FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)

FOR THE

Jericho Rise Wind Farm
Towns of Chateaugay and Bellmont
Franklin County, New York

Co-Lead Agencies: Town of Chateaugay and Bellmont

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition/Denotation
APE	Area of Potential Effect
BBCS	Bat and Bird Conservation Strategy
BGEPA	Bald and Golden Eagle Protection Act
C&D	Construction and Demolition
CRIS	Cultural Resource Information System
CWA	Clean Water Act
dBA	A-Weighted Decibel
DEIS	Draft Environmental Impact Statement
DPS	Department of Public Service
DU	Ducks Unlimited
EAF	Environmental Assessment Form
EIS	Environmental Impact Statement
ENB	Environmental Notice Bulletin
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEIS	Final Environmental Impact Statement
GIS	Geographic Information Systems
IDA	Industrial Development Agency
ISCP	Invasive Species Control Plan
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
MSW	Municipal Solid Waste
MW	Megawatt
NLEB	Northern Long-eared Bat
NRHP	National Register of Historical Places
NTIA	National Telecommunications and Information Administration
NYCRR	New York Code of Rules and Regulations
NYISO	New York Independent System Operator
NYSDEC	New York State Department of Environmental Conservation
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Properties

Acronym/Abbreviation	Definition/Denotation
NYPA	New York Power Authority
NYS	New York State
NYSDOT	New York State Department of Transportation
NYSEG	New York State Electric and Gas
O&M	Operations and Maintenance
OPRHP	Office of Parks, Recreation, and Historic Preservation
PCM	Post-Construction Monitoring
PILOT	Payment in Lieu of Taxes
POI	Point of Interconnect
PSL	Public Service Law
ROW	Right-of-Way
SDEIS	Supplemental Draft Environmental Impact Statement
SEIS	Supplemental Environmental Impact Statement
SEQRA	State Environmental Quality Review Act
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control and Countermeasure
SPDES	State Pollutant Discharge Elimination System
SVIA	Supplemental Visual Impact Assessment
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VIA	Visual Impact Assessment
WEPA	Wind Energy Permit Application
WNS	White Nose Syndrome

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1.0 INTRODUCTION

This Final Environmental Impact Statement (FEIS) is prepared for the Jericho Rise Wind Farm (hereafter, "the Project") pursuant to the New York State Environmental Quality Review Act (SEQRA) and its implementing regulations, 6 NYCRR Part 617. This document is preceded by a Draft Environmental Impact Statement (DEIS) and a Supplemental Environmental Impact Statements (SEIS).

This FEIS builds upon the DEIS and SEIS, providing responses to substantive comments received on these documents, and addressing Project changes that occurred after the SEIS was accepted as complete, including changes in response to public and agency input. The DEIS is incorporated by reference into this FEIS, and remains in full effect except where specifically corrected or the Project has been changed. Likewise, the SEIS, which documents changes to the Project since the acceptance of the DEIS, is incorporated into this FEIS as well. This FEIS thus concludes a comprehensive analysis of the potential environmental impacts of the Project to identify reasonable alternatives or mitigation measures to reduce the effect of those impacts to the maximum extent practicable, while weighing the social and economic considerations of the Project. As indicated above, this FEIS does not, in general, reiterate information that remains accurate and unchanged from the DEIS or SEIS. Rather, this information is incorporated herein by reference.

1.1 SUMMARY OF SEQRA PROCESS

The SEQRA process for the Jericho Rise Wind Farm was initiated in June 2007 with the submission of a Wind Energy Permit Application (WEPA) to the Chateaugay and Bellmont Town Boards. The WEPA was prepared in accordance with the Wind Energy Facilities Laws of the Towns of Chateaugay (Local Law No. 7 of 2006) and Bellmont (Local Law No. 2 of 2006), and included a Full Environmental Assessment Form (EAF). The EAF was circulated to potential interested and involved agencies with a notification that the Towns intended to serve as Co-Lead Agencies for the SEQRA review. No objections were received and the Towns assumed the role of Co-Lead Agencies. As Co-Lead Agencies, the Town Boards issued a positive declaration requiring preparation of a DEIS in September 2007 and accepted a DEIS Scope in October 2007.

The Applicant prepared a DEIS, which was accepted as complete by the Co-Lead Agencies in February 2008. The public comment period for the DEIS (typically, 30 days) was extended through April 2008 and included two public hearings, one each in March and April 2008.

As a result of a proposed increase in turbine height, a reduction in the proposed number of turbines, other changes in the layout of Project components, and the time that had passed since preparation of the DEIS, the Applicant prepared a SEIS. The SEIS was submitted on November 10, 2015 and accepted as complete by the Co-Lead Agencies on December 7, 2015. A public hearing for the Project was held on December 30, 2015. The subsequent public comment period for the SEIS concluded on January 11, 2016.

The following represent the next steps in the SEQRA process for the Project, starting with issuance of this FEIS by the Co-Lead Agencies:

- FEIS accepted by Co-Lead Agencies;
- File notice of completion of FEIS;
- 10-day public consideration period;
- Co-Lead Agencies issue Findings Statement, completing the SEQRA process;
- Involved agencies issue Findings Statements.

1.2 SUMMARY OF THE DEIS

At the time the DEIS was prepared the Applicant was proposing to develop a wind-powered generating facility of up to 53 wind turbines with a maximum generating capacity of 87.45 megawatts (MW). In addition to the wind turbines, the DEIS Project layout included construction of up to four permanent meteorological towers, 15 miles of gravel access roads, 21 miles of buried and overhead electrical collection lines, an operation and maintenance building, and a point of interconnection (POI) substation facility.

Various plans and support studies were prepared and included in the DEIS, which provided detailed information on discrete topical areas in furtherance of the SEQRA evaluation. These studies included the following:

- Phase 1A Cultural Resource Investigation
- Transportation Study
- TV Broadcast Off-Air Reception, AM/FM Station Locations Analysis
- Licensed Microwave Search and Worst Case Fresnel Zone
- Avian and Bat Studies
- Visual Impact Assessment
- Shadow Flicker Impact Analysis

- Environmental Sound Survey and Noise Impact Assessment
- Wetland Inventory
- Property Value Impact Assessment

In addition to providing a Project description (Section 1.0) and summary of the purpose, need, and benefit of the proposed Project (Section 1.4), the DEIS also presented a summary of the required approvals and regulatory process (Section 1.10), a discussion of the environmental setting, potential environmental impacts and proposed mitigation measures (Section 2.0), unavoidable adverse impacts (Section 3.0), Project alternatives (Section 4.0), irreversible and irretrievable commitment of resources (Section 5.0), growth inducing impacts (Section 6.0), cumulative impacts (Section 7.0), and Project effects on the use and conservation of energy resources (Section 8.0). See the DEIS for a full discussion of these topics. A summary of the potential impacts and mitigation presented in the DEIS is outlined below.

1.2.1 Summary of the Potential Impacts

In accordance with requirements of the SEQRA process, potential impacts arising from the proposed action were identified early in the application process and were evaluated in the DEIS with respect to an array of environmental and cultural resources. The potential impacts identified in the DEIS are summarized in the Table 1 below:

Table 1. Summary of Potential Environmental Impacts Reported in the DEIS

Environmental Factor	Potential Impacts
Topography, Geology, and Soils	• Soil erosion • Soil compaction • Loss of agricultural land
Surface and Groundwater Resources	• Stream crossings • Siltation/sedimentation • Temporary disturbance • Wetland filling • Permanent stream crossings
Biological Resources	• Vegetation clearing • Incidental wildlife injury/mortality • Loss or alteration of habitat
Land Use and Zoning	• Adverse and beneficial impacts on farming • Changes in community character/land use

Environmental Factor	Potential Impacts
Socioeconomic	• Host community payment / PILOT • Revenue to participating landowners • Expenditures on goods and services • Tourism • Short and long-term employment
Transportation	• Road wear • Traffic congestion/delays • Road system improvements/upgrades
Cultural Resources	• Visual impacts on architectural resources • Disturbance of historic archaeological resources
Visual Resources	• Visual change to the landscape • Visual impact on sensitive sites/viewers • Shadow-flicker impact on adjacent residents
Community Services, Public Utilities, and Infrastructure	• Demands on police/emergency services • Telecommunication interference • Utility distribution lines and poles • Bulk power system upgrade • New source of clean renewable energy
Communications	• Interference with public, private or government communication facilities
Public Safety	• Stray voltage • Tower collapse/blade failure • Ice throw • Lightning strike • Fire
Climate and Air Quality	• Construction vehicle emissions • Dust during construction • Reduced air pollutants/greenhouse gases
Noise	• Construction noise impacts on neighboring/adjacent residents • Operational noise impacts on neighboring/adjacent residents

The Executive Summary of the DEIS summarized the anticipated Project impacts in the following way:

> *"The Project is expected to result in positive, long-term socioeconomic impacts within the Project Area and across the state, and to provide benefits to the region's air quality. The Project will result in minor, generally short-term impacts to soils, vegetation, wetlands, wildlife habitat, and transportation facilities as a result of Project construction. The Project will have long-term effects on community character, avian/bat resources, ambient noise levels, and some historic and visual resources during operation. However, with the inclusion of proper mitigation measures, and a*

Complaint Resolution Procedure (Appendix N), operational impacts other than the Project's visibility will be limited and minor."

1.2.2 Summary of Potential Mitigation

The DEIS proposed various measures that will be taken to avoid, minimize and/or mitigate potential environmental impacts. General mitigation measures will include adhering to requirements of various local, state, and federal ordinances and regulations, and entering into development agreements with adjacent landowners. The Applicant will also employ an environmental monitor to assure compliance with permit requirements and environmental protection commitments during construction and operation of the Project. The proposed Project will result in significant environmental and economic benefits to the area. These benefits also serve to mitigate unavoidable adverse impacts associated with Project construction and operation. As described in the DEIS, specific measures designed to mitigate or avoid adverse potential environmental impacts during Project construction or operations include the following:

- Siting the Project away from population centers and areas of residential development.
- Siting Project components outside of areas of mature forestland to the extent practicable.
- Locating access roads and turbines along field edges where practical and in field corners to avoid or minimize disturbance of agricultural land.
- Keeping turbines a minimum of 1,000 feet from residences in Bellmont and 1,320 feet from residences in Chateaugay that do not directly receive Project benefits, to minimize noise and visual impacts.
- Utilizing multiple-megawatt scale turbines to reduce the length of interconnect and access roads per megawatt of capacity.
- Burying electrical interconnection lines between turbines except where unavoidable due to sensitive environmental/cultural resources or construction constraints, in order to minimize agricultural impacts.
- Using existing roads for turbine access whenever possible to minimize disturbance to agricultural land, wildlife habitat, wetlands, and streams.
- Utilizing construction techniques that minimize disturbance to vegetation, streams, and wetlands.
- Siting the interconnection substation facilities in an area screened by existing mature vegetation.
- Painting the turbines with a matte non-specular finish.
- Developing and implementing a sedimentation and erosion control plan.
- Proposing a compensatory stream/wetland mitigation program.
- Siting select turbines to avoid or minimize wetland, wildlife, or visual impacts.
- Performing post-construction monitoring to improve understanding of possible avian impacts.

- Siting turbines to avoid interference with microwave and AM/FM communication systems.
- Implementing agricultural protection measures to avoid, minimize, or mitigate impacts on agricultural land and farm operations.
- Developing a traffic and dust management plan during construction.
- Upgrading public roads utilized during construction and removing temporary road improvements upon completion of construction activities unless otherwise requested by Towns.
- Finalizing a component delivery plan that minimizes impacts on residential areas.
- Developing and implementing a historic resource protection plan in concert with the New York State Historic Preservation Office (SHPO).
- Developing and implementing a Complaint Resolution Procedure.

1.3 SUMMARY OF THE SEIS

The SEIS was prepared to build upon the information and analysis in the 2008 DEIS that was previously prepared for the Project. The SEIS addressed all changes to the proposed action that have occurred subsequent to the DEIS, and includes additional studies and analyses. In general, the SEIS did not reiterate information from the previous DEIS that remained accurate and unchanged. The SEIS did not include a comprehensive response to public/agency comments received on the DEIS. However, whenever possible, the SEIS addressed substantive issues that were raised in these comments (in those instances where the comments are applicable to the currently proposed Project layout).

New data collected since the submittal of the DEIS, and which were presented in the SEIS include, but were not limited to, the following:

- Comprehensive field-based wetland delineation and water resources evaluation, conducted in coordination with the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Army Corps of Engineers (USACE);
- Comprehensive survey for rare plants with the potential to occur within the Project Site;
- Subsurface archaeological resource investigations, conducted in accordance with field study guidelines for wind energy facilities that were developed by the New York SHPO (NYSHPO, 2006);
- A review of historic architectural resources within a 5-mile radius of the Project Site that are either listed on, or are potentially eligible for listing on, the National Register of Historic Places (NRHP), conducted in accordance with guidelines developed by the New York SHPO (NYSHPO, 2006);

- Updated and expanded bird and bat studies, including a breeding bird survey conducted in accordance with NYSDEC study guidelines (NYSDEC, 2009) and acoustic and mist-net bat surveys conducted in accordance with U.S. Fish and Wildlife Service (USFWS) 2015 Indiana Bat Summer Survey Guidance (USFWS, 2015);
- An updated assessment of avoided air emissions from the Project; and
- An updated economic and fiscal impact study reflecting the current Project.

In addition, the Applicant updated the following impact assessment studies, which were originally conducted and reported on in the Project DEIS. These revised investigations evaluate the revised Project facility layout presented in the SEIS:

- TV broadcast reception impacts;
- Licensed microwave beam paths and worst-case Fresnel zone;
- Updated information regarding potential avian and bat impacts, including a review of mortality impacts at existing wind farms in the state and region;
- Visual impact assessment, with new photo simulations from the viewpoints evaluated in the DEIS;
- Shadow flicker impact analysis;
- Environmental sound survey and noise impact assessment;
- Land use impact assessment;
- Impacts to geology and soils, including farmlands of statewide significance and prime farmland soils; and
- Additional information regarding potential property value impacts.

1.3.1 SEIS Project Description

The Project layout described in the SEIS includes up to 37 wind turbines, each with a nameplate capacity of 2.1 megawatts (MW), for a total anticipated nameplate generating capacity of 77.7 MW. The Project has submitted an interconnection request and is currently proceeding through the Class Year 2015 Study with the New York Independent System Operator (NYISO) for 77.7 MW. To allow for flexibility on final site selection, the SEIS evaluated six alternate turbine sites, for a total of up to 43 sites plus associated infrastructure.

The Applicant plans to utilize the Gamesa G114-2.1 wind turbine or equivalent model. Consequently, the assessment of potential environmental impacts throughout the SEIS assumed that the Project will use Gamesa G114-2.1 wind turbines, which have a “hub height” (height from foundation to the rotor hub) of approximately 93 meters (305 feet) and a rotor diameter of 114 meters (374 feet), resulting in a total maximum height of 150 meters (492 feet). In addition to

the wind turbines, the proposed SEIS Project layout includes construction and operation of one permanent meteorological (met) tower, 10.3 miles of gravel access roads, 17.2 miles of buried and overhead collection line, a collection system substation, and a POI switchyard.

The SEIS Project Site is very similar to the Project Site previously identified in the original WEPA and in the DEIS. The SEIS Project Site includes approximately 5,895 acres of leased private lands that are roughly bound by State Route 11 to the north, the Chateaugay River to the east, Brainardsville Road to the south, and the Burke/Chateaugay town boundary to the west. There is significant overlap between the areas studied/identified in the DEIS and those evaluated in the SEIS. However, there are some differences between the SEIS Project layout and the DEIS layout. Generally, the changes in the Project since the DEIS relate to the removal of proposed turbines east of the Chateaugay River. Relative to the DEIS Project layout, the SEIS Project layout minimizes potential environmental impacts by reducing the overall scale of the Project in the following ways:

- The number of proposed turbines has been reduced from 53 to 37. Notably, proposed wind turbines located east of the Chateaugay River have been eliminated from the Project layout. Otherwise, the proposed turbines in the SEIS Project layout are for the most part located in proximity to turbine locations that were previously evaluated in the DEIS.
- The total distance of proposed access roads has been reduced from 15 miles (DEIS), to 10.3 miles (SEIS).
- The total areas of temporary and permanent soil disturbance resulting from construction of the SEIS Project layout total approximately 281 acres and 50 acres, respectively. This is reduced from 384 and 91 acres, respectively, in the DEIS Project layout.
- An on-site O&M facility is no longer proposed for the Project. Instead, the Applicant plans to utilize the existing O&M facility at the Marble River Wind Farm.

Differences between the DEIS and SEIS layouts are summarized in Table 2. Layout changes have been made primarily to accommodate the larger Gamesa G114 2.1 MW wind turbines, but also in response to study results and feedback from landowners and agencies designed to minimize environmental and land use impacts.

Table 2. Comparison of DEIS and SEIS Project Layouts and Impacts

Project Component	DEIS Project Layout	SEIS Project Layout
Wind Turbine Model	Vestas V-82 1.65 MW Hub Height: 80 meters (262 feet) Rotor Diameter: 82 meters (269 feet) Total Height: 121 meters (397 feet)	Gamesa G114-2.1 2.1 MW Hub Height: 93 meters (305 feet) Rotor Diameter: 114 meters (374 feet) Total Height: 150 meters (492 feet)
Number of Wind Turbines	53	37 (+6 alternates = 43)
Number of Met Towers	4	1
Length of Access Roads	15 miles	10.3 miles (+2 miles for alternates)
Length of Collection Lines	21 miles	17.2 miles (+3.7 miles for alternates)
O&M Facility	5,000-8,000 square foot building 5 acres of disturbance	None proposed
Laydown Yard	10 acres	10 acres
Collection Substation/POI Switchyard	4 acres each	1.25 acres
Project Site	5,040 acres 92 parcels	5,895 acres 106 parcels
Temporary Soil Disturbance	384 acres	281 acres
Permanent Soil Disturbance	91 acres	50 acres

As indicated in Table 2, the Applicant is proposing the use of a taller wind turbine with a larger rotor diameter (relative to what was considered in the DEIS) to maximize energy production based on the site-specific wind resource analyses. Fewer turbines are proposed in the SEIS layout as a result of the increased nameplate capacities of the larger wind turbine. Taller turbines can create the potential for impacts due to setback issues, the potential for increased visibility, and higher rotor swept zones. However, when compared to a larger number of shorter turbines, the overall benefits associated with the energy production at the taller height and the net reduction of impacts due to fewer turbines and associated infrastructure outweigh the relatively minor differences in potential adverse environmental impacts.

2.0 REVISIONS TO THE SEIS

One of the mandates of SEQRA is to prepare an Environmental Impact Statement (EIS) as early as possible in the review process. As a result, it is common for projects to change after an EIS is submitted, particularly in response to comments on the EIS. This FEIS builds upon the SEIS, providing responses to comments and, in this Section, addressing Project changes that have occurred since the SEIS was accepted as complete and released for public comment.

2.1 CHANGES TO THE PROJECT LAYOUT AND SCHEDULE

Subsequent to the preparation of the SEIS, development of the Project continued to advance. In order to provide flexibility for engineering and construction purposes, address feedback from participating landowners, and further reduce the potential for environmental impacts, the following modifications to the Project have been made (see Figures 1-16 of this FEIS, which correspond to Figures 1-16 of the SEIS and have been updated to reflect the final Project layout).

- *Alternate Wind Turbine Locations No Longer Proposed*: The Project layout presented in the SEIS included 37 proposed turbine locations as well as six alternate turbine locations. The 37 proposed turbines locations have been selected and all of the alternate turbine sites, as well as collection lines and access roads associated with these turbines, are no longer proposed (see Figure 3).
- *Minor Project Layout Shifts*: In addition to the removal of the six alternate turbines, some minor changes have been made to the Project layout since preparation of the SEIS. Several access roads and collection line routes have shifted slightly in order to reduce wetland impacts, avoid identified archaeological resources, reduce impact to agricultural land, accommodate landowner preferences, and align with shifted turbines. The final layout has 10.6 miles of access roads and 17.9 miles of collection lines. In addition, 11 turbines have been shifted less than 250 feet in order to ensure compliance with local setback laws (See Figure 21) and accommodate landowner preference. A comparison of the SEIS layout and the FEIS layout is provided in Figure 3. Turbine shifts are summarized below:
    - Turbine 1 has shifted approximately 162 feet southwest.
    - Turbine 3 has shifted approximately 3 feet southeast.
    - Turbine 9 has shifted approximately 87 feet east.
    - Turbine 13 has shifted approximately 30 feet north.
    - Turbine 18 has shifted approximately 1 foot north.

- Turbine 20 has shifted approximately 102 feet north-northeast.
- Turbine 21 has shifted approximately 249 feet east-southeast.
- Turbine 27 has shifted approximately 75 feet east.
- Turbine 28 has shifted approximately 37 feet north-northwest.
- Turbine 29 has shifted approximately 23 feet southwest.
- Turbine 37 has shifted approximately 242 feet northeast.

- *Additional Project Parcels*: There were 106 parcels totaling approximately 5,895 acres in the SEIS layout. Due to changes in the Project layout, additional parcels have been leased by the Applicant for hosting Project facilities or have established setback agreements. Likewise, some parcels originally included as participating are no longer hosting Project facilities or no longer require setback agreements. The result of these changes is a Project Site that includes 121 parcels consisting of approximately 6,190 acres (see Figure 1).

