

# Draft Stipulations

---

Cassadaga Wind Project

March 2, 2016

## Table of Contents

Stipulation 1 – 1001.1 General Requirements .....	5
Stipulation 2 – 1001.2 Exhibit 2: Overview and Public Involvement.....	6
Stipulation 3 – 1001.3 Exhibit 3: Location of Facilities .....	7
Stipulation 4 – 1001.4 Exhibit 4: Land Use .....	8
Stipulation 5 – 1001.5 Exhibit 5: Electric System Effects .....	11
Stipulation 6 – 1001.6 Exhibit 6: Wind Power Facilities .....	12
Stipulation 7 – 1001.7 Exhibit 7: Natural Gas Power Facilities .....	13
Stipulation 8 – 1001.8 Exhibit 8: Electric System Production Modeling .....	13
Stipulation 9 – 1001.9 Exhibit 9: Alternatives.....	13
Stipulation 10 – 1001.10 Exhibit 10: Consistency with Energy Planning Objectives .....	15
Stipulation 11 – 1001.11 Exhibit 11: Preliminary Design Drawings.....	16
Stipulation 12– 1001.12 Exhibit 12: Construction .....	17
Stipulation 13– 1001.13 Exhibit 13: Real Property.....	18
Stipulation 14– 1001.14 Exhibit 14: Cost of Facilities.....	18
Stipulation 15– 1001.15 Exhibit 15: Public Health and Safety .....	19
Stipulation 16– 1001.16 Exhibit 16: Pollution Control Facilities .....	21
Stipulation 17– 1001.17 Exhibit 17: Air Emissions .....	21
Stipulation 18– 1001.18 Exhibit 18: Safety and Security .....	21
Stipulation 19– 1001.19 Exhibit 19: Noise and Vibration .....	22
Stipulation 20– 1001.20 Exhibit 20: Cultural Resources .....	22
Stipulation 21– 1001.21 Exhibit 21: Geology, Seismology, and Soils .....	23
Stipulation 22– 1001.22 Exhibit 22: Terrestrial, Ecology and Wetlands .....	25
Stipulation 23– 1001.23 Exhibit 23: Water Resources and aquatic ecology .....	28
Stipulation 24 – 1001.24 Exhibit 24: Visual Impacts.....	30
Stipulation 25 – 1001.25 Exhibit 25: Effect on Transportation .....	34
Stipulation 26 – 1001.26 Exhibit 26: Effect on Communication .....	36

**Stipulation 27 – 1001.27 Exhibit 27: Socioeconomic Effects..... 37**

**Stipulation 28 – 1001.28 Exhibit 28: Environmental Justice ..... 39**

**Stipulation 29 – 1001.29 Exhibit 29: Site Restoration and Decommissioning..... 39**

**Stipulation 30 – 1001.30 Exhibit 30: Nuclear Facilities..... 40**

**Stipulation 31 – 1001.31 Exhibit 31: Local Laws and Ordinances..... 40**

**Stipulation 32 – 1001.32 Exhibit 32: State Laws and Regulations..... 41**

**Stipulation 33 – 1001.33 Exhibit 33: Other Applications and Filings..... 42**

**Stipulation 34 – 1001.34 Exhibit 34: Electric Interconnection ..... 42**

**Stipulation 35 – 1001.35 Exhibit 35: Electric and Magnetic Fields ..... 42**

**Stipulation 36 – 1001.36 Exhibit 36: Gas Interconnection..... 43**

**Stipulation 37 – 1001.37 Exhibit 37: Back-up Fuel ..... 44**

**Stipulation 38 – 1001.38 Exhibit 38: Water Interconnection..... 44**

**Stipulation 39 – 1001.39 Exhibit 39: Wastewater Interconnection..... 44**

**Stipulation 40 – 1001.40 Exhibit 40: Telecommunications Interconnection ..... 44**

**Stipulation 41 – 1001.41 Exhibit 41: Application to Modify or Build Adjacent..... 44**

---

NEW YORK STATE BOARD ON ELECTRIC GENERATION  
SITING AND THE ENVIRONMENT

IN THE MATTER OF:

Case No. 14-F-0490

Application by Cassadaga Wind LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 of the New York State Public Service Law for the Cassadaga Wind Project Towns of Charlotte, Cherry Creek, Arkwright, and Stockton, Chautauqua County

---

THE PARTIES HERETO stipulate and agree as follows:

- 1) The Cassadaga Wind Project is discussed in an Article 10 Preliminary Scoping Statement (“PSS”) submitted to the New York State Board on Electric Generation Siting and the Environmental (“Siting Board”) on September 3<sup>rd</sup>, 2015 by Cassadaga Wind LLC (“Applicant”). The term “Facility” as used herein includes the wind turbines, access roads, collection lines, a 115 kV generator lead line, collection substation, a point of interconnect substation, permanent meteorological towers, staging/laydown areas, and operations and maintenance building as well as any other improvements subject to the Siting Board’s jurisdiction.

The Applicant will perform or has performed the studies, evaluations, and analyses set forth in these stipulations to satisfy the application requirements of Article 10 of the Public Service Law. These stipulations are governed by Section 163 of the Public Service Law and by any application requirements for federally delegated environmental permits issued by the New York State Department of Environmental Conservation (DEC), if applicable.

- 2) The Parties hereto may limit their concurrence to one of more of the specific subject area stipulations by so indicating in a notation next to their signature. A signature without any such notation shall indicate concurrence with the entire stipulation.
- 3) Those signing these stipulations agree that, as of the date hereof, the studies outlined herein constitute all the necessary studies concerning the subject matter of these stipulations that the Applicant must provide to satisfy Section 164 of the Public Service Law. Except as provided herein, and in accordance with 1000.5(k) the signatories agree not to request the Applicant to provide additional studies concerning the subject matter of these stipulations in connection with the Article 10 proceeding.
- 4) Under any of these following circumstances the Applicant agrees to perform additional studies, evaluations or analyses:
  - a) A new statute, regulation or final, non-reviewable judicial, federal, state or administrative regulation, ruling or order is adopted subsequent to the date of these stipulations which necessitates such additional studies, evaluations or analyses;

- b) Cassadaga Wind LLC proposes a substantial modification to the Facility or other inputs to the stipulated studies, evaluations, or analyses that will materially affect the results of the studies, evaluations or analyses;
  - c) Results of the stipulated studies, evaluations or analyses demonstrate a substantial need for additional or supplemental study, evaluation or analysis to the extent necessary to meet the requirements of the Article 10 regulations;
  - d) New information is discovered during the course of conducting, or as a result of, the stipulated studies, evaluations or analyses that materially affects the results thereof;
  - e) New, material and relevant information obtained independent of the stipulated studies, evaluations, or analyses demonstrates that the conduct of such studies, evaluations or analyses, or their results, will be substantially affected and should be modified or expanded to the extent necessary to meet the requirements of the Article 10 regulations; or
  - f) The Chairman of the Siting Board, the Siting Board, or the Presiding Examiner, whose ruling will be appealable to the Siting Board, or Associate Examiner presiding with respect to any proceedings concerning federally delegated environmental permits to be issued by New York State DEC, whose ruling will be appealable to the Commissioner of the DEC or the Siting Board, as the case may be, requires an additional study, evaluation, or analysis pursuant to 16 N.Y.C.R.R. § 1000.9.
- 5) After the Chairman of the Siting Board determines that the Application complies with Section 164 of the Public Service Law, if the signatories, in any of the circumstances listed above, reach agreement as to the implementation of any additional studies, evaluations, or analyses, such agreement may be set forth in a new stipulation, which may include the agreement of the Applicant to extend the statutory deadline for completion of the certification proceeding, but only if and only to the extent necessary to provide sufficient time to permit any such studies, evaluations, or analyses to be conducted and reviewed. Any of the signatories, in the circumstances listed in paragraph 4, who do not reach such agreement, shall be free to submit the matter to the presiding examiner for resolution and shall not be restricted from pleading that the Applicant must provide additional studies evaluations or analyses related thereto during the Article 10 proceeding regarding the subject matter of these regulations.

## **Stipulation 1 – 1001.1 General Requirements**

Exhibit 1 shall contain:

- a) The application for a certificate shall contain the exhibits described by Part 1001 as relevant to the Cassadaga Wind Project and such additional exhibits and information as the Applicant may consider relevant or as may be required by the Board or the Presiding Examiner. Exhibits that are not relevant to the particular application have been omitted.
- b) Each exhibit shall contain a title page showing:
  - 1) The Applicant’s name;
  - 2) The title of the exhibit; and
  - 3) The proper designation of the exhibit.
- c) Each exhibit consisting of 10 or more pages of text shall contain a table of contents citing by page and section number or subdivision the component elements or matters contained in the exhibit.
- d) The Application will identify a basis for statistical comparison with data that shall be obtained during post-construction monitoring studies.

- e) If the same information is required for more than one exhibit, it may be supplied in a single exhibit and referenced in other exhibit(s) where it is also required.
- f) Exhibit 1 shall also contain:
  - 1) The name, address, telephone facsimile number, and E-mail address of Cassadaga Wind LLC;
  - 2) The address of the website established by the applicant to disseminate information to the public regarding the application;
  - 3) The address, telephone number, facsimile number, and E-mail address of Bill Spencer, Project Manager, who is a person that the public may contact for more information regarding the application;
  - 4) The business address, telephone number, facsimile number, and E- mail address of the principal officer of the applicant, Jim Spencer, CEO;
  - 5) If the applicant desires service of documents or other correspondence upon an agent, the name, business address, telephone number, facsimile number, and E- mail address of the agent;
  - 6) A brief explanation of Cassadaga Wind LLC, a subsidiary of EverPower Wind Holdings, Inc., including its date and location of formation and the name and address of its parent; and
  - 7) The Facility is to be owned by Cassadaga Wind LLC, a privately owned limited liability company and subsidiary of EverPower Wind Holdings Inc. The business/incorporation information regarding Cassadaga Wind LLC and its parent company, as required by Section 1000.1, will be provided. A certified copy of Cassadaga Wind’s certificate of formation will be provided with the Application.

**Stipulation 2 – 1001.2 Exhibit 2: Overview and Public Involvement**

Exhibit 2 shall not exceed 15 pages of text, unless increased at the discretion of the Secretary, and shall contain:

- a) A brief description of the major components of the Facility, including all proposed turbine locations and the footprint of all other components.
- b) A brief summary of all exhibits required under Part 1001, except those exhibits which do not apply to the proposed Facility.
- c) A brief description of the public involvement program (“PIP”) plan conducted by the applicant prior to submission of the application and an identification of significant issues raised by the public and affected agencies during such program and the response of the applicant to those issues including a summary of changes made to the proposal as a result of the public involvement program. Specific components of the PIP conducted to date will be described, including: opportunities for public involvement, consultation with affected agencies and stakeholders, development of website (<http://everpower.com/cassadaga-wind-project-ny>), factsheets and other outreach materials, use of document repositories and activity logs that are submitted to NYSDPS and made available to the public.
- d) A brief description of the public involvement program to be conducted by the applicant after submission of the application. Applicant will also provide an updated stakeholders list that will be included as an appendix to the Application, including host and adjacent landowners. The Applicant will include an indication of how stakeholders have been identified and subsequently added to the list during the scoping and stipulation process.
- e) A brief, clearly and concisely written analysis in plain language that presents the relevant and material details of the Facility which the Applicant believes the Siting Board should use as the basis for its decision. This will incorporate information gleaned from studies and outreach conducted by

the Applicant, and will include an analytical discussion of findings, determinations and considerations the Siting Board must make in coming to a determination, and why the Applicant believes the requested Certificate should be granted.

The Applicant will ensure that paper copies of all major documents, except those subject to protective order, are properly filed at the designated local repositories, which include the Cassadaga Branch Library, Sinclairville Free Library, and the Farman Free Library Association of Ellington.

Further, the Applicant will ensure that electronic copies of all major documents, except those subject to protective order, are properly filed on the designated website.

### **Stipulation 3 – 1001.3 Exhibit 3: Location of Facilities**

Exhibit 3 shall contain maps, drawings and explanations showing the location of the proposed Facility, including all interconnections, and all ancillary features such as roads, which together comprise the proposed Major Electric Generating Facility, in relation to municipalities (county, city, town and village) and taxing jurisdictions associated with any part of the overall development proposal. Such maps, drawings and explanations shall include:

- a) United States Geological Survey (USGS) 1:24,000 topographic quadrangles (updated in 2013 and depicting topography and 10-foot contour intervals) showing:
  - 1) All Facility components, including wind turbines, access roads, electric collection lines, permanent meteorological towers, permanent stormwater control devices of a significant nature (e.g., large detention basin) to the extent known at the time of Application, operation and maintenance facilities, construction staging/laydown and temporary concrete batch plant locations, a collection substation, a 115 kV transmission line, the point of interconnection substation, and to the extent known permanent mitigation sites or areas (such as for wetlands banking or historic resource offset). Parcels associated with landowners that are hosting Facility components will also be indicated, showing the limits of the host parcels in relation to the Facility layout.

Please note that the study area will vary depending on the resource being studied. Therefore, the narrative portion of Exhibit 3 will describe the various study areas used throughout the Application, with specific reference to study area maps created in support of the analyses and provided in association with subsequent Exhibits. To eliminate potential confusion, the USGS 1:24,000 map included in Exhibit 3 will not depict study areas.

