

**Final Scoping Document
for the Preparation of a Draft Environmental Impact
Statement
Ripley-Westfield Wind Farm**

Towns of Ripley and Westfield
Chautauqua County
New York
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Co-Lead Agencies: Town of Ripley
Town Board
One Park Avenue, P.O. Box 2
Ripley, New York 14775
Contact: Peter J. Ryan Phone:
(716) 736-2201

Town of Westfield
Town Board
23 Elm Street, Eason Hall
Westfield, New York 14787
Contact: Martha R. Bills Phone:
(716) 326-3211

Project Sponsor: Babcock and Brown Renewable Holdings, Inc.
1600 Smith Street, Suite 4025
Houston, Texas 77002
Contact: Peter Gross
Phone: (713) 308-4233

Introduction

Project Description

Babcock & Brown Renewable Holdings, Inc. (Babcock & Brown) has proposed to construct and operate a commercial wind power project with an installed capacity of approximately 125 megawatts (MW) in the Towns of Ripley and Westfield, Chautauqua County, New York. According to Babcock & Brown, the proposed Ripley-Westfield Wind Farm (hereafter referred to as the Project), would include the following:

- Installation and operation of up to 83 wind turbine generators (WTG). Currently, up to 47 WTGs are proposed for Westfield and 36 WTGs for Ripley.
- Construction of approximately 11 miles of Project access roads in the Town of Westfield and approximately 9 miles of Project access roads in the Town of Ripley along corridors no more than 60 feet in width. These roads would allow vehicles to access each WTG site during construction of the Wind Farm. After construction, the same corridors would be reduced to no more than 36 feet in width to allow access for operation and maintenance.
- Construction of an electrical collection system (ECS), predominantly along Project access roads, that would interconnect each WTG to a Project substation. The ECS would consist of buried lines, but would utilize overhead lines where burial is impractical.
- Construction of a substation with one or more transformers that would increase the voltage of the electricity generated by the Wind Farm to the National Grid 230 kilovolt (kV) transmission line located within the Project area in the Town of Ripley.
- Construction of an operation and maintenance building that would contain management offices for Wind Farm personnel and equipment required to maintain and operate the Wind Farm.
- A temporary construction lay down area where equipment and materials would be located during the construction of the Wind Farm.

Each WTG would consist of an enclosed monopole support tower, a nacelle at the top of each tower containing the electrical generating equipment, and a three-bladed rotor attached to the nacelle. The specific WTG for the Wind Farm has not been selected; however, the capacity of each WTG is anticipated to be between 1.5 and 2.5 MW. A total of 83 WTGs, each with a capacity of 1.5 MW, would be required in order for the Wind Farm to attain a total capacity of approximately 125 MW. If a larger WTG were selected, the number of WTGs required would be reduced, possibly altering the total length of the access roads and ECS. The diameter of the rotor/blade assembly would not exceed 335 feet, and the height of the WTG, including the rotor extending to its highest point, would not exceed 445 feet. A more precise estimate of the diameter and height will depend on the specifications of the WTG ultimately selected.

In the preparation of this Draft Environmental Impact Statement (DEIS) and supporting studies, Babcock & Brown will provide a “permitting layout” that specifically defines the Project site (i.e., land under lease) and the characteristics, dimensions and location of all Project components, including turbines, permanent meteorological towers, access roads, underground and overhead collection lines, collection station and substation, operations and maintenance facility, temporary construction lay-down area(s), and concrete batch plant (if proposed). To the extent that Project layout or components change prior to the completion of the State Environmental Quality Review (SEQR) process, the Towns reserve the right to require revised/supplemental analyses (and if necessary, a Supplemental DEIS) to assess the environmental impacts associated with the Ripley-Westfield Wind Farm, as it is proposed to be built.

SEQR Process

To date, the State Environmental Quality Review (SEQR) process for the Project has included the following:

- Preparation of a Full Environmental Assessment Form
- Issuance of a Positive Declaration
- Preparation of Draft Scoping Document
- Public Scoping Process

Additional steps in the SEQR process are anticipated to include the following:

- Issuance of Final Scoping Document
- Preparation of a DEIS
- Co-Lead Agencies (Towns of Ripley and Westfield) accept DEIS as complete, file notice of completion and notice of public hearing and comment period
- Public hearing on DEIS (must be held at least 14 days after public notice is published)
- A minimum 30-day public comment period
- Address substantive/relevant comments received and prepare Final EIS (FEIS)
- Co-Lead Agencies accept FEIS as complete and file notice of completion of FEIS
- Minimum 10-day public consideration period
- Issuance of Findings Statement
- Involved Agencies issue Findings Statements

Purpose of SEQR Scoping Process

A draft scoping document was prepared by Babcock & Brown as a summary of the content that will appear in a DEIS for the proposed Ripley-Westfield Wind Farm (the Project or Proposed Action). It was reviewed and released by the Towns of Ripley and Westfield, which have assumed co-lead agency roles for the Project, in accordance with SEQR Regulations (6 NYCRR Part 617).

The draft scoping document was released for public and agency review and comment on July 6, 2008. Two public scoping meetings were held on July 29, 2008 and written comments regarding the content of the final scoping documents were accepted until the end of the public comment period on August 8, 2008. The lead agencies and the Project sponsor subsequently reviewed transcripts from the meetings and all comment letters received, and have responded to all relevant substantive comments in this final scoping document.

