecological impacts were quantified and described in the Marble River DEIS and SDEIS.

The effect of ROW clearing and maintenance on wildlife is discussed in the SDEIS, Section 3.3.2.2.2. The Commenter is correct in noting that, along with direct habitat loss and conversion of forest habitat to a successional community, construction of the OH line will have a disturbance/displacement effect on wildlife. As described in the DEIS for other construction-related activities, impacts associated with construction of the OH line could include incidental injury and mortality due to construction activity and vehicular movement, construction-related silt and sedimentation impacts on aquatic organisms, habitat disturbance/loss associated with clearing and earth moving activities, and displacement of wildlife due to increased noise and human activity.

Aside from the habitat loss/conversion and forest fragmentation discussions already included in the SDEIS, operation and maintenance of the OH line/ROW will result in little ongoing disturbance and displacement of wildlife. The ROW will be on private land and will include no permanent access roads. ROW and OH line maintenance activities will occur only on a very periodic basis. Therefore, human noise and other forms of disturbance will occur only rarely and be of short duration. No long-term wildlife disturbance/displacement effects associated with operation and maintenance activities are anticipated.

Response 292.21: Based on the current Project layout, 132 acres of wildlife habitat will be permanently

lost from the Project area. Acreages of habitat loss/disturbance reported in the SDEIS are greater than those provided in the DEIS. This is due primarily to an increase in the area of calculated disturbance for certain construction activities. The 15-foot-wide area of temporary disturbance assumed in the DEIS for the UG interconnect was increased to 35 feet in the SDEIS. The permanent access road width of 20 feet assumed in the DEIS was increased to 34 feet in non-agricultural areas and decreased to 16 feet in agricultural fields. These facility measurements changed after field reconnaissance in 2006 and 2007 revealed that existing features present at the Project area, including extensive wetlands and forest cover, prohibited the ability to safely site crane paths. For this reason certain road widths needed to be changed to accommodate crane use. Additionally, the assumed size of the POI switchyard was decreased from 267 by 690 feet in the DEIS to 200 by 350 feet in the SDEIS. Lastly, the addition of a single corridor containing 13.6 miles of OH collection line was sited to connect the turbines in the northeastern portion of the Project area with the substation.

The OH collection line corridor was proposed to avoid the impact associated with trenching an additional 50 miles of UG collection line that would have been necessary to connect the northeast turbines via the UG collection route originally proposed in the DEIS. The revised impact calculations included in the SDEIS reflected the advancement of Project engineering and the input of the Applicant's construction personnel. They thus provide a more accurate assessment of Project-related impacts. Additionally, the Applicant has suggested, based on observations and experience from constructing and operating wind farms in New York State (Maple Ridge & Madison), that the slight increase in planned temporary and permanent impact for UG collection installation and access roads is necessary to account for the realities of construction and operations activities, and ultimately is a means to increase safety levels and avoid incurring additional future impact to undisturbed habitat.

Based on the Project layout, as currently proposed, approximately 71 acres of forest will be converted to built facilities. "Temporary" disturbance totals approximately 405 acres, which includes approximately 276 acres converted to successional communities (i.e. 138 acres of forest within the OH ROW, 138 acres of forest in turbine workspaces), and 129 acres of regenerating forest (along road edges UG interconnect, and other temporary construction-related disturbance).

Response 292.22: The 132 acres of wildlife habitat that will be lost due to Project development includes all cover types (agricultural, successional, and forest). Forest impacts include approximately 71 acres lost (i.e., converted to built facilities) and 276 acres converted to successional communities (within the turbine workspaces and along the OH line ROW), and 129 acres of regenerating forest (along road edges UG interconnect, and other temporary construction-related disturbances). The OH line will result primarily in habitat conversion rather than habitat loss. Conclusions presented in the SDEIS regarding the significance of forest impacts are based on the following considerations:



1. The 347 acres of permanent forest loss and conversion to successional communities (71+276) amounts to approximately 0.5% of the forest land in the Towns of Clinton and Ellenburg, and a small fraction of that found within Clinton County.
2. None of the forest communities being impacted by the proposed Project is a rare or significant natural community.
3. Thousands of acres of forest in the area (especially in the Town of Clinton) have been, and continue to be, disturbed by intensive logging activity. In particular, the harvesting of poplars for woodchips has significantly altered the species composition and physical structure of many of the forests in the area. As described in the DEIS, this activity has already converted large areas of forest to a shrub/sapling-dominated community. The conversion of 138 acres of forest habitat along the proposed ROW to a similar type of shrub-sapling habitat is, at worst, a minor incremental impact to forest dwelling wildlife species in this region.

The Applicant has acknowledged that the NYSDEC is including post-construction monitoring studies as a matter of policy. While the FEIS concludes that this Project, and specifically the proposed OH line within the project, will not have undue significant adverse impact on avian and bat species, the Applicant will commit to developing post-construction monitoring protocols in accordance with NYSDEC policy.

Response 292.23: As stated in Response 292.22, long-term forest conversion to successional communities is estimated at 276 acres. This conversion, associated with turbine sites and OH electric lines will be in effect for the operational life of the Project. While this is clearly a long-term impact, it is incorrect to classify it as permanent. All areas in this category will be devoid of built facilities and will accommodate some sort of successional vegetative community. If/when the Project goes out of operation, these areas will be allowed to regrow. Without future human intervention, it is anticipated that such areas would eventually revert to a forested community, as would an abandoned agricultural field.

Forest impacts included in the temporary category in the DEIS and SDEIS include those areas where trees will be removed during Project construction, but allowed to regrow immediately following site restoration. These areas included disturbed sites along access road (the outer 20 feet of disturbed ground on either side of the permanent road), UG interconnect routes (entire 35 foot-wide corridor), and any temporary staging areas or road widening that will be removed following completion of construction. These areas of temporary, longer-term impact to forest total approximately 129 acres.

Please refer to Responses 193.6, 292.20, and 293.38 regarding habitat fragmentation and its effect on wildlife.

Response 292.24: Please see Responses 292.21, 292.22, and 292.23. The number 620 acres is an incorrect calculation of permanent forest loss. In even the most conservative calculation where long-term conversion is included in this category, the total would

not exceed 347 acres.

Response 293.2: The purpose of the town-specific summaries is to break down impacts that may differ from town to town. Consequently, most of the impacts discussed in these sections are acreages, linear distances, number of receptors, or specific sites that can easily be broken down by town. Because wildlife impacts are, for the most part, not specific to the individual towns, they have not been broken out in this section. Although not broken down by town, the type and significance of wildlife impacts are fully addressed in Sections 3.3.2.1.2 and 3.3.2.2.2 of the DEIS and SDEIS.

Response 293.22: The 2007 Breeding Bird and Area Search Survey is located in Appendix H.

Response 293.23: Study protocols were developed in consultation with the NYSDEC. The Lead Agency considers the data and conclusions from each of the six avian and bat surveys completed by the Applicant to be sufficient to justify the conclusion that the Project will have no undue significant adverse impact on the existing avian resources. Similar studies performed for the Noble Ellenburg and Noble Clinton Windparks support similar impact conclusions. While additional studies would likely result in additional data, it is unlikely that such data will contribute to a more accurate assessment of Project-related impact/risk. The avian/bat and ecological impact assessments are based on site specific studies performed over a two-year time frame, (included within the DEIS and SDEIS).

Anticipated impacts to wildlife have been fully acknowledged and described in the DEIS and SDEIS, to the extent that they can be based on pre-construction studies. It is worth noting that along with existing data and field reconnaissance, the DEIS, SDEIS, and FEIS relied on the following site-specific wildlife studies to draw conclusions regarding potential Project impact:

- Spring 2005 Nocturnal Radar Survey
- Fall 2005 Nocturnal Radar Survey
- 2005 Breeding Bird Field Survey
- Spring 2005 Raptor Migration Study
- Fall 2005 Raptor Migration Study
- Spring 2005 Acoustic Bat Survey
- Summer 2005 Acoustic Bat Survey
- Fall 2005 Acoustic Bat Survey
- Avian Risk Assessment
- 2007 Breeding Bird Field Survey

None of these studies resulted in findings that were significantly different than those observed at other proposed wind power project sites in New York State, thus it is reasonable to conclude from the scientific data that there is little to no elevated level

of risk at the Marble River Wind Farm Project area.

The Applicant has acknowledged that the NYSDEC is including post-construction monitoring studies as a matter of policy, and while the FEIS and associated supporting studies conclude that this Project will have no significant adverse impact on avian and bat species, the Applicant is committed to implementing post-construction monitoring protocols in accordance with NYSDEC policy. (See Appendix I of this FEIS for an avian protocol developed in conjunction with NYSDEC).

Response 293.24: Please see Response 293.23.

Response 293.25: Passage rates and flight altitude data of migrating songbirds have been re-analyzed and the data and median values determined. The median passage rate for spring 2005 was 193 targets per kilometer per hour and the median flight altitude was 391 meters. The fall 2005 median passage rate was 118 targets per kilometer per hour and the median flight altitude was 463 meters.

Response 293.34: Please see Response 292.16.

Response 293.26: Please see Response 293.23.

Response 293.27: Please see Response 293.23.

Response 293.28: This statement is taken directly from the Phase I Avian Risk Assessment (p. 37) included in the DEIS, Appendix F. In both the Phase I Avian Risk Assessment and the DEIS text, it is presented in the context of significant migratory corridors or stop-over sites in the region (i.e., Lake Champlain, St. Lawrence River) that would attract large numbers of migratory waterfowl. The wetlands and ponds within the Project area undoubtedly provide nesting, foraging, and resting habitat for ducks and geese. Ten different waterfowl species were identified as having been documented in the area (see species list included in the DEIS, Appendix F), and the 2007 Breeding Bird Survey of the northeastern portion of the Project area confirmed that three species (Canada goose, mallard, and wood duck) are nesting on site. However, the size and character of the wetlands are not the type that would support significant concentrations of either breeding or migrating waterfowl.

Response 293.29: Detailed discussion of the Christmas Bird Count (CBC) data is included in the Phase I Avian Risk Assessment (p. 37-41) included in the DEIS, Appendix F. As stated in that document, data from three CBCs were evaluated. The maximum number of birds recorded in any of these CBCs was 69 species. The one most similar in habitat to the Marble River Project area was the St. Timothee CBC, and therefore was considered most representative in terms of indicating the frequency of wintering birds in the vicinity of the Project area. As the Phase I Avian Risk Assessment report indicates, a total of 90 species was recorded on the St. Timothee CBC over the last ten years. However, because this CBC includes the St. Lawrence River, it documented numerous

waterfowl and gull species not likely to occur in significant numbers in the Project area during the winter. The most common species documented by this CBC (i.e., recorded at rates of greater than one bird per census hour in at least one year) were Canada goose, mallard, rock dove, mourning dove, American crow, European starling, snow bunting, common red poll, house sparrow, black duck, lesser scaup, common golden eye, common merganser, ring-billed gull, herring gull, blue jay, horned lark, black-capped chickadee, American tree sparrow, dark eyed junco, red-winged black bird, brown headed cow bird, house finch, and American goldfinch. The remaining 65 documented species (73% of the total) were recorded at rates below one bird per hour, and 36 of the 90 species (40%) were recorded at rates of less than 0.1 bird per hour. Based on CBC data, and on-site habitat conditions, the birds most likely to occur in the vicinity of the proposed Project were determined to be horned lark and snow bunting, but their frequencies would probably be fewer than ten birds per hour of observation. Further information on bird studies conducted for the Project is detailed in Response 293.23.

Response 293.30: The Project area has relatively little grassland habitat compared to other proposed wind power project sites in New York State. However, it does include approximately 3,000 acres of agricultural and old field communities, and potential disturbance/displacement impacts on grassland bird species are acknowledged in the DEIS, Section 3.3.2.2.2 (p. 69). As stated in the 2007 Breeding Bird and Area Search Survey included in Appendix H of the FEIS, "the vesper sparrow (NY Species of Concern) and grasshopper sparrow (NY Species of Concern) breeding and foraging movements are generally close to the ground and therefore limit the potential risk or exposure of individuals to collisions with wind turbines.

The DEIS, Section 3.3.3.3 (p. 78) includes a commitment to develop post-construction habitat displacement monitoring protocols in accordance with NYSDEC policy.

Response 293.31: Roving bat surveys were conducted during the summer of 2005 in northern portions of the Project area (see DEIS, Appendix F, Figure 4-1 for exact locations).

Although the northeastern portion of the Project area was not sampled, similar forested wetland complexes located in the central portion of the Project area (DEIS, Appendix F, Figure 4-1, Location #1) were surveyed and data from these locations shows that no large densities were found. Given the close proximity, this data is likely indicative of forested wetland sites in the northeastern Project area.

Response 293.32: The detection rate for spring 2005 (one detector) was 0.26 calls per detector night. The fall 2005 rate (three detectors) was 5.56 calls per detector night. Both seasons were recorded from the same meteorological tower on Gagnier Road.

Response 293.33: In regard to additional study and potential impacts to bats, please see Responses 288.3, 293.23, and 293.42.

Response 293.36: As stated in the DEIS, New York State Reptile and Amphibian (Herp) Atlas data and reconnaissance-level field investigations indicated that over 25 reptile and amphibian species could occur in the area. As also indicated in the DEIS, none of these is state- or federally listed as threatened or endangered. In addition, none of the species documented in the Herp Atlas are listed by the NYSDEC as species of special concern. The Applicant acknowledges that some listed special concern species (e.g., Jefferson/blue spotted salamander) could occur on site, based on species range and the availability of suitable habitat. Therefore, additional surveys to confirm its presence are not considered necessary. To avoid or minimize potential impacts to all amphibians, the Applicant has proposed the following:

- Minimize wetland habitat disturbance by siting all turbines in upland areas.
- Utilize or upgrade existing roads and other previously disturbed sites to the maximum extent practicable to minimize forest habitat loss/disturbance and wetland impacts.
- Provide compensatory wetland mitigation which results in no net loss of wetland functions and values.

Please also see Response 240.1 under the subject "Miscellaneous/General".

Response 293.38: Forest fragmentation and habitat loss/conversion impacts are acknowledged and discussed in both the DEIS and SDEIS. Part of the forest fragmentation impact is the loss of forest interior conditions and potential invasion by edge species (including some nest parasites/predators) into the remaining forest some distance from the edge. The commenter is correct in noting that such impacts degrade habitat conditions for species requiring secluded forest habitat, particularly forest interior nesting songbirds.

Please see Response 292.20.

Response 293.39: Aerial photo interpretation and ground truthing suggest that most of the northeastern portion of the Project area and essentially the entire transmission line route has been, and/or continues to be, heavily logged. Elsewhere within the Project area, logging is less intense or has not occurred for some period of time. However, essentially all of the forested areas being impacted by the Project have been disturbed by logging, as evidenced by the abundance of existing forest roads, skid trails, and log landings (and the use of these sites by the proposed Project). It is estimated that approximately 10,000 acres of the land under lease for this Project is forested. Of this total, approximately 6,000 acres appear to have been significantly disturbed by recent or ongoing logging activity.

Response 293.41: Please see Response 288.3. When a full year of avian fatality monitoring has been completed, and the 2007 Maple Ridge Monitoring Report becomes publicly available, numbers from that study can be cited in other EISs for comparative purposes.

Response 293.42: While such studies would likely result in additional data, it is unlikely that such data will contribute to a more accurate assessment of Project-related impact/risk. The avian/bat and ecological impact assessments are based on site specific studies performed over a two-year time frame, (included within the DEIS and SDEIS). Additional conservative assumptions, along with the results of impact monitoring/assessments undertaken at operating wind power projects provide a pool of applicable data from which reasonable conclusions can be drawn and statistically validated. Additionally, the Applicant has committed to coordinate post-construction avian fatality monitoring with the NYSDEC.

Please see also Responses 293.25 and 293.28.

Response 293.43: As stated in Responses 292.15, 292.18, and 292.19, the Applicant acknowledges that the NYSDEC is including post-construction monitoring as a matter of policy, and while the FEIS and associated supporting studies conclude that this Project will have no significant adverse impact on avian and bat species, the Applicant is committed to adhere to a post-construction monitoring protocols in accordance with NYSDEC policy. (See Appendix I of this FEIS for an avian protocol developed in conjunction with NYSDEC). An invasive species management plan is also included in Appendix F of this document (Appendix F).

The Applicant has also proposed a program of compensatory wetland mitigation involving both wetland restoration and creation, to assure that the proposed Project results in no net loss of wetland functions and values (Appendix E).

Response 293.44: In the SDEIS, Section 3.3.3.2, the Applicant acknowledged that the NYSDEC is including post-construction monitoring studies as a matter of policy and has committed to develop post-construction monitoring protocols in accordance with NYSDEC policy.

Response 293.45: The Applicant acknowledges that the NYSDEC is including post-construction monitoring studies as a matter of policy, and while the FEIS and associated supporting studies conclude that this Project will have no significant adverse impact on avian and bat species, the Applicant is committed to developing post-construction monitoring protocols in accordance with NYSDEC policy. (See Appendix I of this FEIS for an avian protocol developed in conjunction with NYSDEC for use at an operational upstate New York wind farm).

Since the primary land use of all "grasslands" within the Project area are agricultural (mostly hay fields), and standard and accepted agricultural practice in the area is for each hay field to be mowed between two and three times per year (usually beginning in mid-late June and ending in September), it is reasonable to conclude that the affected existing resource is currently adapted to the traffic associated with agricultural practices.