Mapping to address requirements of 1001.3(b) will also show the following two Alternative turbine layouts:

- Taller turbines in the same locations as the proposed layout and correspondingly larger setback distances
  - Alternative layout within the Facility area boundary
- b) United States Census Bureau, New York State GIS Clearinghouse and ESRI online data will be used to clearly show the Facility in relation to municipal boundaries, taxing jurisdictions and designated neighborhoods or community districts.
  - c) Written descriptions explaining the relation of the proposed Facility site to the affected municipalities and taxing jurisdictions. A general description of existing land disturbances, such as

logging roads and existing infrastructure, which are proposed for use by Applicant to aid in minimizing impacts to habitat and other natural resources.

- d) Complete GIS shapefiles for all Facility components, including but not limited to, turbine locations, access roads, collection lines, collection substation, generator lead line, point of interconnect substation, construction lay down and temporary concrete batch plant areas, any known significant permanent stormwater control devices, and associated buildings. This material shall be submitted to the state agencies with the understanding that the agencies shall provide the material confidential, trade secret treatment, not subject to the NY Freedom of Information law, until further notification from the applicant.
- e) Latitude; longitude; and ground surface elevation (based on publicly available data) of all proposed turbine locations in feet above sea level.

#### **Stipulation 4 – 1001.4 Exhibit 4: Land Use**

Exhibit 4 shall contain:

- a) A map of existing land use within the 5-mile radius of the Facility (extending out from all Facility components) using publicly available data from the Chautauqua County GIS Department, and local land use information obtained from the Towns of Arkwright, Charlotte, Cherry Creek and Stockton, as well as the Villages of South Dayton, Cherry Creek, and Sinclairville (including information provided by the local municipalities regarding residences, buildings and any planned or approved building or development lots). Land use will also be depicted using the Classification codes of the New York Office of Real Property Services (NYSORPS), and a more detailed description of “vacant land” will be included in the Application based on consultation with the host/participating landowners. Land uses will be further described based on site-specific field reviews/investigations. In addition, a map and assessment of potential impact during Facility construction and operation of private lands enrolled in NYS Agricultural Districts, conservation programs, NYS 480-a forest management programs or similar long term program enrollments will be included in the Application.
- b) Existing overhead and underground major transmission facilities for electric, gas or telecommunications will be mapped within a 5-mile radius of all Facility components to the extent known. In addition, NYSDEC gas wells data and any known pipeline infrastructure will be mapped based on data provided by NYSDEC personnel and using data obtained from Platts, a division of McGraw Hill Financial, and Geotel.
- c) A map of the existing parcels where Facility components will be located and all those parcels within 2,000 feet of such properties, showing land use, tax parcel number, and owner of record of each property, and any publicly known proposed land use plans for any of these parcels, will be mapped using data from the Chautauqua County GIS Department and the Towns of Arkwright, Charlotte, Cherry Creek, and Stockton.
- d) A map of existing and proposed zoning districts within a 5-mile radius of all Facility components will be created by data obtained from local governments including a description of the permitted and prohibited uses within each zone.



- e) A summary of the relevant portions of the Chautauqua County Comprehensive Plan adopted in 2011, as well as a statement as to whether the proposed land use is consistent with the adopted comprehensive plan. At this time, the Towns of Charlotte, Cherry Creek, Stockton and Arkwright do not have comprehensive plans.
- f) A map of all publicly known proposed land uses within a 5-mile radius of all Facility components from discussions with state and local planning officials, from the public involvement process, or from other sources.
- g) Maps of designated coastal areas, inland waterways, and other specially designated areas within a 5-mile radius of all Facility components, including local waterfront revitalization program areas, groundwater management zones, NYS Agricultural Districts, FEMA flood hazard areas, and critical environmental areas.
- h) Maps of all recreation areas and other sensitive land uses within a 5-mile radius of all Facility components to the extent known, including wild, scenic and recreational river corridors, designated open space, wildlife management lands, forest management lands, conservation easement lands, state and federal scenic byways, nature preserves, designated trails, public-access fishing areas, oil and gas production and any known pipeline transportation, major communication and utility uses and infrastructure, and institutional, community and municipal uses and facilities; and a summary describing the nature of the probable environmental impact of the Facility and interconnection construction and operation of such uses, including an identification of how such impact is avoided or, if unavoidable, minimized or mitigated. The Applicant will comply with all relevant provisions of the NYS Parks, Recreation and Historic Preservation Law, National Historic Preservation Act, its implementing regulations, and the Public Service Law, with regard to disclosure of information about the location, character, or ownership of identified cultural resources, and will, where appropriate, request that a protective order be issued to prevent disclosure of same. The Cassadaga Water Trail will also be mapped in relation to the Facility. With respect to the Adirondack Park State Land Master Plan, due to the Facility's location in western New York (Chautauqua County), areas identified in the Adirondack Park State Land Master Plan will not be mapped or described in the Application.
- i) Land use impact assessment, including
  - 1) A qualitative assessment of the Facility's compatibility with existing and proposed land uses, as well as the Facility's consistency with the latest available version of the NYS Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Wind Power Projects. The qualitative assessment shall include an evaluation of the short- and long-term effects of Facility generated noise, odor, traffic and visual impacts on the use and enjoyment of those areas for the current and planned uses. The assessment shall identify the nearby land uses of particular concern to the community and shall address the land use impacts of the Facility on residential areas, schools, civic facilities, recreational facilities, commercial areas and public lands.
  - 2) A review of compatibility of the Facility with the Boutwell Hill State Forest Unit Management Plan.
- j) To the extent land use impact is quantified in other exhibits (e.g., agricultural land, wetlands, forest) such information will be summarized in this subpart. It is currently anticipated that the Facility will use above-ground interconnect lines where appropriate, including (but not limited to) along the

edges of agricultural fields, crossing of steep terrain and public roads. An assessment of compatibility of above-ground interconnects with existing and proposed land uses within 300 feet of the interconnect lines will be presented in the Article 10 Application.

- k) An assessment of the compatibility of underground interconnect lines with existing, potential, and proposed land use within 300 feet of the interconnects will be presented in the Article 10 Application.
- l) The Facility location is not within a designated coastal area or in direct proximity of a designated inland waterway. Therefore, the parties agree that a demonstration of conformance with the Coastal Zone Management Act is not applicable and will not be included in the Application.
- m) Aerial photographs using USDA's National Agriculture Imagery Program (NAIP) for representing recent and current uses of all land within the Facility area and a 1-mile radius of the Facility. The aerial photograph mapping will be depicted on multiple 8.5 x 11 or 11x17 sheets at a scale that will allow the identification and discrimination of natural and cultural features.
- n) Maps of the Facility components, and the proposed clearing and limits of disturbance will be overlaid on aerial photographs. These maps will be created using ArcGIS software and will depict centerlines of proposed access roads and electrical collection and transmission lines, point symbols to depict turbine and permanent meteorological tower locations, and polygon symbols to depict the collection substation and POI substation, operation and maintenance buildings, and construction laydown areas. A buffer around each of these features will also be depicted to show typical limits of clearing and disturbance relative to the respective feature (e.g., 20-foot permanent width and 50-foot temporary width for access roads), or if the limits of clearing is provided in support of the Preliminary Design Drawings (Exhibit 11), this may be depicted in lieu of impact area buffers.
- o) 2015 (0.5 meter resolution) aerial photographs obtained from the USDA National Agriculture Imagery Program (NAIP) shall be used to reflect the current situation. For the purposes of the Application, it is assumed that the USDA NAIP is the photographer.
- p) A description of community character in the area of the proposed Facility, including defining features and interactions of the natural, built, and social environment, an analysis of impacts of Facility construction and operation on community character, and identification of avoidance or mitigation measures that will minimize adverse impacts on community character.
- q) The Application will review the applicable zoning regulations (including allowed turbine height) and the associated SEQRA review, along with the history of land uses in the areas of the Towns, such as oil and gas exploration and development, where the Facility is proposed to be located and assess the compatibility of the Facility with the existing and proposed future uses with respect to community character.

Any effect Land Use might have on the Chautauqua County Jamestown (JHW) and Dunkirk (DKK) airports along with the Spaulding Aerodrome (28NY) will be addressed in Exhibit 25 (Effect on Transportation) of the Article 10 Application.

## **Stipulation 5 – 1001.5 Exhibit 5: Electric System Effects**

Exhibit 5 shall contain:

- a) A System Reliability Impact Study (SRIS).
- b) An analysis and/or statement of the impact of the proposed Facility on reliability in the state of New York as evaluated in the SRIS.
- c) A discussion of the impacts of the Facility on ancillary services as evaluated in the SRIS.
- d) A summary of reasonable alternatives that would mitigate adverse reliability impacts as evaluated in the SRIS.
- e) An estimate of the increase or decrease in the total transfer capacity across each affected interface based on analysis in the SRIS. If a forecasted reduction in transfer capability across affected interfaces violates reliability requirements, an evaluation of reasonable corrective measures that could be employed to mitigate or eliminate said reduction will be conducted.
- f) A description of:
  - 1) The codes and standards that are applicable to each Facility and interconnection component.
  - 2) The type certification for a selection of potential alternative wind turbines, if available, proposed for the Facility.
  - 3) The commissioning activities and procedures and controls for Facility inspection and testing.
  - 4) A Facility Operations and Maintenance Plan.
- g) The Facility will not have a thermal component and therefore heat balance diagrams are not applicable and will not be included in the Application.
- h) A description of:
  - 1) The substation facilities to be transferred. The specific future transaction and timetable to transfer will not be known until the Facilities Study is complete
  - 2) A statement that the substation-interconnection design will meet the transmission owner's requirements; the description of the design will not be known until the Facilities Study is complete
  - 3) A statement that the operational and maintenance responsibilities for the substation will meet the transmission owner's standards. Further definition of these responsibilities will not be known until the Facilities Study is complete.
- i) A description of the Facility maintenance and management plans including:
  - 1) A description of the turbine maintenance and safety inspections, tower integrity, and discussion of the frequency and scope of such inspections.
  - 2) A description of the transmission maintenance plans including:
    - i) Vegetation clearances for gathering and interconnect lines.
    - ii) A Vegetation Management Plan.
    - iii) An inspection and maintenance schedule for the electrical system.

- iv) Notification for work in public right-of-way
- v) Measures to be used to minimize interference with electric and communications distribution systems.
- j) Vegetation management practices for collection lines, generator lead line, POI and collection substations, and for danger trees (trees that due to location and condition are a particular threat to fall on and damage electrical equipment) near generator lead line, collection station and POI substation, specifications for clearances, and inspection schedules.
- k) A list of the criteria and procedures by which proposals for sharing above ground facilities with other utilities will be reviewed if applicable.
- l) As assessment of the equipment availability and expected delivery dates for major Facility components.
- m) The Facility will not have any blackstart capabilities, therefore this description is not applicable.
- n) An identification and demonstration of the degree of compliance with all relevant applicable reliability criteria of the Northeast Power Coordinating Council Inc., New York State Reliability Council and the local interconnecting transmission utility, including criteria regarding blackstart and fuel switching capabilities. These appropriate criteria will be identified in the SRIS or through consultation with DPS, NYISO, and the local transmission owners.

### **Stipulation 6 – 1001.6 Exhibit 6: Wind Power Facilities**

Exhibit 6 shall contain:

- a) A discussion of factors considered during placement of wind turbines and other Facility components, including an analysis of the height of the proposed turbines along with the turbine “fall-down” distances. Exhibit 6(a) shall also include a statement of all setback requirements and/or setback recommendations for turbines from public roads, occupied structures (dwellings, commercial, industrial, and institutional), barns and unoccupied structures, known areas of public gathering, and electric transmission lines, explaining the rationale for the setback distances for each type, as required or recommended by:
  - 1) Manufacturer setback recommendations and specifications for setbacks to the extent available.
  - 2) Applicant internal setback standards.
  - 3) Local law or ordinance setbacks.
- b) A statement of the Facility’s compliance with turbine setback requirements in subdivision (a) above.
- c) Discussion regarding the status and results of third-party review and certification (type and project) of wind turbines proposed for construction and operation at the electric plant.
- d) The detailed results of wind resource analyses are proprietary and are typically retained as trade secrets. Therefore, a copy of the wind meteorological analysis will be provided with the Article 10 Application, but will be provided to the DPS Records Access Officer pursuant to regulations for confidential treatment of business trade secrets under separate cover. The Applicant will seek the requisite trade secret protection for this information pursuant to NY Public Officer’s Law Section 87(2)(d) and 16 NYCRR 6-1.3. The Article 10 Application will provide non-proprietary information to demonstrate adequate wind conditions for the Facility and discuss the estimated capacity factor.

## **Stipulation 7 – 1001.7 Exhibit 7: Natural Gas Power Facilities**

Exhibit 7: Natural Gas Power Facilities is not applicable to the Facility.

