# NEW YORK STATE BOARD ON ELECTRIC GENERATION SITING AND THE ENVIRONMENT

IN THE MATTER OF: Case No. 15-F-0122 Application by Baron Winds LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Facility in the Towns of Cohocton, Dansville, Fremont, and Wayland, Steuben County

# PROPOSED CERTIFICATE CONDITIONS

## I. Project Authorization

- 1. The Certificate Holder is authorized to construct and operate the Facility, as described in the Application by Baron Winds LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 of the New York State Public Service Law (the Application) and/or clarified by the Certificate Holder's supplemental filings, updates and replies to discovery data requests or additional exhibits except as waived, modified or supplemented by this Certificate or other permits.
- 2. The Certificate Holder is responsible for obtaining all necessary permits, and any other approvals, land easements, and rights-of-way that may be required for this Facility and which the New York State Board on Electric Generation Siting and the Environment (Siting Board) is not empowered to provide.
- 3. The Facility includes up to 76 wind turbines in the Towns of Cohocton, Dansville, Fremont, and Wayland, temporary and permanent access roads, combined overhead and underground 34.5 kilovolts (kV) collection lines, , collection substation, three permanent meteorological towers, operations and maintenance (O&M) building, and two temporary staging/laydown areas. The total generating capacity of the Facility shall not exceed 300 megawatts (MWs).
- 4. The Certificate Holder is authorized to construct electric transmission facilities and interconnect those facilities to existing 230 kV Canandaigua Switching Station, owned by New York State Electric and Gas Corp. (NYSEG), in the Town of Cohocton.

5. Prior to the construction of the Facility the Certificate Holder shall file a request/application for a Water Quality Certification with the Secretary to the Siting Board (Secretary), which shall be filed and served and noticed pursuant to 16 New York Codes, Rules and Regulations (NYCRR) 1000.8(8). This request shall be filed concurrently with the permit application filed with the United States Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.

## II. General Conditions

- 6. The Certificate Holder shall implement the mitigation measures as described in the Application and/or clarified by the Certificate Holder's supplemental filings, updates and replies to discovery data requests or additional exhibits, except as may be waived, modified or supplemented by the Siting Board.
- 7. The Certificate Holder shall construct and operate the Facility in accordance with the substantive provisions of the applicable local laws as identified in Exhibit 31 of the Application.
- 8. The Certificate Holder shall construct the collector lines in accordance to the latest addition of ANSI C-2.
- 9. Certificate Holder shall incorporate and implement as appropriate, in all compliance filings and construction activities, the ANSI standards and measures for engineering design, construction, inspection, maintenance and operation of its authorized Facility, including features for facility security and public safety, utility system protection, plans for quality assurance and control measures for facility design and construction, utility notification and coordination plans for work in close proximity to other utility transmission and distribution facilities, vegetation and facility maintenance standards and practices, emergency response plans for construction and operational phases, and complaint resolution measures.
- 10. Certificate Holder shall work with NYSEG, and any successor Transmission Owner (as defined in the New York Independent System Operator (NYISO) Agreement), to ensure that, with the addition of the Facility (as defined in the Interconnection Agreement (IA) between the Company and NYSEG), the system will have power system relay protection and appropriate communication

capabilities to ensure that operation of the NSYEG transmission system is adequate under Northeast Power Coordinating Council (NPCC), and meets the protection requirements at all times of the North American Electric Reliability Corporation (NERC), NPCC, New York State Reliability Council (NYSRC), NYISO, and NYSEG, and any successor Transmission Owner (as defined in the NYISO Agreement). Certificate Holder shall ensure compliance with the IA with NYSEG criteria.

- 11. The authority granted in the Certificate and any subsequent Order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such Order(s):
  - a) 60 days prior to construction the Certificate Holder Shall provide DPS Staff and the Siting Board a construction organizational structure, contact list, and protocol for communication between parties.
  - b) The Certificate Holder shall regard the Department of Public Service Staff (Staff or DPS Staff) representatives, authorized pursuant to PSL §66(8), as the Board's, or the Commission's, after the Board's jurisdiction has ceased, representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate, or may violate, the terms of the Certificate, Compliance Filings, or any other order in this proceeding, such DPS Staff representatives may issue a stop work order for that location or activity.
  - c) A stop work order shall expire 24 hours after issued unless confirmed by the Board, or the Commission after the Board's jurisdiction has ceased. DPS Staff shall give the Certificate Holder notice by electronic mail of any application to the Board or Commissioner to have a stop work order confirmed. If a stop work order is confirmed, Certificate Holder may seek reconsideration from the confirming Commissioner, Board or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of the DPS Staff field representative, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.
  - d) Stop work authority will be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, DPS Staff representatives will consult (wherever practicable) with

the Certificate Holder's representative(s) possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holder's Project Managers and the Director of the Office of Electric, Gas and Water. In the event that a DPS Staff representative issues a stop work order, neither the Certificate Holder nor the Contractor will be prevented from undertaking any safety-related activities as they deem necessary and appropriate under the circumstances. The issuance of a stop work order or the implementation of measures as described below may be directed at the sole discretion of the DPS Staff representative during these discussions.

- e) If a DPS Staff representative discovers a specific activity that represents a significant environmental threat that is, or immediately may become, a violation of the Certificate, Compliance Filings, or any other Order in this proceeding, the DPS Staff representative may -- in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action -- direct the field crews to stop the specific potentially harmful activity immediately. If responsible Certificate Holder personnel are not on site, the DPS Staff representative will immediately thereafter inform the Certificate Holder's Construction Inspector(s) and/or Environmental Monitor(s) of the action taken. The stop work order may be lifted by the DPS Staff Representative if the situation prompting its issuance is resolved.
- f) If the DPS Staff representative determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the DPS Staff representative may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action, direct the Certificate Holder or the relevant Contractors to implement the corrective measures identified in the approved Certificate or Compliance Filings. However, all directives must follow the protocol established for communication between parties as required by subpart (a) above. The field crews shall immediately

- comply with the DPS Staff representative's directive as provided through the communication protocol. The DPS Staff representative will immediately thereafter inform that Certificate Holder's Construction Inspector(s) and/or Environmental Monitor(s) of the action taken.
- g) DPS Staff will promptly notify the New York State
  Department of Environmental Conservation (NYSDEC) Region 8
  representative of any activity that involves a violation of
  the Certificate within NYSDEC's jurisdictional areas (e.g.,
  a State-regulated wetland or its adjacent area, a protected
  stream or other waterbody, or a threatened or endangered
  species).
- 12. The Certificate Holder shall construct and operate the Facility in a manner that conforms to all substantive State requirements as identified in Exhibit 32 of the Application.

#### III. Notifications

- 13. At least 14 days prior to the Certificate Holder identifying the commencement of construction date or tree clearing activities (which does not include minor tree-clearing or other activities for testing, or surveying [including geotechnical drilling and meteorological testing] as necessary to prepare final design plans) the Certificate Holder shall notify the public as follows:
  - a) Provide notice by mail to host landowners, adjacent landowners within 5,000 feet of the final layout to be constructed, and persons who reside on such property (if different from the landowner);
  - b) Provide notice to local Town and County officials and emergency personnel;
  - c) Publish notice in the local newspapers of record for dissemination;
  - d) Provide notice for display in public places, which will include, the Town Halls of the host communities, at least one library in each host community, at least one post office in each host community, the Facility website, and the Facility construction trailers/offices; and
  - e) Provide notice to the Secretary for filing on the Document Matter Management website.
- 14. The Certificate Holder shall write the notice(s) under this paragraph in language reasonably understandable to the average person and shall ensure that the notice(s)contain:

- a) A map of the Project;
- b) A brief description of the Project;
- c) The construction schedule and transportation routes;
- d) The name, mailing address, local or toll-free number, and email address of the Project Development Manager and Construction Manager;
- e) The procedure and contact information for registering a complaint; and
- f) Contact information for the Siting Board and New York State Public Service Commission (Commission).
- 15. Upon distribution, and prior to commencement of construction, the Certificate Holder shall notify the Town Boards of all areas where information regarding the Project, Project activities, and Project contact information have been posted.
- 16. The Certificate Holder shall inform the Secretary in writing at least seven (7) business days prior to commencement of construction that it has provided the notifications required by this Section III, and provide a copy of the notice(s) under this Section as well as a distribution list.
- 17. Prior to the end of construction, the Certificate Holder shall notify the entities identified in Condition 13a), 13b), and 13e) with the contact name, telephone number, and address of the Operations Manager.
- 18. The Certificate Holder shall file a written notice with the Secretary within 14 days of the completion of construction and provide an anticipated date of commencement of commercial operation of the Facility.

