# 2.0 REVISIONS TO THE DEIS

One of the mandates of SEQRA is to prepare the DEIS as early as possible in the review process. As a result, it is common for projects to change after the DEIS is submitted, and particularly in response to comments on the DEIS. The FEIS builds upon the DEIS, providing responses to comments and, in this Section, addressing Project changes that occurred after the DEIS was accepted as complete and released for public comment.

## 2.1 CHANGES TO THE PROJECT LAYOUT

Since the time that the DEIS was released, two minor adjustments to the Project layout have occurred. These adjustments are limited to the relocation of portions of the buried interconnect line and the realignment of portions of the transmission line.

With respect to the 34.5 kV buried interconnect, the portion of line connecting the turbines on the western ridge to the turbines on the eastern ridge, formerly located within the right-of-way (ROW) of Nichols Run and Chipmunk Road, has been relocated to avoid temporary construction impacts to the public road ROW. As shown in FEIS Figure 1, the buried interconnect now connects the two ridges on private land, roughly between Turbines 5W and 6E, and will cross Chipmonk Road (any work within the Town's road ROW shall require a permit for work in a town road). This route is slightly shorter than the previous route and has been sited entirely within the footprint of existing oil and gas well access roads to avoid any additional vegetative disturbance. Prior to the relocation, no wetland/stream impacts were anticipated. However, the new route will cross Chipmonk Creek and associated wetlands (adjacent to Chipmonk Road). Therefore site-specific investigations were conducted by an EDR biologist subsequent to the release of the DEIS. As a result of these investigations, the current route was defined and it was determined that the new location had the potential to impact wetlands/streams, but that site conditions are suitable for the implementation of avoidance measures (e.g., directional bore) during construction. As such, all impacts (temporary and permanent) to the Chipmonk Creek system can be avoided. Therefore, the construction of the relocated buried interconnect line will not result in adverse impacts to wetlands/streams, and will not require authorization from U.S. Army Corps of Engineers or the NYS Department of Environmental Conservation.

A segment of the 115 kV buried transmission line alignment (approximately a 0.4-mile-long segment) was relocated to accommodate landowner preferences. The realignment is the result of a site walkover between the landowner and an EDR biologist, which took place in September 2010, subsequent to the DEIS. Specifically, the realigned route is now located within an existing

forest/field access road, thereby reducing impacts along this route. The route as currently proposed is depicted on FEIS Figure 1.

With respect to potential wetland/stream impacts, as indicated in the DEIS the buried 115 kV transmission line is proximate to and/or crosses a number of wetlands/streams. Specifically, it was estimated that two temporary stream crossings (Fourmile Creek and Twomile Creek) and up to 1.7 acres of temporary wetland disturbance would occur as a result of constructing the buried 115 kV line. However, it is anticipated that site conditions are suitable for avoidance measures (e.g., directional bore) at these locations as well. The realignment discussed above changes the location of the Twomile Creek crossing (albeit on the same property); however, the avoidance measures will still be applied. Therefore, the construction of the buried 115 kV transmission line will not result in adverse impacts to wetlands/streams, and will not require authorization from U.S. Army Corps of Engineers or the NYS Department of Environmental Conservation.

These minor changes in Project layout were also evaluated and quantified with respect to anticipated impacts to soils, vegetation, and land use and the results were compared to the impact acreages presented in the DEIS. This comparison showed that these two adjustments to the Project layout decreased temporary disturbance to soils, vegetation, and land use by approximately 0.1 acre, and have no effect on permanent impact acreages presented in the DEIS. These minor changes will present no new impacts to sensitive ecological communities/wildlife habitat, and in fact by specifically utilizing existing disturbed areas, these changes further decrease and mitigate potential ecological impacts.

## 2.2 ADDITIONAL INFORMATION

This section provides an overview of additional information provided in this FEIS in response to comments on the DEIS.

