A new Part 1101 of Title 16 is added to read as follows:

Chapter XI, Title 16 of NYCRR Part 1101 Major Renewable Energy Facility Siting

Subpart 1101-1. Major Renewable Energy Facility Pre-application Requirements.

Section 1101-1.1. Pre-application requirements.

- (a) Wetland delineation.
 - (1) At the earliest point possible in the applicant's preliminary project planning, the applicant shall conduct a wetland delineation to determine the boundaries of all freshwater wetlands present on the facility site that are within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, access roadways, and utility tie-ins. For adjacent properties without accessibility, wetland delineation surveys shall be based on remote sensing data, interpretation of existing wetland and soils mapping, observations from adjacent accessible properties, and current and historical aerial imagery.
 - (2) The applicant shall submit to the office a draft wetland delineation report summarizing the wetland characteristics and Cowardin classifications of all Federal, State, and locally protected wetlands, the wetland class consistent with 6 NYCRR Part 664, a summary of the field data collected, mapping depicting all wetlands, and associated spatial data of the field delineated wetland features.
 - (3) The applicant shall consult with the office, to determine the status of the delineated protected wetlands. The office may conduct a site visit to determine which wetlands are protected pursuant to ECL article 24, and to advise with respect to potential impacts to jurisdictional wetlands.
 - (4) The office, in consultation with other relevant State

and Federal agencies (e.g., NYSDEC, APA, USACE), shall determine if any additional information shall be submitted in support of a wetland jurisdictional determination. The office, with a copy to the NYSDEC or the APA, shall provide a final approved jurisdictional determination to the applicant within sixty (60) days of receipt of the applicant's draft wetland delineation report, provided that weather and ground conditions are suitable for making such a determination. In the event that weather or ground conditions prevent the office from making a determination within sixty (60) days, the office shall provide a jurisdictional determination to the applicant as soon as practicable, following suitable weather and ground conditions.

- (5) The applicant shall provide the approved wetland delineation and associated report in the application as required in section 1101-2.14 of this Part.
- (b) Water resources and aquatic ecology.
 - (1) At the earliest point possible in the applicant's preliminary project planning, the applicant shall conduct a surface water delineation to identify the location of all surface waters present on the facility site that are within one hundred (100) feet of areas to be disturbed by construction, including the interconnections. The surface water map shall indicate the jurisdictional boundaries of all protected waterbodies regulated pursuant to ECL article 15. For adjacent properties without accessibility, waterbody delineations may be estimated using remote sensing data, interpretation of waterbody and soils mapping, topographic maps, observations from adjacent accessible properties and aerial imagery.
 - (2) The applicant shall submit a draft surface water delineation report to the office consisting of a description of the waterbody characteristics, NYS water quality classification of mapped features, the Fisheries Index Number (FIN) or Waterbody Index Number (WIN), a description of stream flow (perennial, intermittent, or ephemeral), summary of the field data collected, mapping depicting all surface

waters identified, and associated spatial data.

- (3) The applicant shall consult with the office to determine which waters are protected pursuant to ECL article 15.
- (4) The office, in consultation with other relevant State and Federal agencies (e.g., NYSDEC, USACE), shall determine if any additional information must be submitted in support of a surface waters jurisdictional determination. The office, with a copy to the NYSDEC, shall provide a final approved jurisdictional determination to the applicant within sixty (60) days of receipt of the applicant's draft surface water delineation report, provided that weather and ground conditions are suitable for making such a determination. In the event that weather or ground conditions prevent the office from making a determination within sixty (60) days, the office shall provide a determination to the applicant as soon as practicable, following suitable weather and ground conditions.
- (5) The applicant shall provide an approved surface water delineation report in the application as required by section 1101-2.13 of this Part.
- (c) NYS threatened or endangered species.
 - (1) At the earliest point possible in the applicant's preliminary project planning and prior to commencing any wildlife surveys, the applicant shall conduct a wildlife site characterization summarizing existing public information on bird, bat, and other species, including, but not limited to, New York's Environmental Assessment Form (EAF) Mapper, New York Natural Heritage Program (NYNHP), United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation(iPaC) and Environmental Conservation Online System (ECOs) databases, New York's Environmental Resource Mapper, NYSDEC Nature Explorer, eBird, Audubon Christmas Bird Counts, United States Geological Survey (USGS) breeding bird surveys, the current New York Breeding Bird Atlas III program, New York State Ornithological Association, local

birding organizations, and North American Bat Monitoring Program's data on bat species ranges or NYSDEC bat information. With respect to NYS threatened or endangered species or species of special concern, the wildlife site characterization shall include:

- (i) Identification of endangered, threatened, or species of special concern documented within one (1) mile of the proposed facility, including access roads, interconnections, and connecting lines, from available data sources. Records of threatened and endangered species identified within the last five (5) years shall be highlighted or otherwise identified.
- (ii) For each listed animal species documented from available data sources, provide an evaluation of current habitat suitability for those species at the project site.
- (iii) Landscape features and resources of potential concern within five (5) miles of the facility that may function to funnel or concentrate birds and bats, with a focus on NYS threatened or endangered species, during migration or for feeding, breeding, wintering, or roosting activities, such as national wildlife refuges, wildlife management areas, grassland focus areas, core forest blocks (contiguous areas one hundred fifty (150) acres or larger), Audubon Important Bird Areas, high elevation mountaintops, prominent ridgelines, forested riparian areas, known hibernacula, records of caves and sub-surface mines, or other significant habitat areas.
- (iv) Geographical, topographical, and other physical features within five (5) miles of the facility, interconnections, connecting lines, and access roads.
- (v) National Wetlands Inventory (NWI) and NYSDEC mapped wetlands, streams, waterbodies, and other

resources that may be relevant to siting of the proposed facility.

- (2) The applicant shall provide the results of the wildlife site characterization and project details (including as much information available at the time for facility component plans, preferably in GIS spatial data format) to the office and the NYSDEC. A meeting shall be held by these agencies and the applicant within four (4) weeks of delivery of the draft wildlife site characterization, unless otherwise agreed upon by the applicant and the Office. At this meeting, the agencies shall:
 - (i) Provide feedback as to the content and conclusions of the wildlife characterization study.
 - (ii) Enter into a non-disclosure agreement with the applicant, if necessary, and provide all additional data points beyond those identified in the draft site characterization.
 - (iii) Indicate whether the agencies consider occupied habitat of NYS threatened or endangered species to be present on the proposed facility site based on existing information and, if so, indicate where such is located.
 - (iv) Recommend habitat assessments and/or species-specific field surveys that can be completed in the appropriate seasonal windows within one year of the applicant's meeting with the agencies; and provide the applicant with current applicable protocols to conduct such surveys.
- (3) If the applicant conducts a habitat assessment and believes suitable habitat for a given species is no longer present at the site, it shall provide a copy of the assessment report to the agencies for review and a determination as to whether surveys shall be required.
- (4) If field surveys are recommended, the applicant shall develop a pre-construction study work plan in consultation

with the office and the NYSDEC. Any pre-construction work plans shall be submitted prior to the start of the survey window. All surveys should follow current applicable protocols.

- (5) As applicable for each documented species, the applicant shall conduct surveys and provide draft reports and relevant spatial data to the office and the NYSDEC within six (6) weeks of the completion of each study. If sightings of NYS threatened or endangered species were documented during the surveys, then a summary of the detections with detailed information including surveyor name, coordinates of detection, species name, species behavior, flight path, and flight altitude, if applicable, shall be provided to the agencies in advance of the draft report and within three (3) weeks of the completion of each study.
- (6) Within thirty (30) days of receipt of the survey reports, the Office shall provide preliminary occupied habitat maps for any listed species determined to occupy the proposed facility location, based on the applicant's surveys and any other relevant and credible data (e.g., NYS Natural Heritage Program record). The applicant shall utilize this information to design the facility to best avoid or minimize impacts to occupied habitat and to inform project impact assessments.
- (7) If adverse impacts to listed species or occupied habitat are unavoidable, the applicant shall submit a preliminary take estimate that identifies the species impacted, an estimate of the number of acres or individual animals that may be taken, the actions taken to minimize that impact, and a map indicating where the take is expected to occur. The preliminary take estimate shall include consideration of the type of activities being conducted, and time of year these activities will occur.
- (8) Within thirty (30) days of receipt of the applicant's preliminary take estimate, the office and the applicant shall hold a meeting to review the results of the habitat assessment(s) and survey(s), the current facility design, and

- a preliminary estimate of impact. The agencies and the applicant shall also discuss the requirements for the Net Conservation Benefit Plan, if applicable.
- (9) Within thirty (30) days of such conference pursuant to paragraph (8) of this subdivision, the office shall provide its draft determination regarding whether occupied habitat for one or more NYS threatened or endangered species exists within the facility site, the boundary of the occupied habitat, whether de minimis levels as provided in section 1101-2.12 of this Part might be attainable for grassland birds, and, if applicable, the mitigation that may be necessary if impacts cannot be avoided or mitigated.
- (10) The applicant shall provide the approved wildlife site characterization report, habitat assessment and/or survey reports, the office's take determination regarding impacts to listed species as described in paragraph (9) of this subdivision, and a Preliminary Net Conservation Benefit Plan (if required) in the siting permit application as provided in section 1101-2.12 of this Part.

(d) Cultural resources.

- (1) During the development of initial studies of the impacts on cultural resources within the project impact area (PIA) the applicant shall consult with local historic preservation groups and indigenous nations to identify cultural resources of concern which appear to be at least fifty (50) years old and are potentially eligible for listing in the State or National Register of Historic Places (S/NRHP).
- (2) All cultural resources studies, surveys, and reports, as may be required pursuant to paragraphs (3) and (4), of this subdivision, must be prepared by individuals meeting the 36 CFR 61 professional qualifications established by the Secretary of the Interior.
- (3) Archaeological resources consultation.
 - (i) The applicant shall conduct a Phase IA archeological/cultural resources study for the PIA.

- (ii) The applicant shall submit the results of the Phase IA study including a proposed Phase IB scope of work to the office, the Office of Parks, Recreation, and Historic Places/State Historic Preservation Office (OPRHP/SHPO), and any indigenous nations. Within sixty (60) days of the applicant's submittal of the Phase IA results, the office, in consultation with OPRHP/SHPO, shall inform the applicant as to whether a Phase IB field study will be required. The Office may schedule a meeting with the applicant, OPRHP/SHPO, and any indigenous nations to discuss the scope and content of the Phase IB field study.
- (iii) The applicant shall submit the results of the Phase IB study including a proposed Site Avoidance Plan to the office, OPRHP/SHPO, and any indigenous nations. Within sixty (60) days of applicant's submittal of the Phase IB results, the office, in consultation with OPRHP/SHPO, shall inform the applicant as to whether a Phase II site evaluation study will be required to assess the boundaries, integrity and significance of cultural resources identified in Phase I studies that cannot be avoided. The office may schedule a meeting with the applicant, OPRHP/SHPO, and any indigenous nations to discuss the scope and content of the Phase II site evaluation study.
- (iv) The applicant shall submit the results of the Phase II study to the office, OPRHP/SHPO, and any indigenous nations. Within sixty (60) days of applicant's submittal of the Phase II results, the office, in consultation with OPRHP/SHPO, shall inform the applicant as to whether any S/NRHP listed or eligible sites are present that would require avoidance or mitigation.
- (v) If warranted, for any sites that cannot be avoided the applicant shall conduct a Phase III data recovery investigation or propose alternative measures to mitigate impacts to any S/NRHP listed or eligible resources identified in Phase II studies. The applicant

shall provide the Phase IA, IB and, if applicable, Phase II, Phase III, site avoidance plan, and preliminary mitigation plan in the siting permit application as required by section 1101-2.09 of this Part.