#### IV. Compliance Filings

The following plans, drawings, and other documents shall be provided for approval by the Siting Board in accordance with the rules for submittal, public comment, and decisions set forth in 16 NYCRR §1002. The Certificate Holder shall implement all requirements of the compliance filings, as approved or amended by the Siting Board.

#### Pre-construction

The following compliance filings shall be submitted to the Secretary at least 45-days prior to the commencement of construction date, as defined above, unless otherwise noted.

- 19. Copies of all federal permits and/or approvals required to conduct jurisdictional activities associated with federally-regulated aspects of construction and operation of the Facility;
- 20. Copies of any discretionary local or state permits and/or approvals required for construction and operation of the Facility if such approvals were authorized by the Board;
- 21. Documentation demonstrating that all necessary agreements are in place for use of the Facility Site for construction and operation (e.g., landowner agreements, easements, setback waivers, or Good Neighbor Agreements).
- 22. Documentation demonstrating that the final Facility design meets or exceeds the turbine setback requirements set forth in the zoning regulations for the Towns of Cohocton, Dansville, Fremont, and Wayland, unless written consent has been obtained from affected property owners. Proofs of consent shall be provided and indicated on the final design drawings.
- 23. A Final Decommissioning Plan and proof of the requisite financial security approved by the Towns. The decommissioning estimate shall be updated by a qualified independent engineer licensed to practice engineering in the State of New York one year of Facility operation, and every fifth year thereafter
- 24. Copy of the IA between NYISO, NYSEG, and the Certificate Holder. Any updates or revisions to the IA shall be submitted throughout the life of the Project. Additionally, except in the event of an emergency, if any equipment or control system with different characteristics is installed throughout the life of the Project, the Certificate Holder shall provide that information to NYSEG and file with the Secretary at least three months before any such change is made.
- 25. All Facilities Studies issued by the NYISO shall be provided within 14 days of receipt of the final study. Any updated facilities agreements will also be submitted throughout the life of the Facility.
- 26. System Reliability Impact Study (SRIS) performed in accordance with the NYISO Open Access Transmission Tariff (OATT) approved by the Federal Energy Regulatory Commission), and all appendices thereto, reflecting the interconnection of the Facility.

## Health and Safety

- 27. Final Emergency Action Plan, which shall be implemented during Facility construction, operation, and decommissioning. Training drills with emergency responders shall occur at least once per year. Copies of the final plan shall be provided to DPS Staff, the NYS Division of Homeland Security, and local emergency responders that serve the Facility.
- 28. Final Site Security Plan for Facility Operations. Copies of the final plan shall be provided to the DPS Staff, NYS Division of Homeland Security and local emergency responders that serve the Facility.
- 29. Final Health and Safety Plan which shall be implemented during Facility construction, operation, and decommissioning.
- 30. The Certificate Holder shall contact all pipeline operators in the area to identify the location of existing pipelines where Facility components will encroach upon existing pipeline easement(s) to ensure that said Facility components that encroach upon the pipeline easements will be constructed in compliance with all appropriate standards to ensure maintenance of the pipeline's cathodic protection system. The Certificate Holder shall engineer its Facility to be fully compatible with the pipeline owner's requirement for encroachments to ensure proper coordination of the cathodic protection of any identified pipelines with cathodic protection with the transmission structures' foundations.
- 31. A final site-specific construction Quality Assurance and Quality Control Plan (QA/QC Plan), to be developed in coordination with the selected Balance of Plant (BOP) contractor.

### Transportation

32. A final Traffic Control Plan which will be developed in order to minimize potential delays to local traffic during construction, the Certificate Holder shall coordinate with the State, County, and local municipalities to respond to any locations that may experience any traffic flow or capacity issues. The Traffic Control Plan shall include copies of Host Community Agreements and/or Road Use Agreements with the County and Towns where the

local roads are being used for delivery and construction vehicle transport routes.

# Plans, Profiles, and Detail Drawings

- 33. Maps, site plans and profile figures, and construction details for the Facility to be constructed. Shapefile data shall be provided to DPS Staff for the locations of turbines, collection lines, transmission lines, designated construction and laydown areas, access ways, and other Facility components. Final design drawings, site plans, and/or construction details will include setback dimensions that adhere to the setbacks as described in the Application.
- 34. Details and specifications of the selected turbine model (including cut sheets, and blade details such as length and thickness), including third-party certification documenting that the turbine model meets international design standards; the technical/safety manual for the turbine; foundation drawings (including plan, elevation, and section details); and manufacturer spec sheet and warranty that the selected turbine model does not exceed the total height and sound level output of the turbines presented in the Application.
- 35. Description of the wind turbine blade installation process identifying the anticipated installation method for each wind turbine. Detail showing typical laydown space required for installation will be provided.
- 36. Maps showing the location for the selected O&M building. If an existing building is not utilized, the Certificate Holder shall provide the final O&M building details and construction drawings.
- 37. If an on-site concrete batch plant is to be utilized during construction, the Certificate Holder shall provide:
  - a) final details of the concrete batch plant layout, location, and access;
  - b) temporary lighting that avoids offsite light trespass;
  - c) copies of required permits; and
  - d) initial concrete batch plant set-up plan with references of conformance to ACI (American Concrete Institute), ASTM (American Society for Testing and Materials); and

- e) plan or description of the Certificate Holder's monitoring and testing of concrete in conformance with the Building Code of New York State, ACI, ASTM, and any other applicable specifications.
- 38. Final plan for the collection substation and collection line circuits' configuration and location map, indicating locations of overhead and underground installations and the number of required circuits per circuit-run. A breakdown of the number of miles per circuit shall be included as a legend (including installation distances for single, double, triple, etc. runs).
- 39. Final details of single and multiple-circuit overhead 34.5 kV electric collection line layouts. Each Project circuit layout (single, double, triple, etc.) shall include, if applicable, the following drawings:
  - a) "Right-of-Way Clearing Diagram";
  - b) "Riser Dead-End Structure Diagram";
  - c) "Tangent Structure Diagram";
  - d) "Heavy Angle Dead-End Structure Detail"; and
  - e) "Clearing Diagram-Adjacent to Roadway Detail"

The above listed drawings shall include final layout details of any required guy support systems.

- 40. Final design and details of single and multiple electric circuit underground collection lines. Each Project circuit layout (single, double, triple, etc.) shall include a cross-section and clearing and ROW widths needed for accommodating circuit installations.
- 41. Maps showing all locations where anticipated alternative installation methods (i.e., alternative to the "rip" method, including subsurface bores/horizontal directional drilling) shall be utilized during construction of underground collection lines; alternative methods will be identified in the plans. To the extent the contractor determines, during construction activities, that installation methods should differ from that which is depicted on the maps, such change shall be permitted following on-site consultation with, and verbal approval by, the DPS Staff representative and the Environmental Monitor. The Applicant will include a description of the anticipated approval process with the maps required by this condition.

# Environmental

- 42. Environmental Compliance Program Plan, including:
  - a) Establishment of funding for an independent, third-party environmental monitor to oversee compliance with environmental commitments and permit requirements. The environmental monitor shall perform daily inspections of construction work sites and, in consultation with DPS Staff, issue regular reporting and compliance audits. The Certificate Holder shall identify and provide qualifications and contact information for the independent, third-party monitor for environmental compliance monitoring; there shall be an independent, third party agricultural monitor. If DAM agrees that the independent third party monitor is qualified on agricultural issues, one monitor can act as both environmental and agricultural monitor.
  - b) A Final Environmental Compliance Manual, which will serve as the basis for contractor training. The manual will identify construction organizational structure, contact list, and protocol for communication between parties.
  - c) Mandatory training requirements for all contractors and subcontractors;
  - d) Pre-construction coordination; and
  - e) Construction and restoration inspection standards.
- 43. Final Detailed Geotechnical Engineering Report verifying subsurface conditions at each turbine location. The report shall identify appropriate mitigation measures required in locations of highly corrosive soils or soils with a high frost risk, and confirm whether blasting operations will be required in areas of shallow bedrock.
- 44. Frac-Out Risk Assessment and Contingency Plan where horizontal directional drilling is proposed. Biodegradable drilling solutions shall be used for horizontal directional drilling (HDD) to minimize harm to aquatic species in the event of a drilling frac-out. Exit and entry points shall be located a minimum of 20 feet from the edge of the stream or wetland to minimize disturbance to the extent practicable. All equipment and provisions of the plan shall be readily accessible at the locations where HDD technology is used during construction. If inadvertent drilling fluid surface returns occur in wetlands or streams, the NYSDEC and DPS Staff shall be notified immediately and a written monitoring report describing the location, estimated volume, and cleanup efforts shall be submitted within 24 hours of the occurrence.