Based on the ecological and wildlife studies and analysis completed by the Applicant (contained in the DEIS, April 2006), along with data gathered from adjacent projects under construction in the immediate vicinity (Noble Ellenburg and Clinton), and including post-construction monitoring at other operating projects in the North Country of New York (Maple Ridge 1 and 2), the proposed Project is likely to have negligible impact on local wildlife. (See Appendix O of this FEIS for a video clip of wildlife co-habiting at an existing operational Upstate New York wind farm.)

Recent and ongoing research at a few operating wind energy projects in the northeast region suggest that the risk of bat fatalities may be greatest during the later summer/early fall dispersal and migration periods. Bats may be at greater risk of collision on evenings when winds are light, which corresponds with periods when wind turbines are least likely to be operational due to low winds (i.e., about four to six meters per second or less), and when air temperature is above 45-50 degrees Fahrenheit. Similarly, acoustic bat data shows a drop in activity during cold and windy nights during this period which corresponds with periods when wind turbines are most likely to be operational. Results from a project located in West Virginia may or may not be applicable to bats at the Marble River Wind Farm Project area. A post-construction fatality monitoring study will be developed and implemented by the Applicant in consultation with the regulatory agencies (Appendix I).

Response 293.46: Please see Response 287.13.

Response 293.48: The USFWS Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines were consulted early in the development of the proposed Project. As indicated in Appendix A of the Phase I Avian Risk Assessment, included as Appendix F to the DEIS, many of the consultation, data collection, and design/siting guidelines recommended by this document were followed on the Marble River Wind Farm. In accordance with the Guidelines, specific avian study protocols were developed in consultation with appropriate agency (NYSDEC) personnel. The NYSDEC indicated that one year of pre-construction study would generally be adequate unless the first year results indicated a particular concern. The study methodologies and results for all pre-construction avian and bat studies have been shared with NYSDEC as they have become available, and where additional years of study have been recommended (e.g., 2007 Breeding Bird Survey) such work has been undertaken. Based on the results of pre-construction studies undertaken to date, there is no indication that additional multi-year studies are required.

Response 293.49: Please see Response 292.15 and 3.9 located under the subject "Wetlands and Water Resources".

Response 293.53: Cumulative impacts of the proposed Marble River Wind Farm and the nearby Noble Clinton and Ellenburg Wind Power projects are addressed in Section 5.0 of the DEIS and SDEIS. However, the wildlife and avian studies (contained in DEIS Appendix F)



suggest that while adverse impact to wildlife in general will be minimal, the quantifiable wildlife adverse impact that does exist is an additive function (as opposed to an exponential or logarithmic function) when looked at through the cumulative lens. For this reason the Applicant's cumulative analysis focused on discussion of categories where cumulative impact may have a synergistic effect. As stated in the DEIS, Section 3.3.2.2.2 (p. 7), it appears that avian mortality rates at operating wind power projects typically range from one to seven birds per turbine on an annual basis. Assuming similar levels of collision impact were to occur in Clinton County, the Marble River Wind Farm (109 turbines), along with the Noble Clinton and Ellenburg Wind Park projects (122 turbines) could result in a cumulative mortality range of approximately 231 to 1,617 birds annually. The studies in Appendix F of the DEIS suggest that the majority of these individuals will be night-time migrating songbirds. While the number of potentially affected birds sounds large, it is a very small percentage of the thousands of individuals that migrate through the Project area each spring and fall (see radar data in the DEIS, Appendix F). As indicated in the DEIS and Response 288.3, bat numbers are more difficult to predict. However, it is worth noting that listed threatened-endangered species have rarely been documented in existing post-construction fatality monitoring studies. Thus, the type of species that would potentially be most vulnerable to cumulative impact do not appear to be at high risk. In addition, as indicated in Response 287.13, the Applicant has acknowledged that the NYSDEC is including post-construction monitoring studies as a matter of policy and has committed to developing post-construction monitoring protocols in accordance with NYSDEC policy.

A post-construction dispersal/displacement monitoring study has been proposed by Noble Clinton and Ellenburg Wind Park. The Applicant is willing to coordinate with Noble and the USFWS to ensure that channels exist to allow post-construction monitoring studies to take cumulative effects into consideration. As stated in Responses 292.18, 292.19, and 293.44, continued agency input and consultation will assure that relevant concerns of the agency's can be addressed through the post construction avian fatality study protocol.

Response 293.59: Anticipated impacts to wildlife have been fully acknowledged and described in the DEIS and SDEIS, to the extent that they can be, estimated based on pre-construction studies. It is worth noting that along with existing data and field reconnaissance, the DEIS, SDEIS, and FEIS relied on the following site-specific wildlife studies to draw conclusions regarding potential Project impact:

- Spring 2005 Nocturnal Radar Survey
- Fall 2005 Nocturnal Radar Survey
- 2005 Breeding Bird Field Survey
- Spring 2005 Raptor Migration Study
- Fall 2005 Raptor Migration Study

- Spring 2005 Acoustic Bat Survey
- Summer 2005 Acoustic Bat Survey
- Fall 2005 Acoustic Bat Survey
- Avian Risk Assessment
- 2007 Breeding Bird Field Survey

None of these studies resulted in findings that were significantly different than those observed at other proposed wind power project sites in New York State, or that would suggest elevated level of risk at the Marble River Project area. As stated in Response 293.42, supplemental environmental studies could yield additional data, but are unlikely to result in significantly increasing the ability to predict Project-related impact/risk.

In regard to the need for additional amphibian data, please see Responses 293.23 and 240.1 under the subject "Miscellaneous/General". Regarding the need for additional bird and bat studies, please refer to Responses 293.23 and 293.42.

Response 293.60: Please see Response 293.23, 293.42, and 293.58 regarding the adequacy of the pre-construction studies conducted for the Marble River Wind Farm.

Response 293.61: As stated in the SDEIS and in Responses 292.18, 292.19, and 293.44, the Applicant has committed to develop protocols for all post-construction monitoring studies in consultation with the NYSDEC and USFWS in accordance with current NYSDEC policy. (Appendix I of this FEIS contains a post-construction monitoring protocol developed in consultation with the NYSDEC).

### **CLIMATE AND AIR QUALITY**

Response 293.50: Data supporting the claim that the Marble River Wind Farm will improve air quality through the reduction of emissions at fossil fuel burning facilities are provided in the DEIS, Sections 3.9.3.2 and 5.2.3.

Response 293.51: Rationale for the statement that the Marble River Wind Farm will displace the use of fossil fuels at existing power plants is listed in the DEIS, Section 3.9.3.2 (Potential Long-Term Impacts), Section 5.2.3 (Air Quality), and Section 7.0 (Effects on the Use and Conservation of Energy). Estimated emission reductions, including nitrogen oxide and sulfur dioxide, resulting from the Project is presented in Tables 3.9.3.2-1 and 5.2.3-1 of the DEIS.

The Commenter is correct to state that, in general, wind may be intermittent in nature. However, as stated in the DEIS, Section 8.4, the Applicant selected the proposed site for the Project because of the quality of the wind resource; the ease of access to the site; the proximity and ease of connecting to the transmission grid; and the relative lack of potential disturbance to sensitive ecological, cultural and visual resources, and landowners. In addition, few other areas in New York State have as

strong and reliable wind as the Churubusco Plateau.

Additional efforts the Applicant has made to maximize wind capture include optimally spacing turbine sites based on a Wind Resource Assessment survey performed by AWS Truewind, a world leader in meteorology, engineering, and numerical modeling (see DEIS, Section 2.5.2).

The Commenter referenced the findings from the 2004 Energy Information Administration report which states that (wind) turbines generally produce at 30 percent of their rated capacity. While this may be the reported result for all wind farms throughout the entire United States during 2004, the Applicant specifically selected the present Project area due to the strong and reliable winds of the region. As stated in the DEIS, Section 2.7, "The facility is expected to be generating power about 90 percent of the time, with an average annual capacity of approximately 29 to 33 percent of name plate capacity, which is competitive for commercial wind farms in New York State. Total green electricity expected to be delivered to the grid is anticipated to be approximately 550,000 MW per hour (MWhr) per annum, equivalent to the annual consumption of approximately 67,000 homes."

Additionally, a study completed for NYSERDA by GE Energy titled "The Effects of Integrating Wind Power on Transmission System Planning, Reliability and Operations" and dated 3/4/05, suggests specifically that the addition of wind power to the transmission grid would be a net positive for both for ratepayers as well as the stability of the New York electricity grid.

Response 293.52: The DEIS, Section 3.9.3.2 cites a study performed by Resource Systems Group, Inc. (RSG) for the Flat Rock Wind Power Project (now known as Maple Ridge Wind Power Project) in Lewis County, New York to assess the effects of that project in reducing air emissions (RSG, 2003). The analysis projected significant reductions in contaminants (including mercury) resulting from that project's power generation. Since both projects are located in northern New York State, the emission factors determined by RSG are considered representative for the Project and are presented in Table 3.9.3.2-1 of the DEIS, along with estimated emission reductions that will result from the Project.

### **CONSTRUCTION**

Response 3.10: The intent of the concrete management plan is to outline the Applicant's proposed typical procedure for the discard of waste concrete and mixer washout during, and immediately following, a tower foundation pour. Concrete management construction techniques will be adhere to procedures detailed in the State Pollutant Discharge Elimination System (SPDES) permit and Storm Water Pollution Prevention Plan (SWPPP) that the Applicant has committed to develop prior to and following Project construction. Concrete management techniques for the Marble River Wind Farm are listed below.

- Immediately after a concrete truck exits the pump hopper they will be directed to a designated washout area. The shoot will be pointed into the foundation excavation with all wash out water drained into the excavated hole.
- In some cases it is not practical to get the truck close enough to the excavation to direct the wash out water into the foundation. In these cases a backhoe will be used to extend a washout trench from the excavation sump outward at an incline to safely allow multiple trucks to wash out at one time with the water draining into the foundation excavation.
- At the end of the pour, any remaining concrete will be mixed with washout water and also deposited into the excavation or trench. This includes any pump wash water.
- After base forms are removed, the washout concrete will be broken up and used as part of the foundation backfill.

Response 287.7: Two-phase construction refers to a plan (detailed in SDEIS, Appendix A) to construct the Marble River Wind Farm over a two-summer period (2008-09). The Applicant will construct the substation, interconnect switchyard, access roads, collection system, as well as turbine foundations during the calendar year 2008 (Phase I). The Applicant will erect and commission the 109 turbines in the summer of 2009 (Phase II).

Response 293.7: Five public roads will need to be improved during Project construction in order to properly intersect with proposed access roads. These roads to be improved include the following:

1. Patnode Road – from the access road to WTG 209 north to the access road to the substation
2. Lagree Road – between the access road to WTG 83 and the access road to WTG 84
3. Merchia Road – between the access road for WTG 208 and the access road for WTG 31
4. Soucia Road – one-mile from Clinton Mills north to the end of the public road
5. Jones Road – between the access road for WTG 13 to the access road for WTG 19

Response 293.9: The FEIS clarifies that the Applicant requires a 35-foot width of temporary impact (vegetation clearing) to properly account for the vehicles and processes required in trenching the UG collection line.

Response 293.47: As indicated in the DEIS, Section 4.3, environmental monitoring is proposed during Project construction. This monitoring effort will include pre-construction environmental training for both the monitors and construction personnel. Although few animals are anticipated to be killed during construction, Agency (NYSDEC and/or USFWS) personnel will be invited to participate in training sessions and advise environmental monitors and other Project personnel on the proper procedures for identifying and handling any dead or injured wildlife species encountered during the

course of construction.

### **CULTURAL RESOURCES**

Response 2.6: The OPRHP reviewed the Phase IB and Phase IB-2 Reports and provided a response letter in October 2007 (Appendix N). The Applicant responded to the OPRHP letter in December 2007 (Appendix N).

Response 3.18: Cultural resources are addressed in Section 3.7 of the DEIS and SDEIS. A Phase IA Cultural Resources Survey is located in the DEIS, Appendix J. The SDEIS included a Historic-Architectural Resources Survey Report and Phase IB Archeological Survey Report (SDEIS, Appendix J). A supplemental Phase IB-2 Archeological Survey Report (Appendix K) and correspondence from the OPRHP which provides their comments concerning impacts to historic and/or archeological properties (Appendix N) are included in the FEIS.

The phase IB Archeological Survey Report and the Phase 1B-2 Archeological Survey Report collectively identify all archeological resources in the Project area in accordance with State Historic Preservation Office (SHPO) protocol. These studies document a plan that assures avoidance of all potential archeological resources within the Project area.

Response 287.10: The FEIS includes the supplemental Phase IB-2 Archeological Survey Report (Appendix K) and correspondence from the OPRHP which provides their comments concerning impacts to historic and/or archeological properties (Appendix N).

Response 292.26: The Applicant has submitted all cultural resources studies prepared for the Project to OPRHP for their review and comment. The OPRHP reviewed the Phase IB and Phase IB-2 Report and provided a response letter in October 2007 (Appendix N). The Applicant responded to the OPRHP letter in December 2007 (Appendix N).

### **CUMULATIVE IMPACTS**

Response 2.15: The SRIS and Facilities Study conducted by the New York Independent System Operator (NYISO) take cumulative scenarios into account. The 2006 Class Year Facilities Study concluded that the Noble Ellenburg, Clinton, and Altona Wind Farms, along with the Marble River Wind Farm, are required to upgrade the Willis-Plattsburgh 230kV system to NYPA specifications. The Applicant has officially accepted the NYPA upgrades and posted a letter of credit to pay for over \$4.66 million of the specified \$12 million dollar system upgrades.

Response 3.3: Cumulative impacts, including transportation, visual impacts, air quality, noise, and socioeconomics, from the Marble River Wind Farm and the Noble Clinton and Ellenburg projects are addressed in Section 5.0 of the DEIS and SDEIS.

Cumulative noise impacts are insignificant for the vast majority of homes within the

Marble River Wind Farm. Receptors 09 and 10 prove the exception since the studies suggest that they may incur potential noise impact near 50 dBa which is the maximum allowed for non-participating landowners under the Ellenburg Town ordinance. For more detailed information, please refer to the SDEIS, Section 5.2.4.

In regards to cumulative visual impacts, the Supplemental Visual Impact Assessment (SVIA) (SDEIS, Appendix K, p. 15) states that approximately 69% of the overlapping 10-mile radius viewsheds for the Marble River Project area and Noble has the potential to see one or more turbine from each project. Factoring vegetation into this analysis reduces the potential cumulative visibility (i.e., areas where at least one turbine from each project can be seen) to 9% of the overlapping 10-mile study area. In addition, the Applicant anticipates that only 22 of the 109 turbines will require FAA obstruction warning lights, thereby significantly reducing nighttime visibility as indicated by the viewshed analysis (SDEIS, Appendix A).

Cumulative impacts to wildlife are discussed in Response 293.53 under the subject "Biological Resources".

Wetland and water resource impacts for the Marble River Wind Farm are provided in the Final Wetland Impact Summary Tables located in Appendix B. Cumulative wetland impacts for the Noble Clinton and Noble Ellenburg Wind Parks and the Marble River Wind Farm are listed in Response 3.5 under the subject "Wetlands and Water Resources".

## **DECOMMISSIONING**

- Response 3.14: The decommissioning plan, as required by the Local Laws of the Towns of Clinton and Ellenburg, has been provided in the DEIS, Appendix C. The Applicant has designed the Project so that no additional permits will be needed during de-commissioning other than the appropriate building permits from the local agent (the Towns of Ellenburg and Clinton). The Applicant has proposed gravel crane pads near turbines and permanent roads in order to minimize environmental impacts from operations, maintenance, and decommissioning activities.
- Response 171.2: The comment is in reference to potential future impacts such as the abandonment of the Project when tax credits run out or when the utilities find the power too expensive to purchase. These items have been discussed in the decommissioning plan in the DEIS, Appendix C. The decommissioning bond will be a pre-agreed upon condition for building permits.
- Response 177.3: Wind farms have an operational life of at least 25 to 30 years. Therefore standard practice in upstate New York (and generally throughout the country) has been to avoid commencing the funding of a de-commissioning bond until much later in a projects useful life. This practice allows for a more efficiently run project due to a decreased requirement for assets to sit in a bank. As a supplement to the latter point,

every modern turbine's residual scrap value at commissioning and through at least the first ten years is worth more than the de-commissioning cost. The Applicant has confirmed its general agreement to adhere to posting a de-commissioning bond to the Town to be put into a risk-free escrow account (as designated in the governing decommissioning agreement.)

Response 180.1: The decommissioning plan, as required by the Local Laws of the Towns of Clinton and Ellenburg, has been provided in the DEIS, Appendix C. To guard against the worst-case possibility that the Project operator will be unable to meet its obligation to dismantle the Project, a decommissioning fund will be established in compliance with the decommissioning guidelines provided in the wind ordinances of the Towns of Clinton and Ellenburg.

Response 193.5: Please see Responses 177.3 and 180.1.

Response 261.1: Please see Response 180.1 and the Marble River Decommissioning Plan which is located in the DEIS, Appendix C.

### **LAYOUT AND DESIGN**

Response 2.4: The NYISO's class year facility study process has required close coordination with the NYPA (see NYPA coordination procedures). The Applicant has been in continuous coordination with NYPA to assure that the substation and interconnection switchyard are designed to NYPA specifications (i.e. reviewed and approved). Furthermore, the Applicant has put in place a \$4.66 million letter of credit to finance system upgrade facilities deemed necessary by NYPA personnel.

Response 2.11: The Project will utilize approximately 55 miles of UG electric collection cable and approximately 13.6 miles of OH collection line ROW. The Applicant proposed a single 34.5 kV OH route with the intention of decreasing environmental impact(s) to the Project area during construction. The OH route was sited taking into consideration constraints set by town officials (i.e., avoiding public road right of ways), the NYSDAM (i.e., avoiding agricultural fields wherever possible), and NYSDEC and USACOE recommendations regarding wetland avoidance and minimization procedures (i.e., avoiding and minimizing wetland impacts).