A revised schedule reflecting anticipated dates of permit issuance and construction is provided below.

Table 3. Revised Construction Schedule

Task	Anticipated Date	Timing Restrictions
Pre-Construction Permits and Notifications		
FEIS Submission to Co-Lead Agencies	02/12/16	-
Determination of FEIS Completeness	02/19/16	-
Road Use Agreements Approved County	02/08/16	-
Ten Day Period of Consideration of FEIS Initiates	02/20/16	10-Day No Action Period Required by SEQRA
Distribution of FEIS to Involved Agencies	02/23/16	-
Payment In Lieu of Taxes Agreement Finalized	03/02/16	-
Co-Lead Agencies Issue SEQRA Findings Statement	03/02/16	-
Towns Issue Wind Energy Permit and Approve Waivers	03/02/16	-
Host Community Agreement Finalized	03/02/16	-
Towns Issue Building Permits	03/03/16	-
Community Notice of Start of Construction and Publication of Complaint Resolution 1-800 number	03/03/16	-
Issuance of SPDES Permit	03/03/16	
Nationwide Permit Authorization Issued by Corps of Engineers	04/12/16[1]	-

Task	Anticipated Date	Timing Restrictions
Construction		
Estimated Mobilization Date	02/29/16	-
Pre-Construction Survey/Stakeout	02/29/16	
Environmental and Safety Training	03/01/16	-
Tree Clearing Operations	03/03/16	Tree clearing conducted prior to May 1[2]
Road Construction	6/1/2016	-
Substation and Switchyard Construction	6/1/2016	-
Electrical Collection System Construction	6/1/2016	-
Foundation Construction	6/25/2016	-
Wind Turbine Assembly and Erection	8/22/2016	-
Switchyard and Substation Energization and Commissioning	10/5/2016	-
Energization and Commissioning of Turbines	10/18/2016	-
Final Grading	10/18/2016	-
Restoration Activities	10/18/2016	-
Projected Substantial Completion Date	11/18/2016	-

[1]Assuming permit issuance is 45 days from USACE deeming the Joint Permit Application complete.
[2]To avoid impact to federally-listed threatened northern long-eared bat, the Applicant intends to complete tree clearing by April 30. The Final Rule for northern long-eared bat under Section 4(d) of the Endangered Species Act, which came out on January 14, 2016, provides flexibility in the tree clearing schedule (USFWS, 2016). Discussion with USFWS and NYSDEC regarding northern long-eared bat is ongoing, and may result in a tree clearing period that initiates after, or extends beyond, March 31.

2.2 ADDITIONAL ANALYSIS OF ENVIRONMENTAL IMPACTS

As described in Section 2.1 of this FEIS, since the preparation of the SEIS, there have been minor revisions to the Project layout, and the alternate turbine locations have been eliminated from the Project. This section summarizes changes to environmental impacts as a result of these minor Project layout changes.

Many of the impacts in the SEIS were reported separately for the 37 proposed turbine locations and the six alternate locations, including soils, wetlands, and ecological communities impacts (see Sections 2.2 and 2.3 of the SEIS). These impacts have changed very slightly due to the minor layout shifts, and differences are summarized in the following sections. In addition, several of the impact analyses prepared for the SEIS included both proposed and alternate turbine locations. These analyses were re-performed using only the 37 final turbine locations for this FEIS. These analyses

include visual impact, shadow flicker, and noise impact assessment. In all cases, total impacts were unaffected or slightly reduced as a result of eliminating the six alternate turbine sites from the Project layout. Each of new analyses is described below.

2.2.1 Wetland Impacts

Wetland and stream impacts described in Section 2.2 of the SEIS were calculated from impact assumptions applied across the Project layout. Concurrent with the preparation of the SEIS, Project engineering has advanced, including development of clearing and grading plans for access roads and other components. The more refined design information provided by the Project engineering replaces and supersedes the impact assumptions presented in the SEIS. A Joint Application for Permit to impact wetlands on-site was submitted to the USACE and NYSDEC on December 12, 2015, which included wetland impact drawings with acreages and types of impact for all wetland and stream impacts anticipated for the Project (see Appendix A). Wetland impacts for this Project have been reduced by reducing the proposed area of disturbance where Project components intersect with wetlands and streams, and by plans to install collection lines underneath many of the wetlands and streams crossings by directional drilling, thereby causing no impact at these locations.

Temporary wetland impacts have been reduced from approximately 1.64 acres estimated in the SEIS layout to 0.95 acre for the FEIS layout. Permanent loss of wetlands as a result of wetland fill has been reduced from 0.13 acre in the SEIS to 0.12 acre in the FEIS. Forested wetland conversion has been reduced from approximately 0.88 acre for the SEIS layout to 0.27 acre for the FEIS layout. No NYSDEC protected wetlands will be impacted as a result Project construction or operation. Table 4 provides a comparison of total wetland impacts in the SEIS and the FEIS.

Table 4. Changes in Wetland Impacts from the SEIS to the FEIS

SEIS			FEIS		
Temporary Disturbance (acres)	Permanent Loss (acres)	Forested Wetland Conversion (acres)	Temporary Disturbance (acres)	Permanent Loss (acres)	Forested Wetland Conversion (acres)
1.64	0.13	0.88	0.95	0.12	0.27

Total linear feet of stream impact was not reported in the SEIS, however, engineering has now quantified stream impacts at a site-specific level based on construction plans. Approximately 209 linear feet of streams will be temporarily impacted by installation of buried collection lines and access road construction. Approximately 63 feet will be permanently impacted by access road grading and filling and culvert installation (see Appendix A). No NYSDEC protected streams are anticipated to be impacted by Project construction or operation.

2.2.2 Vegetation and Soil Disturbance

Impacts to soils and vegetation were described in Sections 2.1 and 2.3, respectively, of the SEIS. Minor layout shifts of turbine locations and access roads from the SEIS layout to the FEIS layout have resulted in very slightly different impacts to these natural resources. In all except one case, turbine shifts have occurred within the same natural community/ecological type. Turbines 1, 3, 13, 20, 21, 27, 28, and 29 were shifted within the agricultural fields in which they were originally sited, Turbine 18 was shifted within the same forest, and Turbine 37 was shifted within the same patch of successional scrub/shrub. Since publication of the SEIS, the parcel of land containing Turbine 9 has been cleared by the landowner. Therefore, Turbine 9 is now located in successional shrubland, while previously it was located in forest. These shifts, therefore, result in very little change in impacts from the SEIS to the FEIS. Impacts to soils and vegetation are summarized below in Tables 5 and 6.

Table 5. Changes in Impacts to Soils from the SEIS to the FEIS

SEIS		FEIS	
Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)
280.8	49.5	291.2	49.2

Table 6. Changes in Impacts to Vegetation from the SEIS to the FEIS

Land Use Type	SEIS		FEIS	
	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)
Active Agriculture	222.4	27.7	234.3	28.9
Disturbed/Developed	3.2	0.7	3.3	0.4
Forested	170.8	17.5	163.6	16.3
Successional Shrubland/Old Field	27.0	3.5	37.2	3.5
Open Water	0.2	0	0.2	0
Total	423.6	49.4	438.6	49.2

The differences between impacts from the SEIS to the FEIS layouts are not substantial. Temporary impacts to soils with the FEIS layout are about 291.2 acres, up about 4% from the SEIS. Permanent impacts to soils are about 1% less with the FEIS layout, down to 49.2 acres from 49.5 acres in the SEIS. Temporary vegetation impacts are about 3% higher for the FEIS layout, with approximately 438.6 acres of temporary disturbance. Permanent impacts to vegetation are about 1% less for the FEIS layout, totaling about 49.2 acres.

Comments from several agencies indicated that all clearing impacts to forests should be considered permanent. Forest clearing impacts can be characterized as one of three types: permanent impacts, where forests would be replaced with built facilities (roads, turbines, etc.), permanent conversion, where forests would be cleared and maintained as successional communities for the life of the Project (areas under the turbines or beneath overhead collection lines), and temporary impacts where forest would be allowed to regrow following construction (e.g. along buried collection line routes and along the periphery of access roads and turbine sites). In the latter areas, the Applicant will only remove stumps where necessary to install underground components, will not use herbicides to prevent sprouting, and will not remove trees as part of routine vegetation management during Project operation. Ecological succession will restore the forested condition of these areas over time. Therefore, while forest clearing may be a long term temporary impact, it is not permanent. It is worth noting that all of the forests within the Project site are second-growth in nature and have been cut and allowed to regrow in relatively recent history. Therefore, to clarify, the Project will result in temporary impacts to about 96.7 acres of forest, permanent conversion of 67.0 acres of forest to successional communities, and permanent loss of about 16.3 acres of forest.

Forest Fragmentation

Further analysis of forest fragmentation impacts was prepared in response to comments from the NYSDEC and the New York State Department of Public Service (DPS). SEIS Section 2.3.2.1 notes that some level of forest fragmentation will occur as a result of Project construction. However, most forests within the Project site are already highly fragmented, generally consisting of relatively small successional woodlots and managed timber stands. Geospatial analysis shows that most of the forest patches that will be disturbed by Project construction are generally not large enough to provide the interior forest habitat conditions that could be subject to fragmentation impacts. In order to quantify the effect of fragmentation, those forested areas that were 1,000 feet or greater distance from the forest edge were identified using geographic information system (GIS) software. The forest edge was defined as places where successional areas, public roads, agricultural fields, or disturbed/developed areas were located adjacent to forests. Two thousand feet is the distance identified in comments by NYSDEC as the distance to which some edge effects may penetrate into a forest (see Comment S-34 in Section 4 of this FEIS), so using 1,000 feet from the forest boundary as the threshold beyond which the forest is considered interior represents a conservative approach.

Only five patches of forest greater than 1,000 feet from a forest edge were identified within the Project site (Figure 19), totaling approximately 127 acres. The FEIS Project site contains approximately 3,460 acres of forest, so only about 3.6% of the forests on the Project site are interior forests, as defined by those areas greater than 1000 feet from a forest edge. One of these areas, located approximately 1,500 feet west of Turbine 15 south of Mary Carey Road, is a patch of forest approximately 15 feet by 20 feet, totaling less than 0.005 acre. The second largest patch is a 3.7 acre area located between Turbines 18 and 19. Clearing for installation of collection line is proposed in this area. However,

it is a managed timber stand that currently experiences ongoing disturbance from logging, and therefore does not provide high-quality interior forest habitat. A third 18.8 acre patch located in the southwest portion of the Project site north of County Route 24 will be completely avoided. Five of the six alternate turbine sites evaluated in the SEIS were located in this area, and impacts to the interior forest here have been avoided by eliminating the alternate turbines. The largest interior forest patch is located directly south of Turbine 25, off of Town Line Road, and totals 93.7 acres. Although no clearing is proposed within this forest patch, approximately 20.3 acres may experience some adverse fragmentation impacts due to construction occurring within 1,000 feet of its borders. The final patch, a 10.7 acre area located directly west of Turbine 16 off of Jericho Road, will also experience fragmentation impacts due to nearby Project construction.

These findings are consistent with the statement in Section 2.3.2.1 of the SEIS that some level of habitat loss and fragmentation will occur as a result of Project construction. However, the great majority of the forests within the Project site (96.4%) are already fragmented, and additional clearing associated with Project construction will have limited adverse impacts due to habitat fragmentation and edge effects.

2.2.3 Visual Impact Assessment

The viewshed analysis provided in Section 2.5.2.2.1 of the SEIS evaluated a 43-turbine Project that included both proposed and alternate turbine locations. In order to evaluate the impacts of the 37-turbine FEIS layout, and to account for minor shifts at five turbine locations, the viewshed analysis was re-performed using the FEIS turbine layout. A new study area was established, which included all land within 7.5 miles of FEIS turbine locations within the United States (the "study area"). While the SEIS study area encompassed 266.8 square miles, the FEIS study area was slightly smaller, at 257.2 square miles. The assumptions and parameters used in viewshed modeling were the same for the FEIS and SEIS analyses. Results are provided in Table 7 below, as well as Figure 11 of this FEIS, which is an updated version of Figure 11 of the SEIS.

Potential Project visibility does not differ greatly when comparing the 43-turbine layout evaluated in the SEIS with the 37-turbine FEIS layout. Turbines will be fully screened from view by intervening topography from approximately 21.8% of the visual study area (compared with 23.1% for the SEIS Project layout and study area) (Figure 11, Sheet 1). Once the screening effects of mapped forest vegetation are factored into the analysis, visibility is greatly reduced and that figure increases to 77.1% of the visual study area (77.3% for the SEIS) that is anticipated to be fully screened from view (see Figure 11, Sheet 2). Very similar results are reported for potential visibility of the FAA warning lights on the turbine nacelles, with 25.8% of the visual study area (27.2% for the SEIS) fully screened from view by topography alone

and 80.5% (80.6% for the SEIS) fully screened when mapped forest vegetation is factored into the analysis (see Figure 11, Sheets 3 and 4).

Table 7. Viewshed Results for 7.5-Mile Study Area from the SEIS to the FEIS

Number of Turbines Visible	Blade Tip Topography Only Square Miles (% of Study Area)		Blade Tip Topography and Vegetation Square Miles (% of Study Area)		FAA/Nacelle Topography Only Square Miles (% of Study Area)		FAA/Nacelle Topography and Vegetation Square Miles (% of Study Area)	
	SEIS	FEIS	SEIS	FEIS	SEIS	FEIS	SEIS	FEIS
0	61.6 (23.1%)	56.0 (21.8%)	206.3 (77.3%)	198.3 (77.1%)	72.6 (27.2%)	66.3 (25.8%)	215.0 (80.6%)	206.9 (80.5%)
1-10	15.8 (5.9%)	14.9 (6.0%)	18.8 (7.0%)	19.2 (7.5%)	19.6 (7.4%)	19.3 (7.4%)	20.7 (7.7%)	21.0 (8.1%)
11-20	13.4 (5.0%)	14.6 (5.8%)	12.3 (4.6%)	12.9 (5.0%)	19.3 (7.2%)	20.7 (8%)	12.1 (4.5%)	12.1 (4.8%)
21-30	15.9 (6.0%)	17.8 (6.9%)	9.8 (3.7%)	10.5 (4.0%)	18.3 (6.9%)	21.7 (8.4%)	7.3 (2.7%)	7.9 (3.0%)
31-40 (SEIS) 31-37 (FEIS)	21.6 (8.1%)	153.8 (59.7%)	9.0 (3.4%)	16.4 (6.2%)	27.2 (10.2%)	129.2 (50.1%)	6.5 (2.4%)	9.2 (3.5%)
41-43	138.5 (51.9%)	0 (0%)	10.7 (4.0%)	0 (0%)	109.8 (41.2%)	0 (0%)	5.3 (2.0%)	0 (0%)
Total Visible	205.2 (76.9%)	201.1 (78.4%)	60.5 (22.7%)	58.9 (22.8%)	194.2 (72.8%)	190.8 (73.9%)	51.8 (19.4%)	50.3 (19.4)

[1]The SVIA visual study area totals 266.8 square miles for the SEIS and 257.2 square miles for the FEIS. Due to rounding to the 10th of a square mile and a 10th of a percentage, the sum of the individual turbine count group categories may not precisely equal the size of the study area or 100%.

The major difference between the FEIS and SEIS viewshed results is that the maximum number of turbines within a view has decreased from 43 to 37.

To determine whether this decrease in turbine density would alter the Project's visual impact, the visual simulations prepared for the SEIS, which were based on 43 potential turbines, were revised to illustrate the 37 turbine layout (FEIS Figure 12). In addition, at the request of a Town Board member from the Town of Bellmont, an additional simulation from a location near the Bellmont town line on Jericho Road was also prepared (FEIS Figure 12, Sheet 10). The revised simulation from County Route 24 near the hamlet of Bellmont Center most clearly shows the effect of removing the alternative turbines from the Project layout (FEIS Figure 12, Sheet 1). However, as a whole, these simulations show that while slightly fewer turbines may be visible, the overall change in visual impact is minor. Thus, the conclusions presented in the SEIS remain accurate.

2.2.4 Shadow Flicker Analysis

As with the viewshed analysis, shadow flicker impacts reported in Section 2.5.2.4 of the SEIS were evaluated for a Project that included 43 proposed and alternate turbine locations. In order to quantify impacts for the 37-turbine FEIS layout, the shadow flicker analysis was re-performed. As in the original analysis, resident receptors within 1,140 meters (10 rotor diameters) of a proposed turbine (i.e., those that could potentially perceive shadow flicker) were identified. These included 322 residential structures (as opposed to the 364 receptors evaluated for the SEIS analysis), which are identified on Figure 13 of this FEIS (directly comparable to Figure 13 of the SEIS). The analysis was prepared in accordance with the methods and assumptions outlined in Section 2.5.2.4 and Appendix N of the SEIS.

Table 8 provides a summary of predicted shadow flicker impacts from the revised FEIS Project layout and compares these impacts to the SEIS Project layout. Most (76%) of the receptors will likely experience shadow flicker under the 30 hour/year impact threshold, and some (12%) of the receptors in the analysis are predicted to experience no shadow flicker at all. The FEIS shadow flicker analysis indicates that up to 77 receptors (24%) are predicted to experience shadow flicker in excess of 30 hours/year, before the screening effects of vegetation and topography are taken into account. At most receptor locations shadow flicker will occur primarily in the early morning or late afternoon and will generally last less than 1 hour per day. Appendix G provides graphical tables of all receptors predicted by the model to experience over 30 hours of shadow flicker per year.

Table 8. SEIS/FEIS Shadow Flicker Effects Comparison

Predicted Shadow Flicker	SEIS Layout		FEIS Layout	
	43 turbines		37 turbines	
	364 receptors within 1,140 meters of turbines		322 receptors within 1,140 meters of turbines	
	Receptors (count)	% of Receptors	Receptors (count)	% of Receptors
0 hours	60	16	39	12
0-1 hour/year	1	<0.5	1	<0.5
1-10 hours/year	80	22	71	22
10-20 hours/year	79	22	80	25
20-30 hours/year	56	15	54	17
30+ hours/year	88	24	77	24

As stated in the SEIS, although modeled shadow flicker at some receptors exceeds the 30-hour per year impact threshold, these calculations do not take into account the actual location and orientation of windows, nor the screening effects associated with existing, site-specific conditions and obstacles such as trees and/or buildings. In addition, this analysis assumes turbine rotors are continuously in motion. Given these assumptions, the predicted shadow-flicker frequency represents a conservative scenario, and almost certainly overstates the actual frequency of shadow flicker that would be experienced at any given receptor location. Furthermore, many of the modeled shadow flicker hours are

expected to be low intensity because they would occur during the early morning or late afternoon hours when the sun is low in the sky. As the sun sinks below the horizon, more of its light is scattered by the atmosphere, which has the effect of dampening its brightness and therefore reducing its ability to cast dark shadows (EMD, 2013).

A threshold of 30 hours per year was established in Section 2.5.2.4 and Appendix D of the DEIS as the level of impact requiring additional analysis and possible mitigation measures. Of the 77 receptors that could experience greater than 30 hours of shadow flicker per year, 18 are non-participating residences. The details regarding anticipated shadow flicker at each non-participant receptor where shadow flicker is predicted to exceed 30 hours per year are summarized below in Table 9 and a visual representation is provided as Figure 13 of this FEIS.

Table 9. Non-Participant Receptors Predicted to Exceed 30 Hours of Shadow Flicker

Receptor ID	Predicted Shadow Flicker (days/year)	Predicted Max Daily Shadow Flicker (hh:mm/day)	Predicted Annual Shadow Flicker (hh:mm/year)	SEIS Predicted Annual Shadow Flicker (hh:mm/year)	Change in Predicted Annual Shadow Flicker (+/- hh:mm/year)
5 [1]	173	0:52	31:55:00	31:16:00	+ 0:39
72	211	0:53	43:05:00	43:05:00	0:00
74	159	1:06	37:26:00	37:40:00	- 0:14
82	220	0:58	42:57:00	42:55:00	+ 0:02
84	205	1:05	51:52:00	51:54:00	- 0:02
106	157	0:53	35:45:00	39:11:00	- 3:26
155	229	0:33	31:26:00	32:18:00	- 0:52
176	238	1:47	81:55:00	81:56:00	- 0:52
179	280	1:31	64:37:00	72:16:00	- 7:39
181	161	1:10	31:42:00	32:49:00	- 1:07
186	262	1:17	62:26:00	63:19:00	- 0:53
187	224	1:02	42:05:00	41:07:00	+ 0:58
189	217	1:07	56:03:00	54:24:00	- 0:53
190	243	0:43	37:59:00	37:25:00	+ 0:58
191	233	0:50	48:42:00	47:54:00	+ 0:58
314	145	1:07	34:38:00	34:38:00	0:00
315	150	1:00	32:47:00	32:55:00	- 0:08
596 [2]	186	1:04	39:05:00	36:25:00	+ 2:40

[1] Receptor is a commercial maple products establishment.
[2] Receptor is unoccupied.