Several oral and written comments/suggestions were submitted during the public review period of the Draft Scoping Document that were not incorporated directly into the final scoping document because they were determined to be not relevant, outside the scope of the DEIS or not reasonable in light of applicable standards or requirements.

These issues include the following:

- Three years of pre-construction avian studies utilizing multiple marine radar units is not required. Such level of study is not required by the NYSDEC draft guidelines for avian studies, and is not the standard that has been applied at other wind power projects in New York (or other states). One year of pre-construction data, along with the results of studies conducted for the former Chautauqua Wind Power Project, and data available from the Ripley Hawk Watch and other sources, should allow for an accurate description of avian resources and potential Project impacts.

- Regarding a public health survey, the DEIS will include a literature review and analysis of peer-reviewed articles and publications concerning the alleged health effects of wind turbine installations.
- Balloon testing at every turbine site for visual analysis is not reasonable. However, the sponsor will be required to conduct balloon tests at up to four selected sites considered to be of greatest value in illustrating turbine height and visibility in order to characterize viewshed impacts.
- Regarding visual simulations of “alternative turbine locations”, simulations at locations not currently being proposed by the sponsor are not feasible or reasonable under the circumstances. There is little likelihood of an alternate turbine site being used, given 1) the need to site turbines where there is an adequate wind resource, 2) the requirement of developing the Project only on land under lease, and 3) the need to comply with property line and road set backs. Working within these constraints, it is unlikely that relocating turbines to alternate sites would reduce the visual impacts significantly.
- Regarding aquifer modeling, a detailed quantitative groundwater analysis and geotechnical analysis, including a requirement for monitoring, is premature at this time given the absence of any indication that impacts are likely to groundwater. The DEIS will include a survey of nearby wells accompanied by a general analysis of groundwater conditions by a qualified geologist. The DEIS will include adequate data to understand potential risk to drinking water. A more detailed geotechnical analysis will be completed at each turbine site prior to construction.
- Regarding adverse impacts on property values, no site-specific appraisal of property values will be required at this time. The DEIS will provide a literature search and evaluation of pertinent studies and other information currently available on this topic. If the analysis of the documentation (included in the DEIS) demonstrates a need for a more in depth review of the issues, then the lead agencies may require additional study or analysis at that time, as appropriate, consistent with any requirements of SEQRA.
- Although turbine-specific analyses will be included in the DEIS (e.g., noise, shadow flicker, etc.) the DEIS will address the overall impacts of the Project. Site-specific concerns will be addressed, as necessary, during the Towns’ Special Use Permitting processes.
- No supplemental work plans are being included as attachments to this scoping document. The scoping document identifies the specific studies and data that need to be provided to allow for a full and accurate evaluation of environmental impacts. The Towns reserve the right to request additional studies/data if those prepared/provided for the DEIS are not adequate to allow this evaluation.

The content of this final scoping document is based on the requirements of the SEQR Regulations - 6 NYCRR Part 617.8 and also incorporates the DEIS content requirements stated in 6 NYCRR Part 617.9. It reflects the co-lead agency’s analysis of potential impacts indicated in Parts 2 and 3 of EAF, which states those environmental resource issues that will receive the majority of attention in the DEIS, and also addresses relevant issues raised during the public scoping document review process.

DEIS Scope and Content for the Proposed Ripley-Westfield Wind Farm

The Draft Environmental Impact Statement (DEIS) will include all elements required by 6 NYCRR 617.9. The following sections will be included in the DEIS.

- i. **DEIS Cover Sheet** The DEIS will be preceded by a cover sheet stating: that it is a draft EIS; the name or descriptive title of the action; the location (county and town, village or city) and street address, if applicable, of the action; the name and address of the lead agencies and the names and telephone numbers of the persons at the agencies who can provide

further information; the names of individuals or organizations that prepared any portion of the statement; the date of its acceptance by the lead agency; the date by which comments must be submitted.

ii. DEIS Table of Contents including listings of tables, figures, maps, appendices/attachments and any items that may be submitted under separate cover (and identified as such).

1.0 Executive Summary

The executive summary will include a brief description of the Proposed Action and a listing of potential environmental impacts and proposed mitigation measures. A summary will be provided of the approvals and permits required, and the alternatives to the Proposed Action that are evaluated in the DEIS.

2.0 Description of the Proposed Action

This section of the DEIS will provide a comprehensive description of the Project site in a regional and local context and provide a detailed discussion of the Proposed Action.

2.1 Site Description

This subsection will:

- Depict the regional and local context of the Project site, defined as properties owned or under lease by the Project developer.
- Define the size, geographic boundaries, and physiographic characteristics of the Project site.
- Describe the number of participating landowners and the general terms and conditions of lease/easement agreements with these landowners.
- Discuss the dominant land use within and adjacent to the Project site. Describe any other pending developments in the Towns of Ripley and Westfield and nearby portions of Chautauqua County (including wind power projects) and their status. This information will be obtained by reviewing the NYISO queue and through conversations with local officials. Identify any state forestlands or other state resources in the vicinity of the Project site.

Briefly discuss the relationship of the Project site to wetland areas, stream courses, residential areas, schools, parklands, historic properties, or any other recognized or protected natural or man-made features.