The primary reason for proposing the OH line was to decrease the associated environmental impact of installing the UG collection lines as proposed in the DEIS. Given the greater thermal constraints of UG collection lines (a maximum of 12 turbines per UG circuit) the proposed Project would require over 105 miles of multiple lines running parallel to each other to effectively collect and transport the wind turbines' electricity to the substation. In some cases this would have required up to six UG collection lines running parallel to each other, which would have had resulted in significant temporary wetland and forest impacts, as well as significant and permanent alterations to the functional value of wetlands. Other factors determining



the placement of the OH line are detailed in Response 293.35.

Although, UG lines are typically more expensive to install than an equivalent length in OH line, the additional construction cost is justified due to the generally preferred aesthetic as well as the lower probability of interruption during windy events. However, in the specific case of the proposed 34.5 kV OH line, the Applicant deemed that the disadvantage of increased environmental impact from installing multiple UG collection was prohibitive. The proposed 34.5 kV OH line represents the collection alternative that best balances the imperative to avoid and minimize Project impact(s) while maintaining a viable electrical collection system.

The SDEIS specifically took into consideration the proposed OH ROW in its visual analysis, concluding that the OH line would have a minimal visual effect on the region due to the fact that it is only visible in areas where it will cross existing public roads (specifically Clinton Mills, Lafrancis Road, Route 11, and Gagnier Road). Visual simulations of each of these crossing are depicted in the SDEIS, Appendix K (SVIA).

In addition, the Historic-Architectural Resources Survey Report (SDEIS, Appendix J) identified three properties (MR036, MR042, MR073) located within one mile of the proposed OH interconnect. Views of these properties from some vantage points along public roads would include views of the proposed OH line. Existing views of properties MR036 and MR042 (both are private residences) from public roads already include existing OH utility lines; the incremental impact of adding the proposed OH line is not considered significant (see SVIA conclusions in Appendix K of the SDEIS for the landscape architects complete set of conclusions regarding OH collection line visual impact). MR073 is the abandoned route of the Ogdensburg and Lake Champlain Railroad, which is significant for its role in local history. The Applicant has removed the OH 34.5 kV line along the Ogdensburg and Lake Champlain Railroad from the final Project layout. The OPRHP has acknowledged that the appropriate cultural and archeological studies have been completed by the Applicant (FEIS, Appendix N, Agency Correspondence: "NY Office of Parks, Rec. Historic Pres Letter 10.22.07.pdf"). The Applicant responded to the OPRHP letter in December 2007 (Appendix N).

Vegetation management practices in regard to the OH line are detailed in Response 287.6 under the subject "Biological Resources".

Response 2.12: Although it may be technically feasible for two or more of the proposed wind projects in the region to form joint substations, myriad practical, and organizational barriers stand in the way of such a development occurring.

The combined substation option described in this comment was also deemed an unachievable alternative due to the more aggressive timing of the Noble projects relative to the requirement by the NYPA and NYISO. It is not feasible to effectively permit and build a single substation for separate projects when the project timing is not aligned.

Finally, land constraints stood in the way of this Applicant's ability to site a collection system to the proposed Noble Ryan Road substation.

The appearance and visual impact of the currently proposed substation is addressed in the SDEIS, Appendix K (SVIA). As indicated in this document, the location of the substation in a forested setting along a seasonally maintained town road minimizes its visibility to potential viewers. The proposed substation will only be visible from one viewpoint along this road, where the cleared ROW of an existing OH transmission line offers opportunities for an open view.

- Response 2.13: NYPA has agreed with the location the proposed Patnode substation location for the Marble River Wind Farm. The System Upgrade Facilities proposed by NYPA for the Willis Plattsburgh 230kV Transmission lines will accommodate the Patnode substation.
- Response 2.14: No new high voltage transmission is required for the Project. Please see Responses 2.11 and 2.2 under the subject "Visual Resources" regarding additional visual analysis of the 34.5kV OH line included in the SVIA (SDEIS, Appendix K). Other analyses of environmental impacts associated with the OH line are included in the SDEIS.
- Response 3.1: As stated in the SDEIS, Section 1.1 (Project Description), "Eighty eight of the turbines are proposed to be located in the Town of Clinton and 21 in the Town of Ellenburg." This totals 109 Wind Energy Conversion Systems for the entire Project.
- Response 287.1: The Applicant confirms that no turbine is within 1.5 times the turbine tip height (600 feet) of either NYPA line (Willis-Plattsburgh 1&2). Please see SDEIS, Figures S3 and S4.
- Response 287.2: The Elevation and Substation Grading Figure is located in Appendix J. Please see Response 287.1 regarding setbacks from existing transmission lines.
- Response 287.3: The Elevation and Substation Grading Figure is located in Appendix J.
- Response 287.4: The Elevation and Substation Grading Figure is located in Appendix J.
- Response 287.5: The Applicant has met with the NYSDPS for initial consultations on September 10, 2007; Applicant's substation design is dictated by the specifications of NYPA, NYISO, and the Northeast Power Coordinating Council. The Applicant is available and welcomes the opportunity to have further discussions with the NYSDPS, if necessary.
- Response 287.11: The comment is unclear. There is no inconsistency. SDEIS, Section 3.7.3 refers to a layout revision made to a Project access road to avoid a potential cultural resource identified in the Clinton Mills area. Further, the Applicant has removed the OH 34.5 kV line along the Ogdensburg and Lake Champlain Railroad from the final Project layout, as depicted in Figure 1.
- Response 292.4: The comment is not clear. Access roads are necessary to ensure that facility

personnel have safe access to the wind turbines and do not disturb adjacent undisturbed habitat throughout the operational life of the Project.

Response 292.5: Please see Responses 292.4 and 287.12 under the subject "Wetland and Water Resources".

Response 293.1: The proposed construction staging area is 15 acres in size and has been included in the DEIS and SDEIS Project layout proposals and the current Project impact calculations (please see Responses 292.21 and 292.22). The construction staging area is located on the east side of Route 189 approximately two miles south of the Hamlet of Churusbusco. The three permanent meteorological tower locations are shown in the final layout presented in Figure 1. The associated covertime impact has been quantified and is included in the temporary and permanent impact calculations detailed in Response 292.21.

Response 293.4: Only one step-up substation is required for the Project. As stated in the Town of Clinton Summary in the SDEIS, "The Project will also require a substation to interconnect the wind turbines to the existing electric grid. This substation will be primarily within the Town of Clinton approximately 325 feet to the east of Patnode Road on the north side of the New York Power Authority (NYPA) ROW for the Willis-Plattsburgh 230 kV transmission Line in the Town of Clinton." The substation is mentioned in the Town of Ellenburg summary only in regard to its visual impact.

The Project layout consists of 62 miles total of UG interconnect cable. Approximately 10.8 miles occur within Ellenburg and the remaining 51.2 miles occur within Clinton.

The UG route shown in Figure 1 is representative of the final route (and is consistent with the original route first proposed in the SDEIS). The associated impacts for the final UG route represented in the FEIS are presented in the impact area calculations in Response 292.21. The reason for the inconsistency between the DEIS and SDEIS was due to the evolving nature of the project and availability of information as more precise design and layout details became available. This issue has since been resolved.

Response 293.5: Of the 41 miles of access road proposed to be built by the Applicant, approximately 60% of those roads run along a) existing farm roads, b) existing logging roads, or c) existing logging trails and ROWs. Additionally, the Applicant has quantified the functional value, and associated change in function, of the existing wetlands along all access road and collection corridors. For details on the functional value please see the Wetlands Quality Functional Assessment located in Appendix D.

Response 293.11: Acreages of habitat loss/disturbance reported in the SDEIS are detailed in Response 292.21 under the subject "Biological Resources". Also, please see Responses 2.11 and 293.35 for justification of the OH line.

Response 293.35: The OH collection line proposed in the Marble River Wind Farm was sited in its current position due to the following constraints (please see the wetland avoidance and minimization discussion in Section 7.1 of the Alternatives Analysis, Appendix C):

1. Landowners - the Applicant only had permission along certain routes due to landowner approval;
2. Wetlands avoidance - the Applicant identified the route that provided the combination of the shortest route and the least potential impact to forested wetlands; and
3. Aesthetics - the Applicant minimized aesthetic impact to local landowners (at the guidance of the local town board) by not proposing to run the OH ROW in front of existing homes.

Response 293.40: As stated in the DEIS, Section 8.4, the Applicant selected the proposed site for the Project because of the quality of the wind resource; the ease of access to the site; the proximity and ease of connecting to the transmission grid; and the relative lack of potential disturbance to sensitive ecological, cultural and visual resources, and landowners. In addition, the Project layout (including the turbines and OH 34.5kV line) was designed in order to minimize impacts to environmental resources, including wetlands and forested areas. Please see Response 292.22 under the subject "Biological Resources" for further information regarding forested impacts.

Response 293.54: As stated in the DEIS, the Project size is 109 turbines totaling a capacity of 218 megawatts deliverable to the grid. Since the DEIS, the Applicant has engaged in an effort to respond to initial comments and avoid and minimize Project impacts wherever possible. These efforts have resulted in reduced environmental impacts while maintaining the original stated turbine count of 109 turbines.

Response 293.55: Wind data has been a relatively minor factor in micro-siting of wind turbines. The major influences justifying this Project's turbine locations are a) the avoidance of fragile habitat; b) setbacks from roads, property lines, and homes; and c) landowners' willingness to host a wind turbine. Alternative turbine layout is discussed in Section 5 and 6 of the Alternatives Analysis in Appendix C of this FEIS.

### **MISCELLANEOUS/GENERAL**

Response 170.1: The comment is specifically in reference to the Noble DEIS. Nonetheless, all topics mentioned in this comment have been fully addressed in the following sections of the Marble River DEIS and SDEIS:

- Water Resources – Section 3.2
- Ecological Resources – Section 3.3
- Visual Resources – Section 3.8
- Noise – 3.10
- Safety and Security – Section 3.13

Response 171.4: The Commenter quotes a Rockefeller University expert, who states, "the problem with

wind power is that to get more wind power you need to cover more land which is destructive of the environment.”

This statement is rather general and does not reflect the goals of the current Project. The purpose of the current Project is to provide a significant source of renewable energy to the power grid in New York State, thereby stimulating economic growth, increasing energy diversity, and promoting a cleaner and healthier environment. Although some Project impacts are unavoidable (as detailed in Section 3.1.2 of the DEIS and SDEIS), the actual Project “footprint” (i.e. conversion to built facilities) is relatively small (132 acres). The majority of impacts will be short term and those with longer lasting impacts will be offset by agency-approved mitigation plans.

Response 185.1: The comment is specifically in reference to the Noble DEIS. Nonetheless, all topics mentioned in this comment have been fully addressed in the following sections of the Marble River DEIS and SDEIS:

Water Resources – Section 3.2  
Ecological Resources – Section 3.3  
Visual Resources – Section 3.8  
Noise – 3.10  
Safety and Security – Section 3.13

Response 185.2: The comment is specifically in reference to the Noble DEIS. Nonetheless, all topics mentioned in this comment have been fully addressed in the following sections of the Marble River DEIS and SDEIS:

Water Resources – Section 3.2  
Ecological Resources – Section 3.3  
Visual Resources – Section 3.8  
Noise – 3.10  
Safety and Security – Section 3.13  
Cumulative and Growth Inducing Impacts – Section 5.0

Response 192.1: The Applicant believes that the numerous and thorough wildlife studies presented in the DEIS are sufficient for the size and scope of the proposed Project. Wildlife and habitat studies are presented in Section 3.3 and Appendix F of the DEIS and SDEIS. Bird and bat reports are presented in Appendix F of the DEIS, Section 3.3 of the SDEIS, and Appendix H and I of the FEIS.

Water resources and potential impacts to these resources are discussed in the SDEIS, Section 3. These studies indicate that Project impacts to water quality will be minor and short term in nature. Longer term impacts to wetlands will be unavoidable, but these impacts will be offset by agency-approved mitigation plans. There is no evidence at this time to support the assertion that water contamination will be an issue in the future. With regard to property devaluation, the studies in SDEIS, Section 3.11 and Appendix M, suggest that the Project will have no impact upon property values for undeveloped properties or existing farms. Developed properties,

on the aggregate, appear to have appreciated in value since the announcement of the Project. In sum, the findings suggest that the Project should have no impact upon the future sales or values of developed properties given prevailing conditions.

Noise and shadow-flicker impacts for the revised Project layout are fully addressed in the SDEIS, Section 3.10 and Appendices K and L. Please see Response to 171.1 under the subject "Socioeconomics and Property Values" for information regarding property value impacts. Potential impacts to Water Resources and Telecommunications are detailed in Sections 3.2.2 and 3.12 of the SDEIS, respectively.

Response 239.1: As stated in the SDEIS, Section 1.1 (Project Description), "Eighty eight of the turbines are proposed to be located in the Town of Clinton and 21 in the Town of Ellenburg." This totals 109 Wind Energy Conversion Systems for the entire Project.

The Applicant contacted the U.S. Department of State, International Border Commission and New York Department of State regarding potential regulations for construction and operation of the proposed Project near the Canadian border. The agencies contacted indicated that no regulatory approvals were necessary.

The Applicant further confirms that it has carried out telecommunication impact studies and has found no anticipated impact from the Marble River Wind Farm. Telecommunications are discussed in the SDEIS, Section 3.12. Please also see Appendix N, Agency Correspondence (NTIA No Interference Letter 8.07.07.pdf).

The net positive effects of municipal compensation are discussed in the DEIS, Section 3.11 (Socioeconomics) and will be dictated by the Host Community Agreement and PILOT payments to be negotiated with the Town boards and Clinton County Industrial Development Agency, respectively.

Project setback distances are in accordance with the Town of Clinton and Ellenburg ordinances. Based on the Project layout, no turbine setback distance waivers are requested for the Project. The current Project layout, including location and number of turbines, is detailed in the SDEIS, Section 2.0. Concerns over seismic activity are addressed in the DEIS, Section 3.1.2.2.

Previously identified archeological sites within the Project area that are recorded in state-wide inventories, as well as sites that are known by local historians, were reported in the Phase 1A Cultural Resources Survey included in the DEIS, Appendix J. The SDEIS Appendix J included a Phase IB Archeological Survey conducted in accordance with the New York State Historic Preservation Office Guidelines. An Addendum Phase IB Archeological Survey and Phase IB-2 Archeological Investigation is located in Appendix K. No mention or evidence of "American Indian Burial Grounds" located within or near the Project area were identified during these research efforts.

Response 240.1: Wetland and waterbody resource impacts are provided in the Final Wetland Impact Summary Tables located in Appendix B. As indicated on Appendix B, Table 6, temporary and permanent wetland impacts are 65.52 acres and 8.94 acres, respectively.

The Final Wetland Delineation report was submitted on September 28, 2007 and is included in Appendix A. The final wetland mitigation proposal has been submitted to the U.S. Army Corps of Engineers (USACE) and NYSDEC for continued review. To date, USACE and NYSDEC representatives have conducted three on-site pre-application meetings to review and approve delineation techniques and approve potential mitigation areas.

The Applicant has taken care to provide a detailed compensatory mitigation plan. Further the Applicant has taken care to avoid and minimize wetland or ecological impact by following existing roads, paths, and ROWs wherever possible. In order to avoid additional future wetland impacts during routine maintenance, decommissioning, or eventual re-powering, crane pads will be constructed as permanent fixtures at the base of each turbine. Though a few of the crane pads themselves incur minor wetland impacts, they are being proposed to reduce the severity and extent of any future impacts.

The FAA lighting plan will only include red lights sited on 22 of the 109 turbines to be flashing in a coordinated, simultaneous fashion as deemed acceptable by the FAA and confirmed in the FAA determination letter August 16<sup>th</sup> 2007 (Appendix N).

Operations and maintenance is discussed in the SDEIS Section 2.7.

Wildlife resources within the Project area were identified through analysis of existing data sources, such as the North American Breeding Bird Survey, the New York State Breeding Bird Atlas and the New York State Amphibian and Reptile Atlas and supplemented through correspondence received from Natural Heritage Program and USFWS (Appendix G of the DEIS and SDEIS).

The DEIS wildlife discussion (Section 3.3.23.2.2; p. 72) acknowledges that birds with certain aerial courtship displays (such as northern harrier) could be at increased risk of collision with the turbines. However, it is also noted that such species are rarely documented in collision fatality monitoring studies. The vast majority of avian mortality is made up of night-migrating songbirds, rather than resident species engaged in courtship or nesting. This result has been observed consistently regardless of habitat conditions and geographic location.

Possible impact to amphibian habitat (wetlands), and incidental mortality and injury of reptiles and amphibians, are potential impacts acknowledged in the DEIS and SDEIS (Sections 3.2.2.1.1 and 3.3.2.1.2). However, construction-related impacts to wetlands will be temporary in nature and largely mitigated through post-construction



restoration activities. Permanent loss of wetland habitat will be offset through compensatory wetland mitigation that will result in no net loss of wetland functions and values. Incidental injury and mortality to amphibians will largely be restricted to the construction period. After construction and restoration is complete, maintenance activities will result in only very occasional vehicular use of the Project access roads. Consequently, road kill of amphibians should be minimal over the operational life of the Project.

The Applicant has submitted to the USACE and NYSDEC a complete wetland mitigation strategy including mitigation to compensate for net negative change in function. The Wetland Mitigation Plan and Invasive Species Management Plan are included in Appendices E and F, respectively.