*Decommissioning Plan*

The Project Sponsor has prepared a Decommissioning and Site Restoration Plan for the Project (FEIS Appendix A). In accordance with the Town of Allegany Wind Energy Regulations, this plan states that the Project Sponsor will provide financial security for decommissioning the Project (Decommissioning Security). The Decommissioning Security will be sufficient to ensure the removal of all transformers, met towers, wind turbines, access roads, drive ways, and foundations and regrading and revegetation of the Project site as required by the Regulations (See FEIS Appendix A for further detail on decommissioning requirements). The Decommissioning Security would be

utilized in the event that the Project, or part thereof, becomes inoperable or nonfunctional for a continuous period of one year (following construction) and thereafter the Project Sponsor refuses to conduct decommissioning and site restoration activities after a request is made in writing by the Town. A NYS Licensed Engineer, selected by the Town Board and paid by the Project Sponsor, will estimate and certify the cost of decommissioning as well as the salvage value of wind farm components and will establish the Decommissioning Security as the difference between the estimated cost and the estimated salvage value. Decommissioning Security (in the form approved by the Town Board) will be delivered to the Town prior to issuance of a building permit and will be maintained by the Project Sponsor and its successors or assigns for the duration of the Special Use Permit. The level of Decommissioning Security will be recalculated by a NYS Licensed Engineer every five years.

Megawatt-scale wind turbine generators typically have a life expectancy of 20 to 25 years. The current trend in the wind energy industry has been to replace or "re-power" older wind energy projects by upgrading older equipment with more efficient turbines. However, if not upgraded the turbines and other Project Components will be decommissioned. In general, decommissioning would consist of the following actions:

- All turbines, including the blades, nacelles and towers will be disassembled, and transported off site for reclamation and sale.
- All of the transformers will also be transported off-site for reuse or reclamation.
- All underground infrastructures at depths at or less than 3.5 feet below finished grade will be removed.
- All underground infrastructures at depths greater than 3.5 feet below finished grade including the subsurface collection conductors, and foundations, will be abandoned in place at the Project Sponsor's discretion.
- Areas where subsurface components are removed will be graded to match adjacent contours, stabilized with an appropriate seed mix, and allowed to re-vegetate naturally.
- Project-related access road materials will remain on-site, or will be removed per landowner requirements.
- All town, county or state roads, impacted by Project decommissioning activity, if any, will be restored to original condition upon completion of decommissioning.

See FEIS Appendix A for further detail regarding financial security as well as specific activities involved in Project decommissioning and site restoration.

*Spill Prevention Plan*

Best Management Practices (BMPs) will be implemented during construction of the proposed Project to reduce the risk of spills and other accidental exposures that could potentially result in impacts to stormwater quality. The following BMP's are identified and described in the Allegany Wind Power Project Construction Spill Prevention Plan: Construction Material Storage, Secondary Containment, Leak and Integrity Inspections, Fueling and Hazardous Materials Handling, Spill Response Materials on Hand, Refueling and Maintenance Areas, Restricted Activities Areas, and Spill Response. Please see the Spill Prevention Plan included in FEIS Appendix B for descriptions of the specific BMPs proposed.

*Invasive Species Control Plan*

Throughout Project construction, the Project Sponsor will implement the Invasive Species Control Plan (ISCP) found in FEIS Appendix C. This plan proposes the following four measures to control the spread of invasive species within federal and NYSDEC regulated wetlands, streams, and riparian areas; 1) construction materials inspection, 2) target species treatment and removal, 3) construction equipment sanitation, and 4) restoration. It is proposed that success of the ISCP will be monitored for a two-year period through visual inspection of disturbed regulated areas during the growing season and results will be reported in an annual monitoring report.

*Cultural Resources*

Since the release of the DEIS, two letters have been received from the State Historic Preservation Office (SHPO) regarding the proposed Project (FEIS Appendix D). A letter dated June 11, 2010 was received in response to submission of the Phase 1A/1B Cultural Resource Investigation Reports prepared by John Millner Associates, Inc. (JMA). The SHPO concurred with JMA's recommendations for the ten identified archeological sites, namely that nine of the ten sites will not be impacted and that the tenth site (Central Power Site 2), is not National Register eligible. However, the SHPO expresses concern regarding identified rock outcroppings and requests that a description of construction activities in proximity to the outcroppings be submitted to the OPRHP and the Seneca Nation of Indians. The letter also requests that the Project's final design plans include limits of construction areas in relation to the identified archaeological site boundaries and the rock outcroppings and that these plans also be submitted to the SHPO and the Seneca Nation of Indians for review.