2.2 Detailed Description of the Proposed Action

This subsection will:

- Describe the size, generating capacity and layout of the proposed Project.
- Provide maps, graphics, and plans showing the location of the components of the proposed Project including the turbines, access roads, electrical collection system, substation, meteorological (met.) towers, operations and maintenance (O&M) facilities, construction parking areas, storage/lay down areas, concrete batch plant (if proposed), and any associated lands, easements and/or rights-of-ways.
- Provide mapping of individual turbine locations with multiple rings around each turbine indicating 600 foot, 1000 foot, and 1,500 foot setback distances. This information should be provided on a base map showing the location of all full time and seasonal residences and parcel boundaries.
- Describe the Project components and indicate which are permanent parts of the Project and which are temporary (i.e., for construction purposes only).
- Illustrate the proposed wind turbines, substation, O&M building, and other visible components of the Project.
- Provide dimensions and/or to-scale drawings of all project components.

- Provide specifications for proposed/anticipated turbine make and model, including proposed FAA lighting.
- Describe anticipated travel routes of construction and delivery vehicles and all proposed off-site improvements (e.g., to town roads) that will be necessary to build and operate the Project.
- Describe the potential for future Project expansion.
- Provide a general description of the existing power grid in the region, including its current capacity, the potential for grid congestion with addition of the proposed Project, as well as regulations governing its expansion.
- Discuss utility interconnection study and reliability studies.
- Identify potential sources of construction materials (gravel, concrete, etc.) and discuss whether an on-site concrete batch plant will be required.
- Discuss potential financial assurance/bonding requirements associated with Project construction, operation, and decommissioning.

2.3 Project Potential, Public Need and Benefits

This subsection will:

- Provide a background and history of the Project, and a statement of the objectives of the Project sponsor.
- Describe the public need for the Project, including a brief overview of the environmental, social and/or economic benefits anticipated due to the Proposed Action.
- Describe in general terms, the wind energy market, including cost comparisons of wind generated electricity versus other fuel sources (gas, coal, solar, etc.) and describe how wind power is marketed and sold in the wholesale market.
- Describe New York State policies and goals regarding wind energy.

2.4 Construction and Operation

This subsection will:

- Describe construction of the proposed Project, including construction schedule/duration, anticipated construction employment, construction sequencing, and routing of construction traffic along local roads.
- Provide a summary description of construction activities including clearing and grubbing, treatment of natural products to be removed during construction (e.g. removal of brush, disposal of cut material, etc.), civil work (roads, foundations and underground cable), tower/turbine installation, and site restoration. Identify sources and quantities of construction materials to be obtained from local sources (concrete, gravel, etc.).

- Describe methods to install underground and overhead electrical collection cables, especially where wetlands or streams will be crossed. Include justification for the use of any overhead collection lines.
- Provide details of temporary road construction activities such as stock piling, use of Geotextile erosion control materials, re-grading and restoration to permanent road status.
- For each proposed construction activity (e.g. access road installation, buried cable installation, tower foundation excavation and backfill) describe assumed/typical areas of disturbance, both temporary and permanent, to existing vegetation and soils.
- Describe construction and operation of the concrete batch plant (if proposed), including anticipated delivery routes to turbine sites, means of disposal of unused concrete and truck wash water, and proposed site restoration. The same should be provided for the temporary construction laydown/storage area.
- Describe any safeguards to be taken to protect local citizens from any construction-related hazards.
- Describe the intended long-term ownership, operation, inspection, and maintenance requirements of all Project components/improvements, both on-site and off-site, along with the liability of the Project sponsor. A facility operations and maintenance (O&M) plan shall be included.
- Provide information on the annual rate of power generation, long-term employment, and lease/easement arrangements with landowners, effect on local electric rates, and useful life of the Project.
- Describe the components of an environmental monitoring plan that provides for an independent monitor to oversee the various environmental compliance and mitigation activities. The description should address the duties and authority (including stop-work authority) of the environmental monitor during Project construction. Post construction monitoring should also be addressed including:
 - A contingency plan to assess and minimize environmental impacts during major repairs
 - An assessment and mitigation of environmental impacts during the decommissioning process
 - An adaptive management component that includes a process for addressing environmental impacts that may become apparent during Project operation (such as potential impacts to birds and bats)
- A thorough discussion of post-construction environmental restoration activities should be included in the DEIS. This discussion will include the following:
 - Details of re-grading and stabilization of temporary impacts to wetlands and streams, including re-establishment of wetland hydrology (if disrupted)
 - Restoration of disturbed habitat, including re-planting suitable species in wetlands, adjacent upland areas and streams
 - Any wetland mitigation project construction details
 - Stabilization of disturbed areas subject to New York State Pollutant Discharge Elimination System (SPDES) Stormwater General Permit
 - Removal and proper disposal of temporary road materials
 - Restoration of soils in agricultural areas in accordance with NYS Department of Agriculture and Markets guidelines

- A decommissioning plan that describes how the project will be dismantled and removed if it is either not completed, proves economically unviable, or reaches the end of its useful life span. The means of assuring adequate funding for such removal should be described in detail.

2.5 Reviews, Approvals and Other Compliance Determinations

This subsection will list the governmental entities having approval over the Project, including the nature of their jurisdiction and the approvals required from each entity.