Response 244.1: The comment is specifically in reference to the Noble DEIS. Nonetheless, all topics mentioned in this comment have been fully addressed in the following sections of the Marble River DEIS and SDEIS:

Water Resources – Section 3.2  
Ecological Resources – Section 3.3  
Land Use and Zoning – Section 3.5  
Visual Resources – Section 3.8  
Noise – 3.10  
Safety and Security – Section 3.13  
Cumulative and Growth Inducing Impacts – Section 5.0

Response 287.8: As stated in the SDEIS, “only information that has changed or been added since preparation of the DEIS is addressed in this document. Where information is the same as described in the DEIS, it is so noted in the SDEIS.” The content of Appendices B, C, and D did not change from the DEIS and therefore were not included in the SDEIS.

Response 291.6: Neither the lead agency nor the Applicant is aware of any reports or correspondence from the municipalities hosting the Maple Ridge Wind Power Project (Martinsburg, Harrisburgh, and Lowville) indicating that noise or visual impact of that project is unduly adverse. No evidence of, or reference to, these towns being perceived as a “junkyard” by the general public has been provided. Taxes and the town PILOT programs are detailed in the DEIS, Section 3.11.

Response 293.57: Please see Responses 192.1 under the subject “Miscellaneous/General”, and 292.22 under the subject “Biological Resources”. Economic justification for the Project is discussed in the DEIS, Section 3.11 (Socioeconomics) and Section 6.0 (Commitment of Resources). Factors influencing Project layout and size, and an accompanying wind resources map of the region, are presented in the Alternative Analysis located in Appendix C.

Response 294.1: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.

- Response 294.2: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.3: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.6: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.11: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.12: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.13: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.15: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.16: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.17: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.18: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.19: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.20: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.21: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.22: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.23: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.
- Response 294.24: The Applicant agrees with the suggested edits of CRA and will incorporate the substance of their comments into the construction and operation of the Project.

Response 294.25: Please review Figure S5 of the SDEIS, entitled, "Topography Map". Ten foot topographic contours are displayed.

**MITIGATION**

Response 3.11: Mitigation to offset temporary and permanent wetland impacts have been developed in conjunction with the USACE and NYSDEC (See Appendix E of this FEIS). To date, USACE and NYSDEC representatives have conducted three on-site pre-application meetings to review and approve delineation techniques and approve potential mitigation areas.

Response 3.12 Mitigation plans have been developed in conjunction with USACE and NYSDEC staff and will be conducted concurrently with other construction efforts (See Appendix E of this FEIS for the Proposed Wetland Mitigation Plan).

Response 3.19: As stated in the DEIS, Sections 3.2.3 and 4.3, the Applicant will retain an environmental consultant to monitor construction activities to ensure that contractors are aware of and conduct impacts avoidance and mitigation activities identified in the Environmental Impact Statement. The scope of the work for the environmental construction monitor is listed in the DEIS, Section 4.3 and includes the coordination of environmental monitoring activities, documentation of implementation of mitigation activities as they are conducted, and preparation of a final report available to involved and interested agencies.

Response 3.20: Mitigation of construction-related impacts is proposed throughout the DEIS/SDEIS and this document. These measures include specific actions such as erosion and sediment control practices including protecting topsoil piles in agricultural fields with silt fence, and protecting topsoil piles in non-agricultural fields by seeding them and installing silt fence. Other mitigation measures include adherence of NYSDAM Agricultural Protection Guidelines, submittal of state and federal wetland permits, limitations on hours of construction to avoid local traffic concerns, scheduling component deliveries outside of normal school bus hours, and implementation of a complaint resolution process. Please see Response 3.19 for environmental monitoring scope of work.

Specific mitigation plans for Project impacts can be found under the following sections:

**Mitigation Efforts for Potential Project-Related Environmental Impacts**

Mitigation Topic	Section	Edition
Topography and soil	3.1.3	SDEIS
Soil erosion and siltation	3.1.3.1	DEIS
Water resources	3.2.3	SDEIS
Water resources	2.4.1 and Appendix E	FEIS
Vegetation	3.3.3.1	DEIS
Vegetation	2.4.2 and Appendix F	FEIS

Mitigation Topic	Section	Edition
Fish and wildlife	3.3.2	SDEIS
Avian and bat	2.4.2 and Appendix I	FEIS
Threatened and endangered species	3.3.3.3	SDEIS
Traffic	3.4.3	SDEIS
Land use and zoning/Agricultural	3.5.3	DEIS
Community facilities and services	3.6.3	DEIS
Archaeological resources and historic architectural structures	3.7.3	SDEIS
Archaeological resources and historic architectural structures	2.4.3	FEIS
Visual impacts	3.8.3	SDEIS
Climate and air quality	3.9.4	DEIS
Noise	3.10.4	DEIS
Municipal reserves	3.11.5	DEIS
Construction	3.12.3.1 and 3.13.3.1	DEIS
Operation	3.13.3.2	DEIS
Lightning strikes	3.13.3.3	DEIS
Extreme weather abnormalities	3.13.3.4	DEIS
Facility blackout	3.13.3.5	DEIS
Unavoidable adverse environmental impacts	4.1 and 4.2	DEIS

## **NOISE**

Response 177.1: All Project turbines are in compliance with setback distances as specified in the Town ordinances. It is likely that Project noise will be audible above the background sound level at least some of the time at a number of homes. Studies indicate that the actual sound level at all homes should be below the Town limit of 50 DeciBel Adjusted (dBA). Consequently, noise is not expected to be a significant issue to participating and non-participating residences in the area.

Response 178.2: Noise and shadow-flicker impacts for the revised Project layout are fully addressed in the SDEIS, Section 3.10 and, Appendix K.

The sound made by a wind turbine, even standing right at the base of it, will be completely drowned out by a typical snowmobile or ATV. Consequently, noise from the Project is not expected to have any impact on these activities. In general, the noise level produced by snowmobiles and ATVs and their associated impact on the tranquility of the community is probably many times greater than any possible Project noise impact.

Response 288.1: Dr. Pierpont's assertion that wind turbines cause various illnesses is based on her adamant belief that wind turbines produce extreme levels of low frequency and infrasonic noise. This allegation has been disproved many times by unbiased investigators and most recently by Sondergaard (Low Frequency Noise from Large Wind Turbines, Wind Turbine Noise 2007, Lyon, France, September 21, 2007).

As a practical matter, it is fairly easy to mistakenly measure low frequency noise from wind turbines because self-generated noise by the wind flowing over the microphone tip excites the very lowest frequencies giving a false signal that the turbine is generating noise in this region of the spectrum. For example, the field data collected by Soysal and Soysal (2007) and pointed to in Dr. Pierpont's writings as evidence of low frequency noise was almost certainly contaminated by self-generated noise because an inadequate, standard wind screen was used in the test and the microphone was set at about five feet above grade in the wind (rather than on a reflective surface flat on the ground as described in International Electrotechnical Commission Standards [IEC 61400]).

In addition, a recent study by Environ International Corporation (EIC, 2007) which reviewed over 250 peer-reviewed publications reported that with the exception of noise annoyance, Dr. Pierpont's findings are not based upon a body of literature that directly or indirectly implicates exposure to wind turbines as a likely cause of adverse health outcomes.

In short, the speculation by Dr. Pierpont and others that infrasonic noise from wind turbines causes medical problems has no basis in science.

Response 290.1: The issue of what frequency spectrum filtering network should be used to properly measure wind turbine noise has been raised by individuals (in the medical as opposed to acoustical engineering field), such as Dr. Nina Pierpont and Maria Alves-Pereira, who contend that low frequency/infrasonic noise from wind turbines adversely impacts health. The principal assertion is that the common practice of measuring the A-weighted sound level produced by turbines overlooks and artificially minimizes the low frequency content of the sound, since A-weighting intentionally reduces the lower frequencies to represent the sound as it is subjectively heard by the human ear. It is argued that the application of A-weighting is deliberately done to suppress or hide the low frequency content.

The fact of the matter is that when turbine sound levels are measured, as they normally are, in accordance with IEC 61400-11 Wind Turbine Generator Systems – Acoustic Noise Measurement Techniques, the un-weighted one-third octave band sound level spectrum is recorded. Because the overall, un-weighted sound level cannot easily be related to other sounds and the way they are perceived, the measured spectrum is customarily converted into an overall A-weighted sound level because A-weighting is the standard way of expressing sound levels worldwide. There is nothing erroneous or fraudulent about expressing turbine sound levels in this way, but it is important to note that octave bands are measured.

More broadly, it has been shown many times, most recently by Sondergaard (2007), that wind turbines do not produce levels of low frequency noise that are any higher than those generated by everyday items like cars or washing machines. It has never

been claimed that turbines do not generate any low frequency sound, just that the levels that have been measured are far below any level that might be considered problematic or harmful.

Response 291.1: Please see Response 290.1.

Response 294.5: The Applicant confirms that in the SDEIS, Town of Clinton/Town of Ellenburg Summary (Noise), second paragraph, the last sentence should be revised to: The modeling study demonstrates that the Town of Clinton/Ellenburg local law limit of 50 dBa at any participating and non-participating residence will not be exceeded and therefore the Project will be in compliance.

### **RECREATION**

Response 178.1: The Applicant has made a concerted effort to assure that turbines are not located on known snowmobile routes. The Applicant will also meet with local landowners and snowmobile clubs to explain the nature of wind turbines and associated facilities, and to educate them on proper safety precautions. The Applicant will prepare a Snowmobile Safety Policy. Please refer to the DEIS, Appendix O, for Rules of Engagement for Snowmobilers (Safety Guidelines for Snowmobiles near Wind Turbines).

### **SOCIOECONOMICS AND PROPERTY VALUES**

Response 171.1: Potential effects of the Project on local property values are addressed in Section 3.11 of the DEIS and the SDEIS. In addition, a thorough discussion and analysis entitled Impacts on Local Property Values and a Bureau of Economic Analysis – Economic Multiplier Report is detailed in DEIS, Appendix M. As indicated in these discussions, studies of this topic have failed to show an adverse impact for undeveloped properties or existing farms. Developed properties, on the aggregate, appear to have appreciated in value since the announcement of the Project. In sum, the findings suggest that the Project should have no impact upon the future sales or values of developed properties given prevailing conditions.

These conclusions have been reinforced by the preliminary results of a study presented at the 2007 American Wind Energy Association conference in Los Angeles. This study, conducted by the Lawrence Berkeley National Laboratory, found 1) no statistical evidence that homes within four to- seven miles of an operating wind power facility are adversely affected due simply to their proximity to the facility, and 2) no statistical evidence that homes with a view of turbines have different values than homes without (Hoen and Wiser, 2007).

Response 178.3: Socioeconomics are discussed in Section 3.11 of the DEIS and SDEIS. In addition, a thorough discussion and analysis entitled Impacts on Local Property Values and a Bureau of Economic Analysis – Economic Multiplier Report is detailed in the DEIS, Appendix M. These studies suggest that the Project will have no adverse impact on

property values for undeveloped properties or existing farms. Departure of local residents and adverse impacts on property values have not been observed at other wind power projects that have been built in New York State. In sum, there does not appear to be any supporting economic or statistical data to validate the concern expressed in this comment.

Response 193.1: The DEIS, Section 3.11 (Socioeconomics) lays out clearly that the net economic impact to local municipalities is positive due to the increased cash flows to towns, counties and school boards from the Marble River PILOT and the Host Community Agreement.

Response 193.2: The terms of agreements between landowners and the Applicant are confidential.

Response 193.3: As detailed in the SDEIS, Section 3.11.4.2 (Employment and Income), 190 local and 300 total construction jobs are anticipated during the construction phase of the Project. Regional employment is expected to increase during the construction period by between 85 and 240 non-construction jobs. Once the Project is operational it is expected to require a full-time staff of between 13 and 18 permanent employees.

Response 193.4: The ways in which Towns choose to budget or spend their money is outside the control of the Applicant. It is worth pointing out that other jurisdictions throughout New York with existing wind energy facilities (Fenner and Lowville) tax reductions have been realized due to the increased revenue from the wind projects.

Response 245.1: Regarding the siting of the Project components, various measures have been taken to minimize impacts to neighboring residences and the natural environment. The proposed siting of all Project components is in accordance with the wind turbine siting ordinances of the Towns of Clinton and Ellenburg. These measures are listed in the DEIS, Section 1.5 (Summary of Environmental Effects).

Potential effects of the Project on local property values is addressed in Section 3.11 of the DEIS and the SDEIS. Please see Response to Comment 171.1.

Response 256.1: In accordance with NYSDEC Program Policy, various mitigation measures were considered and are listed in the DEIS, Section 3.8.3 (Proposed Mitigation). These included a significant reduction in turbine height, referred to as a "low profile" design. Upon thorough consideration, it was determined that a significant reduction in turbine height is not possible without significantly decreasing power generation. To offset this decrease, additional turbines would be necessary. There is not adequate land under lease to accommodate a significant number of additional turbines, and a higher number of shorter turbines would not necessarily decrease Project visual impact. In fact, several studies have concluded that people tend to prefer fewer larger turbines to a greater number of smaller ones (see DEIS, Appendix K and the Alternatives Analysis in Appendix C).



Response 283.1: The Renewable Energy Policy Project (REPP) reported a study in 2003, titled Effect of Wind Development on Local Property Values. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (ten megawatts or greater) that became operational between 1998 and 2001 (a total of ten projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger et al. 2003).

The REPP study has been criticized by some because it assumes that all properties within the study area have a view of the respective wind farm, does not account for property distance to the wind farm, uses a questionable statistical analysis, and includes inappropriate transactions (e.g., estate sales, sales between family members, sales due to divorce, etc.). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard College.

The Hoen study's analysis of 280 home sales within five miles of the Fenner Wind Farm did not reveal a statistically significant relationship between either proximity to, or visibility of, the wind farm and the sale price of homes. Additionally, the analysis failed to uncover a relationship even when concentrating on homes within one mile of the wind farm that sold immediately following the announcement and construction of the Project. This study concluded that in Fenner, a view of the wind farm did not produce either a universal or localized effect on home values. To the degree that other communities resemble the Fenner rural farming community, similar conclusions are anticipated (Hoen 2006).

No sales within three-quarters of a mile of a turbine had occurred during the study period. Hoen's study is significant because he developed and used a so-called hedonic model, the best statistical tool for explaining choices. Hoen also inspected each property and rated the views from each site built. Please see Response to Comment 171.1.

## **VISUAL RESOURCES**

Response 2.2: Electrical cables connecting individual turbines are proposed to be UG to minimize visual impacts. As described in the SDEIS, the revised electrical collection system includes approximately 13.6 miles of 34.5 kV OH lines. The visibility and visual impact of the OH lines are addressed in the SVIA included in SDEIS, Appendix K.

Response 2.5: Visual impacts on historic resources were addressed in the Visual Impact Assessments (VIA) included as Appendix K in the DEIS and SDEIS. Historic sites were identified as visually sensitive resources in this report, and potential Project visibility, as

determined through viewshed mapping, line-of-sight cross section analysis, and field review, were discussed. Of the ten visual simulations prepared in the VIA, three (Viewpoints 34 and 74 and the “virtual image” from Lyon Mountain) were from known historic resources. The SVIA included in SDEIS, Appendix K included significant additional analysis of visibility and visual impact from historic resources. Six additional simulations were prepared from historic sites identified by the Project cultural resources consultants. These included Viewpoint 26 (Ellenburg Center), Viewpoint 36 (State Route 190), Viewpoint 196 (Lyon Mountain), Viewpoint 203 (Clinton Mills), Viewpoint 205 (Clinton Mills), and Viewpoint 207 (Frontier). The SVIA and the cultural resources section of the SDEIS specifically address visual impacts on these resources.

The Historic-Architectural Resources Survey Report (SDEIS, Appendix J) includes an inventory of properties listed on, or eligible for listing on, the State/National Register of Historic Places located within the Project’s topographic viewshed within five miles of Project facilities. The report also includes an impacts analysis and recommends appropriate mitigation measures.

- Response 2.7: Two color photographs showing existing conditions/visual screening at each Wind Energy Conversion Systems site are required as part of the local applications (as per Article II, Section 10/11 [17.B] of the local ordinances), if the lead agency does not make a positive declaration under SEQRA. Because the lead agency made a positive declaration, visual impacts were addressed in the DEIS for the proposed Project. The analysis of visual impacts included in the DEIS is a more exhaustive/comprehensive evaluation than required by the local ordinances.
- Response 2.8: Results of the shadow-flicker analysis are provided in SDEIS, Appendix K. In addition, analysis and identification of mitigation measures appropriate for evaluation are discussed.
- Response 2.9: Cumulative visual impacts of the proposed Marble River Wind Farm and the Noble Clinton and Ellenburg projects are addressed in both the VIA included in the DIES (Appendix K) and SVIA included in SDEIS (Appendix K). Cumulative analysis in the DEIS included cumulative simulations from three viewpoints (Viewpoints 8, 34, and 74). Viewpoint 34 is from the edge of the Adirondack Park, which is listed on the National Register of Historic Places, while Viewpoint 74 is from the Hamlet of Churubusco, which includes three locally significant historic structures. Cumulative analysis in the SDEIS included cumulative viewshed mapping and revised cumulative simulations from Viewpoints 34 and 74, as well as a cumulative simulation from Viewpoint 196 on Lyon Mountain. Cumulative visual impacts are discussed in Section 5.0 of the DEIS and SDEIS, and were determined to be highly variable based on the number of turbines visible and their distance from the viewer. The cultural resource section of the SDEIS (Section 3.7.2, p. 51) determined that the Project will have an

adverse effect on 49 identified historic properties within the five-mile radius study area and suggests specific measures to mitigate these impacts.