As described in Section 2.2.3 of this FEIS, an updated viewshed analysis was prepared for the revised FEIS Project that shows areas that are screened from view of the turbines by mapped topography and forest vegetation (see Section 2.2.3 and Figure 11 of this FEIS). This viewshed analysis indicates that nine of the 18 non-participant receptors predicted to experience over 30 hours of shadow flicker will not have views of the Project due to screening provided by mapped topography and vegetation. The remaining nine receptors were checked on a case-by-case basis for screening by vegetation or existing buildings, and five of the nine (receptors 155, 176, 179, 187, and 190) were found to have nearby trees or buildings that would at least partially screen shadow flicker effects (see SEIS Table 28). Therefore, only four receptors (receptors 106, 189, 191, and 596) could experience shadow flicker effects similar to those predicted by the model due to their lack of screening by topography, mapped vegetation, or on-site trees or buildings.

In order to avoid the potential for annoyance or other impacts to non-participating landowners, prior to commercial operation, the Applicant will offer neighbor agreements to each of the remaining four potentially affected property owners. If these landowners are not interested in neighbor agreements, the Applicant will explore alternative mitigation measures with the landowner, e.g., installation of screen plantings or installation of light-blocking blinds.

2.2.5 Noise Impact Analysis

Noise impacts reported in Section 2.7 of the SEIS were evaluated for a 43-turbine Project that included both proposed and alternate turbine locations. In order to quantify impacts for the final 37 turbine layout, Hessler Associates, Inc. re-performed the noise impact analysis using the final Project layout. The analysis was performed using the same assumptions and parameters as the original analysis conducted for the SEIS. A memo summarizing the updated results is attached as Appendix C.

Results from the modeling showed that potential noise impacts resulting from final 37-turbine Project layout are the same as or less than those reported in the SEIS. The most significant change involves removal of sound impacts in the southwestern corner of the Project site, where of five the six alternate turbines were located (see Figure 3 of this FEIS and Plots 1-3 of Appendix C). The anticipated noise impact in that area is considerably reduced by the removal of the alternate turbines. Although 11 of the 37 proposed turbines locations have shifted slightly from their locations in the SEIS Project layout, none of these shifts has significantly changed the sound level at any residence. Therefore, the expected operational noise impact for the “conservative” and “typical” design scenarios (Plots 1 and 2 of Appendix C, respectively) remains consistent with impacts described in Section 2.7.2.2 of the SEIS. In addition, the results of the updated analysis demonstrate that the final Project layout remains in compliance with the local noise limit of 50 dBA at all non-participating residences (Plot 3 of Appendix C).

2.2.6 Microwave Path Analysis

Section 2.12.2.2.1 of the SEIS stated that wind turbines within the Project would not interfere with any of the five microwave paths identified within the Project site. Two of the minor turbine shifts described in Section 2.1 of this FEIS are proposed in order to avoid microwave paths (Turbines 3 and 18). None of the remaining nine wind turbines that have shifted from the SEIS layout to the FEIS layout (Turbines 1, 9, 13, 18, 20, 21, 27, 28, 29, and 37) are in the vicinity of a Fresnel Zone, (i.e., the area around a microwave path inside of which wind turbine components could interrupt communication. Therefore, no impacts to microwave communications systems will result from the minor turbine shifts in the FEIS layout.

2.3 ADDITIONAL INFORMATION

Stormwater Pollution Prevention Plan

The Stormwater Pollution Prevention Plan (SWPPP) for the Project was not finalized when the SEIS was released. Therefore, the SWPPP from EDPR's Marble River Wind Farm was appended to the SEIS as an example that was substantially similar to the Plan that would be prepared for the Project. The Jericho Rise SWPPP has since been finalized, and is attached to this FEIS as Appendix B.

Historic/Cultural Resources Consultation and Mitigation

Section 2.6.2 of the SEIS describes potential impacts to and mitigation measures for archaeological resources as a result of the Project. Phase 1B archaeological resources surveys were conducted for the Project in 2008 (Tetra Tech, 2008) and 2015 (EDR, 2015b) that identified significant archaeological resources within the Project's area of potential effect (APE). These findings are summarized in Section 2.6.2.1.1 of the SEIS. A report was submitted on November 23, 2015 to the New York State Office of Parks Recreation and Historic Properties (NYSOPRHP), per their role as the SHPO, that identified all the cultural sites recorded during both the 2008 and 2015 Phase 1B archaeological resources surveys and showed these sites in relation to the Project layout. The Applicant has committed to avoiding all impacts to all potentially significant archaeological sites through intentionally siting Project components and construction disturbance away from these locations. The mapped locations of identified archaeological sites will be included on Project construction maps surrounded by a 100-foot (minimum) buffer, identified as "Environmentally Sensitive Areas" or similar, and marked in the field by construction fencing with signs that restrict access. These measures were included as recommendations in the report submitted to NYSOPRHP. On December 30, 2015, NYSOPRHP responded that they concurred with the findings of the Phase 1B Survey Report suggesting these measures would be sufficient to

avoid impact to archaeological resources (see Appendix H). Therefore, consistent with the findings in the SEIS, no impacts to archaeological resources will occur as a result of the Project.

On behalf of the Applicant, a historic resources survey (EDR, 2015a) for the Project was prepared and submitted to NYSOPRHP for review and comment on November 11, 2016 (see Appendix H). The historic resources survey was conducted (per the *SHPO Wind Guidelines*) in accordance with a Work Plan developed in consultation with, and approved by, NYSOPRHP staff. Per the *SHPO Wind Guidelines*, the APE for visual impacts on historic properties for the Project was defined as those areas within five miles of proposed turbines which are within the potential viewshed (based on topography) of the Project (NYSOPRHP, 2006). The results of the historic resources survey were summarized within Section 2.6 of the SEIS. The historic resources survey report also included a detailed assessment of potential visual effects on historic resources, including areas specifically requested by NYSOPRHP. The results of the visual effects analysis relative to historic resources are summarized below.

A total of 120 resources were inventoried as part of the historic resources survey. The results of the survey are as follows:

- One property (the Almanzo Wilder Boyhood Home) listed on the NRHP is located within the APE.
- There are 92 properties located within the APE that Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services (EDR) recommends are NRHP-eligible (note that 86 of these are properties that have been previously determined eligible by NYSOPRHP, two properties were previously included in the Cultural Resource Information System database (CRIS) but were not formally evaluated for NRHP-eligibility, and four are newly identified by EDR.

There are 25 additional properties within the APE that were formerly determined NRHP-eligible (or were previously included in CRIS but were not formally evaluated for NRHP-eligibility) that EDR is recommending are not NRHP-eligible and two properties that were formerly determined NRHP-eligible that are now demolished.

Consideration of the screening effects of both topography and mapped forest vegetation in the viewshed analyses (i.e., the vegetation viewshed analysis) indicates that views of the Project will be completely screened from the only NRHP-listed site in the APE and 27 of the 93 properties recommended by EDR to be NRHP-eligible (see Figure 17). However, the vegetation viewshed analysis does not take into account screening that would be provided by buildings, street trees, yard vegetation, or other objects that could screen views of the Project from many locations (especially in urban, village, and hamlet settings). In addition, characteristics of the proposed turbines that influence visibility (color, narrow profile, distance from viewer, etc.), are not taken consideration in the viewshed analyses, so actual visibility of the

Project is expected to be significantly less than indicated by viewshed mapping. In general, the visual effect of the Project will be more significant from locations with open views of the Project. Open views towards the Project are less frequent in developed areas due to the extent of screening provided by existing buildings, vegetation, and other objects. In many locations, views of the Project will be limited to occasional, partially screened view where portions of single (or relatively few) turbines (or turbine blades) will be visible in the gaps between existing buildings and yard vegetation.

In review correspondence dated June 10, 2008, NYSOPRHP indicated that they had identified several key loci where visual impacts should be carefully assessed, including the villages of Chateaugay and Burke, and the north end of Lower Chateaugay Lake, and recommended that visual simulations (or similar analyses) be created to better understand the full extent of the potential visual impacts associated with the Project (Bonafide, 2008). As part of the historic resources survey report for the proposed Jericho Rise Wind Farm Project, EDR conducted a historic resources visual effects analysis addressing potential visual impacts from these key loci.

To show anticipated visual changes associated with the proposed project, high-resolution computer-enhanced image processing was used to create realistic photographic simulations of the completed Project from each of the areas identified by NYSOPRHP (see Figure 18). The photographic simulations were developed using a three-dimensional computer model of the proposed wind turbine created by EDR based on information provided by Jericho Rise Wind Farm, LLC. These simulations were included in the historic resources survey report submitted to NYSOPRHP on November 11, 2015.

From some of the vantage points identified by NYSOPRHP, the proposed Project will be screened by existing buildings and/or vegetation. In these instances, the simulations included in Figure 18 show the turbines where they would be visible, and depict a color overlay of the accurate location and scale of the turbines where they would not actually be visible from those locations. These renderings are included to illustrate the effect that screening provided by vegetation, topography and/or buildings has on Project visibility from some of the locations indicated by NYSOPRHP. An analysis of the Project's potential visual impacts on the areas identified by NYSOPRHP, based on the simulations as well as field observation, is provided below.

Village of Chateaugay (Historic District)

The Village of Chateaugay is located approximately 1.2 miles northeast of the Project site, and includes several NRHP-Eligible properties, primarily clustered around the core of the village. The proposed Chateaugay Village Historic District is comprised of 18 contributing resources (including several late nineteenth and early twentieth century commercial buildings) located primarily along U.S. Route 11 (Main Street), at the intersection of New York State Route 374 (Depot Street). Although the viewshed analysis prepared as part of the historic resources survey report indicated considerable

Project visibility (see Figure 17), field review indicated that views toward the Project from within the historic district and historic core of the village are heavily screened by buildings and topography.

There are minimal opportunities within the historic district for any potential open views toward the Project, mostly available from streets radiating south from the center of the village along State Route 374, as well as west of the village along Route 11. The simulation prepared from the corner of Iron Avenue and Depot Street (near the NRHP-eligible Rutland Depot) indicates that although views of one turbine may be available above the tree line, views south of the village center toward the Project are largely screened by topography, vegetation and/or buildings (Figure 18, Sheet 1). The viewshed analysis prepared as part of the historic resources survey report indicated a narrow, consistent band of Project visibility west of the village Chateaugay along Route 11 (see Figure 17). The simulation prepared from the corner of Route 11 and Cemetery Road (near the NRHP-eligible Saint Patrick's Cemetery) indicates that views from Route 11 toward the Project are only partially screened by topography, vegetation and/or buildings, and the blades of several turbines are visible above the tree line to the south (Figure 18, Sheet 2). Field review confirmed that views to the south along Route 11 are only occasionally interrupted by vegetation and/or buildings. However, few historic resources previously determined NRHP-eligible are located along the portions of Route 11 with potential increased Project visibility.

Village of Burke

The Village of Burke is located approximately 2.2 miles west of the Project site and is primarily residential in character. Several historic resources previously determined NRHP-eligible (primarily late nineteenth century residences) are located near the village center at the intersection of Main Street and Depot Street. Although the viewshed analysis prepared as part of the historic resources survey report indicated moderate potential Project visibility within the village center (see Figure 17), field review indicated that views toward the Project from within the village are significantly screened by buildings and vegetation.

The simulation prepared from West Main Street indicates that distant views of one turbine may be available looking east along Main Street, but the majority of views would be screened by topography and/or vegetation (Figure 18, Sheet 3). The simulation prepared from Depot Street south of the village center is the most open view of the Project near the concentration of NRHP-eligible historic resources in the Village of Burke. The simulation indicates that while views of some wind turbines are available above the tree line, the majority of the turbines are screened by topography and/or vegetation (Figure 18, Sheet 4).

North End of Lower Chateaugay Lake

A small cluster of historic resources previously determined NRHP-eligible are clustered along State Route 374 at the north end of Lower Chateaugay Lake, approximately 2.8 miles southeast of the Project site. The resources include two late nineteenth century lakeside houses, and the Banner House Inn, a summer retreat inn that dates to 1837. Although the viewshed analysis prepared as part of the historic resources survey report indicated moderate potential Project visibility considering topography only (see Figure 17), field review indicated that views toward the Project from Route 374 are heavily screened by vegetation along the west side of the road. The potential for any open views toward the Project is limited to views across the north end of the lake where there are breaks in the vegetation along the road. The simulation prepared from the west side of Route 374 at the north end of Lower Chateaugay Lake indicates that views will be completely screened by topography and/or vegetation (Figure 18, Sheet 5).

In summary, the visual effects analysis included in the historic resources survey report and summarized in this section provides the necessary information for NYSOPRHP to consider the Project's potential effect on historic resources. As described in Section 2.6.2.2.2 of the SEIS, relative to the Project layout that was evaluated in the DEIS and presented in the 2008 report to NYSOPRHP, the reduction of the number of proposed turbines and corresponding reduced size of the visual study area in the SEIS serves to reduce the potential visual impact of the Project. However, as described in Section 2.5 of the SEIS, the overall visual effect of the Project is not anticipated to be significantly different than that described in the DEIS.

Possible mitigation projects for visual impacts historic resources as a result of development of the Project were outlined in Section 2.6.2.2.2 of the SEIS, and are currently being discussed with the Towns of Chateaugay and Bellmont. The Applicant intends to enter into a Memorandum of Agreement (MOA) with the Towns of Bellmont and Chateaugay to fund historic preservation projects that will benefit historic resources within the Project's APE. Ongoing consultation with the Towns of Chateaugay and Bellmont and NYSOPRHP will ensure the agreed upon mitigation project(s) are suitable and meaningful for local historic preservation.

Eagle Observation Study

At release of the SEIS, an Eagle Observation Study, which monitored bald and golden eagle passage rates, as well documented the presence of other raptors in the Project site, was still ongoing. Section 2.3.1.3 of the SEIS summarized results from January to August 2015, and the study was set to continue through December, 2015. Data from January to August 2015 indicated very sparse use by eagles, with only three observations of bald eagles and no observations of golden eagles on the Project site during that time period. The SEIS stated that adverse impacts to bald and golden eagles were unlikely, given the low use observed by these species during the survey. Preliminary results of the study from September to December, 2015 are now available. No additional bald or golden eagle observations were made

during that time period. These results confirm the findings of the SEIS that Project operation is unlikely to adversely impact bald and golden eagle populations within the Project site.

In addition to eagles, the study also noted occurrence of other raptors observed during the eagle survey. These included: American kestrel (45 individuals), broad-winged hawk (17), Cooper's hawk (3), northern goshawk (1), northern harrier (17), osprey (1), rough-legged hawk (3), red-tailed hawk (52), and sharp-shinned hawk (3). These findings are consistent with those presented in the SEIS, and conclusions regarding potential impacts to these species summarized in Section 2.3.2.2 of the SEIS remain valid. It should also be noted that these numbers are preliminary and could change slightly in the final report, which will be shared with the USFWS and NYSDEC. The Applicant will engage in ongoing consultation with these agencies in order to ensure that development of the Project meets all applicable guidelines and regulations.

Northern Long-Eared Bat Protection Measures

The northern long-eared bat is a federally threatened species with potential habitat within the Project site (see SEIS Sections 2.3.1.3, 2.3.1.4, and 2.3.2.2). The SEIS assumed that clearing operations would take place between October 1 and March 31 in order to avoid impacts to the northern long-eared bat. Since release of the SEIS, the Final Rule for northern long-eared bats under Section 4(d) of the Endangered Species Act (ESA) was issued. In this document, released January 14, 2016, the USFWS has provided flexibility in the clearing schedule and exempted operation of wind turbines from the ESA take prohibition (USFWS, 2016). Therefore, the Applicant will be discussing implications of the 4(d) rule on construction and operational protection measures with USFWS and NYDEC. Based on those discussions, the Applicant may be implementing different measures than what is currently included in the document entitled *"Jericho Rise Wind Farm Northern Long-eared Bat Take Avoidance Measures Franklin County, New York"* dated December 10, 2015.

3.0 CORRECTIONS TO THE SEIS

During the preparation of the FEIS, a small number of errors were identified within the SEIS. Corrections to these errors are described below.

- The Table of Contents in the SEIS included a List of Appendices (page vii) which was inaccurate. The correct Appendix list is as follows:

LIST OF APPENDICES

Appendix A	Gamesa 2.0-2.5 MW Brochure
Appendix B	Guidelines for Agricultural Mitigation for Wind Power Projects
Appendix C	Agency Correspondence
Appendix D	Preliminary Geotechnical Report
Appendix E	Preliminary Blasting Plan
Appendix F	Revised Construction SPCC Plan for Marble River Project
Appendix G	Wetland Delineation Report
Appendix H	Marble River Stormwater Pollution Prevention Plan
Appendix I	Rare Plant Survey Memo
Appendix J	Breeding Bird Survey
Appendix K	Jericho Rise Acoustic and Mist-Net Bat Survey Report
Appendix L	Invasive Species Control Plan
Appendix M	Supplemental Visual Impact Assessment
Appendix N	Shadow Flicker Report
Appendix O	Historic Resources Survey Plan
Appendix P	Complaint Resolution Procedure
Appendix Q	Phase IB Archaeology Survey Plan
Appendix R	Environmental Sound Survey and Noise Impact Assessment
Appendix S	Transportation Route Sheet
Appendix T	Communication Studies

- Page 2 of the SEIS states that a total of up to 44 wind turbine sites were assessed in the SEIS. In fact, 43 total sites wind turbine sites were assessed in the SEIS.
- Section 1.5.6 of the SEIS references the description of equipment and features proposed for the substation in the DEIS. The statement indirectly refers to Exhibit 1.5.6 of the DEIS, which shows that National Grid owns the substation. The SEIS should have corrected Exhibit 1.5.6, to show that the substation owners are New York State Electric and Gas (NYSEG) and New York Power Authority (NYPA).
- Section 1.5.9 states that the O&M facility proposed for the Project was as described in the DEIS. In fact, no on-site O&M facility is proposed for this Project.

- Section 2.3, pages 51 and 55 of the SEIS state that further review of the acoustic data "could not confirm" the presence of eastern small-footed bat. This should be revised to say that the analysis "could not confirm or refute" the presence of this species.
- The footnote to Table 38 in Section 2.9.2 of the SEIS states "Earnings and Output values are in 2015 dollars" This should be revised to state "Earnings and Output values are in millions of 2015 dollars."
- The second paragraph of SEIS Section 2.13.2.2.3 states that the permanent impacts to agricultural land that would result from the operation of the proposed 37-turbine Project would include the permanent conversion of approximately 50 acres of productive agricultural land to non-agricultural use for Project facilities, such as access roads and turbines. The impact stated here actually applies to all permanent vegetation loss, not just that of active agriculture. It should be revised to read "would include the permanent conversion of approximately 28 acres of productive agricultural land to non-agricultural land." For the same reason, the second sentence in this paragraph should be revised to read "Construction and operation of the Project at the six alternate turbine locations would result in up to approximately 8 acres of conversion of agricultural lands to Project facilities."

4.0 RESPONSE TO COMMENTS

As described above in FEIS Section 1.1, the SEQRA review for the Jericho Rise Wind Farm has included two previous EISs, including the following:

- A DEIS, accepted as complete by the Co-Lead Agencies (the Towns of Chateaugay and Bellmont) and released for public comment in February, 2008. The Town of Chateaugay held a Public Hearing on the DEIS on March 31, 2008. The Town of Bellmont held two Public Hearings on the DEIS, the first on April 7, 2008, and a second on April 23, 2008. The public comment period for the DEIS concluded on May 5, 2008.
- An SEIS, accepted as complete by the Co-Lead Agencies and released for public comment on December 7, 2015. The Town of Chateaugay held a joint Public Hearing on the SEIS on December 30, 2015. The public comment period on the SEIS concluded on January 11, 2016.

Copies of all public comments on the SEIS, including the public hearing transcript, are included in Appendix D of this FEIS.

Responses to all of the comments received on the DEIS (2008) are included in tabular format in Appendix E of this FEIS. Comments received on the DEIS are identified in Appendix E as Comment 1, Comment 2, etc. (with corresponding Response 1, Response 2, etc.). It is worth noting that many of the comments received on the DEIS have been addressed and/or are superseded by information presented in the SEIS, including the changes to Project layout and additional studies. Therefore, because many of the comments address previous layouts of the Project and in some instances raise concerns that have been addressed by either Project layout changes or supplemental studies addressed in the SEIS, the responses to comments received on the DEIS are included separately in Appendix E to avoid confusion with the comments received on the current layout of the Project as presented in the SEIS.

Written and oral comments received during the SEIS public comment period are summarized and addressed in this Section of the FEIS (below). Comments on the SEIS (hardcopy, email, and oral comments) were received from 16 separate commenters, and broken down into 72 individual comments. Note that the individual comments received on the SEIS are identified as Comment S-1, S-2, etc. (with corresponding Response S-1, Response S-2, etc.). Each of the specific comments received on the SEIS is addressed below.

<u>December 30, 2015: Joint Public Hearing</u>

On December 30, 2015, a joint Public Hearing for the Town of Chateaugay and the Town of Bellmont was held at the Chateaugay Town Hall in Chateaugay, Franklin County, New York. The hearing was held in order to provide an

opportunity for the public to comment on the SEIS, as well as the Applicant's requests for a variance in the maximum allowable height of the wind turbines and an extension in the approved construction hours. In attendance were the Town Supervisors and members of the Town Boards from both the Town of Chateaugay and the Town of Bellmont, in addition to representatives of Jericho Rise Windfarm LLC. The hearing was moderated by Mr. C.J. Madonna, special counsel for the Towns. A total of 40 people signed in to the meeting via the sign-in sheet, and six public speakers were heard after introductory remarks by the Town Supervisors and Mr. Madonna. The majority of those who had signed in on the sign-in sheet indicated that they had no comment to present at the hearing. Public speakers that did comment at the meeting, their individual comments, and the Applicant's responses to these comments are presented below.