This section will discuss local ordinances that govern the development of wind power, including setback and permit requirements. Any state or federal approvals required should be discussed including but not limited to compliance with U.S. Army Corps of Engineers (USACOE) and New York State Department of Environmental Conservation (NYSDEC) wetland and stream permit requirements, NYS Department of Transportation (NYSDOT) approvals, and the NYS department of Public Service (DPS) Certificate of Public Convenience and Necessity. The DEIS will note whether or not compliance with the New York State Historic Preservation Act of 1980, Section 14.09 and Section 106 of the National Historic Preservation Act will be necessary.

3.0 Existing Conditions, Potential Impacts and Mitigation Measures

This section of the DEIS will identify the existing environmental conditions, potential impacts of the Proposed Action, and proposed mitigation measures as appropriate for each of the major issues identified in this Scoping Document. The analysis of impacts will include all Project components including the proposed number and location of individual turbines, existing and proposed access roads, underground and overhead electrical collection line routes, meteorological tower(s), temporary lay down/construction areas, a concrete batch plant (if proposed), an operations and maintenance facility, substation(s), and any other Project development components that will potentially affect existing conditions on the Project site.

The format or organization of this section will include the following subsection headings for each topic discussed:

*Existing Conditions Potential
Impacts Mitigation Measures*

This format provides for a more meaningful presentation of the environmental issues in a reader-friendly form and will allow the reader to focus on individual impact issues. The text of this section will be supplemented with maps, graphics agency correspondence, Geographic Information System (GIS) data, and completed support studies. Both temporary (construction-related) and permanent (operational) impacts should be addressed.

3.1 Topography and Geology

This subsection will contain a description of the existing topographic and geologic conditions with the Project area, including areas of steep slope, depth to bedrock, seismicity, and any unique geologic conditions. Bedrock and surficial geology within the Project area will be described based on a review of existing data sources. A description of prominent and/or unique geologic features, including and rock outcroppings, large boulders, and ledges, will be provided. Constraints imposed by existing geology and topographic conditions will be evaluated.

Impacts to surficial geology and bedrock will be addressed including, disturbance of steep slopes and blasting. If blasting is anticipated, a general blasting plan will be included describing blasting operations and potential impacts to adjacent above and below grade structures. This plan will also identify applicable regulations pertaining to blasting. Mitigation for impacts will be presented, including means of avoiding, minimizing and mitigating possible blasting impacts.

3.2 Soils

Soil types, including any unique soils, will be identified and soil characteristics relating to soil texture, soil-bearing capacity, depth to water table, and hydric and non-hydric soils will be evaluated. Soils data will be obtained from existing surveys, mapping and databases. Constraints imposed by existing soil conditions will be evaluated. Impacts to soils will be addressed including total area of disturbance (temporary and permanent), sediment and erosion, and disturbance of steep slopes. Mitigation for impacts will be presented. An Erosion and Sediment Control Plan will be included as an appendix to the DEIS.

3.3 Agricultural Land Resources

Agricultural land use and Agricultural Districts within the Project site will be mapped and described. Any prime agricultural soils within the Project area will be identified. Impacts to active farmland and vineyards will be quantified (temporary and permanent). If necessary, a "Preliminary Notice of Intent" or

“Final Notice of Intent and Agriculture Impact Statement” will be included as an Appendix to the DEIS. A description of their implication to the Project will be addressed in this subsection. Compliance with NYS Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Windpower Projects (updated January 4, 2008) will be discussed, along with any additional mitigation measures that may be necessary to avoid or minimize impacts to agricultural resources and vineyards, including post-construction monitoring.

Protocol will be outlined for the following:

- Avoiding and/or minimizing losses of active farmland
- Topsoil protection
- Soil de-compaction and site restoration

3.4 Water Resources

This subsection will identify and describe groundwater, surface water, and drinking water resources within the Project area. Descriptions of water resources will be obtained from existing data, site-specific hydrogeology studies, and an on-site residential well survey.

Information on groundwater resources will include depth to groundwater, known aquifers and associated parameters, and a map and description of existing water supply wells/springs within 1000 feet of each proposed turbine site. Data from existing sources will be used to evaluate the potential for impacts to groundwater resources that may be caused by installation of subsurface facilities, including tower foundations and buried electrical lines (e.g. blasting, stormwater runoff, chemical spills, etc), along with proposed means of avoiding or mitigating such impacts. The DEIS will describe the action that will be taken if shallow groundwater is encountered during excavation for construction, and what action will be taken to protect the environment (and existing wells) during dewatering and blasting.

Information for surface water resources will include stream type (perennial or intermittent), name, width, substrate conditions, flow rates, and any special designations (e.g., fisheries classes). Detailed maps of streams and stream classifications within the Project area will be provided. A determination will be made regarding the navigability of each stream that is crossed or impacted pursuant to the definition of “Navigable Waters of the State” found in 6 NYCRR Part 608.