## **Stipulation 8 – 1001.8 Exhibit 8: Electric System Production Modeling**

Prior to preparing this exhibit, the Applicant shall consult with DPS and DEC and develop an acceptable input data set, including modeling for the Applicant’s proposed Facility and inputs for the emissions analysis, to be used in the simulation analyses. Exhibit 8 shall contain:

- a) Analyses developed using GEMAPS, PROMOD, or a similar computer-based modeling tool, to the extent modeling tools are needed for the below sub-parts, including:
  - 1) An estimate of the statewide levels of SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions both with and without the proposed Facility.
  - 2) An estimate of the minimum, maximum, and average annual spot prices representative of all NYISO Zones within the New York Control Area, both with and without the proposed Facility.
  - 3) An estimate of the capacity factor for the proposed Facility.
  - 4) An estimate of the annual and monthly, on peak, shoulder, and off-peak MW output capability factors for the proposed Facility, as those terms are defined by the NYISO.
  - 5) An estimate of the average annual and monthly production output for the proposed Facility in megawatt-hours (MWh).
  - 6) An estimated production curve for the Facility over an average year.
  - 7) An estimated production duration curve for the Facility over an average year.
  - 8) Estimated effects of the proposed Facility on the energy dispatch of existing must-run resources, to include existing wind, hydroelectric and nuclear facilities, as well as co-generation facilities to the extent they are obligated to output their available energy because of their steam hosts.
- b) Digital copies of all inputs used in the simulations required in subdivision (a) of this section. The Applicant will seek the requisite trade secret protection for this information pursuant to NY Public Officer’s Law Section 87(2)(d) and 16 NYCRR 6-1.3.
- c) Discussion and calculation, if practical and feasible of estimates of annual production costs and air emissions for New York and nearby control areas.

## **Stipulation 9 – 1001.9 Exhibit 9: Alternatives**

Any detailed alternatives analysis shall be limited to sites owned by, leased, or under option to, Cassadaga Wind LLC. Exhibit 9 shall contain:

- a) Given that Applicant proposes to operate a private Facility, the identification and description of sites will necessarily be limited to sites owned by or under option to Applicant or its affiliates, as authorized by 16 NYCRR § 1001.9(a).

- b) As indicated in subdivision (a), alternative locations that include areas beyond what is owned by or under option to the Applicant are unavailable. General site selection process and Facility details will be provided including:
- 1) Environmental setting.
  - 2) Recreational, cultural and other concurrent uses of the Facility area.
  - 3) A Preliminary Geotechnical Evaluation including a literature review of publicly available data.
  - 4) A detailed description of the effects of reliability with the Facility based on the SRIS conducted in January 2015.
  - 5) An evaluation of unavoidable environmental impacts and their significance and an assessment of climate change impacts.
  - 6) An estimate of total capital costs of the Facility and alternatives, if applicable. The Application will include an internal work paper that describes the assumptions in estimating the total capital costs as described in 1001.14 (a). However, this information is proprietary and typically retained as business confidential. Therefore, the Applicant will seek the requisite trade secret protection for this information pursuant to NY Public Officer's Law Section 87(2)(d) and 16 NYCRR 6-1.3.
  - 7) The Facility is not expected to have an impact on any environmental justice areas. Environmental justice information will be provided in Exhibit 28 of the Article 10 Application.
  - 8) A description of the methodology to be used to determine potential security risks during construction and operation of the Facility including development of an Emergency Action Plan (EAP).
  - 9) A summary of public health issues that are typically attributed to wind power projects.
  - 10) A detailed description of the Facility's potential vulnerability to seismic disturbances and extreme weather events that could be expected to occur in Chautauqua County, New York, and a discussion of the Facility's contribution to climate change.
  - 11) A discussion of the Applicant's objectives and capabilities.
  - 12) The Application will also include a discussion of the wind meteorological analysis.
- c) The Applicant's private landowner agreements strictly limit the use of land to a wind power project, and as such, do not allow for the siting of other alternative energy production facilities (e.g., solar, hydro, biomass, or fossil fuel). Accordingly, other power generation technologies are not reasonable alternatives, and do not warrant consideration in the Article 10 Application. Rather, this section of the Application will provide details on the Facility design and technology including:
- 1) The general arrangement and design.
  - 2) Wind turbine technology and alternate turbine models.
  - 3) Alternate scale and magnitude of the facilities in the context of the interconnection position (i.e., maximum generating capacity of 126 MW) and information on the economic benefits to local communities related to Facility scale and magnitude.
  - 4) A discussion of the final, maximum number of turbines that could be constructed based on siting factors (including setbacks) and identification of the position of all potential turbine locations, as well as an alternate layout in the study area. The discussion will include examples of the number of turbines to be constructed depending on the turbine model selected. This section of the Application will also address why turbines of certain heights and dimensions are best suited

for this Facility, including an analysis of compliance with existing local height restrictions and turbines that would exceed local height restrictions. Additionally, this section of the Application will address the environmental impacts of the following alternative layouts:

- i) The use of taller turbines in the same properties as the proposed layout and the associated increased setbacks from residences, property lines, and public roads such that turbine fall-down distances are wholly within the participating land parcel
  - ii) Alternative layout within the study area
- 5) A summary of the findings of, and an internet link to, the SRIS in relation the changes to the existing electrical system.
- d) A statement of the reasons why the proposed Facility location is best suited, among the alternatives reviewed in this Exhibit, to promote public health and welfare.
  - e) A statement of the reasons why the proposed technology, scale, and timing of the proposed Facility is best suited to promote public health and welfare.
  - f) A statement of the reasons why the no action alternative to the proposed Facility is not best suited to promote public health and welfare.
  - g) Identification and description of alternative energy supplies will be limited to those that are feasible based on the objectives and capabilities of the Applicant (i.e. a wind power project).
  - h) Due to the nature of the Facility (wind powered electric generation), source and demand – reducing alternatives will not be evaluated in the Article 10 Application.
  - i) A statement of the reasons why the proposed Facility is best suited to promote public health and welfare.

## **Stipulation 10 – 1001.10 Exhibit 10: Consistency with Energy Planning Objectives**

Exhibit 10 shall contain:

- a) An explanation of how the Facility advances the objectives of the State Energy Plan and energy policies including:
  - 1) The five “Guiding Principles” listed on pages 49-54 of the 2015 State Energy Plan.
  - 2) The seven goals listed in the “Initiatives and Goals” section, pages 65-111 of the 2015 State Energy Plan.
  - 3) The three “New York’s 2030 Targets” listed on page 112 of the State Energy Plan.
- b) A description of the impact of the proposed Facility on reliability in the State based on information in the SRIS.
- c) A discussion of the current electric generation capacity by fuel type including consider of the proposed Facility. Fuel mix data will be obtained from NYISO.
- d) A discussion of proposed Facility impacts on regional requirements for capacity.
- e) A discussion of the proposed Facility impacts on electric transmission constraints using New York State Transmission Assessment and Reliability Study and other NYISO reports/data.

- f) The proposed Facility will generate electricity without the use of fuel. Consequently, there will be no adverse fuel delivery impacts and this topic will not be addressed in the Application.
- g) A description of the Facility impacts on state and federal energy policies
- h) A comparison of alternative Facility configurations within the proposed study area including an alternative layout, an alternative turbine height and a no action alternative. However, this section of Exhibit 10 may simply refer to the information presented in Exhibit 9.
- i) This section is not applicable because it requires an evaluation of alternative locations and fuel sources, which is beyond the scope of the agreed upon Exhibit 9 for this Application.

### **Stipulation 11 – 1001.11 Exhibit 11: Preliminary Design Drawings**

All drawings prepared in support of Exhibit 11 of the Article 10 Application will be prepared using computer software (e.g., AutoCAD, MicroStation), will be labeled “preliminary” and “not for construction purposes”, and will be prepared under the direction of a professional engineer, landscape architect, or architect who is licensed and registered in New York State. Exhibit 11 shall contain:

- a) Site plan drawings of all Facility components at an appropriate scale (e.g., 1” = 100’) as listed at 1001.11(a). Adjoining property depiction using publicly available data. The Article 10 Application will include typical details associated with O&M facilities, the Application will identify the O&M facility location, entry from public roads and anticipated service connections. In addition, this section of the Application will provide additional information on the need for an on-site concrete batch plant, including a typical plan layout showing all components of this feature and an approximate location. If an on-site plant will not be utilized, then potential options for concrete will be discussed and an estimate of the number of concrete mixing transport trucks required per day will be provided.
- b) A construction operations plan of the location of anticipated construction staging/material laydown areas, work spaces, temporary concrete batch plant(s), contractor trailers/offices, ingress, egress, and parking areas along with notable excavation areas and soil stockpile areas
- c) Soil type and depth to bedrock information based on publicly available data and a limited number of test borings at turbine and substation locations. Preliminary cut and fill calculations will be included along with a general description of typical cut and fill scenarios. The Application will also provide boring logs and maps indicating location of the pre-Application test borings.
- d) Based on the proposed Facility layout and the results of various analyses, the Application will discuss the need for landscaping in the form of visual screening, and prepare conceptual screening plans if needed. To determine those areas where trees may be removed, the Facility footprint will be depicted on recent aerial imagery, and the acreage of tree removal will be discussed in the Article 10 Application. However, an on-site inventory and survey of all trees to be removed will not be included in the Application. The Application will also include reference to contingency measures to be developed to address potential visual screening needs for mitigation of impacts at historic resources, or community or cultural sites.



- e) A lighting control plan including lighting specifications for FAA lights on turbines and typical lights to be used at substations and O&M building. Lighting control plans generally should give consideration to the use of additional measures including: task lighting, that can be turned on when needed at areas that may require occasional night-time work such as substations and O&M yards; full-cutoff fixtures without drop-down optics, that preclude horizontal or upward-directed light emissions that are not useful or necessary; and review of radar-activated FAA marking lights for night-time use, that are generally only lighted when aircraft approach and trigger activation of lighting for aviation safety.
- f) A typical drawing of an O&M building and typical foundation types to be used for the wind turbines. In addition, typical details of other structures or buildings, such as at the collection and interconnection substations will be included.
- g) The Application/Preliminary Design Drawings will include typical design details for Facility components including access roads, buried and above-ground interconnect lines, turbine laydown areas, wind turbines, and wind turbine foundations. This section of the Application will also include typical details associated with horizontal directional drilling (HDD) staging area/bore pits, and a detail that shows the configuration of collection lines co-located with the overhead 115 kV generator lead line. In addition, the Application will include technical and safety manuals associated with the range of turbine types anticipated to be used for the Facility to the extent available. These manuals are available for certain turbines to be presented in the Application, but may not be available for all turbines. The final turbine model selected may be one of those provided in the Application or may be a different model whose sound power level and tip height are no greater than those analyzed in the Article 10 Application.
- h) A single line drawing of the interconnection substation Facility from the SRIS. Additional details on the interconnection substation will be available once the Facilities study is complete. However, the Facilities study will not be completed until post-certification. The Preliminary Design Drawings will also include a profile of the centerline of the overhead 115 kV generator lead line, and this subpart will also include conceptual 115 kV structure drawings and the footprint and general arrangement of the POI station.
- i) A list of engineering codes, standards, guidelines and practices that the Applicant intends to conform with when planning, designing, constructing, operating and maintaining the Facility.

## **Stipulation 12– 1001.12 Exhibit 12: Construction**

Exhibit 12 shall contain:

- a) A preliminary Quality Assurance and Control plan including special inspections (structural) and statements of special inspections required by the Building Code of New York State.
- b) A statement from a responsible company official that:
  - The Applicant and its contractors will conform to the requirements for protection of underground facilities contained in Public Service Law §119-b, as implemented by 16 NYCRR Part 753;

- The Applicant will comply with pole numbering and marking requirements, as implemented by 16 NYCRR Part 217; and
- c) A summary of all existing utility systems known by the Applicant at the time of Application submission (including those in proximity to the point of interconnection substation), in addition to typical separations of Facility components from existing utilities.
- d) A Complaint Resolution Plan including:
- Communications protocol and contacts for construction and operation
  - Registering a complaint
  - Process for gathering and analyzing information regarding the complaint
  - Complaint response and tracking
  - Complaint response follow up

This section of the Application will also include a discussion of potential for dust generated during construction activities, and identification of reasonable measures to control wind-blown dust from leaving construction sites. The Applicant will have a qualified environmental monitor(s) present during construction activities which result in ground/vegetation disturbance, which will also be discussed in this section of the Application.

### **Stipulation 13– 1001.13 Exhibit 13: Real Property**

Exhibit 13 shall contain:

- a) A tax parcel map of the Facility Site which clearly depicts the tax parcel ID, current land use and zoning, relevant easements, grants and related encumbrances, and public and private roads planned for use as access to the site. Data for this map will be obtained from the Chautauqua County GIS (parcels) along with the United States Census Bureau (TIGER/line files) and the NYS GIS Clearinghouse.
- b) Maps showing all proposed interconnection facilities and associated access drives/laydown areas, including land owned by the Applicant and land owned by the utilities.
- c) A description of titles or leases for parcels that are secured or under option for the Facility, including ingress/egress access to public roads, easements and rights-of-way. A statement that the Applicant has or can obtain access to parcels needed for the Facility.
- d) A statement that the Applicant has or can obtain access to parcels needed for Facility interconnects and utility infrastructure, including a discussion of the status of easements across New York State lands (e.g., state forests, state highways), and local municipal properties.
- e) An identification of any improvement district extensions necessary.

### **Stipulation 14– 1001.14 Exhibit 14: Cost of Facilities**

Exhibit 14 shall contain:

- a) An estimate of the total capital costs of the Facility, in a range broken down by turbine model. The estimate will include development costs, construction costs, turbine costs, engineering costs and insurance costs as well as a contingency cost. The capital costs will include a cost estimate for the collector lines and substation, the 115 kV transmission line, and the Applicant's cost to construct the POI substation.
- b) A cost estimate based on the Applicant's historical experience and the SRIS and in 2015 dollars.
- c) The Application will include an internal work paper that describes the assumptions in estimating the total capital costs as described in 1001.14 (a). However, this information is proprietary and typically retained as trade secret. Therefore, the Applicant will seek the requisite trade secret protection for this information pursuant to NY Public Officer's Law Section 87(2)(d) and 16 NYCRR 6-1.3.