- 45. Dust Control Procedures Plan for minimizing the amount of dust generated by construction activities, consistent with the Standards and Specifications for Dust Control, as outlined in the New York State Standards and Specifications for Erosion and Sediment Controls.
- 46. Shadow Flicker Impacts Analysis, Control and Mitigation Plan. Shadow flicker caused by wind turbine operations shall be limited to a maximum of 30 hours annually at any non-participating residential receptor. The Shadow Flicker Impacts Mitigation Plan shall include:
  - a) updated analysis of realistic and receptor-specific predicted flicker based upon factors such as topography, vegetation, and receptor location for non-participating residential receptors in which the Facility modeling predicts greater than 30 hours per year, if any, based on final proposed design;
  - b) a protocol for monitoring operational conditions and potential flicker exposure at the wind turbine locations identified in the updated analysis, based on meteorological conditions for non-participating receptors in which the modeling shows the potential for greater than 30 hours annually;
  - c) identification of turbines that will have shadow flicker mitigation operational controls, if necessary.
- 47. Final cultural resources mitigation and offset plan, either as adopted by federal permitting agency in subsequent National Historic Preservation Act (NHPA) §106 review, or as proposed in the Application and as revised in further consultation with SHPO in the event that the NHPA §106 review does not require that the mitigation plan be implemented, or as further supplemented pending any negotiations among parties. Proof of mitigation funding awards for offset project implementation to be provided within two years of the start of construction of the Facility shall be included.
- 48. Final Unanticipated Discovery Plan, establishing procedures in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan will include a provision for immediate work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a professional archaeologist, qualified

according to New York Archaeological Council Standards. Work shall not resume in the area of such remains until written permission is received from the NYSOPRHP.

- 49. A copy of the Final Bird and Bat Conservation Strategy (BBCS) submitted to United State Fish and Wildlife Service (USFWS) will be provided at the same time it is submitted to USFWS but not less than 45 days prior to the commencement of construction.
- 50. A final Net Conservation Benefit Plan will be developed in consultation with and accepted by NYSDEC and DPS Staff, for mitigating potential take of Northern Long Eared Bat.
- 51. Final Invasive Species Control Plan (ISCP). Control measures shall include construction materials inspection and sanitation, invasive species treatment and removal, and site restoration in accordance with the Facility's final approved Stormwater Pollution Prevention Plan (SWPPP). A post-construction monitoring program (MP) shall be conducted in year 1, year 3 and year 5 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISCP effectiveness. At the conclusion of the MP, a report shall be submitted to DPS Staff, NYSDEC and Ag&Mkts that assesses how well the goals and recommendation of the Invasive Plant Species Survey Baseline Report ("Baseline Species Report"), due to construction of the Facility, is achieved. In the event that the report concludes that goals are not met, and there is an increase of invasive species due to Facility construction, the Certificate Holder, DPS, DEC and Ag&Mkts will meet to consider why initial control measures were ineffective and the probability of successful additional treatment measures without the need for perpetual treatments.
- 52. Site-specific plans for management of *Golden Nematode (Globodera rostochiensis)*, which shall be developed in consultation with the NYSDAM.
- 53. Final wetland and stream impact drawings, site plans, and construction details shall incorporate and accurately depict methods for minimization of impacts to each wetland and stream.
- 54. Final Wetlands Mitigation Plan, if necessary addressing impacts to federal and State wetlands. The plan shall be developed in

- coordination with NYSDEC, and the Corps to satisfy applicable federal and State regulations.
- 55. No wind turbine shall be sited within 100 feet of an existing water supply well. If environmental or engineering constraints require siting of any collection lines or access roads within 100 feet of an existing, active water supply well or any turbines within 1,000 feet of an existing, active water supply well, pre- and post-construction testing of the potability of water wells within the above specified distances of construction disturbance before commencement of construction and after completion of construction, shall be performed by a qualified third party, to ensure the wells are not impacted. Should the third party testing conclude that the Facility Construction has an impact on the potability of a water well, the Certificate Holder shall cause a new water well, more than 100 feet from a collection line or access road to be constructed.
- 56. Final approved SWPPP. Impacts to soil resources shall be minimized by adherence to best management practices that are designed to avoid or control erosion and sedimentation and stabilize disturbed areas. Erosion and sedimentation impacts during construction shall be minimized by the implementation of an erosion and sedimentation control plan developed as part of the State Pollution Discharge Elimination System General Permit for the Facility. Erosion and sediment control measures shall be constructed and implemented in accordance with the SWPPP.
- 57. Final Spill Prevention, Containment and Counter Measures (SPCC) Plan to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Facility construction and operation. The SPCC Plan shall be applied to all relevant construction activities and contain information about water bodies, procedures for loading and unloading of oil, discharge or drainage controls, procedures in the event of discharge discovery, a discharge response procedure, a list of spill response equipment to be maintained on-site (including a fire extinguisher, shovel, tank patch kit, and oil-absorbent materials), methods of disposal of contaminated materials in the event of a discharge, and spill reporting information. Any spills shall be reported in accordance with State and/or federal regulations.
- 58. Final Complaint Resolution Plan for both construction and operation phases (a separate plan will be submitted for

operational noise), developed in consultation with the Towns. A copy of the Final Complaint Resolution Plan shall be submitted to the Towns and filed at the Facility document repositories. The plan shall address complaint reporting and resolution procedures for all construction and operation issues. The plan shall include protocols for:

- a) Registering a complaint;
- b) Notifying the public of the complaint procedures;
- c) Responding to and resolving complaints in a consistent and respectful manner;
- d) Logging and tracking of all complaints received and resolutions achieved;
- e) Reporting to DPS Staff any complaints not resolved within 60 days of receipt;
- f) Arbitrating complaints not resolved within 60 days; and
- g) Filing an annual report of complaint resolution tracking to DPS Staff.

If the Complaint Resolution process determines that Facility operation has resulted in impacts to existing off-air television coverage, the Certificate Holder shall address each individual problem by investigating methods of improving the television reception system. Should this prove ineffective, cable television hookups shall be offered (in areas where cable service is available), or in areas where cable service is not available or not practical, direct broadcast satellite reception systems.

- 59. A Post Construction Avian and Bat Monitoring and Adaptive Management Plan shall be submitted at least 60 days prior to the start of commercial operation of the Facility. The plan will include direct impact fatality studies and habituation/avoidance studies. The details of the post-construction studies (i.e., the start date, number and frequency of turbine searches, search area, bat monitoring, further monitoring beyond the second year, etc.), will be described following DEC's June 2016 Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects, for Standard Post-Construction Studies and through consultation between the certificate holder, USFWS, and DEC, post construction monitoring will be conducted for a minimum period of at least two (2) years but no more than three (3) years.
- 60. A detailed Facility Exterior Lighting Plan Compliance Filing shall be submitted as a Compliance Filing for review and

approval within 30 days of the commencement of construction. The Lighting Plan shall address:

- a) security lighting needs at wind turbine sites, and collection substation, the facility Operations and Maintenance building site and any exterior equipment storage yards;
- b) plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement at the collection substation, the facility Operations and Maintenance building site, any exterior equipment storage yards; and typical figure(s) for wind turbine sites;
- c) lighting should be designed to provide safe working conditions at appropriate locations;
- d) exterior lighting design shall be specified to avoid offsite lighting effects, by:
  - (i) use of task lighting as appropriate to perform specific tasks; task lighting shall be designed to be capable of manual or auto-shut off switch activation rather than motion detection;
  - (ii) for lighting other than turbine door safety lighting, full cutoff fixtures, with no drop-down optical elements (that can spread illumination and create glare), shall be required for permanent exterior lighting; and
  - (iii) manufacturer's cut sheets of all proposed lighting fixtures shall be provided.
- (e) lighting of the wind turbine nacelles shall be implemented as per the current requirements of the Federal Aviation Administration (FAA) Advisory Circular 70/7460-IL, Chapter 13 (Marking and Lighting Wind Turbines) or as updated, as of the time of Compliance Filing submittal. Revised Determinations of No Hazard to Air Navigation addressing final facility design shall be provided as supporting documentation.
- 61. The final Facility design shall incorporate the following measures for Visual Impact minimization:
  - a) Advertisements, conspicuous lettering, or logos identifying the Facility owner or turbine manufacturer on the turbines shall not be allowed;
  - b) White or off-white color of wind turbines, towers and blades (as required by the FAA to avoid the need for daytime aviation hazard lighting) shall be utilized; and non-reflective finishes used on wind turbines to minimize reflected glare;