Information for drinking water resources will include locations of surface water intakes and wells, where available. A Water Supply Survey (Survey) will be used to evaluate the potential for impacts to drinking water resources. The Survey will inquire as to the resident’s knowledge of the drinking water resources on their property through the distribution of a Private Water Supply Assessment Questionnaire (Questionnaire) to all residential dwellings within 1000 feet of each proposed turbine site and turbine access road. Specifically, the Questionnaire should seek to obtain the following information:

- The presence of any known water wells, or any other water sources (i.e. springs, ponds or cisterns) on their property,
- Whether the well(s) had been tested for water quality parameters, and if so, the date(s) tested, by whom, for what reason(s), and whether the residents had a copy of the results of those tests
- The construction specifications of the well, if known (i.e., depth of well, casing diameter, length of screened interval, PVC or steel casing, etc)
- Does the well experience seasonal fluctuations in water level (i.e. winter vs. summer months, during extended periods of low precipitation)

- A physical description of the well water (i.e. cloudy, color, odor, hard or soft)

In addition, the Survey will also collect and present pre-construction, baseline water quality information on pertinent parameters such as total hardness, pH, and total alkalinity, as available. The Survey results will be summarized in the DEIS.

The DEIS will also describe the action(s) that will be taken to protect the environment and existing drinking water sources/wells during construction, operation and decommissioning of the project.

Similar information for irrigation wells will also be included in this section, where available. The portion of the Project site that falls within the boundaries of the Town of Ripley municipal water supply watershed will be identified. The DEIS will describe the action that will be taken if drinking water resources are encountered during construction, and what action will be taken to protect the environment (and existing wells) during dewatering and blasting. The DEIS will discuss protocols to resolve complaints regarding impacts to wells.

Potential impacts to water resources from the construction and operation of the Project will be evaluated, and possible measures to avoid, reduce, or mitigate impacts will be proposed. A preliminary assessment of potential impacts to surface water resources resulting from installation of all Project components, and Project operation, will be quantified based on detailed, on-site inventory or delineations. FEMA-regulated floodplain areas will be identified based on existing mapping, and an assessment of potential Project related impacts to floodplains, if any, would be provided. The impact of the Proposed Action on stormwater management will be analyzed. This subsection also will describe the proposed stormwater pollution prevention plan (SWPP) and compliance with state regulations pertaining to such a plan. Proposed mitigation measures for managing the rate, quantity and quality of stormwater runoff during and after construction will be described. The DEIS will include a description of specific processes that will likely be implemented to ensure that any proposed de-watering activities will not impact receiving water bodies. Construction methods to properly manage concrete delivery, use and disposal, so as to avoid impacting surface waters will be evaluated.

3.5 Wetlands

This subsection will identify wetlands and their state and federal jurisdictional status. Available mapping will be utilized to illustrate where state or federally regulated wetlands and streams have been mapped within the Project area. This subsection will describe the results of on-site surveys undertaken to inventory and delineate the boundaries of state and federal jurisdictional wetlands and streams occurring within the Project site. The delineation report will be included as an appendix to the DEIS.

A preliminary assessment of potential impacts to surface water resources resulting from installation of all Project components, and Project operation, will be quantified based on detailed, on-site wetland/stream delineations.

Anticipated impacts to wetlands will be quantified and broken down by wetland cover type and construction activity. A distinction will also be made between "temporary" and "permanent" wetland impacts. The wetlands analysis in the DEIS will apply a full range of potential impact criteria to the proposed construction activity in the determination of total area of permanent impact, in accordance with guidance provided by the USACOE and NYSDEC personnel. The evaluation will also consider future recurrences of "temporary" wetland impacts that may occur during the de-commissioning process, or during a major repair operation, requires permanent roads to be temporarily widened or vegetation removed.

Mitigation to offset permitted temporary and permanent impacts to wetlands and streams, if identified, will be developed in consultation with NYSDEC and USACOE during state and federal permitting process. However, an estimate of the type and extent of mitigation likely to be required will be provided in the DEIS.

3.6 Terrestrial Ecology

This subsection will describe the vegetation and wildlife within the Project area. The dominant plant species and ecological communities within the Project area will be described, and a map depicting ecological communities on site will be provided, based on site-specific botanical surveys. State designated Wildlife Management Areas (WMA) and any other state and/or local ecological resources of special interest will be identified. The wildlife community and habitat of the Project area will be described, based on field surveys conducted by professional biologists. The results of agency consultation also will be described. State or federally-listed endangered, threatened or special concern species occurring within or near the Project area on a seasonal or year-round basis will be identified, and mitigation measures designed to offset, reduce, or eliminate losses of listed species and associated habitat will be discussed. The “Avian and Bat Resources” subsection, below, contains further discussion on this issue.

Potential impacts to vegetation and wildlife from the Project will be evaluated, including calculation of the total area of expected vegetation disturbance resulting from the construction and operation of the Project. Forest fragmentation, disturbance/displacement, loss of habitat and other potential impacts to wildlife will be discussed. Recommended measures to avoid, reduce, or mitigate impacts will be discussed, including the implementation of all mitigation measures recommended by state and federal regulatory agencies, where appropriate.

3.7 Avian and Bat Resources

The DEIS will include the results of site-specific bird and bat studies developed in consultation with the NYSDEC and U.S. Fish and Wildlife Service (USFWS). The study of avian species will include an assessment of migratory as well as resident bird populations. These studies will include nocturnal avian radar studies; acoustical bat monitoring (both active and passive); migratory raptor surveys; migratory bird surveys; breeding bird surveys; and survey of the Project area for threatened and endangered species and appropriate habitat. A detailed methodology is described in the “Work Plan for Bird and Bat Studies” attached as an appendix to this scoping document.