- (4) Above ground resources consultation.
 - (i) The applicant shall complete a spatial analysis of areas within the zone of visual impact (ZVI) that will have positive visibility based upon topography and estimated existing vegetation and building heights.
 - (a) For solar facilities, the ZVI shall be two (2) miles.
 - (b) For wind facilities, the ZVI shall be five (5) miles.
 - (ii) The applicant shall submit the results of the ZVI spatial analysis along with an historic resources survey methodology and proposed survey boundary to OPRHP/SHPO. A historic resources survey of all properties 50-years old or older with positive visibility based on the ZVI analysis will be required. Within sixty (60) days of applicant's submittal of the ZVI analysis, historic resources survey methodology, and proposed historic resources survey boundary, the office, in consultation with OPRHP/SHPO, shall provide comments and issue a historic resources survey request.
 - (iii) Upon completion of the field work, the applicant shall submit the digital data and the historic resources survey report to the Office, OPRHP/SHPO, and any indigenous nations. Within sixty (60) days of the applicant's submittal of the digital data and report, the office, in consultation with OPRHP/SHPO, shall inform the applicant as to whether any State/National Register of Historic Places (S/NRHP) listed or eligible properties have been identified.
 - (iv) If warranted, the applicant shall prepare a historic resources effects assessment. The applicant

shall submit the assessment to the office, OPRHP/SHPO, and any indigenous nations. The applicant shall provide the ZVI, historic resources survey methodology, historic resources survey report, and, if applicable, the historic resources effects assessment in the siting permit application as required by section 1102-2.9 of this Title.

- (5) The applicant shall provide OPRHP/SHPO's effect or impact determination letter(s) in the siting permit application as required by section 1101-2.9 of this Part.
- (e) Visual impacts consultation with the office.
 - (1) The applicant shall provide a preliminary visual impact assessment addressing the following for informal staff review:
 - (i) a description of the project setting consistent with section 1101-2.8(a)(1) of this Part;
 - (ii) a description of the proposed facility consistent with section 1101-2.8(a)(4) of this Part;
 - (iii) a list and description of visual resources consistent with section 1101-2.8(b)(4)(ii) of this Part within the visual study area as defined in section 1101-2.8(b)(1) of this Part;
 - (iv) a viewshed analysis of the facility components consistent with section 1101-2.8(b) of this Part;
 - (v) a photolog of photographs depicting views from viewpoints identified consistent with criteria listed section 1101-2.8(b)(1)(iv) of this Part; and photographs of related identified above ground structures (if appropriate);
 - (vi) a preliminary list of resources with potential visibility of the facility to be studied in more detail in the application for permit.

Subpart 1101-2. Major Renewable Energy Facility Application Exhibits.

Section 1101-2.1. Exhibit 1: General Information Regarding Application, Overview, and Executive Summary.

Exhibit 1 shall contain:

- (a) the name, address, telephone number, and e-mail address of the applicant;
- (b) the address of the website established by the applicant to disseminate information to the public regarding the application;
- (c) the name, address, telephone number, and e-mail address of a representative of the applicant that the public may contact for more information regarding the application;
- (d) the name, business address, telephone number, and e-mail address of the principal officer of the applicant;
- (e) if the applicant desires service of documents or other correspondence upon an agent, the name, business address, telephone number, and e-mail address of the agent;
- (f) a brief explanation of the type of business entity that the applicant is, including its date and location of formation and the name and address of any parent entities;
- (g) if the facility is to be owned by a corporation, a certified copy of the charter of such corporation. If the facility is not to be owned by a corporation, a copy of the certificate or other documents of formation;
- (h) an overview of the proposed facility, including a brief description of the major components of the facility, including collection lines, transmission lines, interconnections, access roads, and related facilities;

- (i) an executive summary describing the proposed project, identifying the potential significant adverse environmental impacts of the proposed project, including environmental and public health and safety impacts, and explaining how such impacts will be avoided, minimized, or mitigated through the application of the relevant uniform standards and conditions, or site-specific conditions. The executive summary shall be a brief, clearly and concisely written overall analysis in plain language that assembles and presents relevant and material facts regarding the facility upon which the applicant proposes the office make its decision. The analysis shall be analytical and not encyclopedic and shall specifically address each required finding, determination and consideration the Office shall make or consider in its decision and explain the basis for granting the requested permit;
- (j) identification of any site-specific adverse environmental impacts of the proposed facility that are not addressed by the uniform standards and conditions set forth in Subpart 1102-3 of this Title, as applicable; a proposed site-specific condition to address those site-specific adverse environmental impacts; and an explanation as to why such site-specific condition is required; and
- (k) a map and all related spatial data showing geophysical, environmental, cultural resource, local law, land use, and other constraints impacting facility design and layout within the project area. Constraints shall include but are not limited to: state regulated wetlands and waterbodies, lands used in agricultural production, mineral soils groups (MSG) 1-4, environmentally sensitive areas (e.g., threatened and endangered species locations, archaeologically sensitive areas), and ORES and local setbacks.

Section 1101-2.2. Exhibit 2: Public Involvement.

Exhibit 2 shall contain:

(a) Proof of consultation with the municipality(ies) or political subdivision(s) where the proposed facility will be located as

required by Public Service Law section 144(1), this Part, and Part 1100 of this Title.

(b) A brief description of applicant's local engagement and outreach efforts as required in section 1100-1.3 of Part 1100 of this Title.

Section 1101-2.3. Exhibit 3: Location of Facilities and Surrounding Land Use.

Exhibit 3 shall contain:

- (a) A base map depicting recent-edition transportation network, topography, and built environment information, showing:
 - (1) the proposed location of the facility, including proposed electric collection and transmission lines and interconnections, as well as ancillary features located on the facility site such as roads, railroads, switchyards, energy storage or regulation facilities, substations and similar facilities;
 - (2) the proposed location of any off-site utility interconnections, including all electric transmission lines, communications lines, stormwater drainage lines, and appurtenances thereto, to be installed in New York State connecting to and servicing the site of the facility;
 - (3) the proposed limits of clearing and disturbance for construction of all facility components and ancillary features.
- (b) Maps clearly showing the location of the facility and all ancillary features not located on the facility site in relation to municipal boundaries and taxing jurisdictions, at a scale sufficient to determine and demonstrate relation of facilities to those geographic and political features.
- (c) Written descriptions explaining the relation of the location of the facility site, and all ancillary features not located on the facility site, to the affected municipalities and taxing

jurisdictions.

- (d) A map showing existing land uses within the study area.
- (e) A map of any existing overhead and underground major facilities for electric, gas or telecommunications transmission within the study area and a summary of any consultations with owners of major facilities for electric, gas or telecommunications that may be impacted by the facility (crossing existing utilities or otherwise).
- (f) A map of all properties upon which any component of a facility or ancillary feature would be located, and for wind facilities, all properties within two thousand (2,000) feet of such properties, and for solar projects, all properties within one thousand (1,000) feet, that shows the current land use, tax parcel number and owner of record of each property, and any publicly known proposed land use plans for any of these properties.
- (g) A map of existing zoning districts and proposed zoning districts within the study area and a description of the permitted and the prohibited uses within each zone. For "floating" or "overlay" zones that are not specifically attributable to a specific mapped zoning district, describe the applicable substantive criteria that apply for establishment of the overlay zone.
- (h)A statement as to whether any applicable local jurisdiction has an adopted comprehensive plan applicable to lands on which facility components or ancillary facilities are located and whether the proposed facility is consistent with such comprehensive plan. A copy of the plan shall be provided in the application, with an indication of plan sections applicable to the proposed uses.
- (i) A map of all publicly known proposed land uses within the study area, as determined in consultation with State and local planning officials, from any public involvement process, or from other sources.
- (j) Maps showing designated NYS coastal areas, inland waterways

and local waterfront revitalization program areas (pursuant to 19 NYCRR Part 600, et seq.), groundwater management zones, designated agricultural districts, flood-prone areas, critical environmental areas designated pursuant to article 8 of the ECL, and coastal erosion hazard areas, that are located within the study area.

- (k) Maps showing recreational and other land uses within the study area that might be affected by the sight or sound of the construction or operation of the facility, interconnections and related facilities, including wild, scenic and recreational river corridors, open space, and any known archaeological, geologic, historical or scenic area, park, designated wilderness, forest preserve lands, scenic vistas specifically identified in the Adirondack Park State Land Master Plan, NYS Parks, NYSDEC lands, conservation easement lands, Federal or State designated scenic byways, nature preserves, designated trails, and public-access fishing areas, major communication and utility uses and infrastructure, and institutional, community and municipal uses and facilities.
- (1) A qualitative assessment of the compatibility of the facility, including any off-site staging and storage areas, with existing, proposed and allowed land uses, and local and regional land use plans, located within a one (1)-mile radius of the facility site. 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, and commercial areas. The assessment and evaluation shall demonstrate that conflicts from facility-generated noise, traffic and visual impacts with current and planned uses have been minimized to the extent practicable.
- (m) A qualitative assessment of the compatibility of proposed above-ground transmission lines, collection lines, and interconnections and related facilities with existing, potential, and proposed land uses within the study area.
- (n) A qualitative assessment of the compatibility of proposed underground transmission lines, collection lines, interconnections and related facilities with existing, potential, and proposed land

uses within three hundred (300) feet from the centerline of such interconnections or related facilities.

- (o) For facilities at locations within NYS designated coastal areas, or in direct proximity of coastal areas or designated inland waterways, provide an analysis of conformance with relevant provisions of the New York State Coastal Management Program Policies, and proposed or adopted Local Waterfront Revitalization Plans (pursuant to 19 NYCRR Part 600, et seq.). For facilities located within or adjacent to areas mapped by the National Oceanographic and Atmospheric Administration (NOAA), mapping of the proposed facility's location on the most recent edition of NOAA navigation charts shall be provided.
- (p) Aerial photographs of all properties within the study area of sufficient scale and detail to enable discrimination and identification of all natural and cultural features.
- (q) Overlays on aerial photographs which clearly identify the facility site and any facility layout, interconnection route, the limits of proposed clearing or other changes to the topography, vegetation or human-made structures, and the location of access and maintenance routes.
- (r) All aerial photographs shall reflect the current uses of the land. All aerial photographs shall indicate the source and the date photographs were taken.
- (s) A description of community character in the area of the facility, 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. For the purposes of this exhibit, community character includes defining features and interactions of the natural, built and social environment, and how those features are used and appreciated in the community.
- (t) For repurposed sites with a history of environmental contamination only:

- (1) For a site that has not been remediated under the oversight of the NYSDEC:
 - (i) a copy of a Phase 1 Environmental Site Assessment (ESA) and, if any Recognized Environmental Conditions were identified, a Phase 2 ESA; and
 - (ii) a determination by a qualified Licensed Professional Engineer, on the basis of the Phase I ESA and/or Phase 2 ESA, that it is not anticipated that hazardous substances would be encountered during construction and/or operation of the facility.
- (2) For a site that has been remediated under the oversight of the NYSDEC and received a Certificate of Completion or No Further Action from the NYSDEC:
 - (i) a copy of the applicable Site Management Plan for the facility site and any deed or land use restrictions imposed; and
 - (ii) a certification by the applicant that it will implement and comply therewith.
- (u) Where an oil, gas or mining solution well is known to exist within five hundred (500) feet of proposed areas to be disturbed (based on records maintained by the NYSDEC) or within 1 mile of areas to be disturbed for any proposed facility located in NYSDEC regions 7, 8, or 9:
 - (1) An extraction well survey, setting forth the date(s) the survey occurred, the company that conducted it, and the methodology used. The purpose of the survey is to determine whether any NYSDEC-regulated wells are present within fifty (50) feet of proposed areas to be disturbed (excluding areas on non-participating parcels), and if so, identification of the wells and type, if known. Unless another method was authorized by the office, the survey shall have been done by the use of magnetometers, including aerial platform

magnetometers, that are able to locate wells including those lacking surface expressions and any discovered wells should be recorded in decimal degrees, NAD 83, with six (6) decimal places of accuracy, and presented on the map identified in paragraph (2) of this subdivision. An extraction well survey will not be required upon written advice from the NYSDEC Regional Minerals Manager that the area of the facility has no known history of extraction well development.