The Historic-Architectural Resources Survey Report (SDEIS, Appendix J; also SDEIS Section 3.7.2, p. 51-52) identified properties located within the Marble River study area that would be affected by the Project and recommended appropriate mitigation measures. All of these properties were considered eligible for listing in the State / National Register of Historic Places (S/NRHP-eligible) because:

1. They are good examples of their respective building types and time periods that retain their overall integrity of design and materials; and/or
2. They are significant in local or regional history.

None of these properties was recommended as S/NRHP-eligible based on their scenic or aesthetic qualities. The adverse effect on these properties is a change in setting resulting from the addition of wind turbines to the landscape; this effect would occur regardless of whether one or both projects are built.

Response 2.10: Project layout changes between the DEIS and SDEIS reduced visual impacts from selected locations, including Viewpoint 179 (compare DEIS, Appendix K: Figure 18, Viewpoint 179 with SDEIS, Appendix J (Historic Resources Report, Appendix II Viewpoint 179). The Historic-Architectural Resources Survey Report (SDEIS, Appendix J) includes a site-specific impacts analysis that considers the effects of proximity/distance, viewer orientation from public ROWs, and intervening vegetation for each of the identified historic properties.

Response 3.15: Additional analysis of visibility from the Gulf State Unique Area is included in the SVIA (SDEIS, Appendix K, p. 16 and Appendix C [Expanded Photo Log]). Photos from various locations within the unique area demonstrate that existing tree screening will fully or significantly block views of the proposed Project from all portions of this area.

Response 3.16: Please see Response 2.9 regarding the evaluation of cumulative visual impacts. Cumulative simulations from two viewpoints within the Adirondack Park (Viewpoint 34 and Lyon Mountain) are included in the SVIA (SDEIS, Appendix K). Views toward the proposed Marble River Wind Farm generally will not include views of the Altona and Beekmantown Projects, due to their distance and direction relative to the proposed Project. Based on viewshed analysis, review of aerial photos, and field evaluation (as described in both the VIA and SVIA), views from the vast majority of the Adirondack Park within 15 miles of the proposed Project will be screened by forest vegetation.

Response 3.17: The visual analysis included in the SVIA (including additional analysis of Project visibility from the Gulf State Unique Area and cumulative visual impact to Lyon Mountain) confirm the conclusions of the original VIA. Off-set mitigation is mentioned in the VIA and DEIS, and specific measures are recommended in the cultural resources section of the SDEIS (p. 52) and the SVIA (SDEIS, Appendix K, p. 35).

- Response 177.2: Potential visual impacts throughout a five and ten mile radius visual study area were assessed in the VIA and the SVIA in Appendix K of the DEIS and SDEIS, respectively. To determine potential visibility from sensitive sites within the Adirondack Park, the viewshed distance was extended to 15 miles within the "blue line", and the areas of potential visibility were mapped and quantified.
- Response 188.1: Shadow-flicker impacts for the revised Project layout are fully addressed in SDEIS, Section 3.8.2.2.6 and Appendix K. Noise impacts for the revised Project layout are fully addressed in SDEIS, Section 3.10 and Appendix L. Risks associated with fire are detailed in the DEIS, Section 3.13.1.4.

In regard to flicker, the revised report indicated that no non-participating property had any flicker effect beyond the 25 hour per year threshold which is the conservative threshold level typically applied in the United States. Furthermore, results indicated that due to model conservatism and the large number of potential mitigating factors that can minimize or eliminate shadow-flicker (intervening topography, vegetation, windows facing away from WTGs, etc.), the potential for shadow-flicker on nearby residences is minimal and likely insignificant.

The updated noise modeling survey demonstrated that no residence (receptor) would be in a range at or above the 50 dBa threshold and therefore the Project are in compliance with local wind energy facility ordinances.

- Response 287.14: The Applicant has made efforts to minimize access road entries along State Route 11. There is currently only one access road entry along State Route 11, and this entry is already an existing driveway. The addition of the OH line to the Marble River Project layout allowed for the consolidation of State Route 11 crossings into the one single OH route ROW that is depicted in the SDEIS and shown visually in the SVIA (SDEIS, Appendix K, Figure 30, Viewpoint 212). The Applicant has considered the possibility of running the proposed OH 34.5 kV collection route underneath State Route 11, but found that the thermal constraints of the UG system dictate the necessity of crossing State Route 11 overhead.

As noted in the SVIA, the OH line crossing of Route 11 will have a low to moderate visual impact on motorists traveling on this designated scenic byway. However, the abundance of forest vegetation on either side of the proposed crossing location will limit views of the line and the cleared ROW. Such views will only be available right at the crossing location, perpendicular to the orientation of the road. They will thus be of very short duration, and peripheral to the primary view of passing motorists. However, to further minimize the visibility and visual impact of the OH line and cleared ROW, a 50-foot wide section of the ROW will be managed on either side of the Route 11 crossing to allow vegetation on the ROW to regain adequate height to significantly screen views down the ROW. However, this vegetation will be selectively removed or trimmed to maintain a 15-foot clearance from the OH conductors.

Response 287.15: SDEIS Section 5.2.2 (Visual) has been revised below to include citations to SDEIS, Appendix K and relevant figures therein.

To address concerns regarding the potential cumulative visual impact of multiple wind power projects, a cumulative viewshed analysis was prepared (SDEIS, Appendix K). To accomplish this, the ten-mile radius Marble River topographic and vegetation analyses (based on maximum blade tip height) were overlaid on the same viewshed analyses prepared for the proposed Noble Wind Power projects in the Towns of Clinton and Ellenburg. The viewsheds for the three projects were then plotted on a base map and areas of viewshed overlap identified (SDEIS, Appendix K, p. 8, Figure 6, Sheets 5 of 6 and 6 of 6).

The cumulative topographic viewshed analysis of the proposed Marble River and Noble projects indicates that within the area of overlapping ten-mile radius viewsheds, approximately 69% of the area has the potential to see one or more turbines from each project (SDEIS, Appendix K, pg 15). Areas completely screened from views of all turbines by topography alone are limited to the valleys and backside of hills in the southwestern portion of the overlapping study areas (in the Adirondack Park) and the backside of a major ridge in the Canadian portion of the study area to the northeast. Steep ravines and river valleys in the western portion of the study area are also indicated as being fully screened from view by topography. Factoring vegetation into this analysis (SDEIS, Appendix K, Figure 6, Sheet 6 of 6) reduces potential cumulative visibility (i.e., areas where at least one turbine from each project can be seen) to 9% of the overlapping ten-mile study areas. These areas of potential cumulative visibility are concentrated in open fields and wetlands in close proximity to the projects, and in some broader open areas to the northwest and southeast (similar to the results of the vegetation viewshed for the Marble River Wind Farm alone) (SDEIS, Appendix K, p. 15, Figure 6, Sheet 4 of 6). In addition, the Applicant has received letters of determination from the FAA directing that 22 of the 109 turbines will need to have FAA obstruction warning lights. This being the case, and because the screening effect of forest vegetation was not considered in the nighttime viewshed analysis, nighttime visibility is also anticipated to be significantly less than indicated by the conservative case illustrated in the viewshed analysis (SDEIS, Appendix K, p. 14).

Response 287.16: Cumulative visual impact of the proposed Marble River Wind Farm, along with the proposed Noble Clinton and Ellenburg Wind Power projects, has already been evaluated by the Town's consultants (CRA), as part of the SEQRA review process. Cumulative visual impact from Lyon Mountain, and other sites within the visual study area, has also been evaluated in both the VIA included with the DEIS and SVIA included with the SDEIS. The cumulative simulation from Viewpoint 196 in the SVIA shows the proposed Noble turbines, as well as the proposed Marble River turbines, as seen from the summit of Lyon Mountain. As stated in the SVIA, with these three projects in place, this view is not significantly altered. Despite the considerable

number of visible turbines, their distance from the viewer, narrow profile, and white color limit visual impact. The presence of the turbines does not alter the openness of this landscape, and their contrast in scale, line, color, form, and texture is minimal. Overall, the presence of the turbines does not significantly change the character of the view from Lyon Mountain.

Response 291.3: Potential night-lighting and shadow-flicker impacts associated with the proposed Project were fully addressed in the DEIS and SDEIS. Support studies specifically addressing visual and shadow-flicker impacts were attached as Appendix K to both of these documents. In addition, an analysis and identification measures for mitigation measures appropriate for evaluation are discussed. Also, please see Response 188.1 regarding flicker.

Response 291.4: The FAA approved lighting plan indicates that only 22 of the 109 wind turbines will be lit at night. This represents the minimum number of turbines that need to be lit in order to comply with FAA requirements.

Potential night-lighting and shadow-flicker impacts associated with the proposed Project were fully addressed in the DEIS and SDEIS. Support studies specifically addressing visual and shadow-flicker impacts were attached as Appendix K to both of these documents.

Response 292.24b: The impacts analysis presented in the Historic-Architectural Resources Survey Report (SDEIS, Appendix J) is generic in approach because of the multiple viewpoints at varying distances and orientations from which a given resource could potentially be viewed in relation to the existing landscape and proposed wind turbines. Perceived impacts on a given property from various viewpoints can vary tremendously depending on the distance to the resource, orientation of the viewer, proximity and arrangement of turbines, intervening topography, intervening structures, and intervening vegetation. The visual perception of existing wind farms is very dynamic with turbines appearing, increasing in scale, receding, and disappearing from view as the viewer moves through the landscape. Assessing the "severity of potential visual intrusion by the Project on a property by property basis in relation to their existing setting" is therefore complicated by the multiple potential viewpoints and dynamic nature of views of the resources, landscape, and turbines as well as the position, orientation, direction of movement, and speed of potential viewers. The generic conclusion that "visual intrusion of a single turbine into the setting associated with a historic property is treated as sufficient reason to consider the property adversely affected" is therefore a conservative and appropriate conclusion which assumes a potentially greater degree of impact than would necessarily be the case depending on the position and orientation of the potential viewer.

Setting is only one factor that is considered in the significance evaluation of each property. All of the properties within the study area are significant for either their role



in local/regional history, or because they are good examples of their respective building types and time periods that retain their overall integrity of design and materials. None of the historic properties identified within the study area was determined to be significant for their scenic or aesthetic qualities. In all cases, the significant impact is a change in the setting associated with each property resulting from the introduction of wind turbines to the landscape. This change in setting will not necessarily result in "diminished public enjoyment or appreciation of the resource, or impair its character or quality." The historic properties within the study area would retain the characteristics that caused them to be recommended significant after the installation of wind turbines in the surrounding landscape.

Response 292.25: Please see Response 292.24b. The Historic-Architectural Resources Survey Report (SDEIS, Appendix J) concludes that "because of the height of individual turbines and their geographic distribution, implementation of visual impact mitigation measures for specific properties is difficult." The multitude of potential views of a given resource in relation to the landscape and proposed turbines renders traditional, direct mitigation options (such as relocation of facilities or installation of screening) ineffective and impractical. For instance, the relocation of any given turbine to facilitate reduced visual impacts to a given resource from a specific viewpoint would not necessarily reduce the impact on views of the given resource (or other resources) from other viewpoints, and in fact could inadvertently incur or increase impacts on the same or other resources from other viewpoints. In addition to the mitigation measures proposed in the VIA, the conclusion of the Historic-Architectural Resources Survey Report (SDEIS, Appendix J) includes recommendations for specific, locally appropriate forms of indirect mitigation (or offsets) intended to eliminate or reduce the Project's adverse impacts to historic properties.

Potential Project visibility from all identified aesthetic resources of state-wide significance is summarized in Table 2 of the SVIA (SDEIS, Appendix K). As can be seen from this table, visibility from most of these is indicated as Partially Visible. This is due to the fact that the Project includes over 100 turbines spread over an 18,520-acre Project area (area of leased land). Viewshed and line-of-sight analysis did not definitively rule out turbine visibility from many sites within a five-mile radius of the Project. Although field review indicated that vegetation and structures screen views more than these analyses would suggest, actual Project visibility could only be determined by preparing simulations. Although this was done for all aesthetic resources of state-wide significance, and most resources of local/regional significance, these simulations do not document all views and viewer orientations available from these sites. Consequently, the total number, and extent, of visible turbines that could be viewed from any particular site is unknown. This could only be determined with certainty by doing simulations (in multiple directions) from every vantage point at each sensitive site. Because this is not feasible, representative simulations have been prepared from sites located at various distances and directions from the Project.



These simulations clearly indicate the range of Project visibility and visual impact that will be experienced at sensitive sites throughout the visual study area. Consequently, all potential mitigation measures (as defined by NYSDEC Visual Policy) are considered in the VIA and SVIA for the Project as a whole, rather than for individual sensitive sites/receptors. As the discussion in these documents indicates, the specific presence/location of individual turbines, or other Project components, generally will not have a significant mitigating effect on Project visibility or visual impact. Therefore, offset type mitigation is generally the only feasible mitigation option available.

Response 294.4: As stated in the SVIA (SDEIS, Appendix K, p. 7), ten-mile radius viewshed maps for the study area were analyzed based on the revised turbine dimensions and Project layout.

**WETLANDS AND WATER RESOURCES**

Response 3.5: Wetland and waterbody resource impacts for the Marble River Wind Farm are provided in the Final Wetland Impact Summary Tables located in Appendix B.

Cumulative wetland impacts for the Noble project in the towns of Clinton and Ellenburg along with the Marble River Wind Farm are detailed in the table below.

<b>Project</b>	<b>Permanent Wetland Impact (acres)</b>	<b>Temporary Wetland Impact (acres)</b>
Noble - Clinton	0.96	3.2
Noble - Ellenburg	1.03	3.22
Marble River Wind Farm	8.94	65.52
<b>Cumulative Wetland Impact</b>	<b>10.93</b>	<b>71.94</b>

Response 3.6: The Applicant conducted field verification of delineated wetland boundaries with NYSDEC and USACE representatives on the following dates (with the following persons):

1. October 20, 2006; John O'Connor (NYSDEC) and Kevin Bruce (USACE);
2. November 3, 2006 with Kevin Bruce (USACE); and
3. April 24, 2007 with John O'Connor (NYSDEC) and Christine Delorier (USACE).

Response 3.7: Please see the wetland avoidance and minimization discussion in Section 7.1 of the Alternatives Analysis located in Appendix C. The discussion itemizes avoidance and minimization measures taken over the past two years to minimize wetland impact. Major measures include the deletion of turbines to assure that no turbine site has any permanent wetland impact and the re-alignment of access roads to coincide with previously disturbed logging roads/trails or existing farm roads where possible. The

Applicant has managed to decrease permanent impact by over 35% through this process.

Response 3.8: Temporary wetland impacts for the Marble River Wind Farm total 65.52 acres and are further described in the Final Wetland Impact Summary Tables located in Appendix B.

Response 3.9: The Applicant has submitted a complete wetland mitigation strategy, including mitigation to compensate for net negative change in function, to the USACOE and NYSDEC. The Applicant has also prepared an Invasive Species Management Plan as required to comply with the joint wetland permit process (these are included in Appendices E and F of this document, respectively).

Wetland areas and riparian zones temporarily impacted during the construction of the Marble River Wind Farm will be restored to pre-construction contours and revegetated with native (non-invasive) plant material or seeds immediately following the completion of regulated activities at each site. This revegetation effort will ensure adequate vegetative cover to prevent the colonization of invasive species.

Response 3.13: In order to minimize future additional wetland impacts during routine maintenance, decommissioning, or eventual re-powering, crane pads will be developed near each turbine structure. Though a small number of the crane pads result in permanent wetland impacts, they are proposed to reduce the severity and extent of any future temporary or permanent wetland impacts associated with maintenance and decommissioning activities.

Response 287.9: The water quality classification DD occurs in the NYSDEC geographic information system data. It is acknowledged that class D streams are regulated based on the standards, but Class D streams do not require permit authorizations. References to DD water classifications or statements regarding non regulation of surface waters by the NYSDEC will not be made in the FEIS.

Response 287.12: The Applicant's efforts to avoid and minimize wetland impact along the OH 34.5kV line included the deletion of the permanent access road running along the proposed OH collection line route. The "gravel pads" are permanent structures necessary to provide for the structural integrity of the OH poles located in mapped (and field delineated) wetlands. Assuring the structural integrity of the poles located in wetlands is an important measure that is taken to minimize the possibility of future temporary wetland impact and habitat disturbance that would be associated with re-erecting a failed pole. In total, the OH collection line would consist of 332 poles, of which 71 are located in wetlands. Of the poles located in wetlands, 32 will require a gravel pad for installation.

The "spur line" (referenced in the SDEIS, July 2006) refers to the segment of the proposed OH collection line originally proposed to run along the abandoned Ogdensburg/Champlain Railroad immediately south of Clinton Mills Road. The "spur

line" has been deleted from the Project layout as a mitigation measure to assure avoidance of any potential impact to historical resources located at the Clinton Mills historic area (sited in the phase 1B addendum study, Appendix K, of this document; Also see Section 7.5 of Appendix C – Alternatives Analysis for discussion of cultural and historical avoidance measures implemented in Project design).

Response 292.1: Wetland and waterbody resource impacts for the Marble River Wind Farm, including NYSDEC-adjacent areas, are provided in the Final Wetland Impact Summary Tables located in Appendix B. As indicated in Appendix B, Table 5 (Summary of NYSDEC Adjacent Areas within Project Footprint), permanent disturbance to NYSDEC-adjacent areas totals 24.32 acres for the construction of access roads. Temporary wetland disturbances to NYSDEC adjacent areas total 100.95 acres for the construction of roads and other Project components.