The potential avian and bat impacts associated with construction and operation of the Project (e.g., collision mortality, quantification of habitat loss, disturbance/displacement, fragmentation of grassland and forest habitat etc.) will be described, as will appropriate measures to mitigate any such impacts. The DEIS will also discuss the Project’s potential impacts to bats in light of the recent loss of significant bat populations due to “White Nose Syndrome.” These losses may lead to a change in state and/or federal listing status for impacted bat species. Based on this information, an assessment of the avian and bat risk presented by the Project will be presented, and mitigation measures will be described.

A plan for post-construction bird and bat mortality studies will be outlined in the DEIS. The studies will be designed to assess the impacts of the Project on migrating birds and bats and displacement of resident species, particularly those species identified as rare, threatened, endangered, or of special concern.

3.8 Climate and Air Quality

This subsection will describe the existing air quality status within the region of the Proposed Action and discuss the affects of the Proposed Action (during both construction [temporary] and operation [permanent]) on air quality. It will identify proposed means of mitigating construction-related impacts to local air quality, and will compare the effects of the Proposed Action to the effects of a conventional electric

generating facility on air quality and climate. Results of the microclimate study prepared for the Towns of Ripley and Westfield by representatives of Cornell University and the Chautauqua County Cooperative Extension Service (for the previously proposed Chautauqua Wind Power Project), and any other information on the potential impact of turbines on local climate, will be reviewed.

3.9 Aesthetic/Visual Resources

The visual impact discussion in the DEIS will be based primarily on the results of a Project specific Visual Impact Assessment (VIA) that will be prepared in accordance with NYSDEC program policy DEP-00-2, Assessing and Mitigating Visual Impacts NYSDEC (2000), Westfield Local Law No. 2, and Ripley Local Law No. 2 and will be included as an appendix to the DEIS. Babcock & Brown will develop and conduct specific aspects of the VIA (ballooning, viewpoint selection for simulations, etc.) in consultation with the Towns and their consultant. Existing visual and aesthetic resources will be described by defining landscape character, viewer groups, and aesthetic resources of statewide and local significance.

Potential Project visibility and visual impact will be evaluated in the following manner:

- Short-term visual impacts associated with Project construction will be described
- The extent of potential Project visibility within a 5-mile radius visual study area will be determined, based on viewshed mapping.
- In addition, because DEC Visual Policy recommends studying potential wind turbine visibility within a radius greater than 5 miles, the extent of Project visibility and visual impact on identified aesthetic resources of statewide significance within a 10-mile radius will also be addressed.
- The change in visual character that will result from implementation of the Proposed Action will be evaluated, based on the preparation and evaluation of at least 10 computer-assisted, representative visual simulations rendered for daytime conditions. In addition, a minimum of two viewpoints will be selected for nighttime simulations.
- The visual impact assessment will include at least one simulation of any proposed overhead or collection transmission lines.
- The visual impact assessment will include at least one simulation of the proposed collection station/substation.
- The visual impact assessment will describe in narrative form the adequacy of the number of visual simulations prepared, in terms of illustrating the Project's visual impact.
- The visual impact assessment will include simulations and assessment of alternative turbine sizes.
- The visual impact assessment will have at least one daytime simulation that shows the rotors in motion (animation).
- The visual impact assessment will include simulations at various distances to establish perspective.
- A balloon test will be completed to verify the completed viewshed maps and to better characterize potential Project impacts. Up to four balloons will be raised at selected turbine locations. Ballooning will be conducted in consultation/coordination with the Towns and their consultant. A discussion of the balloon testing methodology and the results of the testing will be included in the DEIS.

- Nighttime impacts associated with FAA lighting will be described, and rendered visually using nighttime simulations, as noted above.
- Measures to minimize impacts to aesthetic resources will be recommended in accordance with NYSDEC visual policy.

As part of the visual impact analysis, a study of potential shadow flicker impacts on nearby residences, including number of potential receptors and predicted annual hours of shadow flicker at each will be provided. Mitigation of shadow flicker impacts will also be addressed.

3.10 Historic, Cultural and Archaeological Resources

This summary will describe the existing historic, cultural, and archaeological resources located within the Areas of Potential Effect (APEs) for the Project. The sites, structures, and districts with local or statewide significant historic and archaeological value (i.e., listed on the National Register of Historic Places) within a 5-mile radius of the Project area will be identified and described. The applicant will conduct a stage 1A and 1B archeological investigation and a historic structures (architectural) survey in consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and local historical societies and/or other local government units. The DEIS will include a summary of the results of the 1A and 1B studies, and architectural survey, and will include these documents as appendices. The DEIS will identify the extent of any State or Federal Agency involvement and discuss the status and results of any historic preservation studies undertaken. Documentation of consultation with the OPRHP will be included in the DEIS. Potential adverse impacts on historic and archaeological resources, either within the Project area or its visual study area, will be addressed. Mitigation measures for direct disturbance and visual impact will be discussed.

3.11 Sound

The DEIS will include an on-site sound study that documents ambient sound conditions within the Project area, describe anticipated construction-related noise, and calculates the increase in sound level over ambient that will result from operation of the specific turbine model proposed. Compliance with noise thresholds as defined in the local wind power and zoning ordinances will be addressed.