- (2) A map based on the survey required in paragraph (1) of this subdivision identifying the location of all wells and associated infrastructure (to the extent known), along with the facility boundaries, proposed areas to be disturbed, and proposed facility components. The map should also identify proposed setbacks from permanent structures and buildings of a minimum of fifty (50) feet from identified well(s) and minimum twenty (20) feet in width from nearest reasonable facility property access point to the well to permit inspections and other regulatory work as may be needed. The setback to a well may be reduced to twenty-five (25) feet for any wells plugged as a facility pre-construction activity.
- (3) An explanation if the applicant cannot meet the setback and access requirements referenced in paragraph(2) of this subdivision.

Section 1101-2.4. Exhibit 4: Real Property.

Exhibit 4 shall contain:

- (a) A map of the facility site showing property boundaries with tax map sheet, block and lot numbers; the owner of record of all parcels included in the facility site and for all adjacent properties; easements, grants, deed restrictions, and related encumbrances on the parcels comprising the facility site; public and private roads on or adjoining or planned for use as access to the facility site; zoning and related designations applicable to the facility site and adjoining properties.
- (b) A property/right-of-way map of all proposed transmission

lines and interconnection facilities and off- property/right-of-way access drives and construction lay-down or preparation areas for such interconnections.

- (c) A demonstration that the applicant has obtained title to or a leasehold interest in the facility site, including ingress and egress access to a public street, or is under binding contract or option to obtain such title or leasehold interest, or can obtain such title or leasehold interest. State whether the applicant is registered as a transportation corporation and plans to acquire necessary lands for generating or transmission line or other facility-related infrastructure pursuant to New York State Eminent Domain Procedure Law.
- (d) A statement that the applicant has obtained, or can obtain (with commercially reasonable certainty), such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all interconnections for the facility site.
- (e) An identification of any improvement district extensions necessary for the facility and a demonstration that the applicant has obtained, or can obtain, such improvement district extensions.

Section 1101-2.5. Exhibit 5: Design Drawings.

- (a) Drawings to be submitted pursuant to this section shall be prepared by or at the direction of a professional engineer, licensed and registered in New York State, whose name and license number shall be clearly printed on the drawings.
- (b) Wind facilities shall meet the setback requirements in Table 5-1 or manufacturer setbacks, whichever are more stringent. The setback distances shall be measured as a straight line from the centerline or mid- point of the wind turbine tower to the nearest point on the building foundation, property line or feature, as applicable. Compliance with such setbacks (based on the tallest wind turbine model under consideration) shall be shown in the site plan drawings (or as stand-alone mapping) as required by section 1101-2.5(f)(1)(ii) of this Part. Temporary and permanent

laydown yards shall have a 100 feet setback from non-participating residential property lines.

Table 5-1: Setback Requirements for Wind Turbine Towers

Structure type	Wind Turbine Towers setback*
Substation	1.5 times
Any Above-ground Bulk Electric System**	1.5 times
Gas Wells (unless waived by landowner and gas well operator)	1.1 times
Public Roads	1.1 times
Property Lines	1.1 times
Non-participating, non- residential Structures	1.5 times
Non-participating Residences	2 times
*1.0 times Wind Turbine Towers setback is equal to the Total Height of the Wind Facility (at the maximum blade tip height).	

*1.0 times Wind Turbine Towers setback is equal to the Total Height of the Wind Facility (at the maximum blade tip height).

**Operated at 100 kV or higher, and as defined by North American Electric Reliability Corporation Bulk Electric System Definition Reference Document Version 3, August 2018 (see section 1100-15.1(e)(1)(i) of this Title)

- (c) The applicant shall provide a table listing manufacturer provided specifications including rated power, hub height, rotor diameter, and total height of each wind turbine model under consideration for the facility. Dimensions required by this subdivision shall be presented in both metric and United States Customary System units.
- (d) Solar facilities shall meet the setback requirements set forth in Table 5-2. Compliance with such setbacks listed in Table 5-2 shall be shown in the site plan drawings required by section 1101-2.5(f)(1)(i) of this Part. Fencing, collection lines, access roads and landscaping may occur within the setback. Temporary and

permanent laydown yards shall have a 100 feet setback from nonparticipating residential property lines.

Table 5-2: Setback Requirements for Solar Facility Components

Setback Type	Solar Facility Setback
Non-participating	100 feet
residential property lines	
Centerline of Public Roads	50 feet
Public Road Right of Way	25 feet
Non-participating property lines (non-residential)	50 feet
Non-participating occupied residences	250 feet

(e) The maximum height of solar facilities, exclusive of electric collection, transmission or substation/switchyard components, shall not exceed twenty (20) feet from finished grade. The height of arrays shall be measured from the highest natural grade below each solar panel to its maximum potential height.

(f) Exhibit 5 shall contain:

- (1) Site plans of the proposed facility, including the following:
 - (i) For solar facilities, site plan drawings of all facility components at a legible common engineering scale (recommended at a scale minimum 1 inch = 200 feet or 1:2400, or other scale acceptable to the office). A full-size physical set (22" x 34" sheets) shall be provided with the application) including the following proposed and existing features:
 - (a) block and lot numbers and the owner of record of all parcels included in the facility site and for all adjacent properties;
 - (b) solar panels, inverters, low-medium

transformers, property lines, applicable setbacks of Table 5-2: Setback Requirements for Solar Facility Components and any applicable local setbacks;

- (c) extents of proposed access road travel lanes (including indications of any existing access roads to be utilized) and any turn-around areas/temporary road improvements for component deliveries (may be included in site plans or as a stand-alone map set per the requirements of section 1101-2.16 of this Part);
- (d) electric cable collection line corridors (including an indication of permanent rights-of-way (ROW)) and the approximate locations of any proposed splice vaults; overhead and underground cable routes shall be differentiated; mapping shall identify any locations of proposed trenchless collection line installations, including the approximate lengths of such electric line routes, information can be included in site plans or provided as a stand-alone map set);
- (e) the existing electric transmission line (which the facility will interconnect to) and any known existing utilities (including pipelines) and associated rights of way within the facility site;
- (f) approximate limits of disturbance for all
 facility components (panels, access roads, electric
 line corridors, etc.);
- (g) approximate clearing limits for all facility components (panels, access roads, buildings, electric lines, shading vegetation, etc.);
- (h) any buildings or structures to be demolished;
- (i) extents of collection and interconnection

stations and any applicable local setbacks;

- (j) any proposed energy storage system(s) and any applicable local setbacks;
- (k) site security features, including approximate location of perimeter fencing; and
- (1) any berms, retaining walls, fences and other landscaping improvements (included in general site plans or provided as a stand-alone map set).
- (ii) For wind facilities, site plan drawings of all facility components at a reasonable legible scale (recommended at a scale minimum 1 inch = 200 feet or 1:2400, or other scale acceptable to the office). A full-size physical set (22" x 34" sheets) shall be provided with the application), including the following proposed and existing features:
 - (a) block and lot numbers and the owner of record of all parcels included in the facility site and for all adjacent properties;
 - (b) extents of proposed access roads (including an indication of any existing access roads to be utilized); turn-around areas/temporary road improvements for component deliveries or construction access (may be included in site plans or as a stand-alone map set per requirements of section 1101-2.16 of this Part);
 - (c) extents of wind turbines (based on approximate dimensions of foundations) and crane pads;
 - (d) electric collection corridors (including an indication of permanent ROW) and the approximate location of any proposed splice vaults; overhead and underground cable routes shall be differentiated; mapping shall include an identification of proposed trenchless collection

line installations, including the approximate lengths of such electric line routes, (this information can be included in site plans or provided as a stand-alone map set);

- (e) collection substation outline and any applicable local setbacks;
- (f) extents of the switchyard station and any applicable local setbacks;
- (g) the existing electric transmission line (which the facility will interconnect to) and any known existing utilities (including pipelines) and associated ROW within the facility site;
- (h) approximate limits of disturbance for all
 facility components (turbines, access roads,
 electric line corridors, etc.);
- (i) approximate clearing limits for all facility components (turbines, access roads, buildings, electric lines, etc.);
- (j) any buildings or structures to be demolished;
- (k) proposed wind turbines setbacks (based on the tallest wind turbine model under consideration), represented by radii (setback circles) offset from turbine locations, demonstrating compliance with manufacturers' setbacks or those listed in Table 5-1: Setback Requirements for Wind Turbine Towers, whichever is more stringent (setback circles can be included in general site plans or provided as a stand-alone map set); participating residences shall also be shown.
- (1) any proposed energy storage system(s) and any applicable local setbacks;
- (m) any proposed berms, retaining walls, fences

and other landscaping improvements (included in general site plans or provided as a stand-alone map set); and

- (n) permanent meteorological towers and any applicable local setbacks.
- (2) All drawings listed below are to be drawn to scale, or to an exaggerated scale, as appropriate. All such drawings are to be created using computer graphics or computer-aided design software; hand-drawn sketches and drawings may not be used. The following details and plans shall be provided:
 - (i) Typical elevation drawings indicating the length, width, height, material of construction, color and finish of all buildings, structures, and fixed equipment to be provided for the following:
 - (a) wind turbine elevations, for each proposed wind turbine model under consideration, including maximum blade tip height and turbine blade specifications with descriptions of the blade installation process (turbine height and blade detail may be substituted with manufacturer sheets, if documentation includes the required detail);
 - (b) switchyard station(s) and interconnection
 facilities (including fencing, gates, and all
 station equipment); a general arrangement plan
 shall be included in the
 elevation drawing set showing elevation mark
 pointers (arrows) with reference to associated
 elevation views (including views of all components
 of the station);
 - (c) collection substation(s) (including fencing,
 gates, and all substation equipment); a general
 arrangement plan shall be included in the elevation
 drawing set showing elevation mark pointers
 (arrows) with reference to associated elevation

views (including views of all components of the substation); and

- (d) energy storage system(s) (including fencing, gates, and buildings); a general arrangement plan shall be included in the elevation drawing set showing elevation mark pointers (arrows) with reference to associated elevation views (including views of all components of the energy storage system).
- (ii) Each proposed permanent point of access or access type shall include a typical installation plan view, cross section and side view with appropriate dimensions (temporary and permanent width(s)) and identification of materials to be used along with corresponding material thickness. Such typical details shall depict any temporary condition necessary for construction traffic (i.e. stabilized construction entrances) as well as the post construction condition. Where existing accessways will be used, a description of proposed upgrades for facility construction shall be provided. Additionally, typical details of any other proposed access (e.g., helicopter or barge placement) shall be provided.
- (iii) Typical underground infrastructure section details including single and multiple circuit layouts with dimensions of proposed depth, trench width, level of cover, separation requirements between circuits, clearing width limits for construction and operation of the facility, limits of disturbance, required permanent ROW and a description of the cable installation process; typical details of any proposed splice vaults shall also be provided, including vault dimensions, level of cover, required trench length, width and depth, clearing width limits for construction and operation of the facility, and limits of disturbance.
- (iv) Details for typical overhead electric transmission and collection lines, including a profile of the

centerlines at an exaggerated vertical scale and typical elevation plans including height above grade and structure layouts.

- (3) Site suitability report from the original equipment manufacturer showing that turbine model(s) are compatible with existing facility conditions (i.e., site specific conditions).
- (4) A list of engineering codes, standards, guidelines and practices that the applicant has or intends to conform with when planning, designing, constructing, operating and maintaining the wind turbines, solar arrays, electric collection system, substation, transmission line, interconnection, energy storage systems (a summary of correspondence with local fire department representatives shall accompany proposals of such systems), and associated structures.
- (5) Any manufacturer provided information regarding the design, safety and testing information for the turbines, solar panel, inverters, substations, transformers, and battery storage equipment to be installed during construction, or as related to any equipment installed during facility operation.

Section 1101-2.6. Exhibit 6: Public Health, Safety and Security.