### **Stipulation 15– 1001.15 Exhibit 15: Public Health and Safety**

The regulations require the application to include a statement and evaluation that identifies, describes, and discusses all potential significant adverse impacts of the construction and operation of the facility, the interconnections, and related facilities on the environment, public health, and safety, at a level of detail that reflects the severity of the impacts and the reasonable likelihood of their occurrence, identifies the current applicable statutory and regulatory framework. Exhibit 15 shall contain:

- a) A list of wastes which the Facility could potentially generate, as well as their source, anticipated volumes, composition, the manner of collection, handling, storage, transport and disposal for wastes retained and not released at the site, or to be disposed of, if applicable. Examples of waste to be generated from facility operation include waste oil from wind turbine gearboxes and electrical transformers, and some solid waste (e.g., cardboard and packaging materials and general refuse). This exhibit will also include a discussion of how construction debris (including any debris from facility construction and demolition debris from buildings or structures removed due to facility construction), and wood waste from site clearing will be handled. Exhibit 15 will also address wastewater disposal including sanitary facilities for workers during facility construction; and assessment and permits needed for development of wastewater septic or alternative system at permanent O&M facilities site. If an existing building is proposed for use as O&M facility, evaluation of suitability of existing wastewater system and any improvements or replacement will be included.
- b) Beyond that which will be addressed per Stipulation 15(a) above, the Facility will not result in additional volumes of waste to be released to the environment, during construction or operation of the facility.
- c) Beyond that which will be addressed per Stipulation 15(a) above, the Facility will not need to treat additional waste to be released to the environment.
- d) Beyond that which will be addressed per Stipulation 15(a) above, the Facility will not need to identify procedures for the collection, handling, storage, transport and disposal of waste.
- e) An analysis of wind power facility impacts including:
  - 1) A thorough literature review (limited to peer reviewed articles or papers prepared by government agencies) to identify potential public health and safety impacts including those associated with potential blade throw and tower collapse, along with a discussion of manufacturer recommendations, to the extent available, and local provisions.

- 2) A thorough literature review including government, scientific and professional studies and peer reviewed publications, including the guidelines and recommendations of the World Health Organization (WHO), regarding the effects on human health from noise, low frequency sound, infrasound, and shadow flicker will be included in the Application.
- 3) A summary of literature review to identify potential public health and safety concerns associated with ice throw, including potential issues related to specific land uses such as recreational trails; the operational measures that can be employed to minimize the potential for ice throw; and siting criteria and setbacks to be protective of potential ice throw.
- 4) A Facility-specific shadow flicker analysis using WindPRO software and the associated shadow module. Input variables and assumptions used for shadow flicker modeling calculations for the proposed Facility will include:
  - i) Latitude and longitude coordinates of proposed wind turbine sites
  - ii) The rotor diameter and hub height of the largest turbine model under consideration
  - iii) Latitude and longitude coordinates for residential structures (both participating and non-participating), schools, office buildings, storefronts, or high-use public recreation areas (e.g., campgrounds) located within a 10 rotor diameter radius of all proposed turbine locations (the shadow flicker study will be limited to the area defined by 10 times the rotor diameter of the turbines)
  - iv) USGS 1:24,000 topographic mapping and USGS digital elevation model (DEM) data (10-meter resolution)
  - v) Annual wind rose data
  - vi) The average monthly percent of available sunshine for the nearest National Oceanic and Atmospheric Administration weather station in Buffalo, NY
  - vii) The Applicant will work with the Towns to identify, within the 10 rotor diameter radius study area, all primary structures and any officially-announced, planned land use developments, such as residential sites or community buildings, under review or already approved for site plan development or building permit issuance at the time of filing the Article 10 Application. All data obtained will be used in the shadow flicker assessment. In addition, shadow flicker contours that are generated by the WindPRO software will be overlain on mapping of known public recreational areas (e.g., trails, state forest land).
  - viii) The analysis will identify potential mitigation measures needed (if any) to offset any identified impacts. The report will specify the mitigation options, and for illustrative purposes, discuss what additional measures could feasibly be implemented once the Facility is constructed.
- f) Public health and safety-related maps using data from the NYS GIS Clearinghouse, FEMA and the USGS, as well as local sources for emergency response resources.
- g) All relevant and significant impacts on the environment, public health, and safety associated with the items discussed in subsections (a) through (f) of this Section.
- h) A description of any potential adverse impacts on the environment, public health and safety that cannot be avoided should the Facility be constructed and operated, and measures for monitoring and mitigating such impacts.
- i) A description of the Facility's irreversible and irretrievable commitment of resources.
- j) A description of any measures proposed by the Applicant to minimize such impacts including but not limited to any measures identified in the Facility-specific studies associated with noise or shadow flicker.
- k) A Complaint Resolution Plan and identification of any other measures proposed by the Applicant to mitigate potential impacts caused by the Facility. The Complaint Resolution Plan shall include the following:

- Communications protocol and contacts for construction and operation
- Registering a complaint
- Process for gathering and analyzing information regarding the complaint
- Complaint response and tracking
- Complaint response follow up

A discussion on any monitoring proposed by the Applicant.

### **Stipulation 16– 1001.16 Exhibit 16: Pollution Control Facilities**

Exhibit 16: Pollution Control Facilities is not applicable to the Facility and therefore will not be included in the Application. To the extent temporary emissions sources are needed during construction this will be addressed in Exhibit 17 of the Application. Please see Stipulation 23(c)(1) for information on the SPDES General Permit for construction.

### **Stipulation 17– 1001.17 Exhibit 17: Air Emissions**

Exhibit 17 shall contain:

A discussion of the anticipated impacts to air quality expected to result from the proposed Facility’s construction and operation, including from temporary emissions sources such as on-site concrete batch plant and fuel-fired generators, and identification of appropriate control and mitigation measures to minimize adverse impacts. As indicated in Stipulation 12(d), a discussion for dust-related impacts during construction will be included in Exhibit 12.

### **Stipulation 18– 1001.18 Exhibit 18: Safety and Security**

The Application will describe the methodology to be used to determine potential security risks, during both construction and operation of the Facility, based on the Applicant’s experience with other projects and reasonable expectations associated with the Cassadaga Wind Project. The Application will also identify a preliminary Emergency Action Plan, Safety Plan, and Site Security Plan regarding the safety and security of Facility construction and operation. Exhibit 18 shall contain:

- a) A preliminary, typical site security plan for construction including:
  - 1) Access controls such as gates and signage.
  - 2) Discussion on how trespassing will be addressed.
  - 3) Security lighting at staging areas and construction trailers.
  - 4) Additional detail on setbacks.
- b) A preliminary, typical site security plan for operation including:
  - 1) Access controls such as gates, fences, and signage.
  - 2) Substation security details.

- 3) A detailed description of security lighting.
  - 4) Lighting plan details associated with preliminary consultation with the Federal Aviation Administration.
  - 5) Additional detail on setbacks.
  - 6) A discussion on how the Applicant will comply with the North American Electric Corporation's CIP standards along with any other voluntary cyber security measures the Applicant plans to implement.
- c) A draft Emergency Action Plan (EAP) including:
- 1) Outline of contingencies that would constitute a safety or security emergency.
  - 2) Detailed instructions for site personnel, the general public and emergency responders (including public utility operators) in the event of an emergency response.
  - 3) Evacuation instructions to site personnel, the general public and emergency responders.
  - 4) Community notification procedures in the event of an emergency situation.
  - 5) Notification of other relevant utilities in the event of an emergency.
  - 6) The method of securing access road gates to include ingress and egress for emergency responders.
- d) Documentation of submission of the preliminary security plans to the New York State Division of Homeland Security and Emergency Services and DPS Utilities Security Section.
- e) Statement that the Applicant will coordinate with the Chautauqua County Emergency Services Department and provide them with a copy of the EAP.
- f) A detailed list of all equipment available for responding to fire emergencies or hazardous substance incidences in the EAP.
- g) A description of contingency plans to be implemented in the event of a fire emergency or hazardous substance incident.
- h) A statement that the EAP will be provided to the local emergency first responders that serve the Facility and documentation of that consultation with the local emergency first responders.

## **Stipulation 19- 1001.19 Exhibit 19: Noise and Vibration**

***STIPULATION 19 TO BE FILED UNDER SEPARATE COVER***

## **Stipulation 20- 1001.20 Exhibit 20: Cultural Resources**

Consistent with 16 NYCRR § 1001.20 and the New York State Historic Preservation Office Guidelines for Wind Farm Development Cultural Resources Survey Work (the SHPO Wind Guidelines; NYSOPRHP, 2006), the Applicant has initiated consultation with the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) to develop the scope and methodology for cultural resources studies

for the Facility. To date, formal consultation with NYSOPRHP has included initiating Facility review and consultation through NYSOPRHP's Cultural Resources Information System (CRIS) website and submission of two technical scoping reports/work plans: a Phase 1A Archaeological Resources Survey and Phase 1B Fieldwork Plan and a Phase 1A Historic Architectural Resources Survey and Work Plan. Exhibit 20 shall contain:

- a) A full analysis of the impacts of the construction and operation of the Facility, interconnections, and related facilities on archaeological resources including:
  - 1) An overview of the nature of any potential impacts and a summary of measures to be implemented to avoid or minimize such impacts.
  - 2) A Phase 1A study.
  - 3) A Phase 1B Archaeological Survey conducted in a manner consistent with SHPO Wind Guidelines and as agreed to by the OPRHP in September 2015 and a Phase 1B report prepared in accordance with NYSOPRHP's Phase 1 Archaeological Report Format Requirements.
  - 4) Phase 2 archaeological studies conducted in consultation with NYSOPRHP and DPS, if warranted based on Phase 1B survey results. If Phase 2 archaeological studies are conducted, a description of the consultation process and results of the Phase 2 studies will be described.
  - 5) A complete list of all recovered artifacts.
  - 6) An Unanticipated Discovery Plan that will identify actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The Unanticipated Discovery Plan will specify the degree to which the methodology used to assess any discoveries follows the NYAC Standards.
- b)
  - 1) A complete Historic Architectural Survey and Report prepared in accordance with methods agreed to by NYSOPRHP in August 2015, which was based on the work plan provided to the NYSOPRHP in July 2015. NYSOPRHP's August 10, 2015 letter states, "We further concur that no additional architectural survey efforts in the APE for the Arkwright Summit Wind Farm are required at this time."
  - 2) A summary of the nature of the probable impact of Facility construction and operation on any historic resources identified addressing how those impacts will be avoided or minimized, or describing potential offset mitigation measures. This will include visual, noise and vibration, traffic and other impacts as identified in other relevant Exhibits, and taking into account potential cumulative impacts as a result of the Arkwright and Ball Hill Wind Projects.

### **Stipulation 21– 1001.21 Exhibit 21: Geology, Seismology, and Soils**

This exhibit will include a study of the geology, seismology, and soils impacts of the Facility consisting of the identification and mapping of existing conditions, an impact analysis, and proposed impact avoidance and mitigation measures. Exhibit 21 shall contain:

- a) A map delineating existing slopes using USGS National Elevation Dataset and ESRI ArcGIS® Software.

- b) A proposed site plan showing existing and proposed contours at 2-foot intervals. The Applicant will use publicly available 5-foot contour data to create the 2-foot contours necessary to fulfill the Application requirements.
- c) Preliminary cut and fill calculations based on 2-foot contours interpolated from publicly available 5-foot contour data, including separate approximations for topsoil, sub-soil and rock. A description of typical scenarios that would result in cut and fill necessary to construct the Facility, such as constructing an access road on a side slope.
- d) A preliminary calculation of the amount of fill, gravel, etc. based on typical Facility details such as an access road cross section.
- e) No materials will be removed from the Facility site, and the Article 10 Application will indicate why it is not necessary to remove material, in relation to preliminary cut and fill estimates. Stockpiled soils along the construction corridors will be used in site restoration, and all such materials will be re-graded to approximate pre-construction contours. Anticipated soil stockpile areas will be addressed on the Preliminary Design Drawings. The Application will also describe the anticipated amount and characteristics of any fill material expected to be imported to the site.
- f) A detailed description of construction methodologies and activities associated with the Facility, including anticipated excavation techniques to be employed based on site-specific preliminary geotechnical investigations. In addition, this section of Exhibit 21 will (i) identify locations and approximate extent (lengths) of installations where horizontal directional drilling (HDD) or other trenchless methods of installing underground collection cables may be proposed, (ii) describe methods anticipated to be used for installation of facilities across streams and wetlands, and (iii) identify sensitive environmental resources (e.g., state-protected trout streams). A typical staging or setup area for HDD or trenchless installation will also be provided in the Application, including typical setbacks from streams/wetlands, and sediment and erosion control measures. To the extent known, soil and bedrock conditions at anticipated boring locations, including the depth to bedrock, will be described. This section will also include a general frac-out plan.
- g) A description of the process of determining excavation locations and an identification of preliminary cut and fill storage locations.
- h) Results of a Preliminary Geotechnical Investigation including:
  - 1) Test borings results and locations.
  - 2) Literature review and publicly available data regarding surface and subsurface soil, bedrock, and groundwater conditions.
  - 3) Data analysis.
  - 4) Detailed report with suitability analysis and recommendations.
- i) A statement that no blasting will be required, based on the results and data obtained from the Preliminary Geotechnical Investigation, and therefore a preliminary blasting plan will not be included.
- j) A statement that no blasting will be required, based on the results and data obtained from the Preliminary Geotechnical Investigation, and therefore an assessment of the potential impacts of blasting will not be included.
- k) A statement that no blasting will be required, based on the results and data obtained from the Preliminary Geotechnical Investigation, and therefore mitigation related to blasting will not be necessary.
- l) A description of the regional geology, tectonic setting and seismology, including any known areas of karst geology within or adjacent to the Facility.
- m) An analysis of the expected impacts of construction and operation with respect to regional geology.