- c) Medium-intensity red strobe lights on turbines for aviation hazard marking, and the extent of lighting will be minimized to the extent allowable by the FAA;
- d) Lighting controls at substations, turbines and turbine sites shall be maintained;

## Post-construction

- 62. The Certificate Holder shall provide a certification within 60-days of the commercial operation date that the collector lines were constructed to the latest editions of ANSI standards. The Facility's electrical collection system shall be designed in accordance with applicable standards, codes, and guidelines as specified in Exhibit 5 of the Application.
- 63. No less than 60 days prior to commercial operation date, the Certificate Holder shall file with the Secretary, Operation and Maintenance Plan(s) for the Facility. The Company shall file with the Secretary complete documentation of its emergency procedures and list of emergency contacts. Certificate Holder shall file annually with the Secretary an updated copy of its emergency procedures and list of emergency contacts and with documentation of any modifications.
- 64. Certificate Holder shall file a report with the Secretary, regarding implementation of a Special Protection System, if one is required, which is designed to mitigated possible overloads from certain transmission outages, as well as copies of all studies that support the design of such a system, in addition, the Certificate Holder shall provide all documentation for the design of special protection system relays, with a complete description of all components and logic diagrams. Prior to commencement of operations, the Certificate Holder shall demonstrate through appropriate plans and procedural requirements that the relevant components of the Special Protection System will provide effective protection.
- 65. A Relay Coordination Study shall be filed at least six months prior to the projected date for commencement of commercial operation of the facilities.
- 66. As-built drawings in both print and electronic format shall be submitted within six months following the commercial operation

date of the Facility. Drawings will include final locations and final grading of all Facility components.

- 67. Long-range Electric Transmission Facility and Corridors
  Management Plan shall be submitted within one year of the
  commercial operation date. The plan shall address specific
  standards, protocols, procedures and specifications for:
  - a) Vegetation management recommendations, based on on-site surveys of vegetation cover types and growth habits of undesirable vegetation species;
  - b) Herbicide use and limitations, specifications and control measures;
  - c) Wire Security Clearance Zone specifications, indicating applicable safety, reliability and operational criteria.
  - d) Inspection and target treatment schedules and exceptions;
  - e) Standards and practices for inspection of facilities easements for erosion hazard, failure of drainage facilities, hazardous conditions after storm events or other incidents;
  - f) Review and response procedures to avoid conflicts with future use encroachment or infrastructure development;
  - g) Wetland and stream protection areas, principles and practices;
  - h) Landowner notification procedures.

#### V. Noise and Vibration

- 68. Noise levels from all noise sources from the Wind Generating Facility, related facilities and ancillary equipment shall:
  - a) Comply with a maximum noise limit of 45 (dBA) Leq (8-hour) nighttime (11 pm to 7 am) at any non-participant residence existing as of the issuance date of this Certificate and 55 dBA Leq (8-hour) nighttime for any participant residence existing as of the issuance date of this Certificate.
  - b) Not produce any audible prominent tones, as defined under ANSI S12.9 Part 4-2005 Annex C at any non-participant residences existing as of the issuance date of this Certificate. Should a prominent tone occur, the broadband overall (dBA) noise level at the evaluated position shall be increased by 5 dBA for evaluation of compliance with Certificate Condition 68(a).
  - c) Not produce human perceptible vibrations inside any nonparticipant residence existing as of the issuance date of this Certificate that exceed the limits for residential use

- recommended in ANSI Standard S2.71-1983 "Guide of evaluation of human exposure to vibration in Buildings."
- d) Comply with a limit of 40 dBA Leq(1-hour) at the outside of any non-participating residence from the collector substation equipment, and subject to the tonal penalties of Condition 68(b).

Emergency situations are exempt from any of these limits.

- 69. The Certificate Holder shall present to the Board, or the Commission after the Board's jurisdiction has ceased, by filing with the Secretary at a minimum 120 days prior to the start of construction:
  - a) Sound Power levels from the turbines by following these provisions:
    - (i) Sound Power levels from the turbines selected for the project shall be documented with information from the manufacturers based on tests that determined sound power levels following the International Electrotechnical Commission (IEC) TS 61400-14 standard, if available. Sound Power Information will be reported associated with wind speed magnitudes, angular speed of the rotor, and rated power to the extent this information is available. The Sound Power Information will include specifications for Noise Reduced Operations or Low-Noise Trailing Edges if these are required to meet the noise conditions of this Certificate.
    - (ii) Sound Power levels from the turbines shall not exceed 105.5 dBA overall.
  - b) Revised sound modeling using the same methodology as the Application but with the specifications of the wind turbine model selected for construction to demonstrate that the project is modeled to meet the Local Laws on Noise for the Towns of Cohocton, Dansville, Fremont and Wayland and the regulatory limits of Conditions 68(a), 68(c), and 68(d). In addition, the revised sound modeling will show conformance with the following non-regulatory, non-enforceable design goals:
    - (i) 40 dBA L(night-outside), annual equivalent continuous average nighttime sound level from the Facility outside any existing non-participating residence.

- (ii) 50 dBA L(night-outside), annual equivalent continuous average nighttime sound level from the Facility outside any existing participating residence
- (iii) 65 dBZ L(1-hour), maximum 1-hour equivalent continuous average sound level from the Facility at the 16 Hz, 31 Hz, and 63 Hz full octave bands outside any existing non-participating residence.
- 70. Compliance with Certificate Conditions for the Facility shall be evaluated by the Certificate Holders by following a Sound Testing Compliance and Noise Complaint Protocol that shall:
  - a) Follow the provisions and procedures for post-construction noise performance evaluations indicated in the Application.
  - b) Be presented to the Board, or the Commission after the Board's jurisdiction has ceased, by filing with the Secretary for review within 90 days after the issuance date of this Order but no later than 90 days before the start of construction.
  - c) Include, among other items, sound instrumentation specifications and calibration requirements; equipment settings; noise and vibration descriptors to be evaluated; weather conditions to be tested and to be excluded; seasons and time frames for testing; testing procedures, provisions for audible prominent tones, low frequency noise, and vibrations; provisions for processing test results, reporting, and documentation.
  - d) Include provisions for First-Year Compliant Testing and testing in response to noise and vibration complaints.
  - e) Include provisions to notify and request permission for access from property owners to conduct noise or vibration measurements at outdoor or indoor private property locations, provided the property owners are willing to grant permission.
- 71. The Certificate Holder shall perform sound monitoring and compliance protocols pursuant to the Baron Winds Sound Monitoring and Compliance Protocol submitted with the Application.
- 72. The Certificate Holders shall comply with the following conditions regarding construction noise:
  - a) Comply with all local laws regulating construction noise.
  - b) maintain functioning mufflers on all transportation and construction machinery;

c) Respond to noise and vibration complaints according to the Protocols established in the Certificate Conditions.

# VI. Threatened and Endangered Species

- 73. The Applicant will implement the curtailment regime as proposed in the Application.
- 74. Excluding bald eagles (Haliaeetus leucocephalus), if at any time during the life of the Project an active nest of any federally or State listed threatened or endangered (TE) bird species is discovered within an active construction, ground clearing grading, or maintenance site, the regional NYSDEC Natural Resource Supervisor will be notified within forty eight (48) hours of discovery, and the nest site will be marked. An area five hundred (500) feet in radius around the nest will be avoided until notice to continue construction at that site is granted by the regional NYSDEC Natural Resource Supervisor.
- 75. If at any time during the life of the Project a bald eagle nest is located, the regional NYSDEC Natural Resource Supervisor will be notified within forty eight (48) hours of discovery, and prior to any disturbance of the nest or immediate area. An area six hundred sixty (660) feet in radius from the nest tree will be posted and avoided until notice to continue construction at that site is granted by the regional NYSDEC Natural Resources Supervisor. The nest tree will not be approached under any circumstances unless authorized by the regional NYSDEC Natural Resource Supervisor.
- 76. During construction, maintenance, and operation of the Facility, the Certificate Holder shall maintain a record of all observations of New York State TE species as follows:
  - a) Construction: During construction the onsite environmental monitors and BOP contractor's environmental compliance manager, identified in the Environmental Compliance Manual or subsequently updated, shall be responsible for recording all occurrences of TE species. All occurrences shall be documented in the required monitoring report(s). If a TE avian species is demonstrating breeding behavior it should be reported to the Natural Resources Supervisor within twenty-four (24) hours.