Exhibit 6 shall contain:

(a) A statement and evaluation that identifies, describes, and discusses all efforts made to avoid and minimize potential adverse impacts of the construction and operation of the facility, the interconnections, and related facilities on the environment, public health, and safety, other than as already detailed in other relevant Exhibits, 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, and also addresses:

- (1) the anticipated gaseous, liquid and solid wastes to be produced at the facility during construction and under representative operating conditions of the facility, including their source, anticipated volumes (excluding estimates for minor waste volumes, such as concrete washout wastes), composition and temperature, and such meteorological, hydrological and other information needed to support such estimates and any studies, identifying the author and date thereof, used in the analysis;
- (2) the anticipated volumes of such wastes to be released to the environment during construction and under any operating condition of the facility;
- (3) the treatment processes to eliminate or minimize wastes to be released to the environment;
- (4) the manner of collection, handling, storage, transport and disposal for wastes retained and not released at the site, or to be disposed of;
- (5) maps of the study area and analysis showing relation of the facility site to: public water supply resources (to the extent locations are publicly available); community emergency response resources and facilities including police, fire and emergency medical response facilities and plans; emergency communications facilities; hospitals and emergency medical facilities; existing known hazard risks including flood hazard zones, storm surge zones, areas of coastal erosion hazard, landslide hazard areas, areas of geologic, geomorphic or hydrologic hazard; dams, bridges and related infrastructure; explosive or flammable materials transportation or storage facilities; contaminated sites; and other local risk factors;
- (6) all significant impacts on the environment, public health, and safety associated with the information required to be identified pursuant to paragraphs (1) through (5) of this subdivision, including all reasonably related short-term and long-term effects;

- (7) any measures proposed by the applicant to minimize such impacts;
- (8) any measures proposed by the applicant to mitigate such impacts; and
- (9) any monitoring of such impacts proposed by the applicant.
- (b) A Site Security Plan for the operation of proposed facility, including site plans and descriptions of the following site security features:
 - (1) access controls including fences, gates, bollards and other structural limitations;
 - (2) electronic security and surveillance facilities;
 - (3) security lighting, including specifications for lighting and controls to address work-site safety requirements and to avoid off-site light trespass;
 - (4) lighting of facility components to ensure aircraft safety, which complies with the required showing in section 1101-2.8 of this Part; and
 - (5) a description of a cyber security program for the protection of digital computer and communication systems and networks that supports the facility demonstrating compliance with current standards issued by a standards setting body generally recognized in the information technology industry, including, but not limited to, the Federal Department of Commerce's National Institute of Standards and Technology, the North American Electric Reliability Corporation, or the International Organization for Standardization, and providing for periodic validation of compliance with the applicable standard by an independent auditor.
- (c) A Safety Response Plan to ensure the safety and security of the local community, including:
 - (1) an identification of contingencies that would constitute

- a safety or security emergency;
- (2) emergency response measures by contingency;
- (3) evacuation control measures by contingency;
- (4) community notification procedures by contingency;
- (5) a description of all on-site equipment, systems, components, and technical compliance with procedures to be provided to prevent or handle fire emergencies and hazardous substance incidents in compliance with the fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to article 18 of the Executive Law (including a description of any exceptions expected to be sought);
- (6) for wind facilities, technologies to be employed, if any, for the detection and prevention of ice throw for each turbine model proposed.
- (7) a description of all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident; and
- (8) a requirement to conduct training drills with emergency responders at least once per year and update the Safety Response Plan in response to applicable comments.
- (d) A statement that the applicant has provided a copy of the plans required in subdivisions (b) and (c) of this section to, and requested review of such plans and comment by, the New York State Division of Homeland Security and Emergency Services.
- (e) If the facility is to be located within any part of a city with a population over one million (1,000,000), a statement that the applicant has provided a copy of the plans required in subdivisions (b) and (c) of this section to, and requested review of such plans and comment by, the local office of emergency management.

Section 1101-2.7. Exhibit 7: Noise and Vibration.

Exhibit 7 shall contain:

- (a) A study of the noise and vibration impacts of the construction and operation of the facility, including the name(s) of the preparer(s) of the study and qualifications to perform such analyses. If the study is prepared by certified member(s) of a relevant professional society or state, the details of such certification(s) shall be provided.
- (b) Design goals. The study shall demonstrate that noise levels from noise sources at the facility will comply with the following:
 - (1) For wind facilities: all operational noise limits pursuant to section 1101-3.5(a) of this Part.
 - (2) For solar facilities: A maximum noise limit of forty-five (45) dBA Leq (1-hour), at the outside of any non-participating type 1 sensitive sound receptor existing as of the date the application is deemed complete by the office (see section 1101-2.7(h)(1)(i) of this Part), subject to the prominent tone penalties specified in section 1101-2.7(b)(3)(i) of this Part, and fifty-five (55) dBA Leq (1-hour) at the outside of any existing participating type 1 sensitive sound receptor (see section 1101-2.7(h)(1)(i) of this Part) existing as of the date the application is deemed complete by the Office.

(3) For all facilities:

(i) A maximum noise limit of fifty-five (55) dBA Leq (1-hour), short-term equivalent continuous average sound level from the facility across any portion of a non-participating type 2 sensitive sound receptor (see section 1101-2.7(h)(1)(ii) of this Part), except for portions delineated as wetlands pursuant to section 1100-1.3(e) of this Title, industrial properties, electric generation or transmission facilities, transportation corridors (e.g., roads and railroads), or

utility ROW. The applicant shall demonstrate compliance with this design goal through the filing of noise contour drawings and sound levels evaluated at the worst-case discrete locations. No penalties for prominent tones will be added in this assessment.

- (ii) A maximum noise limit of forty (40) dBA Leq (1-hour) at the outside of any non-participating type 1 sensitive sound receptor existing as of the date the application is deemed complete by the Office from the collector substation equipment.
- (iii) Prominent tones are defined in and shall use the constant level differences listed under ANSI/ASA S12.9-2013/Part 3 Annex B, Section B.1 (see section 1100-16.1(a)(1)(ii) of this Title). Should a prominent tone occur or be expected to occur outside of any type 1 non-participating sensitive sound receptor existing as of the date the application is deemed complete by the office (see section 1101-2.7(h)(1)(i) of this Part), the broadband overall (dBA) noise level at the evaluated sensitive sound receptor shall be increased by 5 dBA for evaluation of compliance with sections 1101-2.7(b)(1) and (2) of this Part.
- (c) Sound study area and radius of evaluation. Evaluation of the maximum noise levels to be produced during operation of the facility shall be conducted on a cumulative (if any) and non-cumulative basis for all sensitive sound receptors within the sound study area, as follows:
 - (1) For wind facilities, the evaluation shall include, at a minimum:
 - (i) all sensitive sound receptors within a one (1)-mile radius or within the 30 dBA sound contour from any wind turbine, whichever is greater, and all sensitive sound receptors within the 30 dBA noise contour from any associated facility components; and

- (ii) a cumulative noise analysis. The cumulative evaluation shall include noise from any existing and proposed wind turbine(s) and any sensitive sound receptor existing as of the date the application is deemed complete by the office, within a two (2)-mile radius from any wind turbine proposed for the facility or within the 30 dBA cumulative sound contour. It shall also include noise from any solar facility and substation existing and proposed, and any sensitive sound receptors existing as of the date the application is deemed complete by the Office, within the thirty (30) dBA overall cumulative noise contour.
- (2) For solar facilities, the evaluation shall include, at a minimum:
 - (i) all sensitive sound receptors within the thirty (30) dBA noise contour from any solar or substation noise source (e.g., substation transformer(s), reactor(s), capacitors(s), filter(s); gas, diesel or gasoline backup generator(s); medium to low voltage transformers, inverters, energy storage) proposed for the facility; and
 - (ii) a cumulative noise analysis. The cumulative evaluation shall include, at a minimum, noise from any solar and substation noise sources existing and proposed by the date the application is deemed complete by the office, and any sensitive sound receptors existing by the date the application is deemed complete by the office, within the thirty (30) dBA cumulative noise contour. It shall also include noise from any wind facility turbine existing and proposed by the date the application is deemed complete by the office within the thirty (30) dBA overall cumulative noise contour.
- (d) Modeling standards, input parameters, assumptions, and reporting.
 - (1) For wind facilities, solar facilities, substations, and

converter stations, the evaluation shall use computer noise modeling software that follows the ANSI/ASA S12.62-2012/ISO 9613-2:1996 (MOD) (see section 1100-16.1(a)(1)(v) of this Title) or the ISO-9613-2:1996 propagation standards (see section 1100-16.1(g)(1)(i) of this Title) with no meteorological correction (Cmet) or additional types of attenuation (Amisc) added. The model shall:

- (i) set all noise sources operating simultaneously at maximum sound power levels;
- (ii) use a ground absorption factor of no more than G=0.5 for porous ground (e.g., ground covered by grass, trees, or other vegetation, or ground surfaces suitable for the growth of vegetation, typically found in, but not limited to, rural, farming, or agricultural lands) and G=0 for hard ground and waterbodies (e.g., paving, concrete, and all other surfaces having low porosity or tamped ground as typically found in, but not limited to, industrial, commercial, or urban areas); and
- (iii) use a temperature of ten (10) degrees Celsius and seventy (70) percent relative humidity;
- (2) Report, at a minimum, the maximum A-weighted dBA Leq (1-hour) sound pressure levels in a year, and the maximum linear/unweighted/Z dB (Leq 1-hour) sound pressure levels in a year from the thirty-one and a half (31.5) Hz up to the eight thousand (8,000) Hz full-octave band, at all sensitive sound receptors within the sound study area or radius of evaluation indicating the use, property type classification, and participation status of each receptor.
- (3) Report the maximum A-weighted dBA Leq (1-hour) sound pressure levels in a year at the most critically impacted portion of each external boundary of the facility site within the sound study area or radius of evaluation indicating participation status.
- (4) Report the information in tabular and spreadsheet

compatible format differentiating between "unmitigated" and "mitigated" as well as "cumulative" and "non-cumulative" results, as applicable, and summarizing maximum and minimum values for each sound descriptor. A summary of the number of sensitive sound receptors exposed to sound levels greater than thirty-five (35) dBA (for evaluation of operational noise) or equal to or greater than 55 dBA (for construction noise) within the sound study area or radius of evaluation shall also be reported in tabular format grouped in one (1)-dB bins by use, property type classification, and participation status.

- (i) data reported in tabular format shall be clearly identified to include headers and summary footer rows. Headers shall include identification of the information contained on each column, such as noise descriptors (e.g., Leq, L90, etc.); weighting (e.g., dBA, linear, dB, dBZ); any filtering (e.g., ANS); duration of evaluation (e.g., 1-hour, 2-hour), time of the day (day, night); and footer rows shall include maximum, minimum, and average values;
- (ii) columns or rows with results related to a specific design goal, noise limit or local requirement, shall identify the requirement to which the information relates (e.g., 45 dBA Leq-1-h, 65 dB at 16, 31.5 or 63 Hz);
- (iii) tables shall be sorted by both the overall broadband (dBA) and the 16 Hz full octave band level for wind, and the broadband (dBA) level for sound impacts. For this purpose, sensitive sound receptors shall be separated in different tables according to their use property type classification, and participation status (e.g., participating residences, non-participating residences, non-participating boundaries, schools, parks, cemeteries, historic places); and
- (iv) the application shall report the absolute number of sensitive sound receptors that will be exposed to noise

levels that are within 5 dB of, or exceed any design goal or noise limit (in total as well as grouped in one (1)-dB bins by use, property type classification, and participation status).

- (5) For wind facilities, the model shall:
 - (i) be performed at a minimum for the turbine model with the highest broadband A- weighted apparent sound power level at any wind speed condition;
 - (ii) use a four (4.0) meter assessment point above the ground and the addition of a minimum uncertainty factor of two (2) dBA or greater.
- (6) For solar facilities and all substations, the model shall use a minimum height of one and a half (1.5) meters above the ground for single story receptors, four (4.0) meters above the ground for receptors with noise sensitive spaces on a second story, and one and a half (1.5) meters above the floor elevation of the highest sensitive sound spaces for receptors with more than two stories. The addition of an uncertainty factor greater than zero (0) dBA is optional.
- (e) Evaluation of prominent tones for the design.
 - (1) For wind facility, solar facility, and any substation noise sources: The evaluation shall be conducted by using:
 - (i) manufacturer sound information or preconstruction field tests. For sound sources where no one-third octave band manufacturer's information or preconstruction field tests are available, sounds will be assumed to be tonal and prominent. Field test(s) shall report, at a minimum, sound pressure and sound power levels, and provide clear explanations of how the test was conducted and how sound power levels were obtained; and
 - (ii) the ANSI/ASA S12.62-2012/ISO 9613-2:1996 (MOD)

(see section 1100-16.1(a)(1)(v) of this Title) or the ISO 9613-2:1996 propagation standard (see section 1100-16.1(g)(1)(i) of this Title) attenuations (Adiv, Aatm, Agr, and Abar), and the definition of "prominent discrete tone" and constant level differences (Kt) specified in ANSI/ASA S12.9-2013/Part 3 Annex B, Section B.1 (see section 1100-16.1(a)(1)(ii) of this Title), as follows: fifteen (15) dB in low-frequency one-third-octave bands (from twenty-five (25) up to one hundred twenty-five (125) Hz); eight (8) dB in middle-frequency one-third-octave bands (from one hundred sixty (160) up to four hundred (400) Hz); and five (5) dB in high-frequency one-third-octave bands (from five hundred (500) up to ten thousand (10,000) Hz).