- n) Faults within the vicinity of the Facility are not associated with any historic earthquakes. In addition, the USGS Earthquakes Hazards Program does not identify any young faults within the vicinity of the Facility. Therefore, this topic will not be further addressed in the Application.
- o) A map delineating soil types at the Facility and interconnection sites using data from USDA NRCS Web Soil Survey.
- p) A description of the soil characteristics and suitability for construction. This section of Exhibit 21 will also address potential impacts and hazards associated with construction in the vicinity of steep slopes, such as the potential for extreme rainfall events leading to severe erosion and downstream water quality issues.
- q) Maps, figures, and analyses on depth to bedrock, underlying bedrock types, and vertical profiles of soils, bedrock, water table and seasonal high groundwater using USFWS Online Spatial Geology Data, the USDA NRCS Web Soil Survey, and the Preliminary Geotechnical Analysis.
- r) A foundation evaluation including:
  - 1) A suitability analysis of the on-site surface/sub-surface conditions to support turbine foundations and specific recommendations based on the site-specific conditions, including a description of susceptibility of steel and of concrete to corrosion due to existing soil conditions.
  - 2) A statement that pile driving will not be conducted.
  - 3) A statement that no mitigation measures for pile driving will be required, since pile driving will not be conducted.
- s) The Facility appears to have minimal vulnerability associated with seismic events based on review of publicly available data. In addition, because the Facility is located approximately 8 miles from the nearest large water body (Lake Erie), there is no vulnerability associated with tsunami events. Therefore, the Application will not address these topics further.

## **Stipulation 22– 1001.22 Exhibit 22: Terrestrial Ecology and Wetlands**

Exhibit 22 shall contain:

- a) Specific information on plant communities including:
  - 1) Plant community mapping using GIS software and based on Facility-specific field investigations along with roadside observations and aerial photo interpretation for adjacent properties.
  - 2) Detailed description of all ecological communities identified within the parcels that will host the Facility components. Ecological community descriptions will follow the 2014 *Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State.*
  - 3) Plant species list based on Facility-specific field investigations.
- b) Plant community disturbance impact calculations using GIS software based on specific assumptions associated with vegetation disturbance areas for each type of Facility component, or the limits of disturbance as identified in the Preliminary Design Drawings (Exhibit 11). These impact assumptions will be refined as necessary based on the Applicant's experience with constructing wind power projects. A list of all invasive plant species observed during Facility-specific field investigations (within the anticipated limits of disturbance) and maps of any concentrations of invasive species will be included. In addition, an Invasive Species Prevention and Management Plan will be included in the Application; however, a list of all planting and seeding materials will not be available at the time of Application submission. Rather, a list of typical planting and seeding materials will be provided. Specifically, the Invasive Species Control Plan will include:
  - 1) A summary of the survey methods the Applicant used to identify existing invasive species;

- 2) Specific methods the Applicant will use to ensure that imported fill and fill leaving the site will be free of invasive species to the extent practicable;
  - 3) Indication whether fill materials to be placed within the Facility Site will be free of invasives or only used within the area infested with said invasive species;
  - 4) site grading, erosion and sediment control methods that will be used to prevent spread or proliferation of invasive species;
  - 5) Details of cleaning procedures for removing invasive species from equipment and personnel, and properly disposing of materials;
  - 6) Implementation plans for ensuring that equipment arrives at and departs the Facility Site clean and free of invasives;
  - 7) Description of the Best Management Practices or procedures that will be implemented, and the education measures that will be used to educate workers;
  - 8) Details of post-construction monitoring and survey measures and procedures for revising the Invasive Species Control Plan in the event that the goals of the initial plan are not met within a specified timeframe;
  - 9) Anticipated methods and procedures used to treat invasive species that have been introduced or spread as a result of the Facility.
- c) A detailed description of those measures that will be implemented to avoid, minimize and/or mitigate Facility impacts to plant communities.
- d) Information on vegetation, wildlife and wildlife habitats including:
- 1) Identification of plant communities and species.
  - 2) Final bat survey reports along with comments and supplemental information requested from the USFWS and NYSDEC, if any.
  - 3) Final avian survey reports along with comments and supplemental information requested from the USFWS and NYSDEC, if any.
  - 4) Information on amphibians and reptiles, based on the New York State Amphibians & Reptile Atlas Project and assessments of suitable habitat in the vicinity of the Facility area. Information on reptile and amphibian distribution ranges based on database records obtained from the NYS Natural Heritage Program (NHP) and the USFWS. Information on any species observed in field reviews of Facility site and habitat evaluations.
  - 5) Descriptions of wildlife habitat referencing plant community descriptions.
- e) A plant species and wildlife species inventory based on existing data, on-site surveys, and/or the availability of suitable habitat, and which will identify species that could occur in the Facility Area at some time during the year. The inventory will specify whether species were observed, known to occur in Facility area, or are predicted to occur based on habitat characteristics.
- f) Discussion of potential construction-related impacts to vegetation, wildlife and aquatic organisms, habitats and wildlife travel corridors, if any. Discussion of potential operational impacts and potential impacts on documented wildlife travel corridors, if any. Information regarding the presence of threatened and endangered (T&E) species, Species of Special Concern (SSC), and Species of Greatest Conservation Need (SGCN), and the Facility's potential to impact such species or their habitats will also be discussed. Documented T&E, SSC, and SGCN species will be based on database records obtained from the NYS Natural Heritage Program (NHP), other known records documented by NYSDEC staff (to be provided to the Applicant by NYSDEC), and the USFWS. Impacts to vegetation will be addressed in part (b) of Exhibit 22.
- g) A detailed description of those Facility design, construction controls, and Facility operational measures that can be reasonably implemented to avoid or mitigate impacts to wildlife and wildlife habitat within the Facility area. Measures to avoid or mitigate impacts to vegetation will be addressed in part (c) of Exhibit 22.

- h) Avian and bat impact analysis and monitoring program descriptions including:
- 1) An estimate of Facility-related impacts to avian and bat species, habitat and migration corridors, based on the results of site-specific studies, which were conducted in accordance with a work plan agreed upon with the NYSDEC, and standard industry practice. Analyses will include potential forest fragmentation impacts associated with the Facility, and cumulative avian species mortality estimates and forest fragmentation effects taking into account the estimated impacts associated with the proposed Arkwright Summit Wind Project (Towns of Arkwright and Pomfret, Chautauqua County) and the proposed Ball Hill Wind Project (Towns of Hanover and Villenova, Chautauqua County). For the purposes of the fragmentation analysis it is assumed that indirect effects will extend up to 300 feet beyond the limits of disturbance.
  - 2) A literature and impact analysis to assist in determining potential impacts to New York State threatened northern long-eared bat as a result of operation of the Facility.
  - 3) Details associated with a proposed post-construction monitoring program to be implemented to assess direct and indirect impacts of the wind Facility on avian and bat species. The Application will include a statement and summary of the fatality and bird avoidance and habituation studies to be conducted. The Application will also include a statement that the post-construction monitoring program, including specifics on study duration, search frequency, search areas, number and location of turbines to be searched, concurrent data collection and analysis, and carcass collection, will be developed in consultation with the NYSDEC and USFWS.
  - 4) An outline of the Bird and Bat Conservation Strategy for the Facility, including avoidance and minimization techniques and operational adjustments to be implemented at the Facility that will be developed in consultation NYSDEC, NYSDPS and USFWS prior to the start of Facility operation.
- i) Maps depicting the boundaries of wetlands within 500 feet of proposed Facility components based on data collected during on-site field delineations within a 200-foot wide corridor centered on linear Facility components (e.g., access roads, buried electrical interconnect, overhead generator lead line), and within a 200-foot radius of turbines and other components such as permanent meteorological towers, operations and maintenance (O&M) building, and substations. The 200-foot study corridor/radius will allow for identification of all impacts to wetland resources within areas to be disturbed during Facility construction. Aerial photo interpretation, existing databases, and estimation based on the results of on-site studies will be used to extend field delineated wetland boundaries out to 500 feet for mapping purposes. The determination of wetland boundaries during on-site field delineations will be made by EDR personnel according to the three-parameter methodology described in the U.S. Army Corps of Engineers (Corps) *Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North central and Northeastern Region*. Wetland boundaries will be defined in the field by sequentially numbered pink surveyor's flagging marked "wetland delineation", which will be located using Global Positioning System (GPS) technology with reported sub-meter accuracy.
- j) A description of the characteristics of each field delineated wetland, a summary of the field data collected regarding vegetation, soils, and hydrology and copies of all Wetland Determination Data Forms.
- k) Qualitative assessment scores for each delineated wetland in order to assess functions and values of delineated wetlands based on a methodology similar to *The Highway Methodology Workbook Supplement, Wetlands Functions and Values: A Descriptive Approach* published by the U.S. Army Corps of Engineers New England District in 1999 or the *Ohio Rapid Assessment Method for Wetlands, Version 5.0* published by the Ohio EPA, Division of Surface Water in 2001.
- l) A description of the hydrologic connectivity of all delineated wetlands including a summary of the anticipated state and/or federal jurisdictional of each delineated wetland. A summary of all off-site

wetlands that may be hydrologically or ecologically influenced by development of the Facility and the wetlands identified above, to determine their general characteristics and relationship, if any, to wetlands delineated as above. With respect to State jurisdiction under ECL Article 24, NYSDEC may identify its authority as to delineated and verified wetland that meets State criteria.

- m) A quantification of temporary and permanent impacts to wetlands (and any state-regulated 100-foot adjacent areas) based on the proposed footprint of all Facility components and associated impact assumptions. Such impacts will be presented in a table that identifies the type of impact and associated crossing methodology.
- n) A general discussion of measures considered, and indication of methods to be implemented to avoid wetland impacts including stream crossing methodology and a description of Facility construction and operation in relation to the standards established by ECL Article 15. Where impacts are unavoidable, the anticipated mitigation measures to be implemented to offset impacts to wetlands (and any state-regulated 100-foot adjacent areas). This section of the Application will also describe the anticipated Environmental Compliance and Monitoring Program to be implemented during Facility construction to adhere to various permit conditions and protect sensitive environmental resources such as wetlands, streams, and wildlife habitats. The Facility's Environmental Compliance and Monitoring Program will include an Environmental Monitor(s) and the duties of the monitor will also be described in this section of the Application.
- o) An identification of State and Federal T&E species documented within or adjacent to the Facility area, as described in Stipulation 22(f) above, and an T&E species mitigation plan, if needed.
- p) An Invasive Species Prevention and Management plan as described in Stipulation 22(b) above.
- q) A quantification of temporary and permanent impacts to agricultural land based on the proposed footprint of all Facility components and associated impact assumptions. A discussion of potential mitigation, if any, following the most recent edition of guidelines established by the New York State Department of Agriculture and Markets (NYSDAM). This information will also be referenced in Exhibit 4 (Land Use).

### **Stipulation 23– 1001.23 Exhibit 23: Water Resources and Aquatic Ecology**

This exhibit will include a study of the groundwater, surface water, and aquatic ecology impacts of the Facility consisting of the identification and mapping of existing conditions, an impact analysis, and proposed impact avoidance and mitigation measures. Exhibit 23 shall contain:

- a) Information on groundwater including:
  - 1) Maps showing depth to bedrock and depth to water table throughout the Facility area using Soils Survey of Chautauqua County, New York.
  - 2) Publicly available water well data including information on the depth and yield for each well in tabular format (if provided), based on data provided by the Chautauqua County Department of Health and the NYSDEC. A list of private wells to be identified through a well survey sent to all residences/businesses located within a 1-mile radius of the proposed Facility along with a corresponding GIS parcel map. This exhibit will also include publicly available information on groundwater aquifer and recharge areas.
  - 3) Information regarding potential groundwater impacts, including known public and private water supply wells, groundwater aquifers (the only Facility components located over a mapped aquifer will be the point of interconnect substation and a small portion of the overhead transmission line), and anticipated areas of potential dewatering during construction. With respect to mitigation to potential groundwater impacts, please see b)5) below.