- b) Post-construction: During post-construction wildlife monitoring inspections the environmental contractor shall be responsible for recording all occurrences of TE species. Occurrences of TE during wildlife surveys shall be reported as required in the construction monitoring and adaptive management plan.
- c) Operation and Maintenance (O&M): During O&M the certificate holder shall be responsible for training O&M staff to focus on identifying the following bird species: bald eagle, and golden eagle (Aquila chrysaetos). The certificate holder shall report all occurrences to the Region 8 Natural Resource Supervisor within one week of the event.
- d) Reporting Requirements: All reports of TE species shall include the following information: species, observation date and time; GPS coordinates of each individual observed (if O&M staff do not have GPS available the report should include the nearest turbine number and cross roads location); behavior observed; identification and contact information of the observer; and the nature of and distance to any project construction or maintenance activity.
- e) If at any time during Facility operation any dead, injured or damages State-listed TE species, or their parts, eggs, or nests thereof are discovered within the Project Area (defined for the purpose of this condition as leased land or property parcels containing project components) by the certificate holder, their designated agents, or a third party that reports to the certificate holder, the certificate holder shall immediately (within twenty four (24) hours) contact the regional NYSDEC Region 8 Natural Resource Supervisor and United States Fish and Wildlife Service to arrange for recovery and transfer of the specimen(s). The following information pertaining to the find shall be recorded: species, the date the animal or nest was discovered; the GPS coordinates of the location of discovery, the name(s) and contact information of the person(s) involved with the incident(s) and find(s); and, if known, an explanation of how the mortality/injury/damage occurred. This record shall be kept with the container holding the specimen and given to the NYSDEC at the time of transfer. If the discovery is followed by a non-business day, the certificate holder shall ensure the location of the find is marked, GPS data recorded, detailed photographs of the carcass(es) or nest(s) taken and surrounding landscape relative to the project and components, and the

specimen(s) placed in a freezer until it can be retrieved by the proper authorities.

#### VII. Wetland and Streams

- 77. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.
- 78. The certificate holder shall submit a Notice of Intent to Commence Work to the Region 8 Supervisor of Natural Resources, NYSDEC Region 8 at least 72 hours in advance of the commencement of construction and shall also notify him/her immediately in writing of the completion of work.
- 79. All construction activity, including operation of machinery, excavation, filling, grading, clearing of vegetation, disposal of waste, street paving, and stockpiling of material, is to take place as depicted on the Final Construction Drawings. No construction activity is to take place within areas to be left in a natural condition or areas not specifically designated by this certificate. Staking and/or flagging construction limits (i.e., ROW, off-ROW access roads, and extra work areas) shall occur prior to any ground disturbance.
- During construction, erosion control devices such as straw 80. bales or silt fence shall be used to prevent erosion of the dredged material or disturbed soil along with other measures as described in the SWPPP. The straw bales or silt fence shall be installed in accordance with construction techniques described in 2016 New York State Standards and Specifications for Erosion and Sediment Control (Blue Book), including placing the straw bales and silt fence in a shallow trench, backfilling the toe of the silt fence and securing the straw bales with stakes. All erosion and sediment control practices shall be installed prior to any grading or filling operations, or other ground disturbance. They shall remain in place until construction is completed and the area is stabilized. Use of haybales is strictly prohibited to minimize the risk of introduction of invasive species.
- 81. All equipment and machinery shall be stored and safely contained greater than 100 feet landward of the regulated wetland or water body at the end of each work day. This will serve to avoid the inadvertent leakage of deleterious substances into the regulated area.

- 82. Fuel or other chemical storage tanks shall be contained and located at all times in an area greater than 300 feet landward of the regulated wetland or water body. If the above requirement cannot be met by the certificate holder, then the storage areas must be designed to completely contain any and all potential leakage. Such a containment system must be approved by NYSDEC staff in writing prior to equipment, machinery or tank storage.
- 83. All mobile equipment, excluding dewatering pumps, must be fueled in a location at least 100 feet from the top of stream bank, wetland, or other waterbody. Dewatering pumps operated closer than 100 feet from the stream bank, wetland, or waterbody, must be on an impervious surface and absorbents capable of containing any leakage of petroleum products.
- 84. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the NYSDEC's Spill Hotline (1-800-457-7362) within two hours according to the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance.
- 85. All equipment used within bed or banks of streams or in wetlands and adjacent areas must be inspected daily for leaks of petroleum, other fluids, or contaminants and may only enter stream channel if found to be free of any leakage. A spill kit must be on site and any leaks must be stopped and cleaned up immediately.
- 86. All imported fill shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, fly ash, broken concrete, demolition debris, garbage, household refuse, tires, woody materials including tree or landscape debris, metal objects, and all invasive species. The introduction of materials toxic to aquatic life is expressly prohibited.
- Any buried cable stream crossings installed through digging a 87. trench shall be opened for the installation and backfilled in one continuous operation. Before trenching through stream banks or wetlands, upland sections of the trench shall be backfilled or plugged to prevent drainage of possible turbid trench water from entering the stream or wetland. Trench breakers/plugs shall be used at the edges of wetlands as needed to prevent draining of an entire wetland during construction. If there is an inadvertent puncturing of a hydrologic control for a wetland, then the puncture shall be immediately sealed, and no further activity shall take place until NYSDEC is notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved by DEC. Only the excavated wetland topsoil and

subsoil shall be utilized as backfill. In wetland areas, the topsoil shall be removed and stored separate from subsoil. When backfilling, the subsoil shall be replaced as needed, and then covered with the top soil, such that the restored top soil is the same depth as prior to disturbance. Depth of buried cables must be sufficient to prevent exposure during future high flow events.

- 88. turbid water resulting from dewatering operations, including water that has infiltrated the construction site, shall be discharged directly to or allowed to enter any wetland, stream or water body within the project area. All other necessary measures shall be implemented to prevent any visible increase in turbidity or sedimentation downstream of Turbid water resulting from dewatering work site. operation shall be discharged directly to settling basins, filter bags, or other approved device or to an upland vegetated area prior to discharge to any wetland, stream or other water body within the project area. All other necessary measures shall be implemented to prevent any visible increase in turbidity or sedimentation downstream of the work site.
- 89. Discharges from dewatering operations shall be baffled or otherwise diffused in order to prevent erosion or turbid water from entering wetlands and waterbodies.
- 90. All necessary measures shall be implemented to prevent any visible increase in turbidity or sedimentation downstream of the work site, including but not limited to the use of:
  - a) appropriately maintained upland settling basins;
  - b) crushed stone, sand, straw bales, or silt screening (maximum opening size of U.S. Sieve Number 20) to filter turbid waters;
  - c) "silt-bags" or similar preconstructed structure designed to remove silt and sediment particles before they are discharged, or;
  - d) grassy upland areas at a sufficient distance from the receiving water body to prevent a visually discernible turbid discharge to the receiving water.
- 91. Markers used to delineate/define the boundary of the wetland or the extent of the structures allowed by the certificate shall be left in place and remain undisturbed until completion of construction activities and restoration of the impacted area.
- 92. All disturbed soils within regulated freshwaters wetlands and the associated adjacent areas must be seeded with a native seed mix and mulched with straw only (hay is prohibited). Mulch shall be maintained until the disturbed area is heavily revegetated. Additional seeding shall be completed as

necessary to achieve an 85% vegetative cover across all disturbed areas.