- (2) For electrical tonal noise sources (e.g., substation transformers, medium to low voltage transformers) sounds shall be assumed tonal and prominent.
- (3) For other solar facility noise sources (e.g., inverters) where no manufacturer's information or preconstruction field tests are available, the sounds will be assumed to be tonal and prominent.
- (f) Evaluation of low frequency noise for wind facilities. If other wind turbines considered for the facility have lower (or equal) broadband A-weighted sound power levels than the turbine modeled in the application, but greater maximum un-weighted sound power levels at the thirty-one and a half (31.5) Hz, or sixty-three (63) Hz full-octave bands, the estimate of low frequency noise levels at the thirty-one and a half (31.5) Hz, or sixty-three (63) Hz bands can be based on:
 - (1) Computer noise modeling that uses the maximum sound power levels at the thirty-one and a half (31.5) and sixty-three (63) Hz frequency bands at any wind speed among all turbines considered for each turbine location.
 - (2) Alternatively, if the noise modeling uses only one (1) wind turbine model across the site and if noise reduction

operations are not used in the design, the noise levels at the thirty-one and a half (31.5) and sixty-three (63)Hz full octave bands can be estimated by applying corrections to the low-frequency band sound pressure results from the computer noise modeling for the turbine with the maximum overall broadband sound power level. These corrections will be equivalent to the differences between the maximum sound power levels at the thirty-one and a half (31.5) and sixty-three (63) Hz bands at any wind speed for all turbines considered for the facility and the sound power levels for the turbine used for computer noise modeling at the thirty-one and a half (31.5) and sixty-three (63) Hz full-octave bands respectively.

- (3) The maximum linear/unweighted/Z Leq (1-hour) sound pressure levels (dB) in a year at the sixteen (16), thirtyone and a half (31.5) and sixty-three (63) Hz full octave bands for all receptors within the radius of evaluation shall be reported in tabular and spreadsheet compatible format. A list of all sensitive sound receptors with sound pressure levels (SPLs) equal to or greater than sixty (60) dB at sixteen (16), thirty-one and a half (31.5) or sixty-three (63) Hz, shall be provided along with their SPLs. The number of receptors greater than or equal to sixty (60) dB at sixteen (16), thirty-one and a half (31.5) or sixty-three (63) Hz shall also be reported, grouped in one (1)-dB bins by use, property type classification, and participation status.
- (g) Evaluation of infrasound for wind facilities. Infrasound levels at the sixteen (16) Hz full-octave band can be based on computer noise modeling software with such capabilities or, by using extrapolated SPL data down to sixteen (16) Hz full-octave band. The extrapolation estimates can be based on corrections applied to the sound pressure results at thirty-one and a half (31.5) Hz to obtain the sound pressure results at sixteen (16) Hz at each receptor as follows:
 - (1) If no information from the manufacturer is available for the sixteen (16) Hz full-octave frequency band for any

turbine models considered for the facility, at a minimum four (4) dB shall be added to the SPLs at thirty-one and a half (31.5) Hz, to obtain SPLs at sixteen (16) Hz.

- (2) If computer noise modeling uses only one (1) wind turbine model across the site, noise reduction operations are not used in the design or are the same, and the sound power levels at sixteen (16) Hz are available for all turbine models considered for the facility, the correction shall be equivalent to the difference between the highest manufacturer's sound power level at sixteen (16) Hz at any wind speed and the sound power level at thirty-one and a half (31.5) Hz used for computer noise modeling, and it shall be applied to the sound pressure results at thirty-one and a half (31.5) Hz to obtain the sound pressure results at sixteen (16) Hz.
- (3) If computer noise modeling uses only one (1) wind turbine model across the site, noise reduction operations are not used in the design or are the same, and the sound power level information at sixteen (16) Hz is available for some but not all turbines considered for the facility, at a minimum four (4) dB, or the difference between the maximum sound power level at sixteen (16) Hz at any wind speed known for any turbines considered for the facility and the sound power level for the thirty- one and a half (31.5) Hz full-octave frequency band used for computer modeling, whichever is greater, shall be applied to the sound pressure results at thirty-one and a half (31.5) Hz to obtain the sound pressure results at sixteen (16) Hz.
- (4) If computer noise modeling uses more than one (1) wind turbine model across the site and different noise reduction operations are used in the design, independent computer noise modeling runs can be performed for each group of turbine models and each subgroup of noise reduction operations. Total sound pressure levels at sound sensitive receptors can then be obtained by summing up all the sound contributions from all independent computer modeling runs. When sound power levels at sixteen (16) Hz are available for

the turbine model and all noise reduction operations to be modeled in an independent computer noise run, the sound pressure results at the sixteen (16) Hz full-octave frequency band can be obtained with computer noise modeling software with such capabilities or as indicated in paragraph (2) of this subdivision. When sound power levels at sixteen (16) Hz are not available for the turbine model or the noise reduction operations to be modeled in an independent computer noise run, the sound pressure results at the sixteen (16) Hz full-octave frequency band can be obtained as indicated in paragraph (3) of this subdivision.

- (5) The procedures indicated in this subdivision do not restrict the applicant from using additional corrections that provide more conservative (i.e., higher) SPL's at receptors than as obtained as indicated in this subdivision.
- (h) Sensitive sound receptors and sound contour maps.
 - (1) A sensitive sound receptors map(s) showing at a minimum the location of all sensitive sound receptors within the radius of evaluation or the sound study area shall be included as follows:
 - (i) Type 1 receptors: Are discrete sensitive sound receptors subject to the design goals specified in section 1101-2.7(b) of this part as follows: residences including year-round residences and any seasonal residences with septic systems and running water identified by property type classification; places of hospitality (e.g., hotels, motels, inns); hospitals; schools; libraries; places of worship and any enclosed historic structures listed or eligible for listing on the State or National Register of Historic Places.
 - (ii) Type 2 receptors: Are any portion(s) of non-participating properties subject to the design goals and exceptions specified in section 1101-2.7(b)(3) of this Part: cemeteries; outdoor public facilities and public areas, parks; any public (federal, state, and

- local) lands; campgrounds; summer camps; commercial lands; and any historic resources listed or eligible for listing on the State or National Register of Historic Places with open areas or developed lands, but without enclosed structures.
- (iii) Type 3 receptors: Are discrete sensitive sound receptors which shall be evaluated but will not be subject to design goals including uninhabitable structures, except any historic structures listed or eligible for listing on the State or National Register of Historic Places.
- (2) All residences shall be included as sensitive sound receptors regardless of participation in the facility (e.g., participating, potentially participating, and non-participating residences) or occupancy (e.g., year-round, seasonal use).
- (3) Only properties that have a signed contract with the applicant prior to the date of filing the application shall be identified as "participating." Other properties may be designated either as "non-participating" or "potentially participating," but will be evaluated as non-participating sensitive sound receptors. Updates in participation status may be filed at any time prior to issuance of a Notice of Complete Application.
- (4) Sound contour maps shall include all sensitive sound receptors and boundary lines (differentiating use, property type classification, and participation status of receptor) and all noise sources (e.g., wind turbines for wind facilities; substation(s); transformers; heating ventilation and air conditioning (HVAC) equipment; energy storage systems; diesel, gasoline, or natural gas generators; and inverters and medium to low voltage transformers for solar).
- (5) Sound contours, rendered at a minimum, for the sound study area or radius of evaluation in one (1)-dBA steps, with sound contour multiples of five (5) dBA differentiated.

- (6) Full-size hard copy maps (22 inches x 34 inches) of appropriate legible scale shall be provided.
- (i) An evaluation of ambient pre-construction baseline noise conditions by using the L90 statistical and the Leq energy based noise descriptors with and without the application of the ANS frequency filter, and by following the recommendations included in ANSI/ASA S3/SC 1.100-2014-ANSI/ASA S12.100-2014 American National Standard entitled Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas (see section 1100-16.1(a)(1)(iv) of this Title). Sound surveys shall be conducted for, at a minimum, a seven (7) day-long period for wind facilities and a four (4) day-long period (including at a minimum one weekend) for solar facilities.
- (j) An evaluation of future noise levels during construction of the facility and any associated substations, including predicted A- weighted/dBA sound levels using computer noise modeling as follows:
 - (1) The model shall use the ANSI/ASA S12.62-2012/ISO 9613-2:1996 (MOD) (see section 1100-16.1(a)(1)(v) of this Title) or the ISO-9613-2:1996 propagation standard (see section 1100-16.1(g)(1)(i) of this Title) for the main phases of construction, and from activities at any proposed batch plant area/laydown area.
 - (2) The model shall include, at a minimum, all noise sources and construction sites that may operate simultaneously for the most critical activities to meet the proposed construction schedule (e.g., preparation, excavation [including but not limited to blasting, piling, rock hammering, tree clearing, grading]; foundation work [e.g., pouring concrete]; cable installation [including but not limited to horizontal directional drilling (HDD) and trenching]; construction of any buildings; installation or erection of any mechanical equipment [e.g., wind turbines] or electrical components [e.g., for switchyards,

substations], or solar facilities [including but not limited to solar panels, inverters, and medium-to-low-voltage (MLV) transformers]).

- (3) For wind facilities, solar facilities, and substations, with the exception of sound levels in one-third octave band basis, the modeling and reporting requirements included in sections 1101-2.7(d)(1) through (d)(3), (d)(5), and (d)(7) of this Part shall be used for modeling of construction noise.
- (4) Sound impacts shall be reported with sound level contours (specified in section 1101-2.7(h) (4) of this Part) on the map described in section 1101-2.7(h) (5) of this Part and sound levels at the most critically impacted receptors in tabular format (as specified in section 1101-2.7(k) of this Part).
- (5) The evaluation shall indicate:
 - (i) the days of the week and hours of the day during which construction activities are proposed to take place, along with any exceptions to these schedules;
 - (ii) any identified exceedances to construction noise requirements and the magnitude of those exceedances, if any; and
 - (iii) an analysis of whether the construction sound levels will comply with the substantive requirements of local regulations indicated in section 1101-2.24 of this Part.
- (k) A tabular comparison between maximum sound impacts and any design goals, noise limits, and local requirements for the facility, indicating the degree of compliance at all sensitive sound receptors and at the most impacted non-participating boundary lines within the sound study area or radius of evaluation.
- (1) An evaluation as to whether any of the following potential

community noise impacts will occur:

- (1) Hearing loss for the public, as addressed by the World Health Organization (WHO) Guidelines for Community Noise published in 1999 (see section 1100-16.1(d)(1)(i) of this Title). The requirements for the public are not to exceed an average sound level of seventy (70) dBA from operation of the facility and one hundred twenty (120) dB-peak for children and one hundred forty (140) dB-peak for adults for impulsive sound levels (e.g., construction blasting).
- (2) The potential for structural damage from some construction activities (e.g., blasting, pile driving, excavation, horizontal directional drilling, rock hammering) to produce any cracks, settlements, or structural damage on any existing proximal buildings, including but not limited to any residences, Type 1 sensitive sound receptors, and public or private infrastructure.
- (m) An identification and evaluation of reasonable noise abatement measures for construction activities. This will include measures to be taken to minimize noise impacts at sensitive sound receptors and any measures to reduce audible noise levels caused by construction to the maximum extent practicable, including but not limited to, any temporary movable sound barriers.
- (n) An identification and evaluation of noise abatement measures for the design and operation of the facility to comply with the design limits set forth in section 1101-2.7 (b) of this Part.