Oral comment by Nancy King, provided at the SEQRA Public Hearing on December 30, 2015.

Comment S-1: I just wanted to say that they are working in our fields right now on – we have a drainage pipe. Good Lord. We have a drainage pipe in the field and I don't know if they are going to be going near it or anything. I just thought I would warn you about that; ok?

Response S-1: Comment noted. Jericho Rise Wind Farm representatives responded to Ms. King indicating that they will address the presence of the drainage pipe. Construction crews will be made aware of below-grade infrastructure and will avoid impacting such features to the extent practicable. All damaged subsurface drainage lines will be repaired, and the Applicant will conduct two years of post-construction agricultural monitoring to assure that any construction related impacts to agricultural land are adequately addressed.

Oral comment by Tammy Titus, provided at the SEQRA Public Hearing on December 30, 2015.

Comment S-2: I just like to say like I did in the beginning when this all started, I (would) like to see it go forward. I just support this. I (would) like to see it move forward. It's renewable energy. We all use a lot of electricity. It's one of (the) least negative ways to use it. I just like to see everything going. And it's going (to) take a while. I support it. Thank you.

Response S-2: Comment noted.

Oral comment by Marvin Titus, provided at the SEQRA Public Hearing on December 30, 2015.

Comment S-3: Don't want to be outdone. Like my wife said, we have always been supporting it right from the get-go. The town of Chateaugay knows how much money they are receiving from the PILOT program, the fire department, the towns, the schools. I think it's just good for the whole community and I'd just like to see it keep moving forward.

Response S-3: Comment noted.

Oral comment by Judy King, provided at the SEQRA Public Hearing on December 30, 2015.

Comment S-4: I'm Judy King and I was wondering if anyone could speak to the map of the diagram that's in the lobby? Also, I'm sure a lot of – a few people probably are wondering how certain you're projecting of this moving forward to what we are seeing on this map.

Response S-4: Comment noted. Mr. Madonna, legal counsel to the Co-lead Agencies, verbally clarified that the map that was on display at the public hearing is the layout as proposed. If changes are made to the layout, the public will be provided with another opportunity to comment. Mr. Madonna asked that a representative of Jericho Rise Wind Farm discuss the revised project plans, specifically the difference between the DEIS and the SEIS. This discussion was presented by Mr. Aron Branam, Project Manager for Jericho Rise Wind Farm, LLC.

Oral comment by Kip Young, provided at the SEQRA Public Hearing on December 30, 2015.

Comment S-5: My name is Kip Young. Originally I worked for the wind towers for seven years for Noble so I do have some background in which you guys are proposing to do. I'm definitely a supporter of the wind energy by all means.

A couple of questions as a neighbor and resident to the site. Has there been any additional thought process put into, with a larger rotor, more noise? And have the setbacks been considered? Have they been expanded now that the town has gotten larger?

Sure. Maybe a question to the group of the wind farm. Is there an increase in noise with this turbine compared to your original design, and if so, how much?

Response S-5: Mr. Madonna replied orally to Mr. Young indicating that the town's wind law has not been modified. The request for a variance in allowed height (from 400 feet to 492 feet) has not yet been granted. Mr. Branam replied orally to Mr. Young referring him to Section 2.7 of the SEIS which discusses noise impacts in detail. Mr. Branam spoke with Mr. Young following the public hearing regarding the placement of turbines relevant to his property, required town setbacks and the proposed turbine model for the project. Mr. Branam offered to meet with Mr. Young and discuss any further questions he may have once Mr. Young had the opportunity to review the SEIS.

The larger rotors currently proposed for the Project have the potential to result in more shadow flicker impacts and slightly increased Project visibility relative to rotors proposed at the time the DEIS was prepared. These impacts are fully described in Section 2.5 of the SEIS and Sections 2.2.3 and 2.2.4 of this FEIS. Regarding noise, a revised noise impact study has been prepared and is discussed in Section 2.7 of the SEIS and Section 2.2.5 of the FEIS. The details of the noise study incorporating the revised turbine model are included in Appendix R of the SEIS. The Vestas V-82 model that was proposed for the DEIS had a sound power level at 103.3 dBA, while the maximum sound power level for the Gamesa G114-2.1 is slightly higher at 106.6 dBA. However, a difference of 5 dBA is a commonly accepted threshold above which most people can begin to discern a difference in noise levels. Because the difference between the sound power levels of the proposed turbine models for the DEIS versus the SEIS is only 3.3 dBA, the new larger turbines will not be significantly louder than those originally proposed in the DEIS. Please note that noise impacts were further evaluated for the FEIS including the final layout and reduced number of wind turbines, after eliminating the six alternate sites. These studies are discussed in Appendix C of the FEIS.

With regard to setbacks, as noted in the SEIS, the Project has been designed to comply with all local setback laws. Specifically, the local law in Chateaugay requires setbacks of 1,320 feet and 1,200 feet from non-participating and participating residences, respectively, as well as 1,200 feet from US Route 11, State Route 374 and County Route 52, and 600 feet from other public roads. The Town of Bellmont local law requires setbacks of 1,000 feet from any residence, as well as 500 feet from public roads. As proposed in the final layout, the setback distances for all turbines comply with these local laws.

Note that as of the date of the FEIS, the six alternate turbines have been dropped from consideration, and several minor turbine shifts have occurred in order to ensure compliance with local setback laws

and to accommodate landowner preference. These shifts are summarized in Section 2 of the FEIS and indicated on Figure 2 of the FEIS.

Oral comment by Tom Smith, provided the SEQRA Public Hearing on December 30, 2015.

Comment S-6: Tom Smith. I'd like to ask a question. My question is in reference to the variance. The variance in the hours of the construction. I just was wondering if this was seven days a week or if it's from Monday through Friday because where it goes into 10:00 at night and it's right in the neighborhood, I am just wondering if concrete trucks and everything else is going to be rolling until 10:00 at night on a Saturday and Sunday evening?

Response S-6: At the public hearing, Mr. Branam replied orally that he believes the extended construction hours will apply six days a week, but did not have the waiver request immediately available and he would like to do further research and confirm that in writing. Subsequent review of the waiver application indicated that the request was not limited to six days per week.

As noted in the waiver request submitted to the Towns of Chateaugay and Bellmont, the extended construction hours would be utilized only on an as-needed basis for certain activities and only after advanced notice is provided to the Towns. Activities conducted outside normal construction hours will generally be limited to those that do not result in the generation of excessive noise or traffic in order to avoid adverse impacts on the community. It is anticipated that the use of extended construction hours will shorten the overall construction schedule of the Project, thereby reducing overall potential construction impacts on the surrounding community.

No further comments were received at the public hearing. Mr. Madonna clarified that the public comment period on the SEIS is open until January 11, 2016, and written comments would be accepted through that date. The public hearing was concluded at 7:00 pm on December 30, 2015.

Comment letter (undated) from Gilbert and Connie Merrill, 228 Jericho Road, Chateaugay, NY.

Comment S-7: We are writing this letter to the Board in support of the Jericho Rise Wind Project which we will be part of as landowners. As some of the large industrial plants have closed, like GM, Alcoa, Cleyn & Tinker, Valco Furniture, etc., the north country has lost a lot of jobs, money, and benefits. The people of Chateaugay will stand to gain from the building of the Jericho Rise project: revenue for schools,

highway department, fire department, local technicians working on turbines, and taxes. In today's tough times the income from building this project will help everybody in the towns involved in one way or another.

Response S-7: Comment noted.

Comment letter dated January 4, 2016 from Wayne Rogers, 988 County Route 24, Malone, NY.

Comment S-8: Comments on the proposed Jericho Rise Wind Farm in Franklin County, NY in regard to possible impacts on television reception:

I use an onsite antenna for all of my television reception. Of the channels listed in Appendix T, I receive CBOT, CBMT, CJOH, CFCF, CKMI and WCFE. Three of these channels – CMBT, CFCF, and CKMI – are ones that might be impacted by the windmills, based on my location.

If antenna adjustments or upgrades and cable service are not able to correct any impacted service, will satellite service be available for the channels that would likely be impacted?

While most people in this area do not rely on antennas for TV reception, I am aware of others beside myself that have this same concern. Understandably, they like myself, want any reception problems corrected in a timely manner.

Response S-8: As noted in Section 2.12.3.2.2 of the SEIS, mitigation measures for impacts to off-air television coverage as a result of Project operation remain as described in Section 2.12.3.2.2 of the DEIS. As indicated in this Section of the DEIS, should any impacts occur, Jericho Rise will address and resolve each on an individual basis using the Compliant Resolution Plan (Appendix L of this FEIS). The SEIS notes that mitigation options could include adjusting antennas, upgrading antennas, or providing cable or satellite systems to affected households.

Comment letter dated January 5, 2016 from Richard and Joyce King to the Bellmont Town Supervisor.

Comment S-9: Our comments were not ready at the meeting on 12/30/15. Our interests are for Jericho Rise Wind Farm to continue with the construction of the wind farm. We are in favor of the height of the wind turbines in this project being increased to 492 ft. 2.1 megawatts. We are also in favor of the extended

work hours 5:30 am to 10:00 pm six days a week. Our reason being that once a project is started & can't possibly be finished in an average work day it only makes sense that the working hours are extended. We are hopeful that Jericho Rise Wind Farm will go ahead until all turbines are installed & producing energy. It will not only be an asset to the landowners but all residents of the towns. It (is) our wish that these comments be forwarded to all the board members of the town of Bellmont & Chateaugay & EDP Renewables.

Response S-9: Comment noted. As indicated in Response to Comment S-6, the requested waiver is not limited to six days per week.

Comment email dated December 31, 2015 from Bruce Russell, Bellmont Town Supervisor (to Aron Branam, Jericho Rise Project Manager).

Comment S-10: As Wayne Rogers mentioned to you on Dec. 30th and several times to me prior to that date "there are only two Bellmont photo views presented" (page 1 of 9, Figure 12: Viewpoint 3) in the SEIS. His thought is that there are much better sites such as at County Route 24 and Snow School House Road looking north, or at Titus Road and County Route 24 looking north westerly, third would be from the Chase Road (near the hill crest) looking north and westerly. These views encompass much of the properties that his families' homes will be overlooking so I can understand his concern however in the original public hearings in 2007 (there about) the viewscape he now mentions was not an issue that was expressed by the family. I don't know how you address this issue but I do think the request is much to late at this point.

Response S-10: The SEIS includes updated versions of the visual simulations presented in the DEIS. Prior to the preparation of the SEIS, the Applicant met with the Town Supervisors from both the Town of Chateaugay and the Town of Bellmont, and asked if visual simulations from additional viewpoints were desired. Both supervisors indicated that no additional viewpoints were necessary; therefore, the Visual Simulations included in the SEIS were created using the same viewpoints as those included in the DEIS. Review of photographs obtained for development of the simulations revealed that photos from the locations suggested in this comment were not available. However, to address the request for additional simulations from the Town of Bellmont, a supplemental Visual Simulation was created using a centrally-located viewpoint near the Bellmont town line in order to provide additional information on the visibility of the Project. This supplemental Visual Simulation is included as Figure 12, Sheet 10 of the FEIS.

Comment letter dated January 7, 2016 from Jeffrey and Glenda King to the Chateaugay Town Board and the Town of Bellmont Town Board.

Comment S-11: It is without hesitation that we approach the joint boards of Chateaugay and Bellmont with our written comments on the proposed Jericho Rise/EDP Renewable Windfarm project. There are numerous questions we have concerning this project and the process the town boards have followed throughout the course of the planning process. We acknowledge that many of the answers to our concerns may be found in the SEIS, however, we are not subscribers to the local newspaper and have never received any announcements of meetings prior to the December 18th, 2015 letter from Jericho Rise advising us of the December 30th, 2015 public meeting. Therefore we were not aware of the completion or location of the SEIS and have not had adequate time to review it. Based on the extremely low attendance at the aforementioned meeting, it is assumed that our limited notification of pertinent meetings and milestones in the process may be the norm among residents throughout the 2 townships. The mere fact that the New York State Department of Environmental Conservation dutifully posted, as required, on March 5, 2008 the approval by the co-lead agencies of the Draft EIS and made notification of the thirty (30) day public comment period that would close on April 24, 2008 and yet through the month of December 2015, there are no other notifications or bulletins concerning this project intensifies our concern. With a supplement to this 8 year old document, apparently being filed in December, it is quite evasive that there is no public notification of pertinent dates on the same New York State Department of Environmental Conservation Website as of January 3, 2016. Therefore there is no online resource indicating when the comment period actually commenced and when it will conclude, limiting the ease of information for Bellmont and Chateaugay landowners that may reside out of State or simply outside this immediate region of New York State.

Response S-11: The Environmental Notice Bulletin (ENB), available at http://www.dec.ny.gov/enb/enb.html, is an official publication of the New York State Department of Environmental Conservation, produced since 1976 as required by the Environmental Conservation Law Article 3-0306(4). Notices of public hearings are published in the ENB on a weekly basis. The Notice of Acceptance of the SEIS and Public Hearing for the Jericho Rise Wind Farm was published in the ENB on December 16, 2015 (http://www.dec.ny.gov/enb/20151216_not5.html). The Notice included the date, time, and place of the public hearing, the dates of the public comment period, the locations where copies of the SEIS were available to the public, a web link to the SEIS on the Applicant's website, a brief description of the Project, and the contact information for the Town Clerks for Bellmont and Chateaugay.

In addition to the publication in the ENB, a Notice of Acceptance of the SEIS and Public Hearing was published in the Malone Telegram on December 9, 2015 and posted in the Town Hall for both the Town of Chateaugay and the Town of Bellmont. Copies of the SEIS were made available for public review at the Chateaugay Town Hall, the Bellmont Town Hall, and the Chateaugay Public Library.

Comment S-12: With the January 6th, 2016 deadline rapidly approaching, we have determined it is in our best interest: from a personal and legal standpoint, to put forth our questions, concerns, and comments within the established 30 day public comment period.

As the boards know, based on the roster of attendees at the public comment meeting, one of us was in attendance. From our understanding and according to the letter received from Jericho Rise, previously mentioned above, "*2015 is drawing to a close and we wanted to share with you important progress made on the Jericho Rise project as well as what to expect in the upcoming months"* and in the closing of the same notification/invitation: "*We have been working very closely with our civil engineer to finalize a design that balances local laws; environmental constraints and landowner feedback.*" Much to our surprise and dismay, this meeting did not deliver or address any of the above.

Response S-12: Please note that the close of the public comment period is January 11, 2016. The public hearing, held on December 30, 2015 at the Chateaugay Town Hall, was moderated by special counsel for the Towns of Chateaugay and Bellmont, Mr. C.J. Madonna. Mr. Madonna read the rules of conduct for the meeting as part of the opening remarks. The rules that were read are included in the public hearing transcript included in Appendix D of the FEIS. Mr. Madonna stated that all comments should be directed to the Board, not to the public or to the Applicant. Further, any questions should be delivered to the Chair of the meeting (Mr. Don Bilow, Bellmont Town Supervisor). Mr. Madonna indicated that if questions were asked, the Applicant may provide short yes or no answers, but may be deferred in order to allow everyone to speak. As noted in the public hearing transcript, Mr. Madonna specifically noted "this will not be turned into a debate. You all can make your comments and we will not be going back and forth with the Applicant and the Applicant will not do likewise."

At the request of Mr. Madonna, Aron Branam, Project Manager for the Jericho Rise Wind Farm, spoke at the December 30, 2015 public hearing and provided an overview of the proposed Project, including the history of the Project since it was originally proposed in 2006. Mr. Branam discussed

the 2008 DEIS as well as the changes to the Project layout and related investigations that were included in the 2015 SEIS. Mr. Branam explained the revised Project plans, including fewer taller turbines, and indicated that the revised layout would allow the Applicant to achieve the same generating capacity while reducing the impact of the Project on the surrounding area. Mr. Branam indicated that he would be happy to speak with anyone with regards to the map presented at the Town Hall after the public hearing was closed.

Comment S-13: Residents were asked to comment, yet it is difficult to do so from an intelligent perspective when no viable or pertinent information or updates were provided as expected based on the notice and the basic premise of what a public hearing typically entails. On the contrary, when one individual did speak up and ask if consideration had been given to the larger rotors, specifically in regard to larger setbacks, he was not adequately answered. He was simply referred to a specific section of the SEIS. This action was not answering the question as one should and would expect at a public hearing with the proposed purpose of exchanging comments and answering questions.

Response S-13: In regard to the question regarding larger rotors, see Response to Comment S-5. Please note that residents had the opportunity to speak with Mr. Branam regarding any lingering questions after the hearing was closed.

Comment S-14: Furthermore, when Thomas Smith inquired about the waiver on operating time constraints the board transferred the question to Aron Branam, Project Manager. Mr. Branam diverted the question when he stated that he was opting to address this through written comment. What are the time constraints on his response and where will it be available to the member of the public that directly sought the answer and other community residents as well? This information should have been provided at the public hearing once Mr. Branam announced the alternative format in which he would answer the direct question.

Response S-14: See Response to Comment S-6, which is the written response to which Mr. Branam referred. A ten-day period of consideration follows the release of this FEIS. Please also note that residents had the opportunity to speak with Mr. Branam regarding any lingering questions after the hearing was closed.

Comment S-15: Rather than provide pertinent information and address what safeguards, research, and studies have been conducted to protect the residents and land owners of both townships, along with the community as a whole, this public hearing had the opposite effect. It caused a sharp escalation in

our concerns, instilled an increased motivation to thoroughly examine this project, and the exchange of limited information that ranged from appearing evasive, censored, and uninformed to sounding like propaganda has in part, influenced the direction of our intentions.

Response S-15: As indicated in the response to Comment S-12, the public hearing was conducted according to proper procedure. Please note that the public comment period on the SEIS was open from December 9, 2015 through January 11, 2016. Note also that the SEIS and the detailed studies it included are available for public review at the Chateaugay Town Hall, the Bellmont Town Hall, the Chateaugay Public Library, and on the Applicant's web site.

Comment S-16: Our concerns are numerous. Suddenly, this project seems to be progressing quite quickly, after what appeared to be an 8 year moratorium, and we feel the need to voice within the written comment period, our dissatisfaction at this point in time:

We perceive a lack of solid, informative communication with the residents that will be affected by this project as touched upon in preceding pages.

Response S-16: The SEIS was made available to the public on December 9, 2015, and the public comment period on the SEIS was from that date through January 11, 2016. Mailers were sent to all participating landowners on December 17, 2015 which contained public notice cards and a letter to accompany them. Copies of the SEIS were made available to the public at the Chateaugay Town Hall, the Bellmont Town Hall, the Chateaugay Public Library, and on the Applicant's web site. The public was therefore allowed adequate opportunity to provide comments on the proposed Project.

Comment S-17: There seems to be a disregard concerning the impacts it will have on the overall quality of life on individual homeowners.

Response S-17: The SEIS addresses numerous impacts on overall quality of life, including potential noise impacts, visual impacts, and land use impacts. Detailed studies investigating these issues are fully presented in the SEIS, along with proposed mitigation measures, where necessary.

Comment S-18: It is questionable whether the ramifications of the "rift" it will place between neighbors, friends, family or the community at large has been considered.

Response S-18: Comment noted. As indicated by comments made at the public hearing, and subsequent comment letters, residents of the Towns seem to be largely in support of the Project.

Comment S-19: It does not appear as though the financial effects it will cause on property values has been fully evaluated. (As a side note: Has a PILOT been approved? If so, do residents fully understand this request or is the vague belief of the "benefit to schools, fire departments, and town" just taken at face value?)

Response S-19: An assessment of the Project's potential impacts on property values was included in the DEIS. The Applicant's consultants, Cushman and Wakefield, utilized the best available industry studies and standards to evaluate the impact. A full review of recent literature is provided in Section 2.9.2.1.2 of the SEIS, and many of these studies analyze impacts both before and after wind farm construction. The literature suggests that once a wind farm is operational, any negative impact to property values associated with the announcement of the project, and related uncertainty, disappears and property values return to pre-announcement values or more. Based on the best available research and the information provided in the SEIS, there is no evidence to suggest that the Jericho Rise Project would have a negative effect on property values within the area. Please note that the Applicant is currently negotiating a PILOT agreement with the Franklin County Industrial Development Agency (IDA).

Comment S-20: It is apparent that extensive research and disclosure of EDP and other business transactions and projects they have undertaken has not been completed. Specifically, does the Board know if there are any pending lawsuits or allegations of breaches in legal, ethical and/or moral protocol against EDP?

Response S-20: The Applicant's parent company, EDPR NA is and has been party to certain lawsuits from time to time, none of which are material and would not (if adversely determined) materially affect the business or operations of EDPR NA. EDPR NA is a party to a lawsuit in California where the plaintiff alleges a violation of the Bane Act. EDPR NA has strongly denied this allegation in its response. EDPR NA has a strong internal ethics compliance program and adheres to a business code of conduct. In addition to its existing internal code of conduct, EDPR NA and its subsidiaries also comply with the New York Code of Conduct for Wind Developers. To the best knowledge of EDPR NA, Jericho Rise Wind Farm, LLC (the Applicant) is not a party to any pending or threatened litigation.