The study will analyze the change of noise level over background, and demonstrate compliance with the local laws. In determining the background noise levels, the study will use L(90) as ambient background noise level. The standard for significant change will be an increase greater than 6 dB(A) at receptors. Receptors used in the impact analysis will be fully identified and described in the DEIS. Sound contour maps will show property boundaries so that property owners can assess the predicted sound levels at their property lines.

Background noise levels and characteristics will be measured at representative locations under various weather and temperature conditions during day and night. It will be demonstrated that the number and location of ambient noise measurement sites as well as the selection of site settings (wooded, open, hilly, flat, protected from prevailing wind or not) sufficiently characterize the various receptor microenvironments within the study area.

Detailed noise spectra for the specific wind turbine units the Project sponsor proposes to use will be obtained from the manufacturers literature and field testing (by the manufacturer or other accredited party). This information will be the basis for computer modeling of noise levels. All parameters and variables used to model the background and Project-related sound levels will be provided. The sound profile of the selected turbine model will be compared to other comparable makes and models. If multiple turbine models are under consideration, for the Project noise modeling should be based on the sound profile of each of these or the noisiest, to allow an assessment of “worst case” impacts.

Resultant modeled contours (in decibels) will consider and incorporate appropriate provisions from the NYSDEC guidance document, including indicating the anticipated human reaction. The occurrence and potential impact of low frequency noise will be discussed.

Proposed means of mitigating potential construction and operational noise impacts will be addressed, including a proposed complaint resolution procedure.

3.12 Traffic/Transportation

This subsection will describe the existing conditions of the road system in the Project area and identify those regional and local roads that are anticipated to be used for construction of the proposed Project. It also will describe the transportation requirements of the Project (e.g., turning radii, vehicle widths, vehicle weight), and present any limitations/deficiencies that affected roads, culverts and bridges may have.

Traffic and transportation impacts anticipated to occur during the construction period will be described, including temporary damage to road surfaces, temporary traffic delays (due to slow-moving or parked vehicles), and widening/upgrades to existing roads, culverts and intersections to accommodate construction vehicles.

The assessment conducted in this subsection will demonstrate that coordination has taken place with highway superintendents and will document the following:

- Required permits
- A plan to document preconstruction road conditions (i.e., video recording)
- Necessary pre-construction improvements, which may include clearing, widening, replacement/upgrade of existing culverts, and turning radii improvements
- Requirements for maintaining roads during construction
- Impacts to private property (if any).
- Impacts associated with the transport of concrete to and from turbine sites, whether from an on-site concrete batch plant (if proposed) or from an off-site location.
- A plan for post construction inspections of public roads and maintenance/repair of road damage that may result from project operation and decommissioning

This subsection also will discuss measures to remedy damage (if any) to local roads that may result from the proposed Project and will include a statement of responsibility for implementing mitigation.

3.13 Socioeconomics

This subsection will present the economics and local budgetary considerations of the Proposed Action, including the proposed terms of the payment-in-lieu-of-taxes (PILOT) agreement and the Host Community Agreement.

The DEIS will also discuss/assess the following existing conditions:

- Local governing structures

- Current budgets for county and town governments and local school districts
- Local governing structures
- Services of employment (New York State Department of Labor Data)
- Tax base (residential, agricultural, commercial, industrial)
- Commercial business
- Local demographic characteristics

In addition, the DEIS will also discuss the following in terms of potential impacts and/or mitigation:

- General financial benefits to land owners
- Impact on existing local businesses and tourism
- Temporary and permanent jobs
- Benefits to the community
- Tax implications to the community (town, county, school)
- Financial impacts, both during and after construction, on local services including Town infrastructure, and fire and police departments
- Potential environmental justice areas,

A discussion of potential impacts to current property values will be provided based on the results of existing studies on the topic. Efforts will be made to locate studies based in New York in communities similar to Ripley and Westfield (if possible), or otherwise demonstrate relevance to this Project. The DEIS will objectively evaluate the strengths and weaknesses of each report or study and draw any appropriate conclusions.

3.14 Public Health & Safety

The DEIS will address potential public safety issues associated with construction and operation of the proposed Project, including, construction safety, stray voltage, electromagnetic field effects, tower collapse, lighting strikes, and ice shed.

The DEIS will address reported physiological, neurological, and psychiatric health hazards associated with wind farms, including issues pertaining to low frequency noise and shadow flicker (strobe effect). The DEIS will include a literature review and analysis of peer-reviewed articles and publications concerning the alleged health effects of wind turbine installations (referred to in some public comment letters as “Wind Turbine Syndrome”).

Security measures and restrictions on public access and other means of avoiding or minimizing public safety risks will be discussed, along with proposed plans to respond to public safety incidents, and potential impacts to law enforcement and emergency responder helicopters and/or airplanes (i.e. County Sheriffs and Mercy Flight).

The location of existing and proposed gas wells and gas transmission facilities within the project area will be discussed. Gas facility operators, the NYSDEC, the Chautauqua County GIS Office, and the Towns of Ripley and Westfield's Assessor's Offices will be contacted regarding facility location. Design and depth of buried lightning protection will be discussed as it relates to gas well and pipeline safety.

The DEIS will identify Project separation distances from existing overhead transmission lines.