(1) For wind facilities:

(i) If noise reduction operations (NROs) are used to demonstrate conformance with any limit, design goal, or local law on noise in computer noise modeling or any filing, the design shall use less than half of the maximum NRO available for each turbine model. In this case, the application shall report both "unmitigated" (without NROs) and "mitigated" (with NROs) results.

- (ii) If NROs are necessary for the design, those NROs shall be implemented on or before the start date of operations. As feasible, NROs shall also be used during commissioning (e.g., pre-operational testing).
- (iii) For each wind speed for which an NRO is necessary, the same NRO shall be used regardless of wind direction.
- (iv) A description of any avoidance or minimization measures for icing noise that shall be implemented before commissioning and operation of the facility.
- (v) The facility shall comply with any design goal, limit, certificate condition of the permit, or local law on noise unless waived, if icing noise occurs during commissioning or operation of the facility. Any exceedances during commissioning or operation caused by icing will be reported to NYSDPS ORES Office and addressed as indicated in section 1102-3.5 of this Title (Facility Operation).
- (2) For solar facilities and any substation for any solar or wind facility: If noise mitigation measures are necessary, those mitigation measures shall be described in the application and implemented before commissioning and operation of the facility.
- (o) The software input parameters, assumptions, and associated data used for the computer modeling shall be provided as follows:
 - (1) Spatial data used for the computer noise modeling, including noise source, receptor, and barrier locations; heights above the ground or elevations; topography and final grading; boundary lines, and participation status shall be delivered by digital means.
 - (2) Computer noise modeling files for all modeling runs shall be submitted by digital means.

- (3) For any substations, site plans and elevation drawings, including any details for all noise sources (e.g., transformers; diesel, gasoline, or natural gas generators; HVAC equipment; energy storage systems); sound and technical specifications from the manufacturers for any noise sources, and identified mitigation measures (e.g., sound walls, barriers, mufflers, silencers, enclosures).
- (4) In addition, for wind facilities, the application shall contain sound information from the manufacturers for all wind turbines, and any other relevant noise sources as follows:
 - (i) Sound power levels from the turbines proposed for the facility (including broadband, full (1/1), and one-third (1/3) octave frequency bands) associated with wind speed magnitudes shall be supported with information from the manufacturer(s) as obtained by following the International Electrotechnical Commission (IEC) 61400-11 standard (see section 1100-16.1(b)(1)(ii) of this Title). Information obtained by following the IEC TS 61400-14 Technical Specification (see section 1100-16.1(b)(1)(iii) of this Title) shall also be provided, to the extent this information is available.
 - (ii) Sound power level information shall be reported with angular speed of the rotor (e.g., revolutions per minute (rpm)), and rated power to the extent this information is available.
 - (iii) Turbine dimensions to include hub height and diameter of the rotor shall be reported.
 - (iv) The sound power level information for standard or normal operation, and any noise reduced operations and low-noise or serrated trailing edges, or any other noise reduction measures, will be provided if these are available or required to meet the design goals or noise

- limits indicated in section 1101-2.7(b) of this Part, and any applicable substantive provision of local law.
- (5) For solar facilities, the application shall contain:
 - (i) The locations of all noise sources (e.g., medium to low voltage transformers; inverters; energy storage system; HVAC equipment; diesel, gasoline, or natural gas generators;) identified with geographic coordinates and Spatial data.
 - (ii) Sound power level information and cut sheets from the manufacturers for all noise sources as listed above, and any other relevant noise sources.
- (6) For construction noise modeling, the application shall contain sound power level information for all relevant construction noise sources.
- (p) The application shall include a glossary of terminology, definitions, abbreviations, and references mentioned in the application.

Section 1101-2.8. Exhibit 8: Visual Impacts.

Exhibit 8 shall contain:

- (a) A visual impact assessment (VIA) to determine the extent and assess the significance of facility visibility. 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, and proposed Visual Impacts Minimization and Mitigation Plan as outlined in subdivision (d) of this section. The VIA shall address the following issues:
 - (1) the character and visual quality of the existing landscape;
 - (2) the visibility of the facility, including visibility of facility operational characteristics, such as wind turbine

lighting, visible plumes, shadow flickers and glare from solar panel arrays;

- (3) the visibility of all above-ground interconnections and roadways to be constructed within the facility as determined by the viewshed analysis;
- (4) the appearance of the facility upon completion, including building/structure size, architectural design, facade colors and texture, and site lighting;
- (5) the proposed facility lighting;
- (6) representative views (photographic overlays) of the facility, including relevant front, side, and rear views, indicating approximate elevations;
- (7) the nature and degree of visual change resulting from construction of the facility and above-ground interconnections;
- (8) The nature and degree of visual change resulting from operation of the facility and above-ground interconnections;
- (9) a description of all visual resources that would be affected by the facility.
- (b) The viewshed analysis component of the VIA shall be conducted as follows:
 - (1) Viewshed maps depicting areas of facility visibility within two (2) miles of a solar facility and five (5) miles of a wind facility, as well as any potential visibility from specific significant visual resources beyond the specified study area, shall be prepared and presented on a 1:24,000 scale recent edition topographic base map.
 - (i) A line-of-sight profile shall also be done for resources of statewide concern located within the VIA study area.
 - (ii) The viewshed maps shall provide an indication of

areas of potential visibility based on topography and vegetation, the highest elevation of facility structures, and distance zone (foreground, midground and background areas).

- (iii) The potential screening effects of existing vegetation shall also be shown.
- (iv) All visually sensitive resources identified in section 1101-2.8(b)(4)(ii) of this Part shall be included on the map(s) or an overlay.
- (v) An overlay indicating landscape similarity zones shall be included.
- (2) The VIA shall include a description of the methodology used to develop the viewshed maps, including software, baseline information, and sources of data.
- (3) The viewshed mapping shall be used to determine the potential visibility from viewpoints to be analyzed (as indicated in the following paragraph (4) of this subdivision) and locations of viewer groups in the vicinity of the facility, as determined pursuant to the pre-application meeting(s) held pursuant to section 1101-1.3(a) of this Part. These shall include recreational areas, residential and business locations, historic properties (listed or eligible for listing on the State or National Register of Historic Places), and travelers (interstate and other highway users).
- (4) In developing the application, the applicant shall confer with municipal planning representatives, the office, and where appropriate, OPRHP, Indigenous Nations, and/or APA in its selection of important or representative viewpoints. Viewpoint selection is based upon the following criteria:
 - (i) representative or typical views from unobstructed or direct line-of-sight views;
 - (ii) significance of viewpoints, designated scenic

resources, areas or features, which features typically include, but are not limited to: resources of statewide concern; landmark landscapes; conservation easement lands; areas covered by scenic easements, public parks or recreation areas; locally designated historic or scenic districts and scenic overlooks; high-use public areas; and resources identified by local stakeholders;

- (iii) level of viewer exposure (i.e., frequency of viewers or relative numbers, including residential areas, or high-volume roadways);
- (iv) proposed land uses; and
- (v) assessment of visual impacts pursuant to the requirements of adopted local laws or ordinances.
- (c) Visual contrast evaluation.
 - (1) Photographic simulations of the facility shall be prepared from the representative viewpoints to demonstrate the post-construction appearance of the facility. Where vegetation screening is relied on for facility mitigation, leaf-off and leaf-on simulation shall be provided.
 - (2) Additional revised simulations illustrating mitigation shall be prepared for those observation points for which mitigation is proposed in the application. Where screen plantings are proposed, provide simulations illustrating growth at 0-2 years and 5-7 years post-installation. Where existing or proposed vegetation screening is relied on for facility mitigation, leaf-off and leaf-on simulation shall be provided. Background photos must be provided at leaf-on where existing vegetation is used for screening.
 - (3) Each set of existing and simulated views of the facility shall be compared and rated and the results of the VIA shall be summarized in the VIA. Ratings shall be conducted based on a nationally-recognized model that compares and rates contrast and change within the landscape. Documentation of the steps followed in the rating and assessment methodology shall be provided including results

of rating impact panels and a description of the qualifications of the individuals serving on the panels. Panelists shall be independent, not part of the project team, and trained in the methodology to be used. Where visual impacts from the facility are identified, contrast minimization and mitigation measures shall be identified, and the extent to which they effectively minimize such impact shall be discussed.

- (d) Visual Impacts Minimization and Mitigation Plan. The Visual Impacts Minimization and Mitigation Plan shall include proposed minimization and mitigation alternatives based on an assessment of mitigation strategies, including screening (landscaping), architectural design, visual offsets, relocation or rearranging facility components, reduction of facility component profiles, alternative technologies, facility color and design, lighting options for work areas and safety requirements, and lighting options for FAA aviation hazard lighting. The facility design shall incorporate the following measures for the Visual Impacts Minimization and Mitigation Plan:
 - (1) Advertisements, conspicuous lettering, or logos identifying the facility owner, turbine manufacturer, solar module manufacturer, or any other supplier entity, other than warning and safety signs, shall not be allowed.
 - (2) The electrical collection system shall be located underground, to the extent practicable. Structures shall only be constructed overhead for portions where necessary based on engineering, construction, or environmental constraints.
 - (3) Electric collection and transmission facilities design shall specify use of either wood poles or steel pole structures.
 - (4) Non-specular conductors shall be used for any overhead portions of the transmission line and the electric collection system.
 - (5) For wind facilities, wind turbines, towers and blades shall be Federal Aviation Administration (FAA) approved

white or off-white colors to avoid the need for daytime aviation hazard lighting, unless otherwise mandated by FAA, and non-reflective finishes shall be used on wind turbines to minimize reflected glare.

- (6) Shadow flicker for wind facilities. Shadow Flicker shall be limited to thirty (30) hours per year at any non-participating residence, subject to verification using shadow prediction and operational controls at appropriate wind turbines. The Visual Impacts Minimization and Mitigation Plan shall include:
 - (i) analysis of a full year of hourly potential and realistic receptor-specific predicted flicker based on sunshine probabilities, operational projections, and facility design;
 - (ii) a protocol for monitoring operational conditions and potential flicker exposure at the wind turbine locations identified in the updated analysis, based on meteorological conditions;
 - (iii) details of the shadow detection and prevention technology that will be adopted for real-time meteorological monitoring and operational control of turbines;
 - (iv) schedule and protocol for temporary turbine shutdowns during periods that produce flicker to meet required shadow flicker limits; and
 - (v) shielding or blocking measures (such as landscape plantings and window treatments) may also be implemented at receptor locations that exceed the thirty (30)-hour annual limit, with approval by the resident receptor.
- (7) Glare for solar facilities. Solar panels shall have anti-reflective coatings and the Visual Impacts Minimization

and Mitigation Plan shall include an analysis using Sandia National Laboratories Solar Glare Hazard Analysis Tool (SGHAT) methodology or equivalent, as follows:

- (i) that solar glare exposure at any non-participating residence, airport or public roadway within the study area as defined in 1100-8(b)(1) of this Title;
- (ii) demonstrating that glint and glare will be avoided or minimized, and will not result in complaints, impede traffic movement or create safety hazards;
- (iii) the study area shall include analysis of viewers from eye levels representative of each visual receptor. Each array shall be analyzed individually unless surrounding arrays are consistently sloped based on existing topography;
- (iv) analysis shall not assume obstacles unless a justification acceptable to the office is provided.
- (8) A Planting Plan which shall include the facility fenceline; facility substation; energy storage structures; and the POI Switchyard; and for components of solar generating facilities as appropriate to facility setting.
- (9) A lighting plan(s), which shall address:
 - (i) security lighting needs at substation and switchyard sites, and any exterior equipment storage yards;
 - (ii) plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement and illumination levels to provide safe working conditions at the collection substation site, and any exterior equipment storage yards or other locations;
 - (iii) exterior lighting design shall be limited to lighting required for health, safety, security, emergencies and operational purposes and shall be specified to avoid off-site lighting effects as follows:

- (a) using task lighting as appropriate to perform specific tasks; limiting the maximum total outdoor lighting output based on the lowest allowable OSHA limits; task lighting fixtures shall be designed to be placed at the lowest practical height and directed to the ground and/or work areas to avoid being cast skyward or over long distances, incorporate shields and/or louvers where practicable, and capable of manual or auto-shut off switch activation rather than motion detection;
- (b) requiring full cutoff fixtures, with no dropdown optical elements for permanent exterior lighting, consistent with OSHA requirements and adopted local laws or ordinances, including development standards for exterior industrial lighting, manufacturer's cut sheets of all proposed lighting fixtures shall be provided; and
- (c) for wind facilities, lighting shall be installed on turbines for aviation hazard marking as specified by FAA. The applicant shall file a Notice for a Marking and Lighting Study of Aircraft Detection Lighting System(s) (ADLS) and dimmable lighting options with the FAA/Department of Defense (DOD) seeking a written determination approving the use of ADLS or other dimmable lighting option at the Project. If FAA/DOD determine that ADLS or dimmable lighting options are not appropriate for the project, or if the applicant determines installation of ADLS or dimmable lighting options are not technically feasible, the applicant shall consider other means of minimizing lighting effects.