- b) Information on surface waters including:
- 1) A map identifying all surface waters within the Facility area using data from Chautauqua County, NYSDEC, ESRI and stream data collected during the on-site wetland delineation.
  - 2) A description of the characteristics of streams in the Facility area using publicly available data, and when available, supplemented by field data collected during wetland and stream delineations. Additional information regarding the physical characteristics (water quality, flow, etc.) using publicly available data, and when available, supplemented by field data collected during wetland and stream delineations. This section of Exhibit 23 will also include biological aquatic resource characteristics (fish species) based on data obtained from the NYSDEC. Specific to invasive species, please note that common aquatic invasive species as identified by the NYSDEC (<http://www.dec.ny.gov/animals/50272.html>), which are observed while conducting delineations and field investigations, will be documented and included in the Application. However, a comprehensive inventory of aquatic species or aquatic invasive species will not be included.
  - 3) An identification of surface water drinking intakes within one mile of the Facility or, if none are located within one mile, the nearest downstream surface water drinking supply intake. A discussion of potential impacts to drinking water supplies due to the Facility will be included.
  - 4) A calculation of the approximate acreage and linear distance of surface waters that would be temporarily or permanently impacted based on the proposed Facility footprint and associated impact assumptions, and field delineated stream and wetland boundaries. Such impacts will be presented in a table that identifies the type of impact (e.g., buried collection, access road, overhead 115 kV line) and associated crossing methodology and protection measures (e.g., HDD with appropriate bore pit setbacks, access road utilizing stream crossings guidelines and Best Management Practices [BMPs]). Any stream crossings regulated under Article 15 of the ECL will be identified and compliance with applicable standards will also be discussed. A statement that BMPs and guidelines for crossing streams regulated under Article 15 will be developed in consultation with NYSDEC and NYSDPS. This section of Exhibit 23 will also include a discussion of potential impacts to water resources due to construction activities on steep slopes.
  - 5) The Application will identify reasonable avoidance and mitigation measures for groundwater and surface water. Any work prohibition dates associated with crossings of State-protected streams under ECL Article 15 will be established in consultation with the NYSDEC, and crossing methods of State-protected streams will meet the NYSDEC stream crossing guidelines.
- c) Information on stormwater including:
- 1) Prior to construction, the Applicant will seek coverage under the SPDES General Permit with a Notice of Intent for Stormwater Discharges from Construction Activity issued in January 2015 and effective on January 29, 2015 (modified July 15, 2015) at <http://www.dec.ny.gov/chemical/43133.html>. This authorization is subject to review by NYSDEC, and is independent of the Article 10 process. However, the Article 10 Application will include a preliminary stormwater pollution prevention plan (SWPPP), which will be prepared consistent with the SPDES General permit and will describe in general terms the sediment control practices that will likely be implemented during construction activities, and the stormwater management practices that will be used to reduce pollutants in stormwater discharges after Facility construction has been completed. The Preliminary SWPPP will provide typical information on temporary and permanent erosion and sediment control measures (vegetative and structural), construction phasing and disturbance limits, waste management and spill prevention, and site inspection and maintenance.

- 2) The Preliminary SWPPP identified in Stipulation 23(c)(1) above will include typical information on permanent, post-construction erosion and sediment control measures (vegetative and structural), along with the anticipated stormwater management practices that will be used to reduce the rate and volume of stormwater runoff after construction has been completed. However, the Preliminary SWPPP will not include pre- or post-construction stormwater runoff calculations.
- d) Information on chemical and petroleum bulk storage including:
    - 1) A preliminary Spill Prevention, Containment and Counter Measures (SPCC) Plan.
    - 2) It is not anticipated that the Facility will require the on-site storage or disposal of large volumes of any substances subject to regulation under the State of New York's chemical and petroleum bulk storage programs (e.g., fuel oil, petroleum, etc.). Should the O&M facility require petroleum or other hazardous chemical be stored on-site, the Article 10 Application will identify such substances and demonstrate compliance with the State laws.
    - 3) It is not anticipated that the Facility will require the on-site storage or disposal of large volumes of any substances subject to regulation under local laws. Should the O&M facility require petroleum or other hazardous chemical be stored on-site, the Article 10 Application will identify such substances and demonstrate compliance with the Local laws.
  - e) Information on aquatic species and invasive species including:
    - 1) Documentation of common aquatic invasive species identified by the NYSDEC species observed while conducting delineations and field investigations. See Stipulation 23(b)(2) above for additional detail.
    - 2) An evaluation of reasonable avoidance and minimization measures to reduce construction and operation impacts to surface waters and biological aquatic resources.
  - f) The Facility will not require cooling water, and therefore cooling water withdrawals will not be addressed in the Application.

## **Stipulation 24 – 1001.24 Exhibit 24: Visual Impacts**

Exhibit 24 shall contain:

- a) A Visual Impact Assessment (VIA) conducted to determine the extent and assess the significance of Facility visibility. The VIA procedures used for this study will be consistent with general approach or limited provisions included in methodologies developed by various state and federal agencies, including the U.S. Department of the Interior, Bureau of Land Management (1980), U.S. Department of Agriculture, National Forest Service (1974), and the New York State Department of Environmental Conservation (2000). The components of the VIA shall include identification of visually sensitive resources, viewshed mapping, confirmatory visual assessment fieldwork, visual simulations (photographic overlays), cumulative visual impact analysis through a cumulative viewshed analysis taking into account the Arkwright and Ball Hill Wind Projects based on publicly available data, and proposed visual impact mitigation. The VIA shall include:
  - 1) A visibility assessment and identification of visually sensitive resources within the visual study area. In addition, Landscape Similarity Zones will be defined based on the similarity of features such as landform, vegetation, water, and land use patterns. The following Landscape Similarity Zones will be described in the VIA:
    - i) Rural Uplands/Ridgelines
    - ii) Rural Valleys
    - iii) Forest

- iv) Village/Hamlets
  - v) Transportation Corridors
  - vi) Waterfront/Open Water
- 2) An analysis of potential visibility and identification of locations within the visual study area where components may be visible. Visible areas will be identified on viewshed maps and verifying line of sight conditions in the field. An expert consultant will drive public roads and visit previously identified scenic resources and other public vantage points within the 10-mile radius study area to document locations from which the proposed Facility would likely be visible, partially screened, or fully screened. This determination will be made based on the location of helium filled balloons that provide a locational and scale reference for the proposed Facility. Photos will be taken from representative viewpoints throughout the visual study area. All photos will be obtained using a digital SLR camera with a focal length between 28 and 35 mm (equivalent to between 45 and 55 mm on a standard 35 mm film camera). This focal length is the standard used in visual impact assessment because it most closely approximates normal human perception of spatial relationships and scale in the landscape. Viewpoint locations will be documented, using hand-held GPS units and high-resolution aerial photographs (digital ortho quarter quadrangles). The time and location of each photo will be documented on all electronic equipment (camera, GPS unit, etc.) and noted on field maps and data sheets. Viewpoints photographed during field review will generally represent the most open, unobstructed available views toward the Facility. Photographs that document the existing conditions and character of the visual study area will be obtained under a variety of seasonal and weather conditions. However, for the most part photos will be obtained during the “leaf-off” season to minimize the potential screening effect of forest vegetation. In addition, photos to be used in the development of simulations will generally avoid overcast sky conditions and direct views into the sun. Landscape features that allow identification of the viewpoint and/or contribute to the composition and aesthetic quality of the photos will be included whenever possible.
  - 3) The viewshed analysis described above will assist in identification of locations within the visual study area where it may be possible to view the above ground transmission structures from ground-level vantage points. This analysis includes identifying potentially visible areas on viewshed maps and verifying line of sight conditions in the field. Access roads will be included in any visual simulation in which they would be visible.
  - 4) Photographic simulations developed by constructing a three-dimensional computer model of the proposed turbine and turbine layout based on specifications and coordinates provided by the Applicant. Along with the turbines, proposed clearing limits and the location and appearance of proposed meteorological towers or other visible components of the Facility will also be incorporated into the photographic simulations.
  - 5) Viewshed analysis based on the anticipated FAA lighting plan will show where the Facility lights will potentially be visible at night. Several viewpoints will also be selected for the development of nighttime simulations as well. The selected nighttime views will need to be in dark settings with minimal ambient lighting to allow successful nighttime photography. These viewpoints will also be selected to show variety in sky conditions (degree of darkness), number of lighted turbines, and other lights in the landscape. In addition, lighting specifications for FAA lights on turbines, and typical lights to be used at the substation and O&M facility, will be included in the Article 10 Application. The usage of such lights in the context of safety, lumens, etc. will also be addressed.
  - 6) Photographic simulations developed by using Autodesk 3ds Max Design 2015® (or similar) to create a simulated perspective (camera view) to match the location, bearing, and focal length of each existing conditions photograph. Existing elements in the view (e.g., buildings, existing

transmission structures, roads) will be modeled based on aerial photographs and DEM data in AutoCAD Civil 3D 2014® (or similar). A three dimensional (“3-D”) topographic mesh of the landform (based on DEM data) will then be brought into the 3-D model space. At this point minor adjustments are made to camera and target location, focal length, and camera roll to align all modeled elements with the corresponding elements in the photograph.

- 7) The VIA will include a discussion of short term visual impacts associated with the clearing of trees, construction of access roads, erection of turbines and transmission structures, and general construction activity.
- 8) An evaluation of impacts to visual resources from Facility operation by a panel of registered landscape architects (two in-house and one independent) using a standardized rating form. The methodology utilized in this evaluation will be a simplified version of the U.S. Department of the Interior, Bureau of Land Management (BLM) contrast rating methodology (USDOI BLM, 1980).
- 9) A Facility-specific shadow flicker analysis using WindPRO software and the associated shadow module. Input variables and assumptions used for shadow flicker modeling calculations for the proposed Facility will include:
  - i) Latitude and longitude coordinates of proposed wind turbine sites
  - ii) The rotor diameter and hub height of the largest turbine model under consideration
  - iii) Latitude and longitude coordinates for residential structures (both participating and non-participating), schools, office buildings, storefronts, or high-use public recreation areas (e.g., campgrounds) located within a 10 rotor diameter radius of all proposed turbine locations (the shadow flicker study will be limited to the area defined by 10 times the rotor diameter of the turbines)
  - iv) USGS 1:24,000 topographic mapping and USGS digital elevation model (DEM) data (10-meter resolution)
  - v) Annual wind rose data
  - vi) The average monthly percent of available sunshine for the nearest National Oceanic and Atmospheric Administration weather station in Buffalo, NY
  - vii) The Applicant will work with the Towns to identify, within the 10 rotor diameter radius study area, all primary structures and any officially-announced, planned land use developments, such as residential sites or community buildings, under review or already approved for site plan development or building permit issuance at the time of filing the Article 10 Application. All data obtained will be used in the shadow flicker assessment. In addition, shadow flicker contours that are generated by the WindPRO software will be overlain on mapping of known public recreational areas (e.g., trails, state forest land).
  - viii) The analysis will identify potential mitigation measures needed (if any) to offset any identified impacts. The report will specify the mitigation options, and for illustrative purposes, discuss what additional measures could feasibly be implemented once the Facility is constructed.
- 10) An assessment of various visual impact mitigation strategies including screening (landscaping), architectural design, visual offsets, relocating or rearranging Facility components, reduction of Facility component profiles, alternative technologies, Facility color and design, and lighting options. Mitigation will also be assessed in relation to NYSDEC Program Policy DEP-00-2 (NYSDEC, 2000).
- 11) Identification and description of all visually sensitive resources within the visual study area (i.e., up to 10 miles from the perimeter turbines), and assessment of probable impacts of the facilities on these resources. Visually sensitive resources will also include any specific location identified by municipal planning representatives, DPS, DEC and OPRHP.



- b) A viewshed analysis will be included in the VIA that identifies the locations within the visual study area where it may be possible to view the proposed wind turbines and other proposed above ground facilities from ground-level vantage points. This analysis includes identifying potentially visible areas on viewshed maps. The viewshed analysis methodology includes:
- 1) Maps showing the results of viewshed analysis prepared based on the screening effect of topography alone, and the combined screening effect of mapped forest vegetation and topography will be prepared. Viewshed analysis will be based on maximum blade tip height, FAA warning light height, and the height and location of proposed overhead transmission structures. These maps will be presented on the most recent edition 1:24,000 scale topographic base map, and in addition to the results of the viewshed analysis, the maps will also depict visually sensitive sites, viewpoint locations, and Landscape Similarity Zones. The viewshed analyses will serve to document the line of sight profiles for resources of statewide concern.
  - 2) Ten-mile radius viewshed maps to determine the extent of potential turbine visibility based on existing topography and vegetation, and the location and height of the proposed wind turbines. Topographic viewshed maps will be prepared using 10m USGS DEM data (7.5-minute series), coordinates/dimensions of all proposed turbines, an assumed viewer height of 5.5 feet (1.7 meters), and ESRI ArcGIS® software with the Spatial Analyst extension. The viewshed analyses will be based upon a 500 foot blade tip height (the largest turbine models contemplated for this Facility so as to present a worst-case scenario), a 325 foot (99 meter) FAA warning light height, and the location of all proposed turbines. The analyses run at blade tip height illustrates maximum potential day time visibility, while the analyses run at the height of the FAA aviation warning light defines maximum potential nighttime visibility (based on the anticipated FAA lighting plan). The resulting topographic viewshed maps define the maximum area from which any turbine within the completed Facility could potentially be seen within the study area (ignoring the screening effects of existing vegetation and structures). A vegetation viewshed will also be prepared to illustrate the potential screening provided by forest vegetation. The vegetation viewshed will be prepared in the same manner as the topographic viewshed, except that a base vegetation layer was created using the 2011 USGS National Land Cover Dataset (NLCD) to identify the mapped location of forest land (including the Deciduous Forest, Evergreen Forest, and Mixed Forest NLCD classifications) within the visual study area. Based on standard visual assessment practice, the mapped locations of the forest land will be assigned an assumed height of 40 feet and added to the DEM.
  - 3) Identification of visually sensitive resources using a variety of data sources including digital geospatial data (shapefiles) obtained primarily through the NYS GIS Clearinghouse or the Environmental Systems Research Institute (ESRI), national, state, county and local agency/program websites as well as websites specific to identified resources; the DeLorme Atlas and Gazetteer for New York State; USGS 7.5-minute topographical maps; and web mapping services such as Google Maps. Identified aesthetic resources of statewide or local significance, areas of intensive land use within five miles of the proposed Facility, and location of visually sensitive resources within the visual study will be included with the Article 10 application. Visually sensitive resources will also include any specific location identified by municipal planning representatives, DPS, DEC and OPRHP.
  - 4) Identification of representative viewpoints to be used for visual simulations. Representative viewpoints will be selected based upon the past and future consultation with, and feedback provided by, municipal planning representatives, DPS, DEC and OPRHP; while also balanced by the criteria below to ensure that a variety of views are represented. Specifically, the selected viewpoints should:

- i) Provide open views toward the Facility site from different directions throughout the visual study area (as determined through field verification).
  - ii) Illustrate the most open views available from potentially significant public resources within the visual study area.
  - iii) Illustrate open, representative views from the various “Landscape Similarity Zones” within the visual study area, which are defined based on the similarity of features such as landform, vegetation, water, and land use patterns.
  - iv) Illustrate open views of the proposed Facility that may be available to representative viewer/user groups within the visual study area.
  - v) Illustrate views of different numbers of turbines and other Facility infrastructure, from a variety of viewer distances, and under different lighting/sky conditions, to illustrate the range of visual change that could occur with the Facility in place.
- 5) Photo-realistic simulations of completed turbines and other visible Facility infrastructure from each of the selected viewpoints. Viewpoints will be selected, in part, for their open views and as such there will be no significant screening of the proposed Facility due to vegetation in the photographic simulations. Therefore, it is not anticipated that both leaf-on and leaf-off simulations will be prepared.
  - 6) Due to the typical height of individual turbines and the geographic extent of a given wind power Facility, mitigation measures such as screening of individual turbines with earthen berms, fences, or planted vegetation will generally not be effective in reducing visibility. Therefore, additional simulations specific to mitigation are not anticipated. However, to the extent that site-specific mitigation measures are proposed, then simulations will be prepared to show the effect of mitigation.
  - 7) A composite contrast rating for each viewpoint (using the rating form submitted as Appendix L of the PSS). All rating forms will be included in the Application. A narrative description of the existing view and overall visual effect representing the nature and degree of visual change resulting from construction and operation of the Facility on scenic resources and viewers represented by each of the selected viewpoints using comments provided by the rating panel members.
  - 8) A study of potential shadow flicker impacts on nearby receptors, including an assessment of the predicted extent, frequency, and duration and as described in Stipulation 24(a)(9) above.

## **Stipulation 25 – 1001.25 Exhibit 25: Effect on Transportation**

Exhibit 25 shall contain:

- a) A conceptual site plan that will identify access road locations and widths, and the number of turbines to be accessed per road. In addition, a Route Evaluation Study will be prepared for the Facility and included in the Article 10 Application, which will identify public road constraints (e.g., inadequate turning radii/intersections and road widths) and potential haul routes.
- b) A description of the pre-construction characteristics of roads in the area including:
  - 1) Data on traffic from the New York State Department of Transportation (NYSDOT) Traffic Data Online Viewer to review existing traffic volumes along proposed approach and departure routes for the Facility. Accident information along those routes contained in the Accident Location Information System (ALIS) will be obtained from the local police agencies. A table of traffic volumes for all roads in the study area and a summary of information on accidents from the local police agencies.

- 2) A review of school district routes within the transportation study area. This will be accomplished by obtaining school bus routes, number of buses, and times from the school districts. In addition, delivery routes for Facility components from route I-90/I-86 will be analyzed.
  - 3) A review of locations of emergency service provider stations (police, fire, ambulance, and hospitals) that serve the Facility Site, including approximate distances to turbine locations, based on consultation with local emergency service providers. A map of locations and routes. In addition, during Facility operation a map of all emergency service provider locations and routes will be posted in the Facility's O&M building (and provided to the emergency service providers), and all turbines will have a unique 911 ID/address.
  - 4) A summary of load bearing and structural rating information in inspection report form. An expert consultant will drive all potentially impacted roads to identify Load Restricted Bridges, Culverts, and/or roadways along the proposed approach and departure routes for the Facility. If restricted bridges or culverts are located along the proposed delivery routes, the Application will include a description of potential solutions for alternative routes around these restricted structures or provide descriptions of potential improvements for providing stability during transport of equipment and machinery at these locations. For non-posted bridges along those routes, information from the NYSDOT's Biennial Inspection Reports in WinBolts will be reviewed to determine potential load capacity restrictions.
  - 5) The Facility site is not within a congested urbanized area, therefore twenty-four hour traffic counts are not applicable and will not be included in the Article 10 Application.
- c) Facility trip generation characteristics including:
- 1) An estimate of the number, frequency and timing of vehicle trips will be based on the above-referenced site plan and location of turbines, along with the number of phases, estimated quantities of earthwork and materials to construct facilities. A tabulation of the anticipated construction vehicle volumes for each site, including delivery flat beds, cranes, concrete trucks, stone trucks, earth disposal trucks, and contractor workers vehicles.
  - 2) Information and routes regarding trucks carrying water, fuels, or chemicals.
  - 3) An estimate, based on site plan and location of turbines in the Application, of anticipated quantities of earthwork and materials to construct facilities. An estimate based on typical volume of materials and number of vehicles per turbine installation will be provided. In addition an estimate of construction vehicle volumes for each turbine site will be mapped and included.
  - 4) Conceptual haul routes identified by an experienced transportation engineer. Any workers and employees in regular vehicles (pick-up truck size and smaller) will access the construction site and worker parking areas through use of whichever public road route is most logical and efficient for the respective individual/vehicle, which will be stated in the Application.
- d) Traffic and transportation impact information including:
- 1) A summary of levels of service for linear segments of highways used by construction and delivery vehicles using Synchro and HCS software.
  - 2) A Route Evaluation Study that will include anticipated delivery routes and an analysis of the adequacy of these routes to accommodate construction and operation of the Facility. This section of the Application will also address potential cumulative impacts associated with the delivery routes of the Arkwright and Ball Hill Wind Projects.
  - 3) An assessment of over-size load deliveries and the adequacy of existing roads to accommodate such deliveries. A turning template of anticipated delivery vehicles and a review of aerial photography and online street view maps in conjunction with driving all potentially impacted roads will be conducted to identify physical restrictions (widths, turning radius, overhead clearance). In addition, the Applicant's consultant will utilize the CADD® turning template (or similar program) for delivery vehicles to check turning radii and impacts. An identification of

required temporary improvements and a location map will be provided and potential impacts at each temporary improvement location will be summarized. However, all improvements identified in the Application will require verification and/or update following Certification when the final turbine supplier is identified.

- 4) Identification of measures to mitigate traffic and transportation impacts, which will be presented in the Route Evaluation Study.
- 5) An identification and tabulation of all anticipated County and Town road use agreements that will be required for construction and post-construction use of public roads, including highway work permits and special use permits from the NYSDOT. A draft Road Use Agreement will be included in the Application.
- e) A description of airspace usage (including military operations) in the vicinity of the Facility using available aeronautical charts, airport approach plates, airport 5010 forms, and other available sources. No rail or bus mass transit systems will be impacted by this Facility, and therefore will not be addressed in the Application.
- f) A discussion of the aeronautical studies for the proposed Facility along with a discussion of potential impacts to air traffic control and air navigation, and identification of the nearest Air Traffic Control and Armed Forces resources to the Facility. This section of Exhibit 25 will also include:
  - 1) A statement that the Applicant has informally consulted with the Department of Defense.
  - 2) The Applicant's correspondence with airports and heliports, if any.
  - 3) All responses, if any, from the DoD and FAA.

## **Stipulation 26 – 1001.26 Exhibit 26: Effect on Communication**

Exhibit 26 shall contain:

- a) An identification of all existing broadcast communication sources in the area including:
  - 1) Results and analysis of a review of Federal Communications Commission (FCC) license data and a compiled list of AM radio stations within approximately 30 kilometers (18.6 miles) of the Facility.
  - 2) An itemized list of FM radio stations within approximately 30 kilometers (18.6 miles) of the Facility.
  - 3) Full results of a study conducted by Comsearch on the coverage of television stations and communities in the area that could potentially have degraded television reception as a result of Facility operation.
  - 4) An identification of the type of service (e.g., cellular, advanced wireless service, personal communication service) for each mobile phone carrier in Chautauqua County.
  - 5) An identification and map of microwave paths that intersect the study area including call signs, band, and licensee. In addition, the Application will contain study results evaluating the potential impact of the Facility wind turbines on licensed, proposed, and applied non-federal government microwave systems in the area.
  - 6) Results of an assessment of the emergency services communication sources in the vicinity of the Facility Site to identify potential impacts from the planned turbines. For each licensed communication source, the Application will identify the licensee, the area of operation (either County-wide or Statewide), and the frequency band(s).
  - 7) A full listing of site-based and area-wide communication licenses issued to school districts in the Facility area.
  - 8) An identification of any public utility communication sources within 2 miles of the proposed Facility and interconnection.

- 9) An analysis of the potential impacts to NEXRAD (next-generation radar) or Doppler weather radar as a result of the Facility. The response letter from the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce and discussion on how to resolve any potential concerns identified in the response letter.
  - 10) A discussion of the aeronautical studies for the proposed Facility along with a discussion of potential impacts to air traffic control and air navigation.
  - 11) Any identified concerns with military or other federal communication systems.
  - 12) Any identified concerns with GPS or other federal communication systems.
  - 13) In accordance with the 2010 Department of Homeland Security Appropriations Act, the U.S. Coast Guard terminated the transmission of all U.S. LORAN signals in 2010. There are no LORAN stations within 2 miles of the proposed Facility. The closest LORAN station had been located in Seneca Falls, New York. Therefore, this topic will not be addressed in the Application.
  - 14) An identification of the call sign, expiration, date, and operator class for each of the 48 records of amateur radio licenses in the zip codes within 2 miles of the proposed Facility.
- b) An identification of existing underground cable and fiber optic lines within 2 miles of the proposed Facility and interconnection.
  - c) A description of the anticipated effects of the proposed Facility and the electric interconnection on communication systems including:
    - 1) An identification of where residents may experience diminished TV reception for each of the potentially impacted stations.
    - 2) A map of microwave paths with the calculated Fresnel Zone within the Facility area in relation to all wind turbine locations presented in the Application.
    - 3) A statement that the Applicant will coordinate with Dig Safely New York prior to the commencement of any construction activities and that the location of communication infrastructure will be indicated on construction drawings and reviewed by the contractor prior to construction.
    - 4) An evaluation of the potential for the proposed Facility and electrical interconnection to adversely impact co-located lines due to unintended bonding. Specifically, the Application will describe the "One Call" process used for utility lines.
    - 5) Any other potential interference and a discussion of potential measures to avoid or mitigate impacts to communications systems.
  - d) A map illustrating the Facility components and relevant communication system constraints; and a statement describing how the Facility has been designed to avoid impacts to communication systems to the extent practicable.
  - e) Complaint Resolution Procedures that will include a section addressing how and when any complaints, such as degraded communication signals, are adequately investigated and addressed.
  - f) The response letter from the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce, which will identify any concerns with radar interference or other federal communication systems, and discussion on how to resolve any potential concerns identified in the response letter.

**Stipulation 27 – 1001.27 Exhibit 27: Socioeconomic Effects**

The Application will include an analysis of the following three levels of impact that the proposed Facility may have on the economy including:

- 1) On-site labor impacts.
- 2) Local revenue and supply chain impacts.
- 3) Induced impacts.

Exhibit 27 shall contain:

- a) An identification of the estimated construction workforce associated with the Facility using the National Renewable Energy Laboratory's Job and Economic Development Impact (JEDI) model. These results will be evaluated by the Applicant's construction management team to provide an estimate of the average work force, by discipline, for each quarter during construction, and an estimate of the peak construction employment level.
- b) An identification of the estimated annual construction payroll and non-payroll expenditures associated with the Facility using the JEDI model. The JEDI model output will be evaluated by the Applicant's construction management team to provide an estimate of the annual construction payroll by trade.
- c) An identification of the estimated secondary employment and economic activity associated with Facility construction using the JEDI model. The JEDI model output will be evaluated by the Applicant's construction management team, and the basis of any economic multiplier factor or other assumption(s) used will be described in the Application.
- d) An identification of the estimated number of jobs associated with Facility operation using the JEDI model. The JEDI model output will be evaluated by the Applicant's asset management team to estimate on-site payroll by discipline. An estimate of other expenditures likely to be made in the vicinity of the Facility during operation will also be provided. Additional information regarding the economic benefit associated with payments to local landowners will be provided.
- e) An identification of the estimated secondary employment and economic activity associated with Facility operation.
- f) The potential of the Facility to result in any additional operating or infrastructure costs to the local school districts.
- g) The potential of the Facility to result in any operating or infrastructure costs to local municipalities, authorities or utilities, based on consultations with any affected municipalities, public authorities, and utilities.
- h) A list of jurisdictions that are anticipated to have economic benefits due to the Facility.
- i) Detail regarding the anticipated PILOT agreement with local tax jurisdictions, including the involvement of the Chautauqua County Industrial Development Agency.
- j) The Facility is not expected to result in any additional costs to local tax jurisdictions, but will result in significant benefit through implementation of a PILOT agreement. Therefore, the Application will include a comparison of costs to benefits.
- k) Details on the emergency equipment that the Applicant will keep on site in order to respond to a fire or medical emergency. The Application will also contain a fire and emergency responder training and communication plan in order to address any training deficiencies. This plan will also include a list of the equipment, at minimum, that the Applicant will have on site for a fire or medical emergency.
- l) A detailed statement regarding Facility consistency with smart growth criteria specified in ECL 6-0107, to the extent applicable.