3.15 Community Facilities and Services

This subsection will describe existing county and local community services, including police, fire and, emergency service departments, school districts, solid waste management and state or locally-adopted solid waste management plans, and open space/recreation. Such information will be based on personal communications with service providers and/or review and confirmation of pertinent literature. The DEIS will identify how the Proposed Action will impact the above services and the resources of the entity providing the services. The adequacy of existing services and facilities to accommodate the project will be evaluated, along with the potential economic benefits to these services and facilities resulting from Project implementation. Any required mitigation measures to offset or lessen potential impacts shall be identified, including a fire protection and emergency response plan developed in consultation with the local fire departments/emergency service providers.

3.16 Communication Facilities

This subsection will identify any microwave beam paths (Fresnel zones) and television signals within the proposed Project area, and evaluate potential Project impacts on microwave beam paths, as well as television, radio, and cellular phone reception and transmission. Correspondence from the U.S. Department of Commerce National Telecommunications and Information Administration will be provided in the DEIS. Mitigation measures to avoid and minimize impacts on communication facilities will be proposed.

3.17 Land Use and Zoning

This subsection will evaluate the existing zoning and land use conditions and anticipated impacts. It will discuss the Project's compatibility with zoning requirements and development trends in the area. A land use map and quantification of land acreage impacts according to land use will be included. The DEIS will evaluate the relationship of the Proposed Action to existing land use and the surrounding community.

Specifically, the evaluation will include:

- Short and long range plans in the county
- Short and long range plans in adjacent townships
- Existing and proposed land use within and adjacent to the Project area
- Compliance/consistency with requirements of the local zoning and wind power ordinance (including all thresholds and set-backs) and the need for any area or use variances
- Consistency with local Comprehensive Plans and/or development goals
- The compatibility of the Proposed Action with surrounding land uses
- Discussion of effects on residential development
- Discussion of effects on existing agriculture lands, including viticulture

In addition, the DEIS will identify the crucial elements of the "existing community character," such as scenic landscapes, type of local economy, significance of outdoor activities for work and recreational purposes, relative quiet when compared to urban and suburban settings, etc. The DEIS will assess the

likely impacts of the proposed Project on each aspect of the community character, considered separately and cumulatively. The DEIS will discuss mitigation measures to address any identified impacts.

4.0 Unavoidable Adverse Impacts

This section of the DEIS will identify impacts that are likely to occur despite mitigation measures, and will compare the beneficial and adverse implications of these unavoidable impacts.

5.0 Alternatives Analysis

The DEIS will include a description and evaluation of the range of reasonable alternatives to the Proposed Action. Alternatives to be considered will include alternate Project size, alternate Project location, alternate Project layout, alternate turbine size and the “no action” alternative.

This section will discuss the set of assumptions and various siting constraints that led to the development of the current Project proposal. Alternatives that meet the Project’s purpose needs and benefits will be discussed in sufficient detail to reasonably evaluate the anticipated environmental impacts associated with each option. Conclusions regarding the technical and financial feasibility of the proposal and identified alternatives need to be supported by reliable data.

6.0 Irreversible and Irretrievable Commitment of Resources

This section of the DEIS will identify those natural and man-made resources consumed, converted or otherwise made unavailable for future use as a consequence of the Proposed Action.

7.0 Cumulative Impacts

The DEIS will evaluate the potential cumulative impact of the proposed Project along with other wind power Projects that have been proposed within the region (i.e., southwestern New York State and northwestern Pennsylvania). Specific discussion of Babcock & Brown's proposed Project along the New York/Pennsylvania state line will be included. The impact of future wind power Projects identified in the NYISO queue, or expansion of the proposed Project, on visual aesthetic resources, community character, noise, transportation, shadow flicker, and avian and bat resources will be specifically addressed. Draft and Final environmental impact statements for other projects in the region will be reviewed and relevant information from these documents incorporated into the cumulative analysis.

8.0 Growth-Inducing Aspects

This section of the DEIS will describe potential growth-inducing aspects the Proposed Action may have, particularly the potential for additional development of wind power projects in the vicinity of the Project area.

9.0 Effects on the Use and Conservation of Energy Resources

This section of the DEIS will describe the effect of the Proposed Action on the use and conservation of energy resources, including discussions on generating capacity, consistency with state energy plan and the renewable portfolio standard to increase the amount of renewable energy in New York. The Project will provide a comparison of pollution emitted by the Project as compared to a similar fossil fuel facility of comparable size.

10.0 References

This section of the DEIS will list any sources of relevant information cited directly in the report text.

APPENDICES TO ACCOMPANY DEIS

To supplement the information required in each topic section the following will be included:

- Relevant technical maps, figures and exhibits
- Project plans, specifications, or construction information
- Visual Impact Analysis
- Shadow Flicker Analysis
- Cultural Resources Investigations/Architectural Survey
- Microwave Beam Path and Television Baseline Study
- Sound Study
- Transportation Study
- Avian and Bat Studies
- Agricultural Protection Measures
- Agricultural Preliminary Notice of Intent
- Drinking Water Inventory
- Wetland Delineation Report
- Gas Well and Pipeline Facilities Inventory
- Operations & Maintenance Plan
- Decommissioning and Restoration Plan
- Erosion & Sediment Control Plan
- Complaint Resolution Plan
- Relevant agency correspondence
- List of firms and persons responsible for both overall preparation of the DEIS and the underlying plans and other exhibits relied upon.