Comment S-21: Potential health effects of a physical, emotional, developmental, or psychological nature have not been fully addressed. The adverse effects this project may have on safety has not been considered.

Response S-21: Section 2.10 of the SEIS discusses Public Safety conditions and anticipated impacts from the Project, including potential public health effects (SEIS Section 2.10.2.2.8).

Comment S-22: The effects the development and completed project will have on our natural habitats, environment, and infrastructure [have not been considered].

Response S-22: All anticipated project impacts on biological, terrestrial, and aquatic ecology are discussed in detail in Section 2.3 of the SEIS.

Comment S-23: A lack of consideration for the destruction of a way of life that is difficult to attain: waking to the sounds of nature, looking at a dark sky illuminated only by stars.

Response S-23: See Response to Comment S-17.

Comment S-24: And, whether or not all that has transpired thus far falls within constraints and regulations established not only by local law, but state law as well.

Response S-24: The Project is compliant with all relevant state and local laws. As indicated at the December 30, 2015 public hearing, a waiver is being sought for two provisions of the local laws, specifically turbine height and extended construction time.

Comment S-25: This list of concerns is not all inclusive but it is a start. Over the course of the next few weeks, we will review the SEIS and any supporting documents to determine if any of this has been adequately and independently researched and addressed. In the meantime, we would ask the town boards to please proceed carefully and with the entire community you represent in the forefront of your minds as the decisions you make today will effect generations to follow. As summarized in a Native American Proverb: "*We have not inherited the land from our fathers, we are borrowing it from our children*."

Response S-25: Comment noted.

Comment letter received from Rudyard Edick, New York State Department of Environmental Conservation on January 11, 2016, Re: Jericho Rise Wind Project, DEC Comments on Supplemental Environmental Impact Statement (SEIS).

Comment S-26: The New York State Department of Environmental Conservation (DEC or Department) appreciates the opportunity to submit comments on the November 10, 2015 Supplemental Environmental Impact Statement (SEIS) for Jericho Rise Windfarm (Project), a proposed 77.7 MW, up to 37 turbine, wind powered electric generating facility located in the Towns of Chateaugay and Bellmont, Franklin County, New York. In order to satisfy the requirements of the State Environmental Quality Review Act (SEQR), the Final EIS needs to contain sufficient information and analysis to allow the agency to produce a Findings Statement that supports the DEC's final permit decisions. As an involved agency in this process, DEC is submitting these comments related primarily to the agency's permitting authority with an emphasis on wetland, stream, invasive species, listed species and stormwater impacts.

Response S-26: Comment noted.

Comment S-27: Section 1.7 Operations and Maintenance Plan

The Operations and Maintenance (O&M) Plan for the project should include an environmental management component incorporating environmental considerations for the maintenance of the facility. The plan should also describe procedures to assess and minimize environmental impacts during major repairs, emergencies, and decommissioning. DEC recommends that opportunities to create additional environmental enhancements during the life of the project, beyond those required for restoration and mitigation, should be explored through cooperative partnerships with landowners, local governments, educational and conservation organizations.

Response S-27: It is anticipated that the majority of maintenance, repairs, and decommissioning activities that take place during Project operation will utilize the existing infrastructure (i.e., access roads and crane pads) that will be in place following Project construction. Therefore, any additional environmental impacts during maintenance and repair activities should be relatively minor. It is worth noting that the crane pads built during construction will be left in place during Project operation to facilitate Project maintenance (and ultimately, decommissioning) without the potential for additional environmental impacts that might otherwise be incurred to reconstruct the crane pads. Although not anticipated, to the extent the existing infrastructure is not sufficient, all maintenance,

decommissioning, emergency repairs, and restoration activities will adhere to the requirements of appropriate governing authorities, and will be conducted in accordance with all applicable federal, state, and local permits.

With respect to the recommendation to explore opportunities to create additional environmental enhancements during the life of the Project, please see SEIS Section 1.4.2 (Public Need and Benefits to be Derived from the Project) of the SEIS. It is worth noting that this Project will have numerous environmental benefits, primarily by providing a reliable source of clean, renewable energy to the public without introducing air pollutants or using valuable water resources. The Project will help meet state and federal greenhouse gas reduction and renewable energy goals, specifically those outlined in the New York State Energy Plan and the Renewable Portfolio standard

Conservation measures for siting, construction, operations, and decommissioning will be included with the Bat and Bird Conservation Strategy, which is in the process of being prepared. In regard to additional on-site environmental enhancements, the ability of Jericho Rise, LLC to undertake these efforts is limited by the fact that Project lands are still owned and managed by individual private landowners.

Comment S-28: Section 2.2 Water Resources

With respect to both streams and wetlands, this project is not anticipated to require either DEC Article 15 Stream Disturbance or Article 24 Wetland Impact permits. However, unregulated stream and wetland impacts should still be avoided and minimized to the greatest extent possible. And the revised project does reduce both wetland and stream impacts.

Response S-28: Comment noted. All Article 24 wetlands are being avoided, and if feasible, the Applicant intends to install all collection line crossings of state protected streams via directional drilling to avoid the need for an Article 15 permit. As noted in Section 2.2.1 of the FEIS, impacts to federally regulated wetlands and streams (including those that are not state-protected) have been minimized by reducing the proposed area of disturbance where Project components intersect with wetlands and streams, and by plans to install collection lines underneath many of the wetland and stream crossings by directional drilling. Temporary wetland impacts have been reduced from approximately 1.64 acres estimated in the SEIS layout to 0.95 acre for the FEIS layout. Permanent loss of wetlands as a result of wetland fill has been reduced from 0.13 acre in the SEIS to 0.12 acre in the FEIS. Temporary construction-related impacts to unregulated streams are estimated to total 209 linear feet while

permanent impacts will total 63 linear feet. Additional discussion of wetland impact avoidance and minimization is included in the Joint Application for Permit (Appendix A of this FEIS).

Comment S-29: *2.2.2.1 Construction*

Based on review of the project boundary and proposed layout, DEC regulated streams will be avoided due to use of directional drilling. However, some unregulated Class C and D streams will temporarily impacted. With respect to stream crossings, the applicant should abide by the Department's document "Stream Crossings: Guidelines and Best Management Practices" found at http://www.dec.ny.gov/permits/49066.html. Stream crossings should be designed with the goal of protecting stream continuity.

Trenching of non-permanent streams shall be done in the dry, either when the stream has no flow, or by pumping the stream flow around the work site. No discharge of turbidity from such streams is allowed.

Response S-29: The Applicant intends to comply with the NYSDEC's stream crossing guidelines and best management practices for unprotected streams that are crossed by trenching during construction. No NYSDEC protected streams are anticipated to be crossed by trenching. Section 4.1 of the Joint Application for Permit describes minimization and mitigation measures for impacts to streams (Appendix A of this FEIS).

Comment S-30: *2.2.2.1 Construction*

With respect to streams and wetlands crossed via horizontal boring, the following procedures and disposal of waste guidelines should be followed:

Horizontal drilling procedures

a. Biodegradable drilling solution shall be used, to minimize harm to aquatic species in the event of a drilling fracture, which could release the solution to the surrounding areas.
b. Stream and wetland crossings shall be subject to the following:
    i. Exit and entry points shall be distanced from the stream bank so as to minimize disturbance, to the extent practicable.
    ii. Prior to boring, all sediment stabilization measures shall be in place to prevent unnecessary erosion and associated turbidity and sedimentation.
    iii. No increase in downstream turbidity or sedimentation is permitted.

iv. Any water accumulated in the isolated work area shall be managed in a manner that prevents a visible contrast in the stream below the work area.

v. Equipment and provisions of the Frac-Out Contingency Plan shall be readily accessible, for locations where streams are crossed using horizontal directional drilling technology.

Response S-30: The Applicant understands these requirements and anticipates the use of a biodegradable drilling solution. All of the other recommendations, listed under Comment S-30 b, are anticipated to be included in the final construction plans. The Project SWPPP (Appendix B) addresses sediment and erosion control and assures that all construction activities comply with state water quality standards. A Draft Directionally Drilled Installations Inadvertent Return Plan (also known as a Frac-Out Contingency Plan), has been developed by the Applicant since release of the SEIS. It is attached as Appendix J of this FEIS.

Comment S-31: *2.2.2.1 Construction*

Disposal of Drilling Waste

Uncontaminated drill cuttings and drilling muds from drilling processes which utilize only air, water, or water-based drilling fluids are considered to be construction and demolition debris under 6 NYCRR Part 360 (Solid Waste) and can be disposed of at either construction and demolition (C&D) debris landfills or at municipal solid waste (MSW) landfills. Drill cuttings from drilling processes which utilize any oil-based mud or polymer-based mud containing mineral oil lubricant are considered to be contaminated and can only be disposed of at MSW landfills. Dewatered drilling muds including any oil-based mud or polymer based mud containing mineral oil lubricant can only be disposed of at MSW landfills.

Response S-31: The Applicant understands these requirements and intends to abide by them.

Comment S-32: *2.2.2.1 Construction*

Inadvertent Drilling Fluid Returns

Permittee shall submit an approvable "Contingency Plan for Drilling Fluid Release and Mitigation" that describes the procedures for containing inadvertent drilling fluid returns for each trenchless crossing method. "Contingency Plan for Drilling Fluid Release and Mitigation" shall include protocols to contain and clean up any spills and prevent any additional drilling fluids from entering waters of the state. If the amount of surface return exceeds that which can be collected using

small pumps, drilling operations shall be suspended until surface volumes can be brought under control. Permittee must minimize impacts in environmentally sensitive areas, including wetlands and waterbodies. No trenchless crossings can be started until the DEC approves such plan.

Notification Inadvertent Returns of Drilling Fluid

If inadvertent drilling fluid surface returns occur in an environmentally sensitive area (i.e., wetlands and water bodies) the DEC shall be notified immediately and a written monitoring report summarizing the location of surface returns, estimated quantity of fluid, and summary of cleanup efforts shall be submitted within 24 hours of the occurrence.

Response S-32: A Directionally Drilled Installations Inadvertent Return Plan (also known as a Frac-Out Contingency Plan or a Contingency Plan for Drilling Fluid Release and Mitigation) has been developed by the Applicant since the release of the SEIS. It is attached as Appendix J of this FEIS. This plan contains details on the directional drilling methodology to be used, contingency plans for release of drill fluid in upland and wetland environments, a list of equipment to be available on site, procedures for disposal of horizontal directional drilling fluid, and a stipulation that the regional office of the NYSDEC be notified of any inadvertent release of drilling fluid to wetlands and streams. The Plan will be approved by NYSDEC prior to directional drilling on the Project site.

Comment S-33: 2.2.1.2 *Wetlands*

No DEC jurisdictional wetlands are anticipated to be impacted by this project. However, Army Corps regulated wetlands will and include crossings by constructing access roads, trenching collection lines, and creating temporary workspaces around turbine locations. Many of these are forested wetlands. Any wetland impact should be first avoided and then minimized to the greatest extent possible.

The conditions described above with respect to horizontal drilling and streams would apply to horizontal drilling under wetlands as well.

Response S-33: Comment noted. The Project has been designed through an iterative process that has reduced wetland impacts, including forested wetland impacts, wherever practicable. See Response S-28 and discussion of wetland avoidance and minimization in the Joint Application for Permit, attached as Appendix A to this FEIS.

Comment S-34: 2.3 Biological, Terrestrialand Aquatic Ecology

2.3.2 Potential Impacts.

As more energy-related projects such as wind energy facilities, oil and gas pipelines, gas drilling pads, and transmission lines are proposed and built across the state, DEC has been more thoroughly evaluating impacts to interior forest habitat and the protected species that depend on these forests. The project sponsor should consider layout design and actions to minimize impacts to forest interior breeding birds and bats, and to mitigate for unavoidable forest clearing. These may include but are not limited to: placing turbines as close as possible to forest/field edges, to reduce impact to both habitat types; conducting all tree clearing outside of the primary bird nesting season (April1-August 31) and bat roosting and swarming period (April 1-October 31); and communicating with DEC and USFWS about options to mitigate for direct and indirect loss of forest interior habitat.

Direct impact encompasses all acres of forest cleared. Indirect impacts to interior forests are difficult to quantify, though many studies have shown that measureable impacts are found at least 300 feet, and up to 2000 feet, into the forest from the boundary of a disturbance. Such impacts include increased presence of nest parasites, predators, invasive species and human disturbance. These, as well as changes in temperature, light penetration, humidity, soil moisture, plant composition, noise levels, prey availability, and other factors may cause birds to avoid forest edges during nesting, feeding, and migration periods. This can lead to increased intra-and inter-species competition for preferred interior forest habitat, changes in food availability, decreased fledging rates, and increased energy expenditure during foraging and territory defense in sub-par habitat. Each project that impacts interior forest habitat across the landscape puts cumulative stress on bird and bat populations in New York and across the northeast, potentially contributing to a gradual decline in the overall number and diversity of interior forest-dependent species.

Response S-34: Project components have been sited to reduce forest clearing wherever practicable, within the siting constraints of wind farms of this size. Since release of the SEIS, the six alternate turbine locations have been eliminated from the proposed Project layout (see FEIS Section 2.1 and FEIS Figure 3). Five of the six were located in the southwestern corner of the Project site, an area that is heavily forested. Dropping these turbines from the Project layout will avoid impacts to forested habitats in

this area (see Table 18 of the SEIS for a comparison of impacts to forest land from the proposed turbines versus the alternate turbines).

The Project has also been designed to minimize impacts to forests and agricultural land through siting turbines at the edges of agricultural fields and siting access roads and collection line routes along existing access roads through the forest where practicable. In those cases in which turbines had to be sited in forests, they will be located as close to forest edges as possible, in order to reduce both clearing impacts and fragmentation impacts. Of the 37 turbines proposed for the Project, only nine (24%) are proposed to be sited in existing forest. Of these, two (Turbines 16 and 30) are less than 500 feet from the forest edge or public road (see Figure 9 of this SEIS). In addition, Turbine 18 is within a managed timber stand, which experiences heavy disturbance and fragmentation from logging on an ongoing basis. Although Turbine 19 is approximately 560 feet away from the forest edge, it is only about 150 feet from this managed timber stand.

In addition to siting Project components so as to avoid and minimize impacts to forests, where forest clearing is unavoidable, it will be conducted in order to reduce impacts to breeding birds, bats, and small mammals, and the Applicant will be discussing tree clearing restrictions with USFWS and NYSDEC. The Final Rule for northern long-eared bats under Section 4(d) of the Endangered Species Act, which was issued on January 14, 2016, provides flexibility in the clearing restrictions designed to protect northern long-eared bat. See Section 2.3 for additional information on the final 4(d) rule and implications for the Project's tree-clearing schedule.

With respect to concerns regarding forest fragmentation, it is important to note that the Project site is a patchwork of fields and woodlots, and forest patches within the Project site are generally not large enough to provide the interior forest habitat conditions which stand to be most degraded by fragmentation. Further analysis of the effects of fragmentation of forested habitat were conducted in response to this comment and are included in Section 2.2.2 of this FEIS. The analysis showed that of the 3,539 acres of forest in the FEIS Project site, only about 127 acres (3.6%) are considered interior forest, because they are located greater than 1,000 feet from a forest edge. Of the small amount of interior forest that does exist within the Project site, Project construction will cause fragmentation impacts to only about 31% of these forests (see Figure 19 and Section 2.2.2 of this FEIS). These findings are consistent with the statement in Section 2.3.2.1 of the SEIS that some level of habitat loss and fragmentation will occur as a result of Project construction. However, the great majority of the forests within the Project site (96.4%) are already fragmented and additional

clearing associated with Project construction will have limited adverse impacts due to habitat fragmentation and edge effects.

Comment S-35: Further comments on the avian and bat impact study plans and proposals will be submitted in a separate letter by 15 January 2016.

Response S-35: Comment noted. These comments were never received by the Applicant or by the Applicant's avian consultant.

Comment S-36: Cumulative Impacts

Cumulative impacts from other proposed and developed wind projects in the area, such as "Alabama Ledge" should be discussed. The section should elaborate on the issues raised in above sections with respect to both bird and bat impacts – and cumulative loss of habitat and habitat fragmentation – due to roads and collection lines.

Response S-36: Section 7.0 of the SEIS provides an analysis of potential cumulative impacts that may arise from interactions between the impacts of Jericho Rise Project and the impacts of other wind projects in the area. This evaluation specifically includes the five operational projects identified in Table 10 below. Please note that the proposed Alabama Ledge wind farm is over 200 miles from the Project site, and therefore was too far away to be considered in the cumulative effects analysis provided in the SEIS.

Table 10. Current Status of Wind Projects Considered for Possible Cumulative Impacts

Project Name	Status	MW	Approximate Distance from Project
Noble Chateaugay	Operational 2009	107	1.1 miles east
Noble Clinton	Operational 2008	102	4.3 miles east
Noble Ellenburg	Operational 2008	81	4.3 miles east
Marble River	Operational 2012	216	7.5 miles northeast
Noble Altona	Operational 2009	97.5	20.3 miles southeast

Sources: NYISO, 2015b; NYSDEC, 2015.

Section 7.0 of the SEIS evaluates the cumulative impacts and benefits of the Jericho Rise Wind Farm and the five operational wind farms listed above with regard to wetlands and wildlife (SEIS Sections 7.2-7.5). This section focuses specifically on collision mortality that has been documented in post-

construction monitoring studies. With respect to forest habitat fragmentation, some minor adverse impacts to bird and bat populations are anticipated as a result of habitat loss and edge effects (see analysis in Section 2.2.2 of this FEIS and response to Comment S-34). These impacts would contribute to the cumulative habitat loss and fragmentation impact that construction of wind farms in the region has caused. However, the cumulative impact of habitat degradation is difficult to quantify. Studies examining causal relationships between construction of wind farms and mortality or displacement due to habitat loss and degradation have been inconclusive and generally show little displacement effects. In addition, studies of this nature have generally not been conducted at wind farms in the region. In areas where the vegetation is a mosaic of fields/open areas and forest, the forest habitat has already been fragmented so the incremental effects from the turbines that are located in forests generally is not believed to contribute significantly to cumulative effects.

Comment S-37: Appendix F Spill Control and Countermeasure Plan

Based on DEC's experience with similar wind energy projects, spills of petroleum and other chemicals may occur during the construction and operational phases of the project. As such, the applicant should develop a spills management plan that is consistent the Department's regulations regarding petroleum bulk storage, chemical bulk storage and spill response and remediation. As guidance, the applicant can refer to the Department's guidance document entitled "Leaks, Spills and Accidents Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State," found at the following link: www.dec.ny.gov/docs/water_pdf/leaksspillsbmp.pdf.

The applicant has cited and provided the Marble River Wind Project SPCC as an example. Please work with regional spill response staff to ensure that the plan developed will be adequate for this particular wind project. Provide staff with a draft document at the earliest point practical.

Response S-37: The model SPCC provided as Appendix F of the SEIS identifies the planning, prevention, and control measures that will be adhered to during Project construction to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of construction. As indicated in the model plan, spills during construction will be documented and reported to NYSDEC in accordance with applicable regulations. A SPCC specific to the Jericho Rise Project will be developed prior to construction, and is anticipated to address the issues outlined in the NYSDEC guidance document cited above.

Comment S-38: Appendix H Stormwater Pollution Prevention Plan

Before commencing construction activity, the owner or operator of a construction project that will involve soil disturbance of one or more acres must obtain coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity. The SWPPP subject to the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) shall include Erosion and Sediment Controls designed, installed and maintained in accordance with the most current version of the "New York Standards and Specifications for Erosion and Sediment Control." Additionally, for projects that include the construction of permanent gravel access roads, the SWPPP shall include post-construction stormwater management practices designed in accordance with the most current version of the "New York State Stormwater Management Design Manual (Manual)" (see Table 2, Appendix B of GP-0-15-002). Chapter 4 of the Design Manual should be used to determine the *minimum* sizing criteria for these post-construction controls.

The applicant has provided the Marble River Wind Project's SWPPP as an example on which their SWPPP will be based. While this is a reasonable example, please work with the regional water engineer, Kirk Bassarab to ensure that the plan developed will be adequate for this particular wind project. Provide him with a draft document at the earliest point practical.

Response S-38: Since release of the SEIS, a Project-specific SWPPP has been prepared and is included as Appendix B. The SWPPP will comply with the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), which requires control measures designed, installed, and maintained in accordance with the most current version of the New York Standards and Specifications for Erosion and Sediment Control, and also requires appropriate post-construction stormwater management practices detailed in the most current version of the New York State Stormwater Management Design Manual. The Project-specific SWPPP conforms to statewide accepted practices for wind power projects as proposed. The Notice of Intent has been filed and the SWPPP is currently being reviewed by the regional office as part of the required 60-day review period.