Response 292.2: Acreage of forest that will be lost due to Project development is discussed in Response 292.22 under the subject "Biological Resources".

Response 292.3: Please see Response 292.1.

Response 292.6: A more detailed description of potential impacts to freshwater wetlands is located in the final Wetland Delineation Report (Appendix A). In addition, a Proposed Wetland Mitigation Plan and Final Wetland Impact Summary Tables are located in Appendices E and B, respectively.

Response 292.7: The total area estimates for wetland impacts are presented in greater detail in the Final Wetland Impact Summary Tables located in Appendix B. The detailed engineering plans depicting wetland impacts are included in the joint wetland permit application. The total permanent wetland impacts associated with the Project have decreased during the period between the DEIS submittal and this FEIS due to the Applicant's deliberate efforts at avoidance and minimization. The wetland avoidance and minimization analysis located in Section 7.1 of the Alternatives Analysis, (Appendix C) itemizes each Project layout adjustment and re-alignment that the Applicant has made over the last two years to decrease overall wetland impact. The result of this effort has been a 35% decrease of permanent impact, from 13.7 acres to 8.94 acres.

Response 292.8: Please see the Alternatives Analysis attached in Appendix C. Section 7.1 of the Alternatives Analysis itemizes wetland avoidance and minimization measures taken over the past two years to avoid wetland impact wherever possible and minimize wetland impact when deemed un-avoidable. Major measures implemented included the deletion and re-location of proposed turbines to assure that no turbine site incurs permanent wetland impact. Other measures implemented included the re-alignment of access roads to coincide with previously disturbed logging roads/trails or existing farm roads. The Applicant has managed to decrease impact by over 35% through this process.

Impacts to NYSDEC-regulated wetlands and adjacent areas, including wetland impact by Project component, are discussed in Response to Comment 292.1 and itemized in the Final Wetland Impact Summary Tables 1 through 5 in Appendix B.

- Response 292.9: Please see Response 292.8.
- Response 292.10: Please see Response 292.8 and the wetland avoidance and minimization discussion located in Section 7.1 of Appendix C. Impacts to NYSDEC-regulated wetlands and adjacent areas, including wetland impact by Project component, are detailed in the Final Wetland Impact Summary Tables in Appendix B.
- Response 292.11: Please see the Wetland Quality Functional Assessment in Appendix D. The Applicant utilized this model to determine the appropriate amount of mitigation required. Also attached, please see the Proposed Wetland Mitigation Plan (Appendix E) which includes a quantification of the functional change due to canopy loss along the OH ROW.
- Response 292.12: Please see the Proposed Wetland Mitigation Plan located in Appendix E.
- Response 292.13: The tamarack spruce bog in the Town of Clinton will not be a component of the proposed wetland mitigation plan. Please see the Proposed Wetland Mitigation Plan located in Appendix E.
- Response 292.14: The Applicant will protect each mitigation area with conservation easements suggested by the USACOE (pre-application correspondence in March 2007 with Kevin Bruce). Conservation easements would be placed on all wetland and stream mitigation areas to maintain wetland and riparian resources, and prevent the use or development of the property that would conflict with the maintenance of the property in its natural condition. Please see the attached Model Conservation Easement located in Appendix M.
- Response 293.3: The following wetland impact acreages can be added to Table 3.3.2.1.1.1: Total Disturbance – 74.46 acres; Temporary Disturbance – 65.52 acres; and Permanent Loss – 8.94 acres. Additional information regarding wetland impacts is provided in the Final Wetland Impact Summary Tables located in Appendix B.
- Response 293.8: Appendix B of the FEIS (Final Wetland Impact Summary Tables) details temporary and permanent wetland impacts as a result of the Project. One particular avoidance and minimization action taken was to decrease the width of permanent access roads to 16 feet where a wetland is impacted. Anticipated construction transportation routes are provided in the Materials and Equipment Delivery Route Assessment in Appendix H of the SDEIS.
- Response 293.10: The Applicant cannot commit to directional drilling in all cases, but has committed to implementing environmentally acceptable means of trenching and restoring waterbodies in accordance with NYSDEC and USACOE standards.

- Response 293.12: The Applicant has inventoried and delineated all potential impacts along public roads and presented them as permanent impacts in the joint wetland application. The permanent and temporary wetland impacts detailed in Appendix B take into consideration the specific impacts proposed along these roadways.
- Response 293.13: Section 3.2.1.1 of the DEIS and SDEIS discuss existing surface water resources within the Project survey area, an area larger than the Project footprint. Potential Project-related impacts are addressed in Section 3.2 of the DEIS and SDEIS. As indicated in Appendix B, Final Wetland Impact Tables (Table 4), Permanent Stream Impacts are 1,171.2 feet; Temporary Stream Impacts are 5,000.16 feet; and Total Stream Impacts are 6,171.36 feet.
- Response 293.14: Of the 100 surface waterbody polygons within the surveyed area, 67 are within the Project footprint (Appendix A, Wetland Delineation Report, September 2007). Of these 67 features, there are 48 streams, three stream-pond complexes, one pond, six culverts, and nine drainage features (e.g., drainage/roadside ditch, field drainage, wetland drainage). Approximately 6,254 linear feet of surface waterbodies will be affected; however, only 1,171 feet will be permanently affected. Details regarding stream impacts are provided in the Final Wetland Impact Summary Tables located in Appendix B.
- Response 293.15: Field delineation of all wetlands that would be affected by the Project has been completed. All desktop-delineated wetlands were verified in the field. Please see the wetland delineation report (attached in Appendix A). This report identifies specific wetland boundaries of all 390 wetlands that will be disturbed by the Project. Additionally, the USACE and the NYSDEC have met with the Applicant on multiple occasions (October 20, 2006; November 3, 2006 and April 28, 2007) to verify the validity of wetland boundaries.
- Response 293.16: The survey area will contain a larger area of wetlands because it includes the area of jurisdictional determination in addition to the area within the Project footprint. Thus, the area that would be permanently and temporarily affected by the Project will be smaller than the area within the survey area.
- Response 293.17: Wetland areas and riparian zones temporarily impacted during the construction of the Marble River Wind Farm will be restored to pre-construction contours. Indirect impacts to topography and hydrology will be temporary and no long-term effects are anticipated. Subsequent to the Applicants December 11, 2007 meetings to discuss final Stormwater Pollution Prevention Plan (SWPPP) protocol, the Applicant is filing for a SPDES permit and is preparing a SWPPP. The Project SWPPP will include certain protocol designed and approved by the NYSDEC specifically for wind power projects, and these include: erosion and sediment control measures for top soil stockpiling in agricultural fields (silt fencing) and/or sediment control measures for top soil stockpiling in non-agricultural fields (including seeding of the top soil piles).

Response 293.18: The impacts calculated in the DEIS, the SDEIS, and in the FEIS are based on the latest information available to the Applicant and represent the best estimates of existing resources.

Response 293.19: Please see the wetland avoidance and minimization discussion located in Section 7.1 of the Alternatives Analysis included in Appendix C. The discussion itemizes specific wetland avoidance and minimization actions taken over the course of the Project layout evolution.

Response 293.20: The focus of the wetland work was to field-delineate wetlands, not to specifically search for the 19 state-listed plant species. Additional rare plants surveys, with a specific focus on the identification of the 19 species of state-listed rare plants, were conducted by TetraTech in Spring and Fall 2007. No federal- or state-listed plants were found at the site. Please see the 2007 Rare Plant Survey located in Appendix G.

Response 293.21: Project components were rerouted to avoid the sensitive "rich shrub fen" areas of the wetland complex. The Project currently affects a small palustrine emergent marsh (PEM) portion of the wetland polygon.

Two rich shrub fen wetlands were identified at the proposed Marble River Wind Farm (wetlands AR80/81A and AR606B).

1. Wetland AR80/81A is located along the access road to Turbine 10A. This access road was relocated to the south to avoid impacts to the portions of this wetland that included the rich shrub fen. The small portion of this wetland that will be impacted by the Project (approximately .03 acre) does not include these characteristics.
2. Wetland AR606B is located along Bootleg Road (also known as Wilkin's Road). Impacts associated with this extensive wetland will be limited to the edges of an existing access road and will be associated with minor widening of the road and culvert installation. Activities will be limited to the roadside portions of the wetland, which already exhibit some degree of disturbance. In addition, the installation of culverts in this area will restore the hydrologic flow to and from this wetland.

Impacts to sand stone pavement barrens identified at the original location of turbines 5A and 116 have been avoided or minimized through turbine and/or access road relocations. In the case of Turbine 5A the turbine was relocated to an agricultural field to the northwest of the original location. In the case of Turbine 116, the turbine was moved to a previously disturbed area that was essentially devoid of vegetation due to its being used as a log landing.

Response 293.37: Wetland impacts are described in detail in Section 3.2.2 of the DEIS and SDEIS. The DEIS, Section 3.3.1.1.1 describes ecological communities on site and indicates on page 53 "inventoried wetlands within the Project area have been mapped and described separately (see DEIS Section 3.2 in DEIS Appendix E)". SDEIS Table 3.3.2.1.1.1 presents revised impacts to vegetative communities. It is supplemental to

the inventory information included in the DEIS, and, like the DEIS, does not address impacts to wetlands, which are described in detail in SDEIS Section 3.2.2.

Response 293.56: Please see the wetland avoidance and minimization discussion located in Section 7.1 of the Alternatives Analysis (Appendix C). This document provides a line item breakdown of all measures taken, over a design period of two years, to avoid and minimize potential Project impact. Additionally, please refer to the DEIS, Section 2.3 which discusses the Project purpose, public need, and benefit in great detail.

Response 293.58: Information regarding aquatic resource impacts, including streams and wetlands, are included in the Final Wetland Impact Summary Tables located in Appendix B.

Response 294.14: There are no wetland impacts within the 50-foot turbine buffer as these would have been considered permanent impacts. There are 3.49 acres of temporary wetland impacts associated with the remaining turbine buffers (from 50 feet out). The NYSDEC regulates activities within wetlands and the 100-foot adjacent area.

### **ZONING AND LAND USE**

Response 2.1: Based on the Project layout and component specifications, no height or turbine setback distance waivers will be necessary from the Town of Ellenburg. The Applicant confirms that all turbines are sited at least 600 feet (1.5 times the tip height) from the NYPA Willis Plattsburgh Lines. Specifically, Turbines 67, 89-R, and 96-S are 704, 600, and 635 feet from the NYPA transmission line, respectively. WTG 70-R was removed from the Project layout to avoid the impacting the wetland resource documented in the immediate area.

Response 2.3: The Applicant confirms that the process required by the wind energy facility siting ordinances of Ellenburg and Clinton require the Applicant to provide the towns (and its representatives) with construction level drawings for issuance of building permits and construction initiation.

Response 251.1: Regarding the siting of the Project components, various measures have been taken to minimize impacts to neighboring residences and the natural environment. The proposed siting of all Project components is in accordance with the wind energy facility siting ordinances and zoning restrictions of the Towns of Clinton and Ellenburg. These measures are listed in the DEIS, Section 1.5 (Summary of Environmental Effects). As stated in the DEIS and the SDEIS, all proposed turbines will be sited at least 1,200 feet from adjacent residences.

The Applicant confirms that the Project does not include turbine locations within 2,500 feet of a school, church, hospital or nursing home, in accordance with the Town's Wind Energy Ordinances.

Response 257.1: Regarding the siting of the Project components, various measures have been taken to minimize impacts to neighboring residences and the natural environment. The



proposed siting of all Project components is in accordance with the wind energy facility siting ordinances of the Towns of Clinton and Ellenburg. These measures are listed in the DEIS, Section 1.5 (Summary of Environmental Effects).

Response 288.2: The Applicant confirms that the Project is in accordance with the setbacks contained in the town ordinances of Clinton and Ellenburg. The towns have hired an independent engineer to confirm the Project's compliance with town ordinances during the SEQRA process as well as prior to the issuance of building permits. Additionally, the towns have hired an independent engineering auditor to assure that construction turbine erection locations are properly located.

Response 291.2: Please see Response 288.1 under the subject "Noise".

Response 291.5: Setbacks are dictated by local town law and hence are outside of the jurisdiction of the Applicant.

#### **4.2 Response Summary Ordered by Source**

The table below is an alphabetical list by source (or author) of received comments throughout the SEQRA process for the Marble River Wind Farm. Corresponding comment numbers and primary subject matter is detailed below.

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
Ayers, Valerie	244.1	5/30/2006	Miscellaneous/General
Baker, Judy	180.1	5/24/06 Public Hearing Ellenburg	Decommissioning
Baker, Judy	261.1	Not listed	Decommissioning
Britton, Anne	170.1	5/25/06 Public Hearing Clinton	Miscellaneous/General
Britton, Anne	185.1	5/24/06 Public Hearing Ellenburg	Miscellaneous/General
Britton, Anne	185.2	5/24/06 Public Hearing Ellenburg	Miscellaneous/General
CRA	294.7	10/10/2007	Agriculture
CRA	294.8	10/10/2007	Agriculture
CRA	294.9	10/10/2007	Agriculture
CRA	294.1	10/10/2007	Agriculture
CRA	294.1	10/10/2007	Miscellaneous/General
CRA	294.2	10/10/2007	Miscellaneous/General
CRA	294.3	10/10/2007	Miscellaneous/General
CRA	294.6	10/10/2007	Miscellaneous/General
CRA	294.11	10/10/2007	Miscellaneous/General
CRA	294.12	10/10/2007	Miscellaneous/General
CRA	294.13	10/10/2007	Miscellaneous/General
CRA	294.15	10/10/2007	Miscellaneous/General
CRA	294.16	10/10/2007	Miscellaneous/General

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
CRA	294.17	10/10/2007	Miscellaneous/General
CRA	294.18	10/10/2007	Miscellaneous/General
CRA	294.19	10/10/2007	Miscellaneous/General
CRA	294.2	10/10/2007	Miscellaneous/General
CRA	294.21	10/10/2007	Miscellaneous/General
CRA	294.22	10/10/2007	Miscellaneous/General
CRA	294.23	10/10/2007	Miscellaneous/General
CRA	294.24	10/10/2007	Miscellaneous/General
CRA	294.25	10/10/2007	Miscellaneous/General
CRA	294.5	10/10/2007	Noise
Ellenburg, Town of, NY	9.1	Not listed	Agriculture
Filion, Amy	178.2	5/25/06 Public Hearing Clinton	Noise
Filion, Amy	178.1	5/25/06 Public Hearing Clinton	Recreation
Filion, Amy	178.3	5/25/06 Public Hearing Clinton	Socioeconomics and Property Values
Filion, Amy	188.1	5/24/06 Public Hearing Ellenburg	Visual Resources
Filion, Gilles and Amy	291.6	9/27/2007	Miscellaneous/General
Filion, Gilles and Amy	291.1	9/27/2007	Noise
Filion, Gilles and Amy	291.3	9/27/2007	Visual Resources
Filion, Gilles and Amy	291.4	9/27/2007	Visual Resources
Filion, Gilles and Amy	292.24b	9/30/2007	Visual Resources
Filion, Gilles and Amy	292.25	9/30/2007	Visual Resources
Filion, Gilles and Amy	294.4	10/10/2007	Visual Resources
Filion, Gilles and Amy	292.1	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.2	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.3	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.6	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.7	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.8	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.9	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.1	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.11	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.12	9/30/2007	Wetlands and Water Resources

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
Filion, Gilles and Amy	292.13	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	292.14	9/30/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.3	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.8	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.1	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.12	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.13	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.14	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.15	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.16	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.17	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.18	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.19	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.2	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.21	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.37	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.56	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	293.58	9/28/2007	Wetlands and Water Resources
Filion, Gilles and Amy	294.14	10/10/2007	Wetlands and Water Resources
Filion, Gilles and Amy	291.2	9/27/2007	Zoning and Land Use
Filion, Gilles and Amy	291.5	9/27/2007	Zoning and Land Use
Group of Concerned Citizens from Town of Ellenburg	257.1	5/17/2006	Zoning and Land Use
Garell, Martin, Prof of Physics	240.1	5/20/2006	Miscellaneous/General
Giacalone, Arthur	283.1	12/7/2005	Socioeconomics and Property Values