Subsequently, a letter dated July 7, 2010 was received from the SHPO, which requests the evaluation of additional historic/cultural resources with respect to potential visual impacts. Two of

the resources are natural sites within the 5-mile radius study area that are tourist attractions and may be National Register eligible: Rock City Park and Flatiron Rock. The remaining resources are located outside of the 5-mile radius study area within Allegany State Park and include various National Register eligible historic structures associated with the Red House Lake Area. The letter concludes that sufficient information does exist to determine whether the Project will have an Adverse Effect on cultural resources under Section 106 of the National Historic Preservation Act. Specifically, the SHPO letter indicates, "…under Section 106 of the National Historic Preservation Act, the undertaking will have an Adverse Effect on cultural resources." Evaluation of visual impacts to these, and other, historic cultural resources has been conducted in support of this FEIS (see Cultural Resources Technical Memorandum in FEIS Appendix D).

To mitigate for unavoidable impacts to historic structures/cultural resources, the Town of Allegany has identified potential mitigation projects, which are listed below.

- Allegany Area Historical Association (1855 Greek Revival church)
    - painting the building exterior
    - weatherization for the building/storm windows for original stained glass
    - archival storage systems for collections
    - improved access to building and/or collections
- Addition to Allegany Senior Center
- Improvements to Town Hall
    - replacement of interior/exterior stairs
    - improvements to storage area for archival town records
    - energy conservation measures such as insulation and/or window replacement
- Allegany Public Library
    - energy efficient indoor/outdoor lighting
    - repairs to exterior of building (columns, etc.)
    - updated electrical and other wiring to accommodate computers, etc.
- Upgrade Town Cemeteries

*Visual Resources*

A technical memorandum was prepared by EDR in response to comments received during the DEIS public comment period (FEIS Appendix E). The memo addresses potential project visibility and visual impact from Hawthorne Lane, St. Bonaventure University, and Allegany State Park. In addition, the memo includes revised figures from the original Visual Impact Assessment (VIA), and

supplemental graphics to address other questions and comments that have arisen regarding visual issues.

As identified by a commenter, photos and simulations of the Project from higher elevation, residential sites, similar to the views from Hawthorne Lane, were lacking in the VIA. Consequently, EDR obtained photos from seven publicly accessible viewpoints on Hawthorne Lane and selected a view from a small pull-off along the road (Viewpoint 9A) to develop a supplemental simulation of the proposed Project from this area. This view was selected because it offered a completely unobstructed view toward the Project site, and thus presents potential "worst case" views of the Project from a public vantage point on Hawthorne Lane. As illustrated in the simulation (included in FEIS Appendix E) with the proposed Project in place, a total of eight turbines can be seen along the forested ridgetop that forms a portion of the horizon in this view. Significant portions of three of these turbines are screened by the ridge and its forest vegetation, while the remaining visible turbines are largely unscreened. All other Project turbines are fully screened by an intervening ridge that rises on the right hand side of the view. A registered landscape architect who served on the rating panel for the original VIA evaluated this simulation and noted that the turbines' color, line, texture, and scale present moderate to appreciable contrast with landform, vegetation, and land use in this view. However, she also noted that their white color minimizes contrast with the sky, and their presence provides an element of interest to the existing view. Contrast was scored as moderate (1.8 on a scale from 0 to 4) and it was noted that, although the turbines may be perceived to have an adverse impact by area residents, they do not have a significant effect on the scenic quality of the view.

In response to concerns that the simulation from the St. Bonaventure Cemetery included in the VIA understated potential project visibility from the St. Bonaventure University campus, a supplemental simulation was prepared from Viewpoint 175 on the St. Bonaventure University Campus (see FEIS Appendix E). With the proposed project in place, seven turbines appear prominently on the background ridge. Their vertical line, scale, and color (dark due to backlighting) present moderate to appreciable contrast with the landform, vegetation, and sky in this view. The turbines could also have an appreciable effect on viewer enjoyment of this view, and present a distraction to spectators viewing athletic events at this location. However, the rating panel member evaluating this simulation noted that other (primarily man-made) elements in the view limit scale and landuse contrast presented by the turbines, and that overall visual contrast would be moderate (2.3 on a scale of 0 to 4).