Comment S-39: Appendix L Invasive Species and Noxious Weed Control Plan

An acceptable invasive species plan must detail survey methods to identify existing invasive species, listed in DEC regulations found at 6 NYCRR Part 575, in the project area to ensure that these areas can be avoided. At a minimum, the plan must:

- Specify the method used to ensure that imported fill and fill leaving the site will be free

of invasive species to the extent practicable, and whether fill within the site will either be free of invasive species or only used within the area infested with the same invasive species;

- Address how site grading and erosion and sediment control will work together to prevent invasive species;
- Detail all cleaning procedures for removing invasive species from equipment, preferably with a power-washer, including personnel, location of designated equipment cleaning stations, location of off-site disposal (if the material is not rendered incapable of growth or reproduction) which must be either a landfill, incinerator or State-approved disposal facility. The procedures must ensure that the equipment will arrive and leave the site clean and all equipment and clothing-cleaning stations must be constructed so that invasive species seeds and other viable plant parts cannot escape in runoff or through other means;
- Describe the Best Management Practices or procedures that will be implemented to ensure that project activities do not result in introduction or spread of invasive species, especially in or near regulated areas of special interest to DEC Natural Resources staff such as areas containing protected species or habitats within the project area;
- Provide measures for educating workers about invasive species and how to prevent their spread, identify work areas which will trigger cleaning activities (such as prior to using mats in streams and wetland and wetland adjacent areas) and identify methods to prevent and control the transport of invasive species as well as how to clean equipment and clothing using acceptable methods;
- List all planting and seeding materials to be used;
- Detail post-construction monitoring and survey approaches, preferably for at least five years, which would ensure that the objective of no net increase in invasive species was accomplished. If areal coverage of invasive species in the ROW project area increases over the baseline survey level, remedial action should be considered in consultation with DEC and USACE. If the goals of the invasive species control plan are not met within five years post-construction, a revised control plan containing additional control actions for an additional monitoring term must be submitted.
- Set Plan goal for no (0%) net increase in invasive species across the project footprint. While our primary jurisdictional areas are wetlands, streams and the adjacent areas, controlling invasive species in upland construction sites is also important. If there were invasive species prior to construction, or immediately adjacent to the construction area,

then invasive species controls shall be utilized to control such species so that no more than 5% of the vegetative coverage of the disturbed/restored area is comprised of those invasive species. In no case shall new or additional invasive species be allowed to be introduced to the project area, or to new portions of the work area. If a new species is found to be present in the project area, or if a species has been introduced to new portions of the project area, the permittee shall be responsible for removal.

- Remove Japanese knotweed in disturbed areas. If Japanese knotweed (Polygonum cuspidatum, syn. Fallopia japonica, locally called "bamboo") occurs on any portion of the project site, prior to any site work, all areas of Japanese knotweed within the project limits must be identified and flagged. If any of these areas are to be disturbed by the project operations, the entire root systems of the knotweed must first be excavated and placed directly into a container or truck bed for transport off site and not temporarily stockpiled on site. The excavated material containing knotweed must be disposed of at Regulated Waste Facility or treated by a process that destroys all knotweed propagules (roots, rhizomes, etc.) in the excavated material.

Response S-39: The Applicant has prepared an updated Invasive Species Control Plan (ISCP) (FEIS Appendix K) to reduce the potential introduction and spread of invasive species during both construction and operation the Project. The Plan updates the ISCP attached to the SEIS in response to the guidance provided in this comment from NYSDEC. The ISCP outlines measures to educate construction workers about invasive species and how to control their spread through contractor training sessions. Furthermore, the Plan details the procedures that will be utilized for construction materials inspection, target species treatment and removal, construction equipment sanitation, restoration, and post-construction monitoring. The Plan also notes that its goal is to prevent the expansion of invasive species, and will be considered successful when a 0% net increase in the aerial coverage of invasive species compared to a baseline survey of the target area is realized. To achieve this goal, the Applicant will conduct a baseline invasive species survey to determine the location and abundance of invasive plant species, and will conduct two years of post-construction monitoring to determine if the goal of 0% net increase has been achieved. The baseline survey and post construction monitoring program will cover the limits of disturbance of Project construction, rather than the entire Project site, which is defined as all participating parcels. In the event that the ISCP goals are not met after the two year period, then a revised control plan containing additional remedial actions and an extended monitoring term will be developed.

The Applicant understands that there are special considerations associated with controlling the spread of Japanese knotweed. Areas with Japanese knotweed will be identified and flagged prior to initiation of site work. If those areas with Japanese knotweed are to experience soil disturbance during construction, the entire root systems of the plants will be excavated and placed directly into a container or truck bed, rather than being stockpiled on site. The excavated material will be disposed of at a Regulated Waste Facility or treated by a process that destroys all Japanese knotweed propagules (roots, rhizomes, etc.).

Comment letter of January 12, 2016 from David A. Stilwell, Field Supervisor, US Fish and Wildlife Service RE: SEIS for Jericho Rise Wind Farm. The commenter provided a reference list at the end of the letter; these references are provided as footnotes to the specific comments broken out below.

Comment S-40: Executive Summary

The proposed turbines are 95 feet taller than the previous model proposed by the project sponsor. A statement is made that the potential environmental effects of a taller turbine are relatively minor compared to the shorter but more numerous turbines previously proposed in 2008. However, there is no basis in the document to support that statement. With regard to wildlife, studies have shown that the taller the structure, the higher the collision risk to migrating birds (Longcore et al. 2008[1]). Further, the larger the rotor swept area of a turbine, the more likely flying animals (birds and bats) could intercept the path of the turbines blades and be killed or injured.

Response S-40: The Longcore 2008 study cited in this comment is specific to the hazards posed by communication towers that are often much taller than wind turbines, illuminated with steady-burning FAA obstruction warning lights, and supported by numerous guy wires. They thus present substantially different hazards to birds and bats than wind turbines. Avian fatality studies at operating wind projects have not shown a correlation between turbine height and mortality rates. While taller structures may pose greater risk for nocturnal migrants, there have been no definitive studies to show that taller turbines have a greater impact on migratory birds and bats. There have been studies showing that the impact to passerines, most of which are migratory birds, from wind turbines do not result in any effects to the species populations (Erickson et al. 2014).

[1] Longcore T., C. Rich, and S.A. Gauthreaux Jr. 2008. Height, guy wires, and steady-burning lights increase hazard of communication towers to nocturnal migrants: A review and meta-analysis. Auk 125 (2):485-492.

Comment S-41: Section 1.0 Description of Proposed Action

On Page 2 of the document, it is stated that 44 turbine sites are being assessed in the SEIS, but the Executive Summary indicates 43 sites are being considered. Additionally, Figure 3 only shows 6 alternate turbine locations. These discrepancies should be addressed.

Response S-41: Forty three turbine sites were addressed in the SEIS, including 37 proposed turbine locations and 6 alternate turbine locations. The reference to 44 turbine sites on page 2 of the document is a typo, as noted in Section 3 of this FEIS: Corrections to the FEIS. Figure 3 shows the correct number of alternate turbine locations.

Comment S-42: Nameplate capacity is the maximum amount of electricity that a project could generate under ideal conditions. The document mentions that the project will generate 32 percent of nameplate capacity. However, past data from the New York Independent System Operator indicates that most New York wind energy projects fail to generate more than 23 percent of their nameplate capacity (NYISO 2011[2]). The claim of electricity produced by the project should be clarified and substantiated.

Response S-42: The most recent data from the New York Independent System Operator (NYISO) show that the average capacity factor has increased statewide to 31.1% (NYISO, 2015a). The statewide average includes wind projects with smaller turbines and older technology that are less efficient than newer models on the market. The Project will use state-of-the-art technology in order to utilize the wind resource most efficiently. Given that the state average is just 0.9% less than the predicted capacity factor of the Project, 32% is a conservative estimate of the potential capacity factor of the Project.

Comment S-43: There is little information in this section regarding the lighting of turbines, buildings, or substations which may be used for the project. The Service recommends a lighting design that uses motion detectors at substations, buildings, and turbine doors to reduce the amount of excess stray lights that may attract night migrating birds during inclement weather. Light leaking from a nacelle during inclement weather at wind turbines in 2011 in West Virginia is believed to have caused mass mortality of songbirds (Service 2012a[3]). We recommend that any lighting within a turbine nacelle should be on a timer or motion activated sensor. Lighting on the outside of the nacelle should follow Federal

[2] New York Independent System Operator. 2011. Gold Book – 2011 Load and Capacity Data. Available http://www.nyiso.com.

[3] U.S. Fish and Wildlife Service. 2012a. Correspondence from the West Virginia Field Office to AES Corporation dated February 10, 2012.

Aviation Administration standards, using red flashed with minimum intensity and duration and maximum allowable off time as possible to reduce avian attraction.

Response S-43: Consistent with recommendations in the comment, substation lights will be motion-activated to minimize the amount of time the substation is illuminated. The station will be equipped with throw-over switches to allow lights to remain on only when needed (e.g., when maintenance work is being performed). No other buildings are proposed as part of the Project. The interior of turbine nacelles would only be lit for maintenance purposes, and lights will be turned on and off manually in order to reduce the amount of time the nacelle is illuminated. Maintenance work would normally occur during daylight hours, except in emergency situations. Emergency nacelle lighting may turn on automatically if the turbines lost power or were tripped offline. However, this situation would be abnormal, and is not expected to occur regularly. Consequently, no interior lighting should be visible outside of the nacelle under normal circumstances. Interior nacelle lights would only be visible in the rare instance that light was accidentally leaking out of the nacelle when lights were on for maintenance or other emergencies. FAA obstruction warning lights on the turbines will be red flashing lights with the minimum intensity and duration and the maximum off-cycle allowed by the FAA.

Comment S-44: Description of Proposed Action

In Section 2.2, Water Resources, the report indicates that a mitigation plan for unavoidable impacts to wetlands will be developed. Unfortunately, the plan is not available to the reader or the co-lead agencies charged with ensuring that impacts are mitigated. We suggest the wetland mitigation plan be completed for review prior to a project SEQRA determination. Further, we recommend that compensatory mitigation be required for conversion of forest wetlands to other cover types. An estimated 2.6 acres of forested wetland will be converted at turbine locations and another 0.9 acre will be converted due to an overhead collection line. Appropriate mitigation should be provided for the loss of wetland function in these areas. Accordingly, the Corps should not approve a CWA Section 404 permit for the project until an adequate mitigation plan is received.

Response S-44: Revised wetland impact estimates based on advanced Project engineering are presented in Section 2.2.1 of this FEIS and the Joint Application for Permit included as FEIS Appendix A. These impacts have been reduced from those predicted in the SEIS. The Project will temporarily impact 0.96 acre of emergent wetland, scrub-shrub wetland, and intermittent streams. The majority of these temporary impacts are associated with the installation of overhead and buried electrical collection lines. These impacts will occur only at the time of installation, and any resulting disturbance to vegetation and

soils will be restored immediately following installation. Thus, these impacts will be of short duration (a matter of days or hours) and will not alter the character of the affected resource. Approximately 0.37 acre of the temporary impacts will be temporary fill associated with access road crossings. In these instances, the fill may be in place for the duration of construction (up to a year). This impact is greater in duration, but affects only a small area. Functions and values provided by the temporarily impacted resources include storm water detention, water quality improvement, groundwater recharge and wildlife habitat. However, because the impacts to these wetlands and streams are short-term, and/or affect only a very small area, none of these functions or values will be substantially altered as a result of Project construction.

In regard to permanent impacts, only 0.095 acre of emergent wetland, 0.009 acre of scrub-shrub wetland, and 0.136 acre (63 linear feet) of intermittent stream will be lost due to the construction of Project access roads. An additional 0.272 acre of forested wetland will be permanently converted to other wetland cover types along the electrical collection lines. The functions and values provided by the emergent and scrub-shrub wetlands and the intermittent streams being filled are the same as these described for the temporarily impacted wetlands. In addition to these functions and values, the impacted forested wetlands also provide habitat for both upland and wetland species of wildlife that utilize trees as a source of food and/or cover. Because the largest permanent wetland impact associated with the Project is forest conversion, the loss of forested wildlife habitat is probably the most substantial impact on wetland functions and values. However, the small area of forested wetland being affected (0.27 acre) limits the significance of this impact.

To mitigate for the functions and values lost or temporarily altered as a result of Project construction, the Applicant is proposing to implement the following mitigation plan for unavoidable wetland impacts. Jericho Rise LLC will purchase one credit (equivalent to 1.0 acre) from an in-lieu fee program administered by Ducks Unlimited (DU). According to Peter Wyckoff, a representative of DU, they are currently designing a mitigation project in the Town of Brasher that will convert an existing hayfield with drainage ditches into a diverse wetland system that provides wildlife habitat, as well as nutrient reduction and flood flow attenuation. The project will include PFO, PSS and PEM wetland types, and the Applicant's credit will be applied to in-kind replacement of the wetland types being impacted by the Project, thus off-setting impacts to wetland functions and values as closely as possible. Because the Project proposed by DU has a high likelihood of success, the proposed 3:1 replacement of wetlands permanently lost and the 2:1 replacement of converted forested wetlands provided by the 1.0 acre credit to be purchased by the Applicant should result in a net increase of

wetland acreage within the Eastern St. Lawrence River watershed, as well as enhanced wetland functions and values.

Comment S-45: Avian surveys were conducted in 2007 and again in 2015. Of particular importance is the migratory raptor surveys conducted in the project area. A statement on Page 48 indicates that bald eagle *(Haliaeetus leucocephalus)* surveys were conducted but the report (and data) has not yet been submitted to the Service. Therefore, we may require additional information, including surveys, depending upon the results obtained in 2015. At this point, we cannot assess the risk to bald eagles due to the project. Bald eagles are no longer federally-listed under the ESA; however, bald eagles, along with their foraging and winter roosting habitat, remain protected pursuant to the BGEPA and MBTA. Any take and/or disturbance of bald and golden eagles *(Aquila chrysaetos)* is strictly prohibited under these Acts. Additional criteria for permit issuance are outlined in the BGEPA *(50 CFR 22.26 and 22.27).* Please visit our website for additional information on BGEPA regulations http://www.fws.gov/birds/management/managed- species/eagle-management.php.

The Service's 2007 National Bald Eagle Management Guidelines (Guidelines), which can be found at http://www.fws.gov/northeast/ecologicalservices/eagle.html, were developed to assist with project planning and minimize impacts to bald eagles. We recommend that the project sponsor consult these Guidelines for information regarding bald eagles and information needed to assess risk to this species. Measures to conserve eagles and their habitat associated with wind projects have also been provided in the Eagle Conservation Plan Guidance recently developed by the Service (Service 2013[4]).

Response S-45: The Eagle Observation Study, which documented presence of bald and golden eagles within the Project site, was concluded in December 2015, and results are presented in Section 2.3 of this FEIS. The study was performed according to the USFWS Eagle Conservation Plan Guidance and was developed in consultation with the USFWS and NYSDEC. Overall, during the 2015 surveys, only three bald eagles and no golden eagles were observed in the study area. The conclusions of this study, that bald and golden eagle occurrence within the Project site is rare, is consistent with the information presented in the SEIS. The results of the study will be provided to the USFWS in a final report.

[4] U.S. Fish and Wildlife Service. April 2013. Eagle Conservation Plan Guidance Module 1 – Land-based Wind Energy Version 2. http://www.fws.gov/ecological-services/energy-development/eagle_guidance.html.

Comment S-46: To evaluate the potential impacts to nocturnal migrating animals, a review was conducted of other wind project studies in the region. Data from two radar studies at nearby wind energy projects was reviewed and summarized. The case is made in the SEIS that the mean flight altitude of nocturnal migrants in those areas is above the height of the turbine blades and, therefore, risk would be low. However, nocturnal migrants fly at a wide range of heights, and low numbers of high-flying migrants can influence the mean altitude upward and not necessarily reflect if high numbers of migrants are flying within the rotor swept zone. The important metric to report is the density of migrants flying within the area where collisions would occur. The report should be revised to reflect this information.

Response S-46: As the commenter notes, an analysis of nocturnal radar data from adjacent wind projects was conducted, and is provided in Section 2.3.1.3 of the SEIS. This analysis suggests that the Project would not result in impacts to nocturnal migrants greater than any other wind project in New York or within the region or within the United States. As with high flying migrants, low flying migrants can also influence the mean flight height downward. Further, the mean flight height is what would be expected on average, and there could always be occasions when the average conditions do not occur. There have been studies that have addressed the question of whether impacts to passerines, most of which are migratory birds which migrate at night, from wind turbines could have population level effects. Such studies have concluded that while there are impacts to migrant birds from wind turbines, the magnitude of mortality from wind turbines is much lower than many other sources of bird mortality, and the impact from wind turbines does not have an effect on species populations (Erickson et al. 2014).

Comment S-47: Migratory birds, such as waterfowl, passerines, and raptors are Federal trust resources and are protected under the Service's jurisdiction pursuant to provisions of the MBTA. The Service is the primary federal agency responsible for administering and enforcing the MBTA. The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests except when specifically authorized by the Service. Neither the MBTA nor its implementing regulations, 50 CFR Part 21, provide for permitting of "incidental take" of migratory birds that may be killed or injured by wind projects. However, we recognize that some birds may be killed at structures such as wind turbines even if all reasonable measures to avoid it are implemented. Depending on the circumstances, the Service's Office of Law Enforcement may exercise enforcement discretion. The Service focuses on those individuals, companies, or agencies that take migratory birds with

disregard for their actions and the law, including when conservation measures have been developed but are not properly implemented.

Response S-47: The Applicant has consulted the appropriate agencies, including the USFWS, conducted the appropriate studies, and implemented appropriate measures to assure that impacts to migratory birds are minimized to the extent practicable. The Applicant will continue to work with the NYSDEC and the USFWS to monitor collision mortality at the operating Project.

Comment S-48: Surveys for bats were conducted using acoustic detectors and mist nets. Probable calls of the federally-listed threatened northern long-eared bat *(Myotis septentrionalis)* (NLEB) were recorded from acoustic detectors at two different sites within the project boundary in 2015. It is important to note that the project sponsor submitted to the Service a document entitled *"Jericho Rise Wind Farm Northern Long-eared Bat Take Avoidance Measures Franklin County, New York"* dated December 10, 2015, which assumes the species is present in the project area. However, this document was not mentioned in the SEIS. It should be appended to the SEIS for reference. This document serves as an important strategy to avoid the killing or injuring of this and other bat species.

Response S-48: The referenced document was prepared shortly after the release of the SEIS. It is included as Appendix D of the Joint Application for Permit, which is included as Appendix A of this FEIS. Section 2.3 of the FEIS summarizes the proposed northern long-eared bat protection measures described in this document. It should be noted that in the Final Rule for northern long-eared bats under Section 4(d) of the Endangered Species Act (ESA), issued on January 14, 2016, the USFWS has exempted operation of wind turbines from the ESA take prohibition (USFWS, 2016); therefore, the Applicant will be discussing implications of the 4(d) rule on operational protection measures with USFWS and NYSDEC. Based on those discussions, the Applicant may be implementing different measures than what is currently included in the document entitled *"Jericho Rise Wind Farm Northern Long-eared Bat Take Avoidance Measures Franklin County, New York"* dated December 10, 2015.

Comment S-49: We note that the text on Pages 51 and 55 indicates that analysis of acoustic data could not confirm the presence of eastern small-footed bats *(Myotis leibii).* This text should be revised to state that the analysis could not confirm or refute the presence of this species.

Response S-49: As noted in Section 3 of the FEIS, the suggested wording change has been made.

Comment S-50: We support the statement on Page 58 which indicates that all tree clearing will occur in winter to avoid breeding bird and bat impacts. We recommend the co-lead agencies make this a condition of project approval. To limit construction impacts of the project on migratory birds, we recommend no vegetation clearing during the breeding season, generally April 1 to July 15. In addition, in their December 2015 document, the project sponsor committed to conducting all tree removal between October 1 and March 31 to avoid impacts to the northern long-eared bat from tree removal. If vegetation is cleared outside of the breeding season, seeding of disturbed areas with an annual grass, such as winter wheat or annual rye, should be used to limit soil erosion until project construction commences.

Response S-50: A revised schedule is presented in Section 2.1 of the FEIS. The Applicant is committed to minimizing impacts to breeding birds and bats, including conducting tree-clearing during the appropriate timeframe. The Applicant will be discussing tree clearing restrictions with USFWS and NYSDEC to determine the appropriate times of year to avoid or minimize any potential impacts. However, it should be noted that the Final Rule for northern long-eared bat under Section 4(d) of the Endangered Species Act, which was issued on January 14, 2016, provides flexibility in the clearing schedule (USFWS, 2016). Therefore, the Applicant will be discussing implications of the 4(d) rule on tree clearing restrictions with USFWS and NYSDEC. Based on those discussions, the Applicant may be implementing different measures than what is currently included in the document entitled *"Jericho Rise Wind Farm Northern Long-eared Bat Take Avoidance Measures Franklin County, New York"* dated December 10, 2015. Please see Section 2.3 of this FEIS for additional information regarding the Final 4(d) rule for northern long-eared bat.

Stabilization of disturbed soils, both inside and outside of the growing season, will be in accordance with the Project SWPPP included as Appendix B to the FEIS.

Comment S-51: We believe the text on Page 59, which states that no impacts to the NLEB and eastern small-footed bat will occur during construction, is not appropriate because the project sponsor has assumed presence of the NLEB in its take avoidance strategy mentioned above. As stated above, the project sponsor specifically committed to removing trees in the winter to avoid direct impacts to the NLEB while in their summer roosts. The statement on Page 59 contradicts their acknowledgement that the NLEB could be present during the summer.