- 93. All areas of temporary disturbance to regulated Freshwater Wetlands and 100-foot adjacent areas must be restored and appropriately graded upon completion of temporary work items.
- 94. A minimum of 85% vegetative cover across all disturbed soil areas must be established by the end of the first full growing season following construction.
- 95. All wetlands disturbed during installation of buried interconnects shall be restored in accordance with the following requirements:
  - A) Restored to pre-construction contours within 48 hours of backfilling of the trench within the wetland boundary. Immediately upon completion of grading, the area shall be seeded with native herbs at densities approximating those that existed prior to construction. Seeding with an appropriate native wetland species mix such as an Ernst Wetland Mix (OBL-FACW Perennial Wetland Mix, OBL Wetland Mix, Specialized Wetland Mix for Shaded OBL-FACW, or equivalent) shall be completed to help stabilize the soils. Restored areas shall be monitored for up to 5 years, if needed to document an 85% cover of native species that has been reestablished over all portions of the replanted area, unless the invasive species baseline survey indicates a smaller percentage of native species exists prior to construction.
  - B) These replanted areas shall also be monitored for invasive species to ensure there is zero percent net increase (or other "reasonable definition" as agreed upon following the baseline survey) in areal coverage of invasive species compared with pre-construction conditions. If at any time during the monitoring the invasive species criteria above are not met, the certificate holder shall take immediate action to ensure control of the invasive species. Such actions shall be part of an invasive species control plan approved by the NYSDEC.
  - C) If at the end of five years the restored areas do not meet the above criteria for success, then monitoring and corrective action shall continue until the criteria are met.
  - 96. Overhead colleciton lines in wetland and state-regulated adjacent areas shall be completed in accordance with the following requirements:
    - A) Swamp mats must be used in wetlands for installation of utility poles and overhead lines;
    - B) Prior to installation in wetlands and adjacent areas, swamp mats must be cleaned of invasive species following

- protocols described in the approved "Invasive Species Monitoring and Control Plan";
- C) Swamp mat removal must be conducted from adjacent mats (i.e., removal equipment always stationed on a mat) as soon as practicable, but no later than four months following installation of the overhead line. The Environmental Monitor shall provide notification to the NYSDEC when compliance with this condition has been achieved.
- D) Disturbed areas will be monitored for up to 5 years following the installation of overhead lines interconnects as needed to assure an 85% cover of native species, unless the invasive species baseline survey indicates a smaller percentage of native species exists prior to construction. If after one complete growing season the pre-construction percentage of native species is not achieved, the certificate holder must evaluate the reasons for these results and submit an approvable "Wetland Planting Remedial Plan" for NYSDEC approval. The "Wetland Planting Remedial Plan" must describe the survival, describe the for poor actions to the situation necessary to correct ensure successful restoration, and the schedule for conducting the remedial work. Once approved, the "Wetland Planting Remedial Plan" will be implemented according to the approved schedule.
- 97. Any debris or excess material from construction of this project shall be completely removed from the wetland or adjacent area (upland) and removed to a facility duly authorized to receive such material. No debris is allowed to remain in wetlands and/or regulated adjacent areas.
- 98. Cleared vegetation and slash from wetland and adjacent areas will not be burned or buried within the wetland or adjacent area. The vegetation must be disposed of outside of the wetland and adjacent area, but slash that is cut may be left in place (drop and lop or piled in dry or seasonally saturated portions of freshwaters wetlands and 100-foot adjacent areas to create wildlife brush piles).
- 99. This certificate does not authorize any permanent alteration of wetland hydrology.
- 100. No disturbance to wetlands or regulated adjacent areas is allowed until the "Wetland Mitigation Plan" has been approved in writing by DEC. All measures and requirements included in the approved "Wetland Mitigation Plan" shall be enforceable conditions of the certificate.

- 101. If, after five years post-construction, all wetland performance standards have not been achieved, the certificate holder must evaluate the likely reasons for these results and submit an approvable "Wetland Mitigation Remedial Plan" for NYSDEC approval. The "Wetland Mitigation Remedial Plan" must describe the likely reasons for not achieving performance standards, describe the actions necessary to correct the situation to ensure a successful mitigation, and the schedule for conducting the remedial work. Once approved, the "Wetland Mitigation Remedial Plan" will be implemented according to the approved schedule.
- 102. To control the spread of invasive insects, the certificate holder will: a) coordinate with outside logging contractors for sale and use of the merchantable timber; and provide unmerchantable timber as firewood to adjacent landowners or the general public pursuant to the NYSDEC's firewood restrictions to protect forests from invasive species found in 6 NYCRR Part 192.5; and b) make sure crews are trained to identify the Asian Longhorned Beetle and the Emerald Ash Borer and any other insects that the NYSDEC identifies as a potential problem. If these insects are found, they must be reported to the NYSDEC regional forester.
- 103. Waste concrete or concrete from truck clean out activity and/or any wash water from trucks, equipment or tools if done on site, must be contained in a manner that will prevent it from escaping into the streambank or into the stream channel and entering the stream, or entering wetland, or any other waterbody. If a discharge occurs, NYSDEC Region 8 Supervisor of Natural Resources shall be contacted within 2 hours. Disposal of waste concrete or wash water must occur greater than 100 feet from any waterbody.
- 104. If a one-time crossing of a stream occurs as part of an installation of a temporary bridge and a tire mat is used, the following restrictions apply;
  - A) The mat must follow the contour of the streambed and allow for a low flow channel and not change the flow path of the stream thalweg.
  - B) The mat shall be removed immediately after the crossing of the stream occurs.
- 105. In-stream work shall only occur in the dry. Trenchless methods or dewatering measures (e.g., dam and pump or flume) must be used. If approved measures fail to divert all flow around the work area, in-stream work must immediately stop

- until dewatering measures are in place and properly functioning again.
- 106. Prior to installation of any permanent road/stream crossings of state-protected streams, a site specific "Stream Crossing Plan" shall be submitted to the NYSDEC for approval. The "Stream Crossing Plan" must include detailed site-specific plans that describe and illustrate the layout and alignment of each crossing, and the proposed crossing method. At a minimum, the plan must include:
  - A) the alignment of roads, bridges, and culverts;
  - B) the location, quantity, and type of any fill associated with construction;
  - C) the location and installation details of any dewatering measures; and
  - D) a description of the dry crossing methods that will be used to install the crossing

These plans must be approved by the Department prior to construction.

- 107. The restored stream channel shall be equal in width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to profile of the stream channel upstream and downstream of the project area. The planform of any stream shall not be changed.
- 108. If any trees and shrubs growing within 50 feet of state-protected streams need to be cut in the process of constructing overhead collection line crossings, they shall be cut off with at least two feet of the stump remaining. Stumps and root systems shall not be damaged to facilitate stump sprouting. Trees shall not be felled into any stream or onto the immediate stream bank. All trees and shrubs cut within 50 feet of state-protected streams shall be left on the ground.
- 109. Clearing of natural vegetation shall be limited to that material which poses a hazard or hindrance to the construction activity. Snags which provide shelter in streams for fish shall not be disturbed unless they cause serious obstructions, scouring or erosion. Trees shall not be felled into any stream or onto the immediate stream bank.
- 110. All crossings of buried cables under state-protected streams (C(T/TS) or above) must be conducted using trenchless crossing methods, such as horizontal directional drilling (HDD), to avoid impacts on water quality, habitat, and stream bed stability. If trenchless methods are not constructible or not feasible, the certificate holder must provide an approvable "Site-Specific Constructability Assessment" for NYSDEC approval. The "Site-Specific Constructability Assessment"

be conducted by an experienced and qualified, professional engineer licensed in New York State and must include a detailed analysis of the site-specific conditions that lead to the conclusion that all trenchless crossing methods are not constructible or not feasible at particular stream crossing. If, based on results of the "Site-Specific Constructability Assessment", the Department approves stream crossings using trenched methods, all stream crossings must be done in the dry. Intermittent and ephemeral streams must be crossed during times of no flow, while perennial streams must be crossed using a temporary water control device such as a dam and pump or cofferdam to isolate the work area and redirect the water around the work site. Temporary water control devices/cofferdams for perennial streams must adhere to the following:

- a) Specifications: Any temporary cofferdam shall constructed of clean materials such as sheet piling, jersey barriers, inflatable dams, or sandbags that will not contribute to turbidity or siltation of the waterbody or wetland, and non- erodible materials, so that failure will not occur at Q2 or higher flow conditions. practicable, an upstream or interior membrane shall be installed to control percolation and erosion. Sandbags shall be of the filter fabric type, double bagged and individually tied to prevent sand leakage and only clean sand (e.g. free of debris, silt, fine particles or other foreign substance) shall be used as fill. They shall be placed and removed manually to prevent spillage. bale sediment control basins are prohibited.
- b) Fill materials must not come from the waterbody or wetland.
- c) The water control structure/cofferdam shall not impair downstream water flow in the waterbody or water flow into and/or out of a wetland.
- d) If exposed for an extended period of time, excavated or temporarily stockpiled soils or other materials should be covered and protected to reduce runoff of fines which may cause a turbidity problem and to prevent rainwater from soaking the materials and rendering them unsuitable for backfill.
- e) The work area shall remain isolated from the rest of the stream or wetland until all work in the streambed or bank, or wetland is completed, concrete is thoroughly set and the water clarity in the coffered area matches that of the open water.
- f) If a dam and pump diversion is used as part of a dry opencut crossing, the pump and diversion must be monitored continuously from time of installation until crossing is completed, streambed restored, and diversion is removed.
- g) Dewatered sections of stream cannot exceed 50 linear feet (measured from the inside edges of the cofferdams) for each stream crossing unless the certificate holder has prior