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
Kramer, Joseph	192.1	5/24/06 Public Hearing Ellenburg	Miscellaneous/General
LeClair, Toby and Cindy	288.3	9/28/2007	Biological Resources
LeClair, Toby and Cindy	288.1	9/28/2007	Noise
LeClair, Toby and Cindy	288.2	9/28/2007	Zoning and Land Use
LeClaire, Toby	177.3	5/25/06 Public Hearing Clinton	Decommissioning
LeClaire, Toby	177.1	5/25/06 Public Hearing Clinton	Noise
LeClaire, Toby	177.2	5/25/06 Public Hearing Clinton	Visual Resources
Miller, Dinah	239.1	5/25/2006	Miscellaneous/General
Miller, Dinah	290.1	9/28/2007	Noise
NYS DAM	1.1	6/2/2006	Agriculture
NYS DAM	1.2	6/2/2006	Agriculture
NYS DEC	292.15	9/30/2007	Biological Resources
NYS DEC	292.16	9/30/2007	Biological Resources
NYS DEC	292.17	9/30/2007	Biological Resources
NYS DEC	292.18	9/30/2007	Biological Resources
NYS DEC	292.19	9/30/2007	Biological Resources
NYS DEC	292.2	9/30/2007	Biological Resources
NYS DEC	292.21	9/30/2007	Biological Resources
NYS DEC	292.22	9/30/2007	Biological Resources
NYS DEC	292.23	9/30/2007	Biological Resources
NYS DEC	292.24	9/30/2007	Biological Resources
NYS DEC	292.26	9/30/2007	Cultural Resources
NYS DEC	292.4	9/30/2007	Layout and Design
NYS DEC	292.5	9/30/2007	Layout and Design
NYS DEC (Ellenburg)	3.4	6/2/2006	Biological Resources
NYS DEC (Ellenburg)	3.1	6/2/2006	Construction
NYS DEC (Ellenburg)	3.18	6/2/2006	Cultural Resources
NYS DEC (Ellenburg)	3.3	6/2/2006	Cumulative Impacts
NYS DEC (Ellenburg)	3.14	6/2/2006	Decommissioning
NYS DEC (Ellenburg)	3.1	6/2/2006	Layout and Design
NYS DEC (Ellenburg)	3.11	6/2/2006	Mitigation
NYS DEC (Ellenburg)	3.12	6/2/2006	Mitigation
NYS DEC (Ellenburg)	3.19	6/2/2006	Mitigation
NYS DEC (Ellenburg)	3.2	6/2/2006	Mitigation
NYS DEC (Ellenburg)	3.15	6/2/2006	Visual Resources
NYS DEC (Ellenburg)	3.16	6/2/2006	Visual Resources
NYS DEC (Ellenburg)	3.17	6/2/2006	Visual Resources
NYS DEC (Ellenburg)	3.5	6/2/2006	Wetlands and Water Resources
NYS DEC (Ellenburg)	3.6	6/2/2006	Wetlands and Water Resources

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
NYSDEC (Ellenburg)	3.7	6/2/2006	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.8	6/2/2006	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.9	6/2/2006	Wetlands and Water Resources
NYSDEC (Ellenburg)	3.13	6/2/2006	Wetlands and Water Resources
NYSDPS	287.6	9/28/2007	Biological Resources
NYSDPS	287.13	9/28/2007	Biological Resources
NYSDPS	287.7	9/28/2007	Construction
NYSDPS	2.6	6/5/2006	Cultural Resources
NYSDPS	287.1	9/28/2007	Cultural Resources
NYSDPS	2.15	6/5/2006	Cumulative Impacts
NYSDPS	2.4	6/5/2006	Layout and Design
NYSDPS	2.11	6/5/2006	Layout and Design
NYSDPS	2.12	6/5/2006	Layout and Design
NYSDPS	2.13	6/5/2006	Layout and Design
NYSDPS	2.14	6/5/2006	Layout and Design
NYSDPS	287.1	9/28/2007	Layout and Design
NYSDPS	287.2	9/28/2007	Layout and Design
NYSDPS	287.3	9/28/2007	Layout and Design
NYSDPS	287.4	9/28/2007	Layout and Design
NYSDPS	287.5	9/28/2007	Layout and Design
NYSDPS	287.11	9/28/2007	Layout and Design
NYSDPS	287.8	9/28/2007	Miscellaneous/General
NYSDPS	2.2	6/5/2006	Visual Resources
NYSDPS	2.5	6/5/2006	Visual Resources
NYSDPS	2.7	6/5/2006	Visual Resources
NYSDPS	2.8	6/5/2006	Visual Resources
NYSDPS	2.9	6/5/2006	Visual Resources
NYSDPS	2.1	6/5/2006	Visual Resources
NYSDPS	287.14	9/28/2007	Visual Resources
NYSDPS	287.15	9/28/2007	Visual Resources
NYSDPS	287.16	9/28/2007	Visual Resources
NYSDPS	287.9	9/28/2007	Wetlands and Water Resources
NYSDPS	287.12	9/28/2007	Wetlands and Water Resources
NYSDPS	2.1	6/5/2006	Zoning and Land Use
NYSDPS	2.3	6/5/2006	Zoning and Land Use
Oddie, Alfred	245.1	5/31/2006	Socioeconomics and Property Values
Scott, William F., Sup. of Schools	251.1	5/25/2006	Zoning and Land Use

**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
Selkirk, Kirby	167.3	5/25/06 Public Hearing Clinton	Agriculture
Silvester, Peter	193.6	9/28/2007	Biological Resources
Silvester, Peter	193.5	5/24/06 Public Hearing Ellenburg	Decommissioning
Silvester, Peter	193.1	5/24/06 Public Hearing Ellenburg	Socioeconomics and Property Values
Silvester, Peter	193.2	5/24/06 Public Hearing Ellenburg	Socioeconomics and Property Values
Silvester, Peter	193.3	5/24/06 Public Hearing Ellenburg	Socioeconomics and Property Values
Silvester, Peter	193.4	5/24/06 Public Hearing Ellenburg	Socioeconomics and Property Values
Soltysik, Bernie	171.2	5/25/06 Public Hearing Clinton	Decommissioning
Soltysik, Bernie	171.4	5/25/06 Public Hearing Clinton	Miscellaneous/General
Soltysik, Bernie	171.1	5/25/06 Public Hearing Clinton	Socioeconomics and Property Values
Sylvester, Anne	256.1	Not listed	Socioeconomics and Property Values
USFWS	293.6	9/28/2007	Agriculture
USFWS	293.2	9/28/2007	Biological Resources
USFWS	293.22	9/28/2007	Biological Resources
USFWS	293.23	9/28/2007	Biological Resources
USFWS	293.24	9/28/2007	Biological Resources
USFWS	293.25	9/28/2007	Biological Resources
USFWS	293.34	9/28/2007	Biological Resources
USFWS	293.26	9/28/2007	Biological Resources
USFWS	293.27	9/28/2007	Biological Resources
USFWS	293.28	9/28/2007	Biological Resources
USFWS	293.29	9/28/2007	Biological Resources
USFWS	293.3	9/28/2007	Biological Resources
USFWS	293.31	9/28/2007	Biological Resources
USFWS	293.32	9/28/2007	Biological Resources
USFWS	293.33	9/28/2007	Biological Resources
USFWS	293.36	9/28/2007	Biological Resources
USFWS	293.38	9/28/2007	Biological Resources
USFWS	293.39	9/28/2007	Biological Resources
USFWS	293.41	9/28/2007	Biological Resources
USFWS	293.42	9/28/2007	Biological Resources
USFWS	293.44	9/28/2007	Biological Resources
USFWS	293.45	9/28/2007	Biological Resources
USFWS	293.46	9/28/2007	Biological Resources
USFWS	293.49	9/28/2007	Biological Resources
USFWS	293.48	9/28/2007	Biological Resources



**Table 4.2 Marble River Response Summary Ordered by Source**

Source	Response Number	Date	Primary Subject
USFWS	293.53	9/28/2007	Biological Resources
USFWS	293.59	9/28/2007	Biological Resources
USFWS	293.6	9/28/2007	Biological Resources
USFWS	293.61	9/28/2007	Biological Resources
USFWS	293.5	9/28/2007	Climate and Air Quality
USFWS	293.51	9/28/2007	Climate and Air Quality
USFWS	293.52	9/28/2007	Climate and Air Quality
USFWS	293.7	9/28/2007	Construction
USFWS	293.9	9/28/2007	Construction
USFWS	293.47	9/28/2007	Construction
USFWS	293.1	9/28/2007	Layout and Design
USFWS	293.4	9/28/2007	Layout and Design
USFWS	293.5	9/28/2007	Layout and Design
USFWS	293.11	9/28/2007	Layout and Design
USFWS	293.35	9/28/2007	Layout and Design
USFWS	293.4	9/28/2007	Layout and Design
USFWS	293.54	9/28/2007	Layout and Design
USFWS	293.55	9/28/2007	Layout and Design
USFWS	293.57	9/28/2007	Miscellaneous/General

**4.3 Response Summary – No Response Necessary**

The table below lists comments received throughout the SEQRA process for the Marble River Wind Farm that do not require a response.

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
106.1	Agricultural Resource Center (WI): Survey	5/16/2001
127.1	Agricultural Resource Center (WI): Survey	5/16/2001
128.1	Agricultural Resource Center (WI): Survey	Not listed
128.2	Agricultural Resource Center (WI): Survey	Not listed
128.3	Agricultural Resource Center (WI): Survey	Not listed
128.4	Agricultural Resource Center (WI): Survey	Not listed
142.1	Agricultural Resource Center (WI): Survey	5/16/2001
24.1	Agricultural Resource Center, WI: Survey	5/16/2001
29.1	Agricultural Resource Center, WI: Survey	5/16/2001
30.1	Agricultural Resource Center, WI: Survey	5/16/2001
38.1	Agricultural Resource Center, WI: Survey	5/16/2001
15.1	Albuquerque Tribune: Article	4/28/2006
15.2	Albuquerque Tribune: Article	4/28/2006
15.3	Albuquerque Tribune: Article	4/28/2006
15.4	Albuquerque Tribune: Article	4/28/2006
82.1	Alves-Pereira, Mariana: Scientific Article (Portugal)	Not listed
82.2	Alves-Pereira, Mariana: Scientific Article (Portugal)	Not listed



**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
120.1	Archives & Collections Society (Canada): Report	6/24/1905
120.2	Archives & Collections Society (Canada): Report	6/24/1905
120.3	Archives & Collections Society (Canada): Report	6/24/1905
120.4	Archives & Collections Society (Canada): Report	6/24/1905
120.5	Archives & Collections Society (Canada): Report	6/24/1905
120.6	Archives & Collections Society (Canada): Report	6/24/1905
120.7	Archives & Collections Society (Canada): Report	6/24/1905
163.1	Arnett, Edward B., Bat Conservation International: Letter	6/5/2005
86.1	Article written in French	12/1/2004
86.2	Article written in French	12/1/2004
87.1	Article written in French	10/1/2004
87.2	Article written in French	10/1/2004
134.1	Askins, Suzan of Steuben County, NY: Letter to Calvin Luther Martin, Ph.D.	11/9/2005
84.1	Aviation, Space and Environmental Medicine, Vol. 70, No. 3, Section II: Article	3/1/1999
84.2	Aviation, Space and Environmental Medicine, Vol. 70, No. 3, Section II: Article	3/1/1999
118.1	aweo.org: Article	Not listed
253.1	Ayers, Valerie	5/30/2006
201.1	Baker, Cynthia	5/26/2006
242.1	Bennett, Edward, President of New York Interfaith Power and Light	5/30/2006
250.1	Bennett, Edward, President of New York Interfaith Power and Light	5/30/2006
121.1	Bittner, Bob (Illinois): E-mail	12/6/2005
121.2	Bittner, Bob (Illinois): E-mail	12/6/2005
121.3	Bittner, Bob (Illinois): E-mail	12/6/2005
121.4	Bittner, Bob (Illinois): E-mail	12/6/2005
121.5	Bittner, Bob (Illinois): E-mail	12/6/2005
113.1	Boone, Jon (Maryland): Testimony	7/25/2005
113.2	Boone, Jon (Maryland): Testimony	7/25/2005
113.3	Boone, Jon (Maryland): Testimony	7/25/2005
113.4	Boone, Jon (Maryland): Testimony	7/25/2005
113.5	Boone, Jon (Maryland): Testimony	7/25/2005
113.6	Boone, Jon (Maryland): Testimony	7/25/2005
114.1	Boone, Jon (Maryland): Testimony	Spring 2005
114.2	Boone, Jon (Maryland): Testimony	Spring 2005
114.3	Boone, Jon (Maryland): Testimony	Spring 2005
114.4	Boone, Jon (Maryland): Testimony	Spring 2005
114.5	Boone, Jon (Maryland): Testimony	Spring 2005
114.6	Boone, Jon (Maryland): Testimony	Spring 2005
114.7	Boone, Jon (Maryland): Testimony	Spring 2005
125.1	Boone, Jon, Caledonian Record: Letter to Editor	8/5/2005
125.2	Boone, Jon, Caledonian Record: Letter to Editor	8/5/2005

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
125.3	Boone, Jon, Caledonian Record: Letter to Editor	8/5/2005
139.1	Bounds, Russell, Realtor: Letter to Maryland Public Service Commission	11/8/2005
140.1	Bounds, Russell, Realtor: Testimony before the Maryland Public Service Commission	6/27/1905
143.1	Brandes, David, Lafayette College: Article	Not listed
182.1	Breault, Bruce	5/24/06 Public Hearing Ellenburg
21.1	Brierly, David (U.K.): Letter to Powergen UK	10/1/2004
170.2	Britton, Anne	5/25/06 Public Hearing Clinton
185.3	Britton, Anne	5/24/06 Public Hearing Ellenburg
236.1	Burl, Casandra	Not listed
166.1	Burl, Cassandra	5/25/06 Public Hearing Clinton
145.1	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
145.2	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
145.3	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
145.4	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
145.5	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
145.6	Burnett, H. Sterling Ph.D.: Testimony to the American Legislative Exchange Council Task Force on the Energy, the Environment, Natural Resources and Agriculture - Austin, TX	5/1/2004
37.1	Bush, Katherine: Email to Calvin Luther Martin	2/17/2006
191.1	Cantler, Patricia	5/24/06 Public Hearing Ellenburg
237.1	Cassani, Anthony C.	5/5/2006
12.1	Cassani, Anthony C., Ellenburg, NY: Letter	5/14/2006
147.1	Charleston Gazette (West Virginia): Article	Not listed
289.1	Churubusco Lodge	9/27/2007
44.1	Citizens of Ellenburg, NY	Not listed
53.1	Citizens of Ellenburg, NY	5/1/2006
101	Clarkson Integrator: Article	5/14/2002
7.1	Clinton County Farm Bureau	5/11/2006
99.1	CNN.com/U.S.: Online Article	4/20/2006

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
263.1	Cole, Cynthia	11/24/2004
108	Cooper, Linda (West Virginia), Personal Statement	3/3/2005
108	Cooper, Linda (West Virginia), Personal Statement	3/3/2005
108	Cooper, Linda (West Virginia), Personal Statement	3/3/2005
108	Cooper, Linda (West Virginia), Personal Statement	3/3/2005
32.1	Danley, Rev. Kathleen: E-mail to Calvin Luther Martin	2/2/2006
13.1	Democrat & Chronicle: Article	12/3/2005
13.2	Democrat & Chronicle: Article	12/3/2005
13.3	Democrat & Chronicle: Article	12/3/2005
13.4	Democrat & Chronicle: Article	12/3/2005
17.1	Dominion Post (New Zealand): Article	11/16/2005
198.1	Drake, Deborah	Not listed
161.1	Duchamp, Mark: Article	9/1/2004
231.1	Dupras, Elaine and I. Pat	5/19/2006
158.1	Ecological Monographs 60(2), 1990, pp. 213-238: Article	6/12/1905
159.1	Ecology 84(11), 2003, pp. 3024-3032: Article	6/25/1905
47.1	ECONorthwest: Report	11/1/2002
25.1	Editor (Caledonian Record, Vermont): Letter to Editor	9/24/2005
25.2	Editor (Caledonian Record, Vermont): Letter to Editor	9/24/2005
25.3	Editor (Caledonian Record, Vermont): Letter to Editor	9/24/2005
22.1	Editor (Press Republican, UK): Letter to Editor	11/1/2004
103	Editor, (U.K.) This is South Wales: Letter to the Editor	6/28/1905
103	Editor, (U.K.) This is South Wales: Letter to the Editor	6/28/1905
34.1	Editor, Scranton Times Tribune: Letter to the Editor	2/7/2004
34.2	Editor, Scranton Times Tribune: Letter to the Editor	2/7/2004
34.3	Editor, Scranton Times Tribune: Letter to the Editor	2/7/2004
34.4	Editor, Scranton Times Tribune: Letter to the Editor	2/7/2004
204.1	emediawire	5/25/2006
247.1	Environmental Advocates of New York	Not listed
93.1	Ervin, Karen (Pennsylvania): Letter	3/7/2006
93.2	Ervin, Karen (Pennsylvania): Letter	3/7/2006
93.3	Ervin, Karen (Pennsylvania): Letter	3/7/2006
93.4	Ervin, Karen (Pennsylvania): Letter	3/7/2006
93.5	Ervin, Karen (Pennsylvania): Letter	3/7/2006
262.1	Fenner Renewable Energy Education Ceneter (FREE)	Not listed
178.4	Filion, Amy	5/25/06 Public Hearing Clinton
165.1	Filion, Michael	5/25/06 Public Hearing Clinton
281.1	Foringer, Pamela	8/1/2004
14.1	Foringer, Pamela, Fenner, New York: Statement	6/26/2005
14.2	Foringer, Pamela, Fenner, New York: Statement	6/26/2005
14.3	Foringer, Pamela, Fenner, New York: Statement	6/26/2005
14.4	Foringer, Pamela, Fenner, New York: Statement	6/26/2005
14.5	Foringer, Pamela, Fenner, New York: Statement	6/26/2005