Likewise, the text on Page 66 indicates no impacts to the NLEB from project operation. This statement also contradicts the take avoidance strategy which acknowledges the need to operate the turbines in a way that will avoid NLEB take. We recommend both sections of the SEIS be rewritten to reflect the NLEB take avoidance strategy provided to the Service. Our office will continue to work with the project sponsor to avoid and minimize impacts to bats and other species.

We note that the most recent research summary on this topic was not included in the DEIS. The new report, *A Synthesis of Operational Mitigation Studies to Reduce Bat Fatalities at Wind Energy Facilities in North America* (Arnett et al. 2013[5]) provides valuable information on how to conserve bats at operating wind energy facilities. This research summary shows that modest operational adjustments can reduce bat mortality by at least 50 percent or more with minimal losses of electricity production. We support the report's recommendation that increasing turbine cut-in speed by 1.5 to 3 meters per second be adopted as a means of conserving bats at wind energy projects. Implementing this strategy to conserve bats would adhere to our agency's recent recommendations in the *U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines* (Service 2012b[6]).

Response S-51: To clarify, the statement on page 59 was meant to indicate that construction-related impacts to northern long-eared bat will be avoided by restricting clearing to the winter months, when this species will not be on site. Other construction activities that occur during the summer months when northern long-eared bat could be on site are not anticipated to result in injury, mortality, or loss of habitat for this species.

It should be noted that in the Final Rule for northern long eared bat under Section 4(d) of the Endangered Species Act, issued on January 14, 2016, the USFWS has specifically exempted operation of wind turbines from the ESA take prohibition (USFWS, 2016). In regard to comments on possible operational impacts (SEIS p. 66), please note that the USFWS made the following statements as part of their findings in the Final 4(d) Rule:

5 Arnett, E.B., G.D. Johnson, W.P. Erikson, and C.D. Hein. 2013. A synthesis of operational mitigation studies to reduce bat fatalities at wind energy facilities in North America. A report submitted to the National Renewable Energy Laboratory. Bat Conservation International. Austin, Texas, USA.

6 U.S. Fish and Wildlife Service. 2012b. Final Land-Based Wind Energy Guidelines. Available at: http://www.fws.gov/windenergy.

"*Our primary reason for not establishing regulatory criteria for wind-energy facilities is that the best available information does not indicate significant impacts to northern long-eared bats from such operations. We conclude that there may be adverse effects posed by wind-energy development to individual northern long-eared bats; however, there is no evidence suggesting that effects from wind-energy development has led to significant declines in this species, nor is there evidence that regulating the incidental take that is occurring would meaningfully change the conservation or recovery potential of the species in the face of WNS.*"

In addition, the wind industry has recently published best management practices establishing voluntary operating protocols, which they expect "to reduce impacts to bats from operating wind turbines by as much as 30 percent" (AWEA, 2015). The Applicant intends to follow these best management practices, including the operational protection measure of feathering turbines below manufacturer cut-in speed to reduce impacts to bats. The Applicant will be discussing implications of the 4(d) rule on operational protection measures (i.e., feathering below manufacturer cut-in speed and/or increasing cut-in speed) with USFWS and NYSDEC. Based on those discussions, the Applicant may be implementing different measures than what is currently included in the document entitled *"Jericho Rise Wind Farm Northern Long-eared Bat Take Avoidance Measures Franklin County, New York"* dated December 10, 2015. Please see Section 2.3 of the FEIS for additional information regarding northern long-eared bat conservation measures.

Comment S-52: On Page 66, the project sponsor does not commit to conducting post-construction monitoring to determine the level of bird and bat fatalities at the project but indicates they will assess the need. As a conservation measure, we strongly recommend that post-construction monitoring protocols be developed and submitted to the Service and the New York State Department of Environmental Conservation (NYSDEC) for review. In addition, we recommend the co-lead agencies not approve the project until such a plan has been developed and approved.

Prior to the completion and approval of the SEIS, the project sponsor should provide a draft Bat and Bird Conservation Strategy (BBCS) which will outline the specific conservation commitments that will include monitoring turbine sites for wildlife mortality, adaptive management strategies which will reduce the potential for mortality, and compensation for unavoidable impacts. The BBCS document has been used for other wind energy projects in New York and the Service is willing to work with the project sponsor in developing it for this project.

Response S-52: The Applicant is developing a draft post-construction monitoring (PCM) study plan and will work with the USFWS and NYSDEC to finalize the study plan. NYSDEC guidelines for post-construction monitoring are attached as Appendix M. In addition, the Applicant is developing a Bird and Bat Conservation Strategy (BBCS) that outlines measures the Project is implementing during the siting phase and will implement during the construction, operation, and decommissioning phases to protect bird and bat resources. A copy of the BBCS will be provided to the Towns when finalized.

Comment S-53: Summary

At this time, we continue to encourage existing and proposed wind developments to follow current Service recommendations on wind power siting and construction found in the *U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines* (Service 2012b). The Service hopes to work cooperatively with wind developers to appropriately site wind projects and consider wildlife during the design, construction, and operation of these facilities. We look forward to continuing to work with the project sponsor and reviewing additional information on bald eagles and nocturnal migrants.

Response S-53: Anticipated impacts to nocturnal migratory birds are fully described in the DEIS and SEIS. As indicated in these documents, neither pre-construction surveys at the Project site, nor the results of post-construction fatality monitoring at nearby operating wind projects suggest the Jericho Rise Wind Farm will have a significant adverse impact on nocturnal migrants. The Applicant continues to work with the USFWS in developing measures to minimize potential impacts to birds and bats and will be working cooperatively with the agency to develop a PCM study plan. The NYSDEC guidelines that will inform the development of the plan are attached as Appendix M. The results of the Eagle Observation Study have been provided in Section 2.3 of this FEIS, and the Applicant will also provide USFWS the final report.

Comment letter dated January 11, 2016 from Dean Long, Utility Analyst 2, Environmental Certification and Compliance, New York State Department of Public Service, Re: Comments on Supplemental Draft Environmental Impact Statement for Jericho Rise Wind Farm.

Comment S-54: As currently proposed, the Jericho Rise Wind Farm would have a nameplate capacity of 77 megawatt (MW), below the threshold set in Public Service Law (PSL) §68, and will therefore not require a Certificate of Public Convenience and Necessity from the Public Service Commission. Because no certificate is required, DPS is an Interested Party as defined in the State Environmental Quality Review Act (SEQRA) 6 New York Code of Rules and Regulations (NYCRR) 617.2(t). If the

proposed project power capacity increases to over 80 MW, or work is proposed for a rights-of-way (ROW) previously approved under PSL Article VII, DPS would then have authority under existing statue to complete a separate review.

Response S-54: Comment noted.

Comment S-55: Section 2.12 SEQRA

On Page 19, the third and fourth paragraphs there are statements regarding the required length of the SEQRA comment period. These statements identified a typical comment period of 30 days or a 30-day comment period. The SEQRA regulations requires a minimum of a 30-day comment period (6 NYCRR 617.9 (a)(3). When an optional public hearing is held, the hearing has to take place no sooner than 14 following the notice of complete environmental impact statement (EIS) and the comment period must be open for at least ten days following the hearing NYCRR 617. 9 (4) (i- iii)). Jericho Rise comment period meets the minimum requirements of 30 days (33 days), however the prior comment on the draft environmental impact statement (DEIS) ran from sometime in February to April 2008 and included two public hearings. The SDEIS comment period includes two major holidays. Due to the large number of changes in the project, need for waivers to increase height, and the length of the prior comment period, a longer comment period for this SDEIS would have been appropriate.

Response S-55: The duration of the public comment period was agreed to by the Co-Lead Agencies. Although the need for a longer comment period was discussed, the lengthy comment period afforded the DEIS, in combination of the very limited (and generally supportive) comments at the SEIS public hearing, resulted in a determination that the 33 day comment period for the SEIS was adequate.

Comment S-56: Section 1.4.2 Public Need and Benefits to be derived from the Project; and Section 2.4.1.2.1 Conventional Power Plants and Air Pollution

The benefits of wind energy are described in Section 1.4.2 while the information in Section 2.4.1.2.1 provides a generic discussion on national electric power production by fossil fuel combustion with emphasis on coal. In New York State (NYS), the electricity produced by coal combustion is 4% of the power produced and decreasing (NYISO Power Trends 2015 "Gold Book"). The Power Profiler program by the United States Environmental Protection Agency (USEPA) used by the Applicant for the analysis of project benefits estimates coal combustion production of electricity for the project area

as under 7%, therefore the relevance of national use of coal for power production is limited. The analysis suggesting that Jericho Rise will displace electricity produced by coal combustion is unrealistic given the location of the wind turbines and the limited number of remaining coal plants operating in NYS. The power grid in upstate New York is supported by the NYPA hydropower projects on the St. Lawrence River, and other hydroelectric plants found in the region.

Response S-56: While the effect of this particular wind project on displacing coal-power generation may be limited, its overall environmental benefits, and roll in achieving state and federal goals for displacement of conventional generation with renewables, is accurately described in the SEIS. Governor Cuomo's recent State of the State address called for New York to become the "capital of the clean energy economy," recommended the development of 300 new wind projects, and reiterated the goal of having 50% of the state's generation be from renewable sources by 2030. The Jericho Rise Project helps advance all of these goals.

Comment S-57: Section 1.5.6 Interconnection Substation Facilities

SDEIS Section 1.5.6 references DEIS Section 1.5.6 that includes Exhibit 1.5.5. That exhibit identifies National Grid as the owner of the interconnection substation whereas the substation owners are actually New York State Electric and Gas (NYSEG) and New York Power Authority (NYPA) or, collectively' Operating Utilities. The DPS prefers connection at this substation via the 115kV regional transmission system operated by NYSEG rather than on the NYPA 230 kV transmission system side of the substation. All work on the properties owned by either Operating Utility will require approval and acceptance by the respective utility.

Response S-57: Reference to National Grid in the DEIS was an error. Ownership of the existing stations by NYSEG and NYPA, as indicated in the SEIS, is correct. The Applicant has, and will continue to, coordinate with the operating utilities during the location, design, and construction of the POI substation.

Comment S-58: Section 1.5.6 Interconnection Substation Facilities

Any new lighting in the connection substation should be task lighting that illuminates the work site when possible, and should be activated by a switch. The use of motion detection activated light is not appropriate since it will be frequently tripped by windblown debris or animals. The arrangement of the lighting and switching will be consistent with the practices of the Operating Utility and comply with applicable standards.

Response S-58: The Applicant has, and will continue to, coordinate with the operating utility (NYPA) regarding the design of the POI substation. If required, the arrangement of the lighting and switching will be consistent with NYPA practices and comply with all applicable NYPA standards. Because the POI substation will be operated by NYPA, the Applicant does not have control over the lighting at the POI substation. However, the Project substation, which is separate from the POI station, will have motion-activated lights with throw over switches to allow lights to remain on only when needed (e.g., when maintenance work is being performed). This is consistent with the USFWS recommendation of using motion detectors at substations, buildings, and turbine doors (see Comment S-43).

Comment S-59: Section 1.6 Project Construction

The SDEIS identifies the need for winter clearing of the ROW to avoid impacts to the Indiana bat and Northern long-eared bat. The schedule estimates that mobilization and deployment of environmental/ safety inspectors will occur from 1/10-15/2016, while the SEQRA comment period will close on 1/11/2016. DPS Staff notes that this is insufficient time to issue the Final Environmental Impact Statement (FEIS) and complete the 10-day post-acceptance waiting period when no action may take place (6NYCRR 617.11(a)). The schedule does not include a time for construction drawing review by agencies or the involved Operating Utilities. The Applicant should provide the lead agency and involved agencies with a revised schedule that includes anticipated submittals and review periods of the engineering plans, construction activities, and work period restriction associated with tree clearing or protected stream crossings. The project schedule will need to include pre-construction meetings and notice to the community of the start of construction.

Response S-59: See Response S-50. A revised scheduled is presented in Section 2.1 of the FEIS. With regard to work period restrictions for tree clearing, it should be noted that the Final Rule for northern long-eared bat under Section 4(d) of the Endangered Species Act, which was issued on January 14, 2016, provides flexibility in the clearing schedule. See Section 2.3 for additional information on the final 4(d) rule for northern long-eared bat. With regard to work period restrictions for stream crossings, impacts to protected streams have been avoided by siting access roads and wind turbines away from these streams. Where collection lines cross protected streams, if feasible, they will be installed via directional drilling, which will avoid all impacts to these streams. Therefore, a timing restriction for stream crossings is not anticipated.

Comment S-60: Section 2.2.1.3 Groundwater and 2.2.3 Groundwater Mitigation

Neither the SDEIS nor the DEIS presents a map that illustrates local topography and the locations of home and barns in relation to the proposed access road system. This prevents an evaluation of the proximity of an access road to a home or barn that may have a water well. Construction of an access road has the potential to interrupt a flow path of a spring or a shallow well that is supporting a barn or a homestead. The assessment is correct that separation distance between turbines and dwellings will generally protect home wells; however, there is not a separation requirement between access roads and buildings. To protect drinking water supplies of homes and livestock, the lead agency may require that wells near access roads be inventoried, and evaluated prior to the start of construction

Response S-60: The Applicant prepared maps showing topography, residences, and Project components as part of the Wind Energy Permit Application submitted to the Towns of Chateaugay and Bellmont. These maps are available at the Town Offices. Field review to date has not identified any wells along the proposed access road and collection line routes. In addition, impacts on wells and drinking water supplies have generally not been a significant issue on wind projects that have been built in New York State. However, the Applicant will conduct a reconnaissance-level well inventory to identify any active wells within 100 feet of proposed Project components prior to the start of construction, to ensure that construction of the Project does not result in adverse impacts to drinking water supplies. For any wells that are identified within this corridor, the Applicant will contact the landowner to document pre-construction water quality and yield so that this information is available should any complaints regarding possible well impacts arise during or after Project construction.

Comment S-61: Section 2.3.2.1 Potential Construction Impacts

The Applicant scoping document and DPS comment letter (DEIS Volume 2 of 2, Appendix A page 8, Section 3.3.2 and DPS comment Appendix 2 of 2, Appendix A September 14, 2007 letter section 3.3) both identified forest fragmentation as an issue, yet there is not a cohesive evaluation on this topic presented in the SDEIS. The SDEIS Table 18 does identify specific impacts to vegetation. Fragmentation related to forest clearing and clearing of successional fields are not evaluated. Northern Harriers are identified in the bird surveys and this bird uses successional fields for both foraging and nesting. The Northern Harrier is listed as a threatened species due in part to habitat loss. (http://www.dec.ny.gov/animals/7090.html) The EIS should provide an evaluation of the issue of habitat fragmentation for both forest and shrub lands. The Applicant needs to clearly state reasons for the conclusions reached in its evaluations of the habitat impacts.

Response S-61: In regard to forest fragmentation impacts, please see Response to Comment S-34. Northern harrier is an open country bird species that forages and nests in open habitats, including agricultural fields, marshes, meadows, pastures, and successional communities. Successional old field/shrubland habitats are limited in their occurrence within the Project site, and temporary and permanent impacts to these communities are estimated to total 36.5 acres and 3.5 acres, respectively. Areas of temporary impact within these communities will be allowed to return to their preconstruction condition, resulting in minimal fragmentation effects. Most of the open areas that could be used by harriers within the Project site are active agricultural fields. In general, turbines and access roads have been sited at the edges of agricultural fields to minimize loss of productive farmland. Collection lines cross these fields in places, but will be buried, and restored to their pre-construction condition following installation. Human disturbance along access roads and at turbine sites will be substantial during construction, but very limited during Project operation. Thus, any physical or human disturbance to successional habitat and agricultural fields utilized by northern harriers will be short term and temporary in nature.

Comment S-62: Section 2.3.2.1 Potential Construction Impacts

This section also identifies temporary construction impacts of 170.8 acres and permanent impacts of 17.5 acres to forested areas. The SDEIS Section 2.3.2.2 identifies 85.5 acres of forest land will be converted to shrub lands. The impacts are described as clearing and stump grubbing in section 2.3.2.1 of the DEIS. A plan to recover 67.8 acres of forest clearing should be described; otherwise, the permanent impacts of the project warrants revision. To complete the SEQRA review it is necessary to accurately assess the environmental impacts of the project. Clearing of 170.8 acres of forest is not a temporary impact considering the rate of tree growth and the period of habitat loss caused by tree clearing. The EIS should provide a complete analysis of the short term and long-term changes in the vegetation communities and assess those impacts.

Response S-62: Areas of forest clearing will include some areas where stumps are grubbed, such as along proposed access roads, collection line trenches, and at turbine foundations. In other areas, such as the perimeter of turbine work spaces and the outside edges of road and collection line corridors, it is anticipated that trees will be cleared, but the stumps will be left in place. Any area where forest will be converted to a built facility (i.e., access road, crane pad, turbine) has been identified as a permanent impact. Areas where forest will be converted to, and maintained as, successional communities are considered permanent conversion. Areas where trees will be allowed to regrow

following Project construction are characterized as a temporary impact. Although temporary impact to 67.8 acres of forest that will be allowed to regrow is long term, it is not permanent. It should be noted that forests in the Project site are second-growth forests, which have been historically cut and allowed to regrow. Section 2.2.2 of this FEIS includes an acknowledgement of the long term nature of this temporary impact, and describes how portions of forest cleared during Project construction will be allowed to regrow.

Comment S-63: Section 2.8 Traffic and Transportation

The SDEIS relies upon the road and bridge evaluation found in Appendix J of the DEIS. The DEIS analysis used the weight of the nacelle for the smaller Vestas V-82 or GE 1.5 MW turbines as the maximum transport weight. The SDEIS did not provide a comparison of the weights of the nacelle for the smaller turbines to the currently proposed larger Gamesa G 114 turbines. In addition, the Appendix J did not identify the weight range for the crawler crane components that may be heavier than the nacelle.

Response S-63: The road and bridge evaluation was completed prior to confirming the final proposed turbine model. Although the new turbine components will be heavier, the resulting axle loads will still be designed to be within the legal limits. The component weights are a concern when analyzing long structure spans where multiple axles will exert force on the structure. There are no structures within the Project area that will experience a different loading due to the new turbine model. The transport vehicles for the crawler crane components will also meet the maximum axle loading requirements. Constructed cranes are not being proposed to "walk" over any existing paved roads or drainage structures. Damage to the roadways is generally due to the increase in traffic. Additional testing of the road structure has been performed to evaluate the potential for damage and determine the road strengths needed to withstand the increased traffic loads. The County roads to be used, and the mitigation for potential damages, have been detailed in the Road Use Agreement between Franklin County and the Applicant. The Town roads to be used, and the mitigation for potential damages, will be detailed in the Host Community Agreement between the Applicant and the Towns of Bellmont and Chateaugay.

Comment S-64: Section 2.8 Traffic and Transportation

Bridge construction on US Route 11 east of the project area will prevent delivery of oversized or overweight trucks along the routes analyzed in the DEIS. The Applicant has proposed a travel route that delivers the turbine components on the west side of the project using US Route 11, to avoid the

bridge construction. Entering the project from the west may involve other communities and roads that have not been fully presented in the SDEIS, or cause a higher volume of traffic on NYS Route 190 and town roads. A revised transportation plan needs to: 1) identify a route that gains access to US Route 11 on the west side of the project, and assess the impacts to the roads identified in that plan; and 2) provide weight information on the Gamesa nacelle, and crawler crane components for cranes that have capacity to lift the nacelle and reach the heights of the hub.

Response S-64: The transportation route outside of the Project site, including US Route 11, will be reviewed and permitted by New York State Department of Transportation (NYSDOT). The hauling permits for large turbine components will be obtained by Gamesa, the turbine manufacturer. Impacts to town roads have been addressed in Section 2.8.2.1 of the DEIS and SEIS (impacts from temporary road improvements), Section 2.10.2.1.3 of the DEIS and SEIS (risks to public from passage of large construction equipment on public roads), Section 2.11.3.1.5 of the DEIS and SEIS (impacts to bus routes), and Sections 2.13.2.1.1 of the DEIS and SEIS (impacts to residential property as a result of traffic delays due to construction). Impacts to town roads will mainly involve short term traffic delays resulting from Project construction. The type and magnitude of traffic-related impacts should be similar in communities to the west of the Project site, and will largely be restricted to Route 11.

In response to item two in the comment, referring to weight information, please see Response to Comment S-63.

Comment S-65: <u>Section 2.13 Land Use</u>

Table 18 identifies Agricultural land impacts as 27.7 acres and Forest impacts as 17.5 acres. Section 2.13.2.2.3 Agricultural Land Impacts identifies 50 acres of impact to agricultural land. Section 2.13.1.1 Regional and Local Land Use identifies 13.7 acres of sugar bush land in the project area. Section 2.13.2.1.3 Anticipate Impacts Agricultural Land Use states that sugar bush impacts have been minimized. The EIS should clarify the extent of agricultural impacts and provide an estimate of the clearing in sugar bush operations and a supporting map so that avoidance and minimization can be evaluated.

Response S-65: The impact numbers provided in SEIS Table 18 are correct. Section 2.13.2.2.3 has been revised to read that the total impacts to agricultural lands are approximately 28 acres; see Section 3 of this FEIS. The approximately 50 acres of impact referenced in Section 2.13.2.2.3 of the SEIS was the permanent impact to soils and vegetation in all community types, not just active agriculture.