An August 16, 2010 letter was sent to the Town of Allegany from the State Parks division of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), which expressed concern regarding potential Project visibility from Allegany State Park (ASP). This letter identified eight specific locations from which photo documentation of existing views toward the Project site was requested, and the possible preparation of supplemental visual simulations. Each viewpoint identified was visited during supplemental fieldwork conducted on September 1 and September 22, 2010 (see viewpoint location map and photo log for ASP in FEIS Appendix E). The view from the Summit Fire Tower (Ridge Run Trail) in ASP is the only open view identified by EDR that would allow unscreened views of the Project from the park. With the proposed Project in place, only one turbine is clearly visible along the background ridge. At this distance the turbine appears as a slender vertical line that is barely noticeable against the sky. All of the remaining turbines are fully or partially screened by the branches of the foreground trees. Although turbine visibility would increase somewhat during the leaf-off season, relatively few visitors would be utilizing the fire tower and experiencing this view during the winter. In addition, the distance of the turbines from the viewer, and the partial screening provided by the foreground tree branches during all seasons, will minimize Project visibility and visual contrast with the landscape. Although scenic quality and viewer sensitivity at this viewpoint are considered to be high, evaluation by the rating panel member indicated that overall Project contrast and visual impact is likely to be insignificant (0.1 on a scale of 0 – 4) at this viewpoint.

With respect to the view from the Summit Fire Tower at night, five FAA warning lights mounted on the turbine nacelles are visible in the distant background, just above and in the gaps between the tops of the trees in the foreground of the view (see FEIS Appendix E). The lights and silhouettes of the towers are visible above the ridgeline against the clear, relatively bright sky; however, the tops of the trees in the foreground of the view partially screen the project. The lights on the turbines appear to be approximately the same height and intensity as the existing warning lights on the communication tower at the left side of the view. For both the existing and proposed lights, the effect on the view is minimal due to distance. The landscape in the nighttime view is barely visible and the significant views during the nighttime condition are assumed to be of the night sky. It is also assumed that the fire tower receives little use at night. The FAA warning lights on the distant ridgeline do not create significant contrast with the views of the sky and the visual impact is not considered significant.

*Meteorological Tower*

Although two meteorological towers were originally proposed, the Project Sponsor's wind resource experts have determined that only one is necessary. The proposed meteorological tower design

consists of a 100-meter (328 foot) tall free-standing lattice steel structure, located approximately 1,000 feet southwest of proposed turbine 5E (see Figure 1). This meteorological tower (and associated access road) has been sited specifically to take advantage of the existing disturbance caused by the oil/gas extraction activities. In addition, the free-standing (i.e., no guy wires) tower design serves to minimize/mitigate impacts to avian/bat resources, which are expected to be very minimal (e.g., of the two meteorological towers including the 2008 fatality monitoring for the Maple Ridge Wind Farm, only two birds [one at each tower] were documented). The visual effects of this meteorological tower are evaluated in the Technical Memorandum provided in FEIS Appendix E.

*Sound*

Hessler Associates prepared a letter report in response to three letters/reports prepared by Mr. Richard James of E-Coustic Solutions, outlined as follows:

1. Letter to Gary A. Abraham, Esq., February 19, 2009
2. Letter to Gary A. Abraham, Esq., February 22, 2010
3. "A Report on Background (Ambient) Sound Level At Selected Sensitive Receivers, Olean/Alleany, NY, April 22-24, 2010", May 3, 2010

After reviewing the materials prepared by Mr. James, Hessler Associates identified and repudiated each of the points/complaints in the Hessler Associates letter report, which is provided in FEIS Appendix K.

*Public Health and Safety*

In addition to the information presented in the DEIS, additional research/analysis is now available regarding potential public health impacts. Specifically, the Australian National Health and Medical Research Council (NHMRC) conducted a literature review on the potential impacts on human health associated with wind turbines, including low frequency sound. In a *Public Statement* issued in July 2010, the NHMRC states: "*There is currently no published scientific evidence to positively link wind turbines with adverse health effects*". Also in July 2010, the NHMRC issued *Wind Turbines and Health; A Rapid Review of the Evidence*, which concludes with: "*This review of the available evidence, including journal articles, surveys, literature reviews and government reports, supports the statement that: There are no direct pathological effects from wind farms and that any potential impact on humans can be minimised by following existing planning guidelines".* The NHMRC *Public Statement* and the NHMRC *Wind Turbines and Health; A Rapid Review of the Evidence* are provided in FEIS Appendix L.