## **Stipulation 28 – 1001.28 Exhibit 28: Environmental Justice**

Exhibit 28 shall contain:

- a) A statement that the Facility is not expected to have any impacts on Environmental Justice areas.
- b) A map and description of nearby Environmental Justice areas identified in the Towns of Leon, Conewango, New Albion and Napoli in Cattaragus County, and analysis pursuant to §1001.28 if they fall within the area defined by 6 NYCRR Part 487.

## **Stipulation 29 – 1001.29 Exhibit 29: Site Restoration and Decommissioning**

Exhibit 29 shall contain:

- a) A statement of the performance criteria proposed for the restoration or decommission of the Facility.
- b) A complete decommissioning plan that provides specifics on the site restoration and decommissioning, including the removal or non-removal of visible above-ground and underground structures and debris, the proposed depth of removal, as well as a discussion of the non-visible improvements whose removal may be subject to landowner consultation.
  - 1) The Article 10 Application will provide a decommissioning plan that provides more specifics on site restoration and decommissioning. Unless otherwise agreed between the towns and the Applicant, the Decommissioning Plan is likely to include:
    - a) Provision describing the triggering events for decommissioning of the Facility and a statement of the performance criteria proposed for site restoration in the event the Facility cannot be completed.
    - b) Provisions for the removal of all above-ground structures and debris, but not the removal of anything 48 inches below ground level.
    - c) A 36-inch depth (e.g., tower foundations, buildings) in non-agricultural land.
    - d) Provisions for the removal of all below-ground structures to 48 inches in active agricultural land.
    - e) Provisions for the restoration of the soil and vegetation.
    - f) A timetable approved by the towns for site restoration.
    - g) The method of estimating decommissioning costs, including restoration, certified by an independent, Professional Engineer.
    - h) The method of estimating the salvage and any resale value of Facility components.
    - i) Provisions for updating the decommissioning costs and salvage/resale value.
    - j) Provisions that any Road Use Agreements will apply to the decommissioning of wind power facilities to ensure roads are adequately restored to their original condition or better prior to decommissioning activities.
    - k) The types of financial assurance, as needed and secured by the Applicant, for the purpose of adequately performing decommissioning, in an amount equal to the Professional Engineer's certified estimate of decommissioning cost, less the expected salvage value and/or resale value of the wind farm components.
    - l) Identification of procedures for the towns to access financial assurances.

- m) A provision that the terms of the Decommissioning Plan shall be binding upon the Applicant or any of their successors, assigns, or heirs.
  - n) A Provision that the towns shall have access to the site, pursuant to reasonable notice, to inspect the results of complete decommissioning.
  - o) Removal of machinery, equipment, tower, and all other materials related to the Facility is to be completed within one year of decommissioning.
- c) Information on the method and schedule for updating the cost of decommissioning and restoration, the method of ensuring funds will be available for decommissioning and restoration, and the method by which the Facility will be decommissioned and the site restored. Details on the provisions of the decommissioning and restoration language between the Applicant and landowners.
- d) Information related to nuclear power facilities will not be included in the Application.

### **Stipulation 30 – 1001.30 Exhibit 30: Nuclear Facilities**

Exhibit 30: Nuclear Facilities is not applicable to the Facility, and therefore will not be addressed in the Application.

### **Stipulation 31 – 1001.31 Exhibit 31: Local Laws and Ordinances**

During preparation of the Article 10 Application, the Applicant will continue its consultation with the Towns of Arkwright, Charlotte, Cherry Creek, and Stockton, to determine whether all such requirements have been correctly identified, and to determine whether any potential request by the Applicant that the Board elect to not apply any such local requirement could be obviated by design changes to the proposed Facility. Exhibit 31 shall contain:

- a) An updated list of applicable local ordinances, laws, resolutions, regulations, standards, and other requirements of a procedural nature required for the construction (including maintenance of construction equipment) or operation of the proposed Facility. A copy of all local laws obtained by the Applicant and/or provided by the host municipalities will be included as an appendix to the Application.
- b) There are no local procedural requirements that the Applicant requests that the Board expressly authorize the exercise thereof.
- c) The Application will identify the municipal agency or officer qualified to review and approve building permits, if any.
- d) An updated list of applicable local ordinances, laws, resolutions, regulations, standards, and other requirements of a substantive nature required for the construction or operation of the proposed Facility, including local wind energy laws and substantive Wind Overlay Zone requirements. Copies of zoning, flood plain, and similar maps, tables and/or documents related to local substantive requirements will be included in the Article 10 Application. This section of the Application will also include a review of any local standards or requirements related to emissions from construction and operation of the Facility, as well as controls to minimize impacts.



- e) The Application will address the substantive requirements of all local laws known to the Applicant, based on consultations with the Towns. The Application will also specifically address compliance with the substantive requirements of the WECS laws in Arkwright and Cassadaga. With respect to Cherry Creek, the Town has proposed an amendment to its WECS law to include the allowable height to 500 feet. If the Town enacts the Legislation and amends its law, the Application will demonstrate how the Facility will comply with the substantive requirements of the WECS law. If the Town does not amend its law to an allowable turbine height of 500 feet, the Applicant will request that the Siting Board set aside the height restriction as unduly burdensome.
- f) The Facility is not anticipated to require permits related to the use of water, sewer, or telecommunications. Therefore, it is assumed that no local laws or ordinances of a procedural nature relating to the use of essential services are relevant at this time.
- g) There are no local substantive ordinances related to the use of water, sewer, or telecommunication lines that would apply to the proposed Facility.
- h) There are no local substantive ordinances/laws that the Applicant request the Board not apply.
- i) A summary table that has two columns, one consisting of applicable substantive requirements to the Facility and the second containing a description of how the Applicant plans to adhere to those requirements. To the extent that the Applicant intends to seek relief from substantive local zoning requirements, the Application will identify those requirements and explain why they would be unduly burdensome as applied to the Facility.
- j) Identification of the zoning designation or classification of all lands constituting the Facility site, and a statement indicating if the Facility would be considered a permitted use in accordance with the zoning ordinance or local laws.

### **Stipulation 32 – 1001.32 Exhibit 32: State Laws and Regulations**

During preparation of the Article 10 Application, the Applicant will consult with the state agencies and authorities whose requirements are the subject of the exhibit, to determine whether all such requirements have been correctly identified. To the extent that the requirements below are applicable, the Applicant intends to comply with such requirements unless the Applicant specifically requests relief from the Siting Board. Exhibit 32 shall contain:

- a) An updated list of state approvals, consents, permits, or other conditions of a procedural nature required for the construction or operation of the proposed Facility which would be supplanted by Article 10 unless specifically applied by the Siting Board.
- b) Additional explanation and justification for requesting that the Siting Board authorize the DOT to issue the applicable over-sized vehicle permits and any other select procedural state approvals/permits/etc. that the Applicant would request the Board apply.
- c) Clarification on which identified State approvals, consents, permits, certificates, or other conditions apply to the proposed Facility based on the final Facility layout and consultation with the appropriate state agencies and authorities, and how the Facility will comply with those requirements.
- d) A summary table of the substantive state requirements.

- e) A list of all state approvals, consents, permits, or other conditions for the construction and operation of any offsite features (if any).

### **Stipulation 33 – 1001.33 Exhibit 33: Other Applications and Filings**

Exhibit 33 shall contain:

- a) Additional detail on other applications or filings concerning the subject matter of the proceeding, such as required approvals from the U.S. Army Corps of Engineers, the Federal Aviation Administration, the U.S. Fish and Wildlife Service, etc. or any needed air permits.
- b) A summary of any anticipated federal permit, consent, approval, or license needed for the proposed Facility.

### **Stipulation 34 – 1001.34 Exhibit 34: Electric Interconnection**

Exhibit 34 shall contain:

- a) Description of the design voltage and voltage of initial operation.
- b) A description of the type, size, number, and materials of conductors to be used on the generator lead line.
- c) Detail on the specific insulator design to be used on the 115 kV generator lead line, including if the conductor will be specular or non-specular.
- d) The length of proposed generator lead line.
- e) Detail on the specific design details for the 115 kV generator lead line towers, including drawings of typical structures.
- f) Tower and tower foundation design standards.
- g) The type of cable system to be used and the design standards for that system.
- h) Drawings of the collection system that illustrate the depth of the underground cables, along with the location of any oil pumping stations and manholes.
- i) Design drawings illustrating the equipment to be installed in both the collection and POI substations, including an explanation of the necessity of these components.
- j) Description of POI and collection substation as the terminal facilities.
- k) Description of any necessary cathodic protection measures and standards to be followed.

### **Stipulation 35 – 1001.35 Exhibit 35: Electric and Magnetic Fields**

The Article 10 Application will include an electric and magnetic field (EMF) study, to be prepared to address the requirements of 16 NYCRR 1001.35. This study will describe the assumptions used in the calculations. Exhibit 35 shall contain:

- a) An identification of every right-of-way (ROW) segment having unique EMF characteristics due to structure types and average heights, rights-of-way widths, and co-location of other transmission facilities in the ROW.
- b) The EMF base case and proposed cross sections for each unique ROW segment that show:

- 1) All overhead electric transmission, sub-transmission, and distribution facilities including the proposed Facility showing structural details and dimensions and identifying phase spacing, phasing, and any other characteristics affecting EMF emissions;
  - 2) All underground electric transmission, sub-transmission and distribution facilities;
  - 3) All underground gas transmission facilities;
  - 4) All ROW boundaries; and
  - 5) Structural details and dimensions for all structures (dimensions, phase spacing, phasing, and similar categories) and include a station number identifying the location.
- c) A set of aerials photos/drawings within the EMF study showing the exact locations of each:
- 1) Each unique ROW segment;
  - 2) Each cross-section; and
  - 3) The nearest residence or occupied non-residential building in each ROW segment with a stated measurement of the distance between the nearest edge of the residence or building and the edge of the ROW.
- d) An EMF study with calculation tables and field strength graphs for each unique ROW cross section and including:
- 1) A signature and stamp/seal by a licensed professional engineer registered and in good standing in the State of New York.
  - 2) The name of the computer software program used to model the facilities and make the calculations.
  - 3) For the electric fields, model the circuits at rated voltage and provide electric field calculation tables and field strength graphs calculated at one meter above ground level with 5-foot measurement intervals extending to the property boundary of the Facility, including digital copies of all input assumptions and outputs for the calculations.
  - 4) For the magnetic fields, model the circuit phase currents equal to the summer normal, summer short term emergency (STE Sum), winter- normal, and winter short term emergency (STE Win) loading conditions and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with 5-foot measurement intervals extending to the property boundary of the Facility, including digital copies of all input assumptions and outputs for the calculations.
  - 5) For the magnetic fields, model the circuit phase currents equal to the maximum average annual load estimated to be occurring on the power lines within ten years after the proposed Facility is put in operation and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with 5-foot measurement intervals depicting the width of the entire right-of-way and out to 500 feet from the edge of the right-of-way on both sides, including digital copies of all input assumptions and outputs for the calculations.
  - 6) There are no existing power lines within the right-of-way that the proposed transmission line will be located in, therefore this analysis is not applicable.

### **Stipulation 36 – 1001.36 Exhibit 36: Gas Interconnection**

Exhibit 36: Gas Interconnection is not applicable to the Facility, and therefore will not be included in the Application.

**Stipulation 37 – 1001.37 Exhibit 37: Back-up Fuel**

Exhibit 37: Back-up Fuel is not applicable to the Facility, and therefore will not be included in the Application.

**Stipulation 38 – 1001.38 Exhibit 38: Water Interconnection**

Exhibit 38: Water Interconnection is not applicable to the Facility; however, water supply needs at the O&M building or other Facility facilities will be explained in the Article 10 Application.

**Stipulation 39 – 1001.39 Exhibit 39: Wastewater Interconnection**

Exhibit 39: Wastewater Interconnection is not applicable to the Facility; however, wastewater treatment at the O&M building or other Facility facilities will be explained in the Article 10 Application.

**Stipulation 40 – 1001.40 Exhibit 40: Telecommunications Interconnection**

Exhibit 40 shall contain:

- a) A description of how generating Facility operational data will be transmitted to the NYISO.
- b) An identification of communications methods proposed for the O&M facility communication with the proposed generating facilities; with the interconnected utility system owners and operators; with any regional or national control center or system monitor and with the public, including emergency responders.

**Stipulation 41 – 1001.41 Exhibit 41: Application to Modify or Build Adjacent**

Exhibit 41: Application to Modify or Build Adjacent is not applicable to the Facility, and therefore will not be included in the Application.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered:

**Cassadaga Wind LLC**  
**As to all Stipulations identified above agree:**

By: \_\_\_\_\_

Name: \_\_\_\_\_  
Dated: \_\_\_\_\_

**New York State Department of Public Service**  
**As to all Stipulations identified above agree:**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Dated: \_\_\_\_\_

**New York State Department of Environmental Conservation**  
**As to all Stipulations identified above agree:**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Dated: \_\_\_\_\_