- written approval from the NYSDEC Region 8 Supervisor of Natural Resources.
- h) All temporary water control structures shall be removed in their entirety upon completion.
- i) All fish trapped within the cofferdam shall, in the presence of the Environmental Monitor, be netted with all necessary care to facilitate continued existence and returned to the water outside the confines of the cofferdam, in the same stream, before the dewatering process.
- 111. Dewatering within the coffer(s) shall be performed so as to minimize siltation and turbidity. Water taken from the coffered area will be passed through a settling basin, filter bag, or a vegetated upland area more than 100 feet from the stream bank, to prevent the discharge of turbid water into any wetland, stream or river. The pump discharge must be directed against a solid object (concrete slab, stone or steel container), or other effective method to prevent erosion by dissipating energy.
- 112. During HDD installation, erosion and sediment control will be used at the point of drilling, so that sediment laden runoff shall not escape the drill site and enter streams or wetlands. The disturbed area will be restored to original grade and reseeded upon project completion.
- 113. During HDD installation, drilling fluid circulation shall be maintained to the extent practical. If inadvertent surface returns occur in upland areas, the fluids shall be immediately contained and collected. If the amount is not enough to allow practical collection, the affected area will be diluted with freshwater and allowed to dry and dissipate naturally. 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. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area (i.e. wetlands and water bodies) the returns shall be monitored and documented. Drilling operations must suspended if the surface returns pose a threat to the resource or to public health and safety. Removal of released fluids from environmentally sensitive areas will take place only if the removal does not cause additional adverse impacts to If inadvertent drilling fluids surface returns occur resource. in an environmentally sensitive area the Department shall be notified immediately and a monitoring report summarizing the location of surface returns, estimated quantity of fluid and summary of cleanup efforts shall be submitted within 48 hours of the occurrence.

- 114. During HDD installation, the certificate holder will maintain close monitoring for possible "frac-outs" that would result in the release of drilling fluids to sensitive areas. The certificate holder will maintain a HDD spill response plan and the necessary response equipment will be kept on-site for the duration of the drilling. All releases of drilling fluids to sensitive areas (e.g., freshwater wetlands, 100-foot adjacent areas, waterbodies) shall be reported to the NYSDEC Region 8 Supervisor of Natural Resources within 2 hours.
  - 115.To reduce thermal impacts to exposed streams, native woody plants such as shrub willows, dogwoods, appropriate native trees, or other native riparian species will be planted at all stream crossings, which have less than 50% cover due to construction impact of any such vegetation and is to be restored following a temporary impact, to shade the project area. Planting may be done at top of bank and/or among rocks along toe of slope.
  - 116. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.
  - 117. Any in stream work or restoration authorized by this certificate, including the installation of structures and bed materials, shall not result in an impediment to passage of native aquatic organisms, including fish. Any in-stream work (excluding dewatering practices associated with dry trench crossings) and restoration shall be constructed in a manner which maintains low flow conditions and preserves water depths and velocities similar to undisturbed upstream and downstream reaches necessary to sustain the movement of native aquatic organisms. Any in-stream structures placed in a stream must not create a drop height greater than 6".
  - 118.All disturbed stream banks below the normal high water elevation must be graded no steeper than 1 vertical to 2 horizontal slope, or to the original grade as appropriate, and adequately stabilized. All other areas of soil disturbance above the ordinary high water elevation, or elsewhere, shall be stabilized with natural fiber matting, seeded with an appropriate perennial native conservation seed mix, and mulched with straw within two (2) days of final grading. Mulch shall be maintained until suitable vegetation cover is established. Destroyed bank vegetation shall be replaced with shrub willow or silky dogwood planting, native trees, or other suitable species.
    - 119. Construction in streams protected under Environmental Conservation Law (ECL) Article 15 shall comply with work period restrictions established in consultations with NYSDEC that are protective of fish spawning and migration. In protected streams classified as C(T or TS), B(T or TS), A(T or TS), or AA((T or

- TS), all instream work, as well as any work that may result in the suspension of sediment, is prohibited during the trout spawning and incubation period commencing October 1 and ending May 31, unless the certificate holder receives prior approval from the NYSDEC Regional Supervisor of Natural Resources.
- 120. Dates for the seasonal work period restrictions on in-stream work during Facility construction, established in consultation with NYSDEC, shall be included in the plan and noted on final construction detail drawings.

#### VIII. Construction

- 121. At least 60 days prior to the commencement of construction, the Certificate Holder shall become a member of Dig Safely New York. The Certificate Holder shall require all contractors, excavators, and operators associated with its facilities to comply with the requirements of the Commission's regulations regarding the protection of underground facilities (16 NYCRR Part 753).
- 122. Certificate Holder shall design, install and maintain ground grids for the wind turbines, coordinating them with the gas transmission pipelines. Plastic pipe location wires and gas wells are to be in full conformance with Institute of Electrical and Electronics Engineers (IEEE) 80 and IEEE 100.
- 123. The Certificate Holder shall require all contractors, excavators, and operators associated with its facilities to comply with all requirements of the Commission's regulations regarding identification and numbering of above ground utility poles (16 NYCRR Part 217).
- 124. At least 14 days before the commencement of construction, the Certificate Holder shall hold a pre-construction meeting with DPS Staff, NYSDAM, New York State Department of Transportation (NYSDOT), Town Supervisors and Highway Superintendents, and NYSDEC. BOP construction contractor and the environmental compliance monitor shall be required to attend the pre-construction meeting.
  - a) An agenda, the location, and an attendee list shall be agreed upon between DPS Staff and the Certificate Holder prior to the meeting;

- b) Maps showing designated travel routes, construction worker parking and access road locations and a general project schedule will be available at the meeting for the attendees;
- c) The Environmental Monitor shall provide a summary of the Environmental Compliance Manual, copies of which shall be provided to a representative of each attending entity;
- d) The Certificate Holder shall supply draft minutes from this meeting to a representative of DPS Staff, NYSDAM, NYSDOT, Towns and the NYSDEC for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes to all attendees;
- e) If, for any reason, the BOP Contractor cannot finish the construction of the Project, and one or more new BOP contractors are needed, there shall be another preconstruction meeting with the same format as outlined above.
- f) Throughout construction, the Environmental Compliance Monitor will notify the NYSDEC Regional Natural Resource Supervisor of any refinements in the schedule of construction activities in regulated wetland and adjacent areas as they are identified.
- 125. Construction work hours will comply with the local laws for each Town, with the exception of wind turbine erection activities which may need to occur during extended hours on an as-needed basis to address unusual circumstances and as approved by the Towns. The Certificate Holder shall alert the Town and On-Site Monitor when wind turbine erection activities will be required to occur past 7 p.m.
- 126. At least 10 days before construction, copies of all necessary transportation permits from the affected State, County, and Town agencies. Such permits shall include, but not be limited to: Highway Work Permit to Work Within Right-of-Way (ROW), Highway Utility Permit to Work Within ROW, Permit to Exceed Posted Weight Limit Roads, Traffic Signal Permit to Work Within ROW, Special Haul Permit for Oversized/Overweight Vehicles, and Divisible Load Overweight Permit.
- 127. At least 10 days before construction, copies of all necessary agreements with local utility companies for raising overhead wires where necessary to accommodate the oversized/overweight delivery vehicles.

- 128. The Certificate Holder will provide DPS Staff copies of all applicable local code requirements for the O&M building (i.e., building permits, certificate of occupancy, etc.) at least 10 days before construction.
- 129. The Applicant shall construct the Facility consistent with the New York State Department of Agriculture and Markets (NYSDAM) Guidelines for Agricultural Mitigation for Wind Power Projects, to the maximum extent practicable. The Certificate Holder and/or Environmental Monitor will consult with NYSDAM and DPS Staff during construction when deviation from the Guidelines is necessary. Mitigation measures shall include full restoration of temporarily disturbed agricultural land.
- 130. Post-construction monitoring and remediation of agricultural land impacted by the Facility will be conducted for a period of no less than two years following completion of initial restoration. The monitoring and remediation phase shall be used to identify lingering agricultural impacts associated with construction requiring mitigation and/or follow-up restoration.
- Drawings any necessary measures for avoidance of archaeological sites identified within the Facility site. The mapped locations of all identified archaeological sites within 100 feet (31 meters) of proposed Facility-related impacts shall be identified as "Environmentally Sensitive Areas" or similar on the final Facility construction drawings, and marked in the field by construction fencing with signs that restrict access. If complete avoidance of archaeological sites is not possible, the Certificate Holder shall consult with the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and DPS Staff to determine if Phase II investigations or mitigation is warranted. The results of any Phase II investigations and/or identification of mitigation measures will be included in the plans.
- 132. Except where crossed by permitted access roads or through use of temporary matting, streams shall be designated "No Equipment Access" or similar on the final Facility construction drawings and ROW clearing plans, and marked in the field. The use of motorized equipment shall be prohibited in these areas.