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
172.1	Fountain, Glen	5/25/06 Public Hearing Clinton
189.1	Fountain, Glen	5/24/06 Public Hearing Ellenburg
10.1	Fountain, Glenn & Faye, Residents of Plattsburgh, NY: Letter	5/15/2006
232.1	Fountain, Glenn and Faye	5/15/2006
18.1	Fox, Darrell: Story	9/25/2005
18.2	Fox, Darrell: Story	9/25/2005
18.3	Fox, Darrell: Story	9/25/2005
174.1	Glance, Dareth	5/25/06 Public Hearing Clinton
174.2	Glance, Dareth	5/25/06 Public Hearing Clinton
197.1	Glance, Dareth, Citizens Campaign for the Environment	5/25/2006
255.1	Glance, Dareth, Citizens Campaign for the Environment	6/5/2006
196.1	Grue, Dan	5/31/2006
169.1	Haas, Dan	5/25/06 Public Hearing Clinton
183.1	Haas, Dan	5/24/06 Public Hearing Ellenburg
176.1	Harriman, Richard	5/25/06 Public Hearing Clinton
132.1	Harvey, Neil, Western Morning News: Letter	1/17/2006
259.1	Hatfield, John R., NYSEG	10/6/2006
260.1	Hatfield, John R., NYSEG	12/16/2005
36.1	Hawke's Bay Today (New Zealand): Article	2/18/2006
36.2	Hawke's Bay Today (New Zealand): Article	2/18/2006
40.1	Healthlink.org: Online Article	2/14/2006
41.1	Healthlink.org: Online Article	5/24/2006
42.1	Healthlink.org: Online Article	5/24/2006
43.1	Healthlink.org: Online Article	5/24/2006
91.1	Heartland Institute: Article	10/1/2005
91.2	Heartland Institute: Article	10/1/2005
91.3	Heartland Institute: Article	10/1/2005
122.1	Herald Sun (Australia): Article	2/21/2004
122.2	Herald Sun (Australia): Article	2/21/2004
122.3	Herald Sun (Australia): Article	2/21/2004
133.1	Hexham Courant (U.K.): Article	9/9/2005
133.2	Hexham Courant (U.K.): Article	9/9/2005
133.3	Hexham Courant (U.K.): Article	9/9/2005
133.4	Hexham Courant (U.K.): Article	9/9/2005
203.1	Hoffmen, Vanessa, Cornell Daily Sun	3/17/2005
94.1	Hutzell, Rodger Jr. (Pennsylvania): Letter	2/13/2005
94.2	Hutzell, Rodger Jr. (Pennsylvania): Letter	2/13/2005
94.3	Hutzell, Rodger Jr. (Pennsylvania): Letter	2/13/2005
280.1	IEEE Proceedings, MacQueen; Terry Matilsky from Rutgers	6/5/2005

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
144.1	Inside Bay Area: Article	Not listed
278.1	Journal Article 11th Annual meeting	6/26/2005
265.1	Journal of Anxiety Disorders	6/23/1905
266.1	Journal of Anxiety Disorders	6/23/1905
80.1	Journal of the Acoustical Society of America: Article	Not listed
80.2	Journal of the Acoustical Society of America: Article	Not listed
168.1	Kanzler, Norbert	5/25/06 Public Hearing Clinton
187.1	Kanzler, Norbert	5/24/06 Public Hearing Ellenburg
11.1	Kangler, Norbert & Kathleen, Residents of Ellenburg, NY: Letter	5/15/2006
109	Kelly, Angela: E-mail	3/5/2007
254.1	Kramer, Joseph	6/4/2006
249.1	LaBarre Vaincourt, Dianne	5/30/2006
190.1	Labarron, Gerard	5/24/06 Public Hearing Ellenburg
211.1	Lake, Joanna, orig. published in Vt Free Press	3/30/2005
223.1	Lamare, Wendy and Larry Ross	5/25/2006
224.1	Lamb, Kenneth	Not listed
227.1	Lamb, Kenneth	Not listed
225.1	Lamb, Mary	Not listed
226.1	Lamb, Mary	Not listed
219.1	Larivee, Robert	Not listed
92.1	Larivee, Robert Ph.D.: Letter	6/27/1905
92.2	Larivee, Robert Ph.D.: Letter	6/27/1905
243.1	Lavin, Martin	6/2/2006
252.1	Lawrence, Daryl	6/2/2006
27.1	Lawton, Catharine of West Bend, WI: Letter	1/27/2004
27.2	Lawton, Catharine of West Bend, WI: Letter	1/27/2004
277.1	Leventhall for DEFRA	5/1/2003
141.1	LJK Wireless Communications Engineering: Report	2/24/2005
141.2	LJK Wireless Communications Engineering: Report	2/24/2005
175.1	Lyons, Mark	5/25/06 Public Hearing Clinton
175.2	Lyons, Mark	5/25/06 Public Hearing Clinton
175.3	Lyons, Mark	5/25/06 Public Hearing Clinton
194.1	Lyons, Mark	5/24/06 Public Hearing Ellenburg
194.2	Lyons, Mark	5/24/06 Public Hearing Ellenburg
194.3	Lyons, Mark	5/24/06 Public Hearing Ellenburg
194.4	Lyons, Mark	5/24/06 Public Hearing Ellenburg

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
194.5	Lyons, Mark	5/24/06 Public Hearing Ellenburg
195.1	Lyons, Mark	5/24/06 Public Hearing Ellenburg
282.1	Maier, Catherine S.	9/24/2005
33.1	Malone NY Telegram: Article	2/12/2005
33.2	Malone NY Telegram: Article	2/12/2005
33.3	Malone NY Telegram: Article	2/12/2005
33.4	Malone NY Telegram: Article	2/12/2005
65.1	Martin, Calvin Luther Ph.D.: Article	2/25/2006
65.2	Martin, Calvin Luther Ph.D.: Article	2/25/2006
89.1	Martin, Calvin Luther, Ph.D.	Not listed
89.2	Martin, Calvin Luther, Ph.D.	Not listed
88.1	Matilsky, Terry: Internet Article	Not listed
130.1	Maturen & Associates, Inc. (Michigan): Letter	9/4/2004
130.2	Maturen & Associates, Inc. (Michigan): Letter	9/4/2004
130.3	Maturen & Associates, Inc. (Michigan): Letter	9/4/2004
130.4	Maturen & Associates, Inc. (Michigan): Letter	9/4/2004
235.1	Miller, Gerald	5/23/2006
241.1	Miller, Paul, Asst. Director Madison County Planning Department	5/25/2006
68.1	Miskelly, Andrew, BCompSci: Report	1/1/2005
105	Monfils, Arlin (Wisconsin): Statement	2/1/2000
105	Monfils, Arlin (Wisconsin): Statement	2/1/2000
105	Monfils, Arlin (Wisconsin): Statement	2/1/2000
105	Monfils, Arlin (Wisconsin): Statement	2/1/2000
106	Monfils, Arlin (Wisconsin): Statement	2/1/2000
106	Monfils, Arlin (Wisconsin): Statement	2/1/2000
106	Monfils, Arlin (Wisconsin): Statement	2/1/2000
234.1	Moore, Dennis	Not listed
85.1	National Academy of Medicine (France)	3/29/2006
85.2	National Academy of Medicine (France)	3/29/2006
222.1	National Wind Watch	3/31/2006
222.2	National Wind Watch	4/11/2006
90.1	New Scientist: Article	5/3/2006
8.1	New York Farm Bureau	Not listed
31.1	Newsquest Media Group: Online Article	7/27/2005
39.1	NewWind Energy	Not listed
5.1	Noble & Marble River DEIS	Not listed
6.1	Noble & Marble River DEIS	5/24/2006
78.1	Noise & Health, 2001, 4:13, 33-49: Article	6/23/1905
78.2	Noise & Health, 2001, 4:13, 33-49: Article	6/23/1905
77.1	Noise & Health, 2003, 5:20, 35-46: Article	6/25/1905
77.2	Noise & Health, 2003, 5:20, 35-46: Article	6/25/1905
75.1	Noise & Health, 2004, 6:23 35-57: Article	6/26/1905
75.2	Noise & Health, 2004, 6:23 35-57: Article	6/26/1905

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
76.1	Noise & Health, 2004, 6:23 87-91: Article	6/26/1905
76.2	Noise & Health, 2004, 6:23 87-91: Article	6/26/1905
81.1	Noise & Health, 2004, 6:23, 3-20: Article	Not listed
81.2	Noise & Health, 2004, 6:23, 3-20: Article	Not listed
200.1	Norcross, Andrea	5/31/2006
199.1	Not Listed	Not listed
206.1	Not Listed	9/1/2005
207.1	Not Listed	9/1/2005
208.1	Not Listed	5/13/2005
213.1	Not Listed	4/26/2005
258.1	Not Listed	Not listed
276.1	Not Listed	5/23/2006
110	NYSDEC	2/2/2001
3.2	NYSDEC (Ellenburg)	6/2/2006
48.1	NYSEG	Not listed
45.1	NYSEG: Letter to Francis LaClair	10/6/2005
46.1	NYSEG: Letter to Francis LaClair	12/6/2005
184.1	O'Neil, Dan	5/24/06 Public Hearing Ellenburg
164.1	Onshore Wildlife Interactions with Wind Developments - Research Meeting V, Landsdown, VA (11/3-4/05): Proceedings	3/1/2005
228.1	Osakawicz, John	5/22/2006
35.1	Ouest France	10/23/2003
154.1	Pierpont, Nina M.D., Ph.D. and Calvin Luther Martin, Ph.D.: Report	Not listed
60.1	Pierpont, Nina M.D., Ph.D.: Article	Not listed
60.2	Pierpont, Nina M.D., Ph.D.: Article	Not listed
62.1	Pierpont, Nina M.D., Ph.D.: Letter	2/8/2006
62.2	Pierpont, Nina M.D., Ph.D.: Letter	2/8/2006
61.1	Pierpont, Nina M.D., Ph.D.: Letter to the Editor	Not listed
61.2	Pierpont, Nina M.D., Ph.D.: Letter to the Editor	Not listed
202.1	Pierpont, Nina PhD	5/31/2006
221.1	Pierpont, Nina PhD	3/1/2005
63.1	Pierpont, Nina, M.D., Ph.D.: C.V.	5/12/2006
230.1	Pollic, John	Not listed
148.1	Post-Gazette (Pittsburgh, PA): Article	9/27/2005
238.1	Poupore, Ross and Carol	Not listed
179.1	Poupore, William	5/25/06 Public Hearing Clinton
83.1	Proceedings of the Institute of Acoustics	Not listed
83.2	Proceedings of the Institute of Acoustics	Not listed
209.1	Raymo, Denise	5/25/2006
151.1	Recorder Publishing of Virginia, Inc.: Article	9/30/2005
124.1	ReMax	7/11/2005
54.1	Renewable Energy Policy Project: Report	5/1/2003



**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
115.1	REPP Report: Excerpt	5/1/2003
115.2	REPP Report: Excerpt	5/1/2003
104	Residents of Upper Lachlan, Australia: Statement	8/9/2005
104	Residents of Upper Lachlan, Australia: Statement	8/9/2005
104	Residents of Upper Lachlan, Australia: Statement	8/9/2005
215.1	Roberson, David	3/17/2005
153.1	Rosenbloom, Eric, kirbymtn.blogspot.com: Online Article	12/8/2005
119.1	Rosenbloom, Eric: Article	8/23/2005
119.2	Rosenbloom, Eric: Article	8/23/2005
119.3	Rosenbloom, Eric: Article	8/23/2005
119.4	Rosenbloom, Eric: Article	8/23/2005
119.5	Rosenbloom, Eric: Article	8/23/2005
119.6	Rosenbloom, Eric: Article	8/23/2005
119.7	Rosenbloom, Eric: Article	8/23/2005
173.1	Sacckeri, Jim	5/25/06 Public Hearing Clinton
162.1	Safewind: Wind Farms, Wildlife and the Environment: Online Article	Not listed
233.1	Sands, Greg	5/15/2006
214.1	Schleede, Glenn	4/14/2005
155.1	Scotsman.com (Scotland): Online Article	11/25/2005
205.1	Scripps Howard News Service	4/28/2006
181.1	Selkirk, Kerby	5/24/06 Public Hearing Ellenburg
167.1	Selkirk, Kirby	5/25/06 Public Hearing Clinton
167.2	Selkirk, Kirby	5/25/06 Public Hearing Clinton
167.4	Selkirk, Kirby	5/25/06 Public Hearing Clinton
218.1	Series of Article Excerpts	Not listed
279.1	Series of Noise/Health Articles Abstracts	1/16/2004
217.1	Series of UK Abstracts	Not listed
264.1	Servo, John, Advocates for Prattsburgh	11/23/2004
20.1	Shick, Chuck: Letter	11/28/2005
50.1	Sierra Club: Online Article	5/24/2006
210.1	Sliwinski, Sue	9/27/2005
123.1	smh.com.au: Online Article	4/30/2006
28.1	socme.org (UK): Online Article	6/6/2005
171.3	Soltysik, Bernie	5/25/06 Public Hearing Clinton
69.1	Soysal, Oguz A., Ph.D.: Presentation	12/14/2005
107	Stahl, Paula (West Virginia): Personal Statement	4/4/2004
107	Stahl, Paula (West Virginia): Personal Statement	4/4/2004
107	Stahl, Paula (West Virginia): Personal Statement	4/4/2004
107	Stahl, Paula (West Virginia): Personal Statement	4/4/2004

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
111.1	Stanger, Casella (U.K.): Report	Not listed
111.2	Stanger, Casella (U.K.): Report	Not listed
149.1	Statesman: Article	11/12/2005
220.1	stopillwind.org	5/25/2006
126.1	stuff.co.nz (New Zealand): Internet Article	Not listed
126.2	stuff.co.nz (New Zealand): Internet Article	Not listed
16.1	stuff.co.nz (New Zealand): Online Article	8/11/2003
67.1	Styles, Peter et al, Keep University, Scotland: Report	7/18/2005
160.1	The Auk 118(3): 589-609, 2001: Article	6/23/1905
131.1	The Australian (Australia): Article	1/9/2006
100	The Geological Society of America	3/1/2005
98.1	The Press Republican - Plattsburgh, NY: Archives	1999-2006
102	The Press Republican - Plattsburgh, NY: Article	6/28/1905
136.1	The Westmorland Gazette	1/9/2004
136.2	The Westmorland Gazette	1/9/2004
136.3	The Westmorland Gazette	1/9/2004
136.4	The Westmorland Gazette	1/9/2004
116.1	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.2	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.3	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.4	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.5	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.6	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
116.7	Tillinghast, Eleanor, Green Berkshires, Inc.: Report	5/14/2004
135.1	Times Online (U.K.): Article	1/10/2004
135.2	Times Online (U.K.): Article	1/10/2004
135.3	Times Online (U.K.): Article	1/10/2004
135.4	Times Online (U.K.): Article	1/10/2004
186.1	Tourville, Gerald	5/24/06 Public Hearing Ellenburg
195.1	Town of Altona	Not listed
57.1	Town of Ellenburg, NY: Index of documents	5/23&24/2006
57.3	Town of Ellenburg, NY: Index of documents	5/23&24/2006
57.4	Town of Ellenburg, NY: Index of documents	5/23&24/2006
57.5	Town of Ellenburg, NY: Index of documents	5/23&24/2006
57.6	Town of Ellenburg, NY: Index of documents	5/23&24/2006
57.7	Town of Ellenburg, NY: Index of documents	5/23&24/2006
117.1	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
117.2	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
117.3	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
117.4	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003

**Table 4.3 Marble River Response Summary – No Response Necessary**

Comment Number	Source	Date
117.5	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
117.6	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
117.7	Town of Lincoln (Wisconsin) Wind Turbine Moratorium Committee: Excerpts from the Final Report	12/4/2003
19.1	TVNZ (New Zealand): Online Article	7/24/2005
156.1	U.S. Department of the Interior, Fish & Wildlife Service: Letter to Highland New Eind Development, LLC	9/28/2005
157.1	U.S. Department of the Interior, Fish & Wildlife Service: Letter to Patrick McCarthy	5/13/2005
152.1	U.S. Government Accountability Office (GAO) to Congressional Requesters: Report	9/1/2005
150.1	U.S. Government Accountability Office (GAO): Report	9/1/2005
216.1	UK Article	Not listed
51.1	Union of Concerned Scientists: Online Article	5/24/2006
64.1	University of New South Wales (Australia): Online Article	1/25/2006
23.1	Unknown Author: Statement	Not listed
285.1	US Dept. of Interior Fish and Wildlife	9/28/2005
286	US Dept. of Interior Fish and Wildlife	5/13/2005
52.1	UWIG: Report	5/1/2006
70.1	van den Berg, G.P., Journal of Sound and Vibration: Article	9/22/2003
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## **6.0 ACRONYMS AND ABBREVIATIONS**

APA .....	Adirondack Park Agency
ARA .....	Avian Risk Assessment
BBA .....	Breeding Bird Atlas (New York State)
BBS .....	Breeding Bat Survey (North American)
BMP .....	Best Management Practice(s)
dBa.....	Decibels, A-weighted
DEIS .....	Draft Environmental Impact Statement
FAA .....	Federal Aviation Administration
FEIS .....	Final Environmental Impact Statement
IDA.....	Industrial Development Authority
kV .....	kilovolt
kW .....	kilowatt
m/s.....	Meters per Second
MW.....	Megawatt
NAAQS.....	National Ambient Air Quality Standards
NRCS .....	Natural Resources Conservation Service
NWI.....	National Wetlands Inventory
NYS .....	New York State
NYSDA&M .....	New York State Department of Agriculture & Markets
NYSDEC .....	New York State Department of Environmental Conservation
NYSDOT.....	New York State Department of Transportation
NYSERDA .....	New York State Energy Research and Development Authority
NYSDPS .....	New York State Department of Public Service
NYSOPRHP .....	New York State Office of Parks, Recreation and Historic Preservation
OS/OW .....	Oversize/Overweight
PILOT .....	Payment in Lieu of Taxes
QA/QC .....	Quality Assurance/Quality Control
SEQRA .....	State Environmental Quality Review Act
SHPO.....	State Historic Preservation Office
SPDES .....	State Pollutant Discharge Elimination System
SWPPP .....	Storm Water Pollution Prevention Plan
USACOE.....	United States Army Corps of Engineers
USDA.....	United States Department of Agriculture
USFWS.....	United States Fish & Wildlife Service
USGS .....	United States Geological Survey
VIA.....	Visual Impact Assessment
WECS.....	Wind Energy Conversion System