Section 1101-2.9. Exhibit 9: Cultural Resources.

Exhibit 9 shall contain:

(a) A study of the impacts of the construction and operation of

the facility, interconnections and related facilities on archeological/cultural resources within the project impact area, including:

- (1) a summary of the nature of the probable impact on any archeological/cultural resources identified, addressing how those impacts shall be avoided or minimized;
- (2) as required pursuant to section 1101-1.1(d) of this Part, a Phase IA archeological/cultural resources study for the proposed facility;
- (3) if required pursuant to section 1101-1.1(d) of this Part, a Phase IB field study;
- (4) if required by the Phase IB study results, as determined pursuant to section 1101-1.1(d) of this Part, a Site Avoidance Plan and Phase II site evaluation study to assess the boundaries, integrity and significance of identified cultural resources;
- (5) if required by the Phase II study results, as determined pursuant to sections 1101-1.3(d)(3)(iv) and (v) of this Part, a Site Avoidance Plan and/or Phase III data recovery investigation or alternative measures to mitigate impacts to identified cultural resources.
- (b) A study of the impacts of the construction and operation of the facility, interconnections, and related facilities on historical/ above ground cultural resources within the project impact area, including:
 - (1) a summary of the nature of the probable impact on any historical/ above ground cultural resources identified, addressing how those impacts shall be avoided or minimized;
 - (2) as required pursuant to section 1101-1.1(d)(4)(i) of this Part, a zone of visual impact (ZVI) analysis for the

proposed facility;

- (3) as required pursuant to section 1101-1.1(d)(4)(ii) of this Part, a historic resources survey methodology for the proposed facility;
- (4) as required pursuant to section 1101-1.1(d)(4)(iii) of this Part, a historic resources survey for the proposed facility;
- (5) if required pursuant to section 1101-1.1(d)(4)(iv) of this Part, a historic resources effects assessment for the proposed facility.
- (c) An Unanticipated Discovery Plan that shall identify the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance, or human remains, are encountered during the excavation process. This plan shall include a provision for work stoppage upon the discovery of possible cultural, historical, or archaeological resources or human remains and be prepared by a professional archaeologist meeting the 36 CFR 61 standards.
- (d) A description and documentation of the applicant's consultation with OPRHP/SHPO, local historic preservation groups, and indigenous nations as required in sections 1101-1.1(d) of this Part and section 1100-1.3(c) of Part 1100 of this Title.
- (e) OPRHP/SHPO's effect or impact determination letter(s) pursuant to section 1101-1.1(d)(5) of this Part.

Section 1101-2.10. Exhibit 10: Geology, Seismology and Soils.

Exhibit 10 shall contain:

- (a) 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, including:
 - (1) a map delineating existing slopes (0-3 percent, 3-8 percent, 8-15 percent, 15-25 percent, 25-35 percent, greater

than 35 percent) on the drainage area potentially influenced by or influencing the facility site and interconnections;

- (2) a proposed site plan showing existing and proposed contours at two-foot intervals, for the facility site and interconnections, at a scale sufficient to show all proposed buildings, structures, paved and vegetative areas, and construction areas (features may be provided in stand-alone mapping or included as part of site plans required in 1100-2.6(f)(1)(i) and (ii) of this Title);
- (3) a description of excavation techniques to be employed;
- a description of the characteristics and suitability for construction of the material excavated for the facility and of the conditions at foundation level, including factors such as soil corrosivity (for both steel and concrete), bedrock competence, and subsurface hydrologic characteristics and groundwater levels; analysis should be based on a geotechnical engineering report verifying subsurface conditions, including the results of borings and/or test pits at a subset of proposed turbine locations (for wind facilities) or solar array locations (for solar facilities) and proposed horizontal directional drilling locations that are representative of known soil and bedrock formations within the facility site. Identify appropriate mitigation measures required in locations with highly corrosive soils, soils with a high frost risk, soils with high shrink/swell potential, and soil with significant inadvertent returns potential. Identify all locations where blasting operations will be required;
- (5) a map and plan describing all blasting operations consistent with NYSDOT "Geotechnical Engineering Manual GEM-22" including location, minimum blasting contractor qualifications, hours of blasting operations, estimates of amounts of rock to be blasted, warning measures, measures to ensure safe transportation, storage and handling of explosives, use of blasting mats, conduct of a pre-blasting condition survey of nearby buildings and improvements, and

coordination with local safety officials, and measures to protect nearby structures and groundwater wells;

- (6) an assessment of potential impacts of blasting to environmental features, above-ground structures and below-ground structures such as pipelines and wells;
- (7) an identification and evaluation of reasonable mitigation measures regarding blasting impacts, including the use of alternative technologies and/or location of structures, and including a plan for securing compensation for damages that may occur due to blasting;
- (8) a description of the regional geology, tectonic setting and seismology of the facility site;
- (9) an analysis of the expected impacts of construction and operation of the facility with respect to regional geology, including analysis of potential impacts in areas of known or anticipated karst, and a description of measures to minimize and/or mitigate risks from construction (including blasting and pile driving) in karst areas;
- (10) an analysis of the impacts of typical seismic activity experienced in the facility site based on current seismic hazards maps, on the location and operation of the facility identifying potential receptors in the event of failure, and if the facility is proposed to be located near a young fault or a fault that has had displacement in Holocene time, demonstration of a suitable setback from such fault;
- (11) a map delineating soil types on the facility site and interconnection sites;
- (12) a description of the characteristics and suitability for construction of each soil type identified above, including a description of the soil structure, texture, percentage of organic matter, and recharge/infiltration capacity of each soil type and a discussion of any dewatering that may be necessary during construction and

whether the facility shall contain any facilities below grade that would require continuous dewatering; and

- (13) maps, figures, and analyses delineating depth to bedrock and underlying bedrock types, including vertical profiles showing soils, bedrock, water table, and typical foundation depths on the facility site, karst, highly erodible or highly corrosive soils, high groundwater, artesian conditions, or other conditions for which mitigation measures may be required based on information to be obtained from available published maps and scientific literature, review of studies conducted on the facility site, and on-site field observations, test pits and/or borings as available.
- (b) An evaluation to determine suitable building and equipment foundations, including:
 - (1) a preliminary engineering assessment to determine the types and locations of potential foundations to be employed. The assessment shall investigate and present the suitability of such foundation types as spread footings, caissons, or piles, including a list of applicable building code requirements or industry standards by foundation type;
 - (2) if piles are used, a description and preliminary calculation of the number and length of piles to be driven, the daily and overall total number of hours of pile driving work to be undertaken to construct the facility, and an assessment of pile driving impacts on surrounding properties and structures due to vibration;
 - (3) identification of mitigation measures regarding pile driving impacts, if applicable, including a plan for securing compensation for damages that may occur due to pile driving; and
 - (4) an evaluation of the vulnerability of the facility site and the operation of the facility to an earthquake event and a tsunami event.

Section 1101-2.11. Exhibit 11: Terrestrial Ecology.

Exhibit 11 shall contain:

- (a) An identification and description of the type of vegetative and ecological communities present on the facility site, and adjacent properties within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, based upon field observations and data collection. Ecological communities shall be categorized according to the current edition of the New York Natural Heritage Program's "Ecological Communities of New York State."
- (b) An analysis of the temporary and permanent impact of the construction and operation of the facility and the interconnections on the vegetation identified, including a mapped depiction of the vegetation areas showing the areas to be removed or disturbed, categorized according to "Ecological Communities of New York".
- (c) An identification and evaluation of avoidance measures or, where impacts are unavoidable, minimization measures, including the use of alternative technologies, regarding vegetation impacts identified. Ecological communities categorized as vulnerable or rare shall be prioritized for avoidance and minimization of impacts.
- (d) A list of the species of mammals, birds, amphibians, terrestrial invertebrates, and reptiles that are likely to occur based on ecological communities present at, and bird and bat migration routes through, the facility, supplemented as necessary by site surveys, site observations and publicly available sources.
- (e) An analysis of the impact of the construction and operation of the facility and interconnections on wildlife, wildlife habitats, and wildlife travel corridors, other than a NYS threatened or endangered species or species of special concern

(which will be addressed pursuant to section 1101-2.12 of this Part).

(f) An identification and evaluation of avoidance measures or, where impacts are unavoidable, minimization measures, including the use of alternative technologies, regarding impacts to wildlife and wildlife habitat.

Section 1101-2.12. Exhibit 12: NYS Threatened or Endangered Species.

Exhibit 12 shall contain:

- (a) A wildlife site characterization report prepared pursuant to section 1101-1.3(c) (1) of this Part.
- (b) Any reports detailing the results of pre-application survey(s).
- (c) A copy of the office's determination pursuant to section 1101-1.3(c)(8) of this Part as to the existence of occupied habitat at the facility site.
- (d) A review of National Audubon Society climate change modeling for listed bird species documented at the facility site, and review of other climate change models relevant to listed bird species and other wildlife species documented at the facility site, as available.
- (e) If the office determined that there is confirmed or presumed occupied habitat at the site, an identification and evaluation of avoidance and minimization measures incorporated into the facility design, as well as any unavoidable potential impacts to NYS threatened or endangered species or species of special concern. Adverse impacts shall be summarized by species impacted and include an assessment of the acreage and/or an estimate number of individual members of each such species affected.
- (f) For a facility to be determined to have only de minimis impacts to NYS threatened or endangered grassland birds or their

habitat, the applicant shall submit a demonstration that the facility has been designed to meet one or more of the following criteria, as applicable:

- (1) the facility has been designed such that the only impacts would be to occupied habitat identified based on records greater than five (5) years old from the time of the wildlife site characterization report, but for which the applicant conducted appropriate surveys as approved by the Office that demonstrate that the species is not present at the facility site; or
- (2) construction of the facility within each mapped area of listed bird occupied habitat (based on the documented area of species' use prior to addition of buffers) will only impact grasslands less than twenty-five (25) acres in size and will not include a recent (i.e., less than five (5) years) confirmed nesting or roosting location; or
- (3) the facility has been designed such that the only impacts would be to occupied habitat identified for NYS threatened or endangered species for which the NYSDEC has issued a Notice of Adoption of regulations delisting or downlisting to Special Concern.
- (g) For a facility that would adversely impact any NYS threatened or endangered species or their habitat, a preliminary Net Conservation Benefit Plan prepared in compliance with section 1101-3.4(o) of this Part. Section 1101-2.13 Exhibit 13: Water Resources and Aquatic Ecology

Section 1101-2.13. Exhibit 13: Water Resources and Aquatic Ecology.

Exhibit 13 shall contain:

- (a) Groundwater.
 - (1) Hydrologic information reporting depths to high groundwater and bedrock, including a site map based on publicly available information and any field investigations completed by the applicant, showing depth to high

groundwater and bedrock in increments appropriate for the facility site.