- 133. A buffer zone of 100 feet, referred to as "Restricted Activities Area" or similar on the final Facility construction drawings and ROW clearing plans, shall be established where Facility construction traverses streams, wetlands and other bodies of water. Restricted Activities Areas shall be marked in the field. Restrictions will include: no deposition of slash within or adjacent to a waterbody; no accumulation of construction debris within the area; herbicide restrictions within 100 feet of a stream or wetland (or as required per manufacturer's instructions); no degradation of stream banks; no equipment washing or refueling within the area; no storage of any petroleum or chemical material; and no disposal of excess concrete or concrete wash water.
- 134. The creation, modification or improvement of any permanent road/stream crossing must meet the following requirements:
  - j) Culvert pipes shall be designed to safely pass the 2% annual chance storm event;
  - k) Culvert pipes must be embedded beneath the existing grade of the stream channel;
  - 1) Width of the structure must be a minimum of 1.25 times (1.25X) width of the mean high water channel; and
  - m) The culvert slope shall remain consistent with the slope of the adjacent stream channel. For slopes greater than 3%, an open bottom culvert must be used.
  - n) Before any such work in state-protected streams, proposed plans must be submitted to NYSDEC for approval prior to construction. The requirements above may be adjusted, if agreed to by the NYSDEC, on a case-by-case basis.
- 135. As set forth in the approved Environmental Compliance Manual, legible "protected area" signs, exclusionary fencing, colored flagging, and/or erosion controls pursuant to the approved Storm Water Pollution Prevention Plan (SWPPP) shall be installed along the approved work area to protect and clearly identify the boundaries of non-work areas associated with wetlands, waterbodies, and wetland/waterbody setbacks (e.g., Additional Temporary Work Space setbacks, refueling restrictions, etc.). This shall be done prior to any disturbance or vehicular traffic through such areas. Signs, fencing, and silt fence must be removed following completion of the project and after all disturbed areas are appropriately stabilized and planted as described in the SWPPP and in certificate conditions.
- 136. Where underground collection lines will be installed in wetlands by open trenching, the top 12 inches of wetland top soil shall be removed first and temporarily placed onto a geo-textile blanket

running parallel to the trench, if necessary. Wide-track or amphibious excavators shall be used for wetland installations. Subsoil dug from the trench shall be sidecast on the opposite side of the trench on another geo-textile blanket running parallel to the trench, if necessary. The length of the trench to be opened shall not exceed the length that can be completed in one day. This length of trench generally shouldn't exceed 1,500 feet in a wetland. Trench shall be backfilled with the wetland subsoil and the wetland top soil shall be placed back on top. All excess materials shall be completely removed to upland areas more than 100 feet from the wetland and suitably stabilized.

- 137. Where access roads are to be constructed through wetlands, a layer of geotextile fabric shall be placed across the wetland after removal of vegetation and before any backfilling occurs. The final road surface shall be covered with a minimum 1 inch depth of gravel in the area of the wetland crossing.
- 138. Tree and vegetation clearing shall be limited to the minimum necessary for Facility construction. Surrounding trees and vegetation will not be cut down on any property solely to reduce turbulence or increase wind flow to the Facility. To reduce mortality to nesting/roosting birds and bats, all tree clearing activities (except for hazard tree removal) shall be conducted between November 1 and April 1 and does not include tress less than or equal to 3 inches in diameter at breast height (DBH).

# IX. Operation

- 139. Certificate Holder shall operate the Facility in accordance with the IA, approved tariffs and applicable rules and protocols of NYSEG, NYISO, NYSRC, NPCC, NERC and successor organizations.
- 140. Certificate Holder shall operate the Facility to be in full compliance with the applicable reliability criteria of NYSEG, NYISO, NPCC, NYSRC, NERC and successors. If it fails to meet the reliability criteria at any time, the Company shall notify the NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the Board, or the Commission after the Board's jurisdiction has ceased, by filing with the Secretary and NYSEG with a copy of the NYISO notice.
- 141. Certificate Holder shall obey unit commitment and dispatch instructions issued by NYISO, or its successor, in order to

maintain the reliability of the transmission system. In the event that the NYISO System Operator encounters communication difficulties, Baron Winds shall obey dispatch instructions issued by the NYSEG Control Center, or its successor, in order to maintain the reliability of the transmission system.

- 142. After commencement of construction of the point of interconnection substation, Certificate Holder shall file with the Secretary and provide to NYSEG a quarterly report on the progress of construction of the point of interconnection substation and an update of the construction schedule, and file copies of current construction progress reports during all phases of construction. In the event the Commission determines that construction is not proceeding at a pace that is consistent with the Good Utility Practice, and that a modification, revocation, or suspension of the Certificate may therefore be warranted, the Commission may issue a show cause order requiring Certificate Holder to explain why construction is behind schedule and to describe such measures as are being taken to get back on schedule. The Order to Show Cause will set forth the alleged facts that appear to warrant the intended action. Certificate Holder shall have thirty days after the issuance of such Order to respond and other parties may also file comments within such period. Thereafter, if the Commission is still considering action with respect to the Certificate, a hearing will be held prior to issuance of any final order of the Commission to amend, revoke or suspend the Certificate. It shall be a defense in any proceeding initiated pursuant to this condition if the delay of concern to the Commission:
  - a) arises in material part from actions or circumstances beyond the reasonable control of the Certificate Holder(including the actions of third parties);
  - b) is not in material part caused by the fault of the Certificate Holder; or
  - c) is not inconsistent with a schedule that constitutes Good Utility Practice.
- 143. "Good Utility Practices" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods or acts that, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility

Practices are not intended to be limited to the optimum practices, methods or acts to the exclusion of all others, but rather to be practices, methods or acts generally accepted in the NYISO region.

144. Certificate Holder shall work with NYSEG engineers and safety personnel on testing and energizing equipment in the authorized interconnection substation. If NYSEG's testing protocol is not used, a testing protocol shall be developed and provided to NYSEG for review and acceptance. Certificate Holder shall file with the Secretary a copy of the final testing design protocol.

Certificate Holder shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the project to the NYSEG transmission system and provide the opportunity for DPS Staff to attend those meetings.

- 145. Certificate Holder shall call the Bulk Electric System Section within one hour to report any transmission related incident that affects the operation of the Facility. Certificate Holder shall file with the Secretary a report on any such incident within seven days and provide to NYSEG. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. Certificate Holder shall work cooperatively with NYSEG, NYISO, NYSRC, NERC and the NPCC to prevent any future occurrences. The notifications subject to this condition shall be governed by the applicable NYISO and NYSEG guidelines and procedures.
- 146. If NYSEG or the NYISO bring concerns to the Commission, Certificate Holder shall be obligated to address those concerns.
- 147. If, subsequent to construction of the Facility, no electric power is generated and transferred out of such plant for a period of more than a year, the Commission may consider advising the Siting Board that the amendment, revocation or suspension of the Certificate may be appropriate.
- 148. In the event that a malfunction of the Facility causes a significant reduction in the capability of such Facility to deliver power, Certificate Holder shall promptly file with the Secretary and provide to NYSEG copies of all notices, filings, and other substantive written communications with the NYISO as to such reduction, any plans for making repairs to remedy the

reduction, and the schedule for any such repairs. Certificate Holder shall provide monthly reports to the Secretary and NYSEG on the progress of any repairs. If such equipment failure is not completely repaired within nine months of its occurrence, Certificate Holder shall provide a detailed report to the Secretary, within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months; if the repairs will not be completed within three months, Certificate Holder shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to be pursued.

- 149. In the event of a blade failure, fire or other catastrophic event involving a wind turbine and its associated equipment, the Department's Chief of Bulk Systems shall be notified no later than 12 hours following such an event.
- 150. The Certificate Holder shall have an inspection program for the wind turbine blades and provide reports to the Secretary monthly on any damage, defects or any other problems with the wind turbine blades. The report should include any photographs of the area in question, the repairs under taken and the diagram of the wind turbine blade.
- 151. The Certificate Holder shall conduct yearly ground testing of all wind turbine ground grids that are within 1.1 times the height of a turbine of high pressure gas lines. The Certificate Holder shall provide the test results to the Secretary and the gas line operator.