Sugar bush operations within the Project site were classified as forests, rather than active agriculture. There are two sugar bush operations that occur in the vicinity of proposed Project components (Figure 20). There may be additional sugar bush operations in the Project site because the Project site includes all participating parcels, but only those that could possibly be impacted by the Project were noted during site planning. All impacts have been avoided at the southeastern most sugar bush, located off of Mahoney-Jericho Road. A previous iteration of the Project layout had a wind turbine and collection line sited in the sugar bush, but these Project components were subsequently moved in order to avoid all impact. The northwestern sugar bush, located off of Taylor Road, will experience some clearing due to a collection line crossing through the sugar bush. However, the collection line is sited on an existing access road, which will substantially reduce removal of sugar maple trees along this route. Where the collection line crosses the sugar bush, clearing will be limited to only remove those trees necessary to install the line. Clearing within sugar bush facilities is anticipated to total up to approximately 0.8 acres. This is likely an overestimate, because it includes the area that has already been cleared for the existing access road (see Figure 20). This is considered a long-term impact. Trees will be allowed to regenerate over the buried collection line. However, it will take decades of regrowth before the regenerating maple trees are large enough to produce the same yields as the lost mature maple trees. The Applicant has worked with this landowner to site Project components in a manner that minimizes impacts to sugar bush operations while still allowing for construction of facilities on the landowner's property.

Comment S-66: <u>Section 2.5 Aesthetic and Visual resources and Appendix J Second Supplemental Visual Resource Assessment</u>

The DPS scope letter included a recommendation that a cumulative assessment of the visual impacts of the project in relation to other operating wind farms and that the historic resource inventory be completed. The visual analysis record is complex and is found in DEIS and in the SDEIS in three separate sections of text and two appendices. This fragmentation may reduce the public's ability to gain complete understanding of the issue.

Response S-66: The SVIA (Appendix J of the SEIS) follows the format of the original VIA (Appendix F of the DEIS) and incorporates much of that document by reference. Because the SVIA supplements the work previously completed, all of the analyses are presented in comparison to the results of the original study, including figures that present side-by-side simulations of the DEIS and FEIS turbine layouts to allow for direct comparison of potential visual impacts. The purpose of the SVIA was to update

and validate the analyses included in the original VIA so that it could be determined if conclusions from the original study remained valid.

Comment S-67: Section 2.5 Aesthetic and Visual resources and Appendix J Second Supplemental Visual Resource Assessment

The cumulative visual impact on the regional visual setting was not covered in Appendix J Supplemental Visual Resource Assessment. The discussion of cumulative visual impacts is found in SDEIS Section 7.8 and it relies upon the analysis found in the DEIS. The DEIS analysis identifies an evaluation of the cumulative visual impacts in the form of memos that are not in the record. That cumulative impact analysis completed in 2007 when all the turbine farms were to be built with turbines that were of similar heights, therefore the applicability of that cumulative visual analysis to the current project may be limited, due to the change in heights. The Military Trail along US Route 11 is a designated scenic byway route that highlights the history of this travel corridor from the French and Indian war to after the War of 1812. Along the Military Trail there are multiple operating wind turbine farms, therefore cumulative visual impacts are an appropriate consideration. The cumulative analysis needs to address both the change in height and the important regional setting found along US Rte.11. The cumulative analysis page 181 states that the overall project visibility and visual impact will be similar to that reported in the original VIA and the cumulative impacts analysis found in DEIS section 7.6 would be largely applicable. This ignores the increase in heights of the turbines that will be the tallest in the region. There are opportunities to evaluate cumulative impacts in the Town of Chateaugay, since it already hosts an operating wind turbine farm. Two wind turbines in the Chateaugay project are visible on SDEIS Figure 8 sheet 2 of 3, approximately 3,210 and 4,500 feet from turbine 11. The visual analysis of this view should have identified existing turbine height (approximately 388 feet), the ground elevation of each turbine, and the distance from photograph location to each turbine in the photographic simulation. This information would allow a description of the photograph perspective and the visual impacts associated the expansion of wind generation facilities. The same analysis would be useful for viewpoints near location (turbine) 30. Without this type of detail, the lead agency may not have insufficient information to reach the required SEQRA conclusions.

Response S-67: The turbines proposed for the Jericho Rise Project are substantially taller than the turbines in adjacent operating wind projects, with a total height of about 492 feet for the proposed Jericho Rise Wind Farm versus approximately 388 feet for those in the adjacent Noble Chateaugay Wind Farm (The Wind Power, 2015). However, this difference in height is actually difficult to perceive. All of the

turbines in the area are very tall in comparison to other existing landscape features, and most individuals would have difficulty determining their exact height without some sort of reference feature. Even when the taller and shorter turbines are present in the same view, it is difficult to determine which are taller. The simulations included as Figure 12 in the SEIS demonstrate this. The commenter references Figure 8, Sheet 2 of 3 of the SEIS. Figure 8 shows delineated wetlands, and is unrelated to the SVIA. It is assumed that this comment refers to SEIS Figure 12, Sheet 3 which includes the turbines he references. The visibility and visual effect of the currently proposed turbines in the updated simulations is not significantly different than that of the shorter turbines originally proposed for the Project and illustrated in the original simulations. In those views where both existing and proposed turbines are included in the updated simulations (Figure 12, Sheet 3), it is difficult to distinguish which are existing and which are simulated, and the difference in height between the two is not perceptible. However, in response to this comment, additional information has been provided below that identifies the location, height, and distance from the viewer for the existing turbines in the simulations from Viewpoints 10, 14, and 15 (FEIS Figure 12, Sheets 2, 3, and 4, respectively).

The existing turbines visible in the "Existing View" panel on FEIS Figure 12, Sheets 2, 3, and 4 are from the Noble Chateaugay Wind Farm, a project with wind turbines that are approximately 388 feet at blade tip height. In Sheet 2, the existing turbine is approximately 1.14 miles from the viewpoint. Ground elevation at the base of this turbine is approximately 1,540 feet. Note that the existing turbine is visible as a white object located behind the tree line on the right side of the photograph. In Sheet 3, two existing turbines are visible; the left-most turbine is 0.96 mile from the viewpoint, and ground elevation at the base of the turbine is approximately 1,270 feet. The right-most turbine is 1.17 miles from the viewpoint, with an elevation of approximately 1,240 feet. Sheet 4 includes a view of 12 existing turbines. The distance from the viewpoint to these turbines is variable, with the closest existing turbine (second from the right) being 0.66 mile from the viewpoint and the farthest (left-most turbine) being 1.6 miles from the viewpoint. Ground elevation at the bases of these turbines is variable as well. The turbine located second from the right is at lowest topographic position, with an elevation of approximately 1,030 feet. The turbine farthest to the left is at the highest topographic position, with a ground elevation of about 1,230 feet.

In regard to Route 11, despite being referred to as the Military Trail, in the vicinity of the proposed Project there are no historic sites related to the French and Indian War or the War of 1812. In fact, this byway now appears to be referred to as the North Country Trail by the New York State Department of Transportation (NYSDOT), rather than the Military Trail. According to the NYSDOT

website, its themes are primarily scenic and recreational, and highlighted features include scenic views, major rivers, historic villages/downtowns, as well as the area's "agricultural and energy economies" (NYSDOT, 2016). The Corridor Management Plan for the North Country Trail (Adirondack North Country Association, 2012) specifically highlights sustainable energy and mentions operating wind farms under the heading of *Special Tourism Sites, Attractions, Services and Events*. East of the Project site along Route 11, the turbines from several operating projects are clearly visible at relatively close range for approximately 14 miles. Consequently, the proposed Jericho Rise Project is consistent with existing features already highlighted along the North Country Trail.

Comment S-68: Section 2.5 Aesthetic and Visual resources and Appendix J Second Supplemental Visual Resource Assessment

SDEIS Appendix J on page 17 states visual impacts to the eligible historic resources had not been completed and would be a part of the future report to the New York State Office of Parks Recreation and Historic Preservation (OPRHP) and those potential impacts are not evaluated in Appendix J. The OPRHP has made a determination that the Project will have adverse effect on cultural resources due to visual impacts (SDEIS page 97). On page 81 of the SDEIS, there is a reference to Appendix 0. Appendix 0 on page 3 indicates that 90 potentially eligible resources had been identified by prior wind farm projects in the area. Also on page 3 there is a reference to a OPRHP letter to NYSDPS confirming a study approach and the need for more visual analysis in the hamlets of Burke, Chateaugay, Lower Chateaugay Lake and some agricultural properties (also SDEIS section 2.6.2.2.2 has some of the same information contained in Appendix 0). The record of analysis of the 90 sites is absent from the SDEIS and it is unclear whether the other locations recommended for visual analysis has been completed. If there are 90 known eligible sites the Applicant should use the available viewshed mapping to evaluate the potential visual impacts to these locations. The lead agency will have to make its own judgment on the potential impacts to eligible sites as a SEQRA Finding, however with the gaps in the record; and the adverse effect determination by OPRHP, meeting the statutory finding 6 NYCRR 617.11 may prove to be difficult.

Response S-68: On behalf of Jericho Rise Wind Farm, LLC, EDR conducted a historic resources survey for the proposed Jericho Rise Wind Farm Project (EDR, 2015a), which was submitted to NYSOPRHP for review and comment on November 11, 2015 (see Appendix H). The historic resources survey was conducted (per the *SHPO Wind Guidelines*) in accordance with a Work Plan developed in consultation with, and approved by, NYSOPRHP staff. Per the *SHPO Wind Guidelines*, the APE for

visual impacts on historic properties for the Project was defined as those areas within five miles of proposed turbines which are within the potential viewshed (based on topography) of the Project (NYSHPO, 2006). The results of the historic resources survey were summarized within Section 2.6 of the SEIS, and a more detailed summary has been provided in Section 2.3 of this FEIS. The historic resources survey report also included a detailed assessment of potential visual effects on historic resources, including the areas specifically requested by NYSOPRHP (and noted by DPS in Comment S-67). The results of the visual effects analysis relative to historic resources are summarized below.

A total of 120 resources were inventoried as part of the historic resources survey. The results of the survey are as follows:

- One property (the Almanzo Wilder Boyhood Home) listed on the NRHP is located within the APE.
- There are 92 properties located within the APE that EDR recommends are NRHP-eligible (note that 86 of these are properties that have been previously determined eligible by NYSOPRHP, two properties were previously included in the OPRHP's CRIS but were not formally evaluated for NRHP-eligibility, and four are newly identified by EDR).

There are 25 additional properties within the APE that were formerly determined NRHP-eligible (or were previously included in CRIS but were not formally evaluated for NRHP-eligibility) that EDR is recommending are not NRHP-eligible and two properties that were formerly determined NRHP-eligible that are now demolished.

In review correspondence dated June 10, 2008, NYSOPRHP indicated that they had identified several key loci where visual impacts should be carefully assessed, including the villages of Chateaugay and Burke, and the north end of Lower Chateaugay Lake, and recommended that visual simulations (or similar analyses) be created to better understand the full extent of the potential visual impacts associated with the Project (Bonafide, 2008). As part of the historic resources survey report for the proposed Jericho Rise Wind Farm Project, EDR conducted a historic resources visual effects analysis addressing potential visual impacts from these key loci.

To show anticipated visual changes associated with the proposed project, high-resolution computer-enhanced image processing was used to create realistic photographic simulations of the completed Project from each of the areas identified by NYSOPRHP (see FEIS Figure 18). The photographic

simulations were developed using a three-dimensional computer model of the proposed wind turbine created by EDR based on information provided by Jericho Rise Wind Farm, LLC. These simulations were included in the historic resources survey report submitted to NYSOPRHP on November 11, 2015.

From some of the vantage points identified by NYSOPRHP, the proposed Project will be screened by existing buildings and/or vegetation. In these instances, the simulations included in Figure 18 show the turbines where they would be visible, and depict a color overlay of the accurate location and scale of the turbines where they would not actually be visible from those locations. These renderings are included to illustrate the effect that screening provided by vegetation, topography and/or buildings has on Project visibility from some of the locations indicated by NYSOPRHP. An analysis of the Project's potential visual impacts on the areas identified by NYSOPRHP, based on the simulations as well as field observation, is provided in Section 2.3 of this FEIS.

The visual effects analysis included in the historic resources survey report (and summarized in Section 2.3 of the FEIS) provides the necessary information for NYSOPRHP to consider the Project's potential effect on historic resources. As described in Section 2.6.2.2.2 of the SEIS, relative to the Project layout that was evaluated in the DEIS and presented in the 2008 report to NYSOPRHP, the reduction of the number of proposed turbines and corresponding reduced size of the visual study area in the SEIS serves to reduce the potential visual impact of the Project. However, as described in Section 2.5 of the SEIS, the overall visual effect of the Project is not anticipated to be significantly different than that described in the DEIS. As described in Section 2.6.3 of the SEIS, the Applicant is continuing to consult with NYSOPRHP and the Co-Lead Agencies regarding the Project's effect on historic resources and to define appropriate mitigation projects that will benefit the local community. To mitigate the Project's potential adverse effect on historic resources, the Applicant intends to enter into an agreement with the Towns of Bellmont and Chateaugay to fund historic preservation projects that will benefit historic resources within the Project's area of potential effect.

Comment S-69: <u>Section 2.5 Aesthetic and Visual resources and Appendix J Second Supplemental Visual Resource Assessment</u>

The SDEIS relies upon the prior visual analysis prepared for the project that was proposed in 2008 for 57 wind turbines that were 398 feet tall without sufficient discussion of the change in height to justify continued use of this information. On page 78 of the SDEIS, there is an analysis of the increased visibility of the proposed taller wind turbine. This analysis identifies that there would be

new areas that will have views of the wind turbines and that there will be a general increase in the number of towers visible from a given location. The land area that will have a potential view of 21 to 53 turbines will double or triple as a result of the revised plan (Table 24). The land area that may allow views of 41 wind turbines increases from 1.6% to 4.0%. Page 81 Section 2.5.2.3 states that the SDEIS concludes that the visual impacts of the new project is similar to the former project described in the DEIS. The statement of similar visual impacts between 2008 and 2015 projects is an over simplification of the visual impacts described on page 78 of the SDEIS. The Applicant needs to provide additional visual analysis to demonstrate that visual impacts have been avoided or minimized. Additional mapping to show the change in visibility because of the increase in turbine height and a description of the settings where new views of turbine will be occurring, may demonstrate that visual impacts have been avoided or minimized.

Response S-69: Please see SEIS Section 2.5.1.5.1, page 74, which discusses the proposed turbine height for the SEIS Project and the parameters and assumptions of the viewshed analysis conducted for the Supplemental Visual Impact Assessment (SVIA). Section 2.5.2.2.1 presents the proposed Project's visibility impacts (SEIS Table 23) and compares these results with those presented in the DEIS (SEIS Table 24).

The viewshed analysis in the SVIA indicates areas of potential Project visibility will be limited to 22.7% of the study area. While this represents an increase over the 13.2% predicted by the DEIS, it still indicates that the Project will be screened from view in over three quarters of the study area. Although the area that could have views of over 41 turbines has more than doubled, additional land within the study area that could have such views has increased by only 2.4%. In addition, the viewshed analysis presented in the SEIS was a conservative estimate of impacts because it evaluated impacts of 43 potential turbines (including both the 37 proposed turbines as well as the six alternates). An updated viewshed analysis was performed using locations of only the 37 proposed turbines in the final Project layout. Results of this analysis are included in Figure 11 and Section 2.2.3 of this FEIS. Based on this final layout, none of the study area will have views of over 41 turbines. The portion of the study area that is completely screened from views of the Project has not changed, with about 77.1% of the study area completely screened from turbine views. SEIS Section 2.5.2.2.1, page 78 describes the ways in which increased turbine height affects the Project visibility: "due to the increase in turbine height, areas of potential turbine visibility have expanded further down hillsides and valleys throughout the visual study area, into areas that were formerly outside of the VIA viewshed."

However, the pattern of overall Project visibility within the study area remains similar when comparing the viewsheds prepared in the VIA, the SVIA and this FEIS.

Although the increased turbine height has increased the total area of Project visibility, the number of turbines within the viewshed was reduced from 53 to 43 from the DEIS to the SEIS, and from 43 to 37 from the SEIS to the FEIS. Therefore, there has been a 30% reduction in number of turbines visible in those areas where all the turbines in the Project would be visible. In this sense, visual impacts have been substantially reduced from the DEIS to the SEIS to the FEIS. This is significant because several studies show that fewer turbines are considered preferable from a visual impact perspective (Thayer and Freedman, 1987; van de Wardt and Staats, 1998). Therefore, although the area where potential views may be available has increased, the number of turbines visible in these areas has generally decreased. The statement that impacts are similar in the DEIS and the SEIS is a general summary of the results of the visual impact analyses performed for both layouts. The discussion of visual impacts in Section 2.5.2.2.1 of the SEIS provides sufficient detail on the potential visual impacts of the SEIS Project layout in comparison with the DEIS Project layout, including side-by-side comparison of visual simulations. A comparison viewshed map is not considered necessary for a reader to compare the visual impacts from the DEIS to the SEIS, as viewshed maps are provided in both documents, as well as this FEIS (DEIS Figure 2.5-2, SEIS Figure 11, FEIS Figure 11).

The simulations presented in the SEIS and SVIA clearly demonstrate that the visual effect of the 2008 project and the current Project are not substantially different (SEIS Figure 12; also see FEIS Figure 12 for visual simulations with the final 37-turbine Project layout). Actions taken to minimize the Project's visual impacts include the following:

- Selection of a Project site where wind turbines are already present as a component of the landscape.
- Reduction in the number of proposed turbines from 53 to 37 (approximately 30% reduction).
- Limiting FAA lighting to the minimum number of turbines allowable.
- Use of existing farm and forest roads to minimize vegetation clearing.
- Siting of the substation well off the public highway, and adjacent to an existing substation and transmission line.
- Burying of electric collection lines and only limited instances of overhead transmission line.

Comment S-70: Appendix 0 Complaint Resolution

The proposed complaint resolution process needs to be revised to provide rapid resolution of construction issues rather providing for a 60-day period for verification of the problem. Registering a complaint needs to be simple and responsive to the community. During the construction period complaints need to rapidly transfer from verbal notice to a written record and not end up in a voice mail of a supervisor or on a supervisor third cell phone. During construction work hours, complaints need to reach a person that is working on the project and at the job site, with the capability to accurately prepare the written notice and circulate the notice to the appropriate individuals.

Response S-70: An updated Complaint Resolution Procedure has been attached to this FEIS as Appendix L. The Applicant takes the need for rapid resolution of construction issues seriously. The updated Procedure provides a 48-hour period for verification of construction problems, reduced from the 60-day period referenced in the original Complaint Resolution Procedure appended to the SEIS.

Comment S-71: Appendix G Stormwater Pollution Prevention Plan

Appendix G contains a Stormwater Pollution Prevention Plan that was prepared for Marble River by URS Corporation in 2008 and amended in 2012. This plan is not current since the general stormwater permit changed in 2015 (GP-0-15-002). The SWPPP only identifies that a stormwater inspector would be employed, however the SDEIS identifies the need for qualified environmental and agricultural monitors. The lead agency will need to make findings and establish a plan that provides for sufficient number of construction, stormwater, environmental, and agricultural monitors are employed to ensure that all applicable rules or laws and permit conditions are followed.

Response S-71: See Response to Comment S-30. The SWPPP has been included as Appendix B.

Comment S-72: Appendix Q Communication Studies

The microwave communication links operated by NYPA and Hydro-Quebec are essential data transmission pathways that support the New York State, New England, and Canadian electric power grid. The DPS requests that lead agency require the Applicant obtain confirmation that the both NYPA and Hydro-Quebec have reviewed and accepted the Comsearch report prior to the start of construction. The lead agency should require the Applicant verify in writing that microwave communication operated NYPA and Hydro-Quebec are intact following construction. The lead agency should state in findings that interference with microwave pathways will be sufficient cause to require a turbine to be shutdown.

Response S-72: As indicated in Section 2.12.2.2.3 of the SEIS the Applicant contacted the National Telecommunications and Information Administration (NTIA) and received a letter indicating that consultation with federal agencies represented in the Interdepartment Radio Advisory Committee (including the Army, Navy, Air Force, Coast Guard, Department of Homeland Security, Department of Transportation, Broadcasting Board of Governors, National Aeronautics and Space Administration, National Science Foundations, and Federal Aviation Administration) determined that the Project would not have an adverse effect on agency communications. A follow-up request has been made to the NTIA to update and confirm this assessment based on the final turbine layout. A study performed by Comsearch for the Project identified microwave paths that occur within the Project site. Although Hydro-Quebec was not listed as an entity that could possibly have communications adversely impacted by the Project, NYPA microwave paths were identified as crossing the Project site. Although Turbine 18 was close to NYPA microwave path (call sign WNEV804), cross sectional analysis indicated that the blade rotor will not impact the Fresnel Zone for this microwave path. ComSearch provided a letter to the Applicant confirming NYPA communications will not be affected by the Project. This letter was provided to NYPA on February 4, 2016, and is included in FEIS Appendix H. Although consultation to date indicates that communications will not be adversely impacted by the Project, the Applicant will contact NYPA and Hydro-Québec within 60 days of commercial operation and coordinate with them to make sure that the Project has not had an adverse effect on their communication links.

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