- A survey based on publicly available information and the results of a private, active groundwater well survey distributed to non-participating property owners and residents within one thousand (1,000) feet of the facility site. The groundwater well survey materials will include a summary of the project, contact information, and a description of where the well owner can get more information about the project, an invitation to join the stakeholder list, and questions regarding any wells on the property. Survey respondents that indicate an active well on their property shall be added to the stakeholder list if not already included. The application shall include information on groundwater quality, and the location, depth, yield and use of all public and private groundwater wells or other points of extraction of groundwater, and a delineation and description of well head and aquifer protection zones, to the extent such information is publicly available or obtained through the private well survey. Parcel-based maps shall be provided based on publicly available information and the results of the private well survey, showing the locations of all identified public and private groundwater wells, delineating all groundwater aquifers and groundwater recharge areas, and identifying groundwater flow direction, and shall distinguish the following features:
 - (i) all existing, active water supply wells or water supply intakes located within one hundred (100) feet of any collection lines or access roads;
 - (ii) all existing, active water supply wells or water supply intakes located within five hundred (500) feet of horizontal directional drilling operations (HDD);
 - (iii) all existing, active water supply wells or water supply intakes located within two hundred (200) feet of solar pier/post driving locations and turbine excavations not requiring blasting; and

- (iv) all existing, active water supply wells or water supply intakes located within one thousand (1,000) feet of any blasting operations.
- (3) An analysis and evaluation of potential impacts (during normal and drought conditions) from the construction of the facility on all water supplies and uses, groundwater quality and quantity in the facility area, including potential impacts on public and private groundwater sourced water supplies, including private wells within a one (1)-mile radius of the facility site, and wellhead and aquifer protection zones.

(b) Surface water.

- (1) A map or series of maps showing delineated boundaries of all Federal, State, and locally regulated surface waters present on the facility site that are within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, as determined by the office pursuant to section 1101-1.1(b) of this Part. For adjacent properties without accessibility, surface water delineations may be based on remote sensing data, interpretation of wetlands and soils mapping, observations from adjacent accessible properties, and aerial imagery.
- (2) Any reports and summary tables detailing the results of the surface water delineation survey(s) conducted pursuant to section 1101-1.1(b) of this Part.
- (3) For the surface waters depicted on the map(s) required in paragraph (1) of this subdivision, a description of the New York State listed Water Quality Standards and Classification, ambient standards and guidance values, flow, presence of aquatic invasive species and other characteristics of such surface waters, including intermittent streams, based on actual on-site surface water observations conducted pursuant to section 1101-1.3(b) of this Part.

- (4) An identification of any surface water drinking-water supply intakes within one (1) mile, or if none within one (1) mile, an identification and location of the nearest intake, including characterization of the type, nature, and extent of service provided from the identified source.
- (5) If the office determines pursuant to section 1101-1.1(b) of this Part that there are jurisdictional surface waters at the site, a demonstration of avoidance and minimization of impacts to such NYS protected waters by siting all components and construction activity more than fifty (50) feet from any delineated NYS protected waterbody, and avoids excavation or fill below the mean high water elevation of navigable waterbodies.
- (6) If the applicant cannot avoid all impacts to NYS protected waterbodies, an explanation of all efforts the applicant made to minimize the impacts, including a discussion of all best management practices used during design, including the following:
 - (i) no solar panel racking, or perimeter fence shall span a NYS protected waterbody unless it is a first order stream;
 - (ii) excavation, grading, or placement of fill within the bed shall only occur for access roads at locations in compliance with all uniform standards and conditions set forth in Subpart 1101-3 of this Part;
 - (iii) stream crossings are located in the straight sections of the channel/bed and as perpendicular to the direction of flow as practicable;
 - (iv) how the facility design minimizes all tree clearing requirements to the extent practicable within fifty (50) feet of NYS protected waters;
 - (v) how the facility design takes into account the slopes of the NYS protected waters, as well as

surrounding surface slope and erosion potential, when siting within fifty (50) - feet of NYS protected waters;

(vi) how the facility design minimizes surface grading requirements to the extent practicable within fifty (50) feet of NYS protected waters; and

(vii) how the facility will incorporate and maintain low height stabilizing vegetation with fine root biomass and some stream shading potential (e.g., low scrub shrub like willows or dogwood).

(c) Stormwater.

- (1) A draft Stormwater Pollution Prevention Plan (SWPPP) for the collection and management of stormwater discharges from the facility site during construction. The draft SWPPP will be prepared in accordance with the applicable New York State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity and the New York State Standards and Specifications for Erosion and Sediment Control (see section 1100-16.1(i)(1)(i) of this Title). If the facility is not eligible for coverage under the SPDES General Permit, a draft application for an individual SPDES Permit shall be provided.
- (2) To the extent not covered in paragraph (1) of this subdivision, a preliminary plan, prepared in accordance with the New York State Stormwater Management Design Manual (see section 1100-16.1(i)(1)(ii) of this Title), which identifies the post-construction stormwater management practices that will be used to manage stormwater runoff from the developed facility site. This can include runoff reduction/green infrastructure practices, water quality treatment practices, and practices that control the volume and rate of runoff.
- (d) Chemical and petroleum bulk storage.
 - (1) A description of the spill prevention and control

measures to be in place for ammonia storage, fuel oil storage, wastewater storage, and other chemical, petroleum or hazardous substances stored on the facility site, including an evaluation of alternatives and mitigation measures.

- (2) An identification of whether the storage of ammonia, fuel oil, wastewater, other chemicals, petroleum or hazardous substances, or disposal of solid wastes on the facility site is subject to regulation under the State's chemical and petroleum bulk storage programs, and, if so, a demonstration of compliance with such regulations.
- (3) An identification whether the storage of ammonia, fuel oil, wastewater, other chemicals, petroleum, or hazardous substances on the facility site is subject to regulation under local law (county, city, town, or village), and if so, a demonstration of the degree of compliance with such local laws.
- (4) Plans to comply with §175 of the Navigation Law, 6 NYCRR §613.8 (petroleum spills), and 6 NYCRR section 595.3(b) (hazardous substance spills) as applicable.
- (e) Aquatic species and invasive species.
 - (1) An analysis of the impact of the construction and operation of the facility on aquatic biota, including species listed as endangered, threatened, or species of special concern in 6 NYCRR Part 182, and including the potential for introducing and/or spreading invasive species listed in 6 NYCRR Part 575.
 - (2) An identification and evaluation of reasonable avoidance measures and, where impacts are unavoidable, mitigation measures regarding impacts on such aquatic biota, including species and invasive species impacts to be addressed pursuant to the Invasive Species Control and Management Plan to be prepared pursuant to section 1101-4.2(f)(4) of this Part (if any) and assure compliance with

applicable water quality standards (6 NYCRR Part 703).

Section 1101-2.14. Exhibit 14: Wetlands.

Exhibit 14 shall contain:

- (a) A map or series of maps showing jurisdictional boundaries of all Federal, State and locally regulated wetlands and regulated adjacent areas present on the facility site that are within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, as determined by the Office pursuant to section 1100-1.1(a) of this Title, and provide Federal jurisdictional determination, if available. For adjacent properties without accessibility, initial surveys may be based on remote-sensing data, interpretation of existing wetlands and soils mapping, observation from adjacent accessible properties, and current and historical aerial imagery.
- (b) Any reports and summary tables detailing the results of the delineation survey(s) pursuant to section 1101-1.1(a) of this Part.
- (c) A qualitative and descriptive wetland functional assessment, including seasonal variations, for all delineated wetlands that would be impacted for groundwater recharge/discharge, flood flow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal, sediment/shoreline stabilization, wildlife habitat, recreation, uniqueness/heritage, visual quality/aesthetics, and protected species habitat.
- (d) An analysis of all off-site wetlands within 100 feet beyond the LOD that may be hydrologically or ecologically influenced by development of the facility and the wetlands identified on the map required by subdivision (a) of this section, observed in the field where accessible to determine their general characteristics and relationship, if any, to delineated wetlands.
- (e) If the office has determined pursuant to section 1101-1.1(a) of this Part that there are jurisdictional wetlands at the site, a demonstration of avoidance of impacts to such

wetlands and their one hundred (100)-foot adjacent areas by siting all components more than one hundred (100) feet from any delineated NYS protected wetlands.

- (f) If the applicant cannot avoid impacts to all wetlands and adjacent areas, an explanation of all efforts the applicant made to minimize the impacts to wetlands and adjacent areas identified during wetland surveys. The impact minimization summary shall address the following criteria for each proposed impact area:
 - (1) why the facility design and siting cannot avoid NYS wetlands and adjacent areas, as applicable;
 - (2) how the facility design has minimized the spatial extent of proposed impacts to protected wetlands and regulated adjacent areas, as applicable; and
 - (3) how the facility design and siting minimize impacts to the functions and values currently provided by these wetlands and/or regulated adjacent areas.
- (g) For permanent or long-term impacts to protected wetlands and/or regulated adjacent areas for which compensatory mitigation is required in Table 14-1 of this subdivision, unless determined otherwise by the office, the applicant shall submit a Wetland Restoration and Mitigation Plan pursuant to section 1101-4.2(f)(3) of this Part, in accordance with the following:
 - (1) Subject to the approval of the Office, payment of wetland mitigation credits for unavoidable wetland impacts into:
 - (i) an existing wetland mitigation bank, or
 - (ii) an in-lieu fee program, or
 - (iii) any other wetland mitigation fee program.

The purchase of mitigation banking credits or payments into an in-lieu fee program or other mitigation fee

program shall occur, to the maximum extent practicable, within the same HUC 8 Watershed within which the facility is located. The Office may give the applicant credit, in whole or in part, for mitigation fees paid to another state or federal agency or authority; or

- (2) unless determined otherwise by the office, implement applicant-responsible wetland and/or adjacent area mitigation at the ratios as set forth in Table 14-1 of this subdivision and subject to the following:
 - (i) Category: Prescribed mitigation ratio and type.
 - (a) X: Not an allowable feature or activity.
 - (b) A: Allowed; no mitigation or enhancement required.
 - (c) A(M1): Allowed, mitigation required (3:1 mitigation ratio by area of impact creation only, broken down by cover type).
 - (d) A(M2): Allowed, mitigation required (2:1 mitigation ratio by area of impact creation, restoration, and enhancement).
 - (e) A(M3): Allowed, mitigation required (1:1 mitigation ratio by area of impact creation, restoration and enhancement).
 - (f) A(E): Allowed, enhancements required (no mitigation ratio; e.g., planting of adjacent area, mitigating hydrological changes).
 - (ii) within the same HUC 8 sub-basin; and
 - (iii) within a location that is subject to jurisdiction under ECL article 24, which includes the following:
 - (a) contiguous with an existing NYS-regulated wetland; or
 - (b) within fifty (50) meters (one hundred sixty-four (164) feet) of an existing NYS-regulated wetland;
 - (iv) Where creation, enhancement, and restoration mean

the following:

- (a) creation, in cases of activities requiring fill, means making a new wetland or expanding an existing wetland in lands that were not previously occupied by a wetland. Creation, in cases of activities not requiring fill, can include planting trees and/or shrubs in an existing wetland currently devoid of trees and shrubs.
- (b) restoration means reclaiming a degraded wetland or adjacent area to bring back one or more functions that have been partially or completely lost.
- (c) enhancement means altering an existing functional wetland or adjacent area to increase selected functions and benefits that offsets losses of these functions or benefits in another wetland or adjacent area or parts of the same wetland or adjacent area.
- (3) Implement a combination of the mitigation required pursuant to paragraphs (1) and (2) of this subdivision to meet the mitigation requirement.

Table 14-1: Wetland Mitigation Requirements

	Clas s Iª		Class IIª		Class III & IV ^a	
Feature/Activity	FWW	AA	FWW	AA	FWW	AA
Major Activities	l	L	l.	<u>I</u>	l	l
Wind Turbines	Х	A (M3)	Х	A(E)	A (M3)	А
Solar Panels	Х	A(E)*	A (M2)	A (E	A (M3)	А
Energy Storage	X	A (M3) **	X	A (E	A (M3	А
Access Roads	A (M1)	A(E)	A (M2)	A (E	A (M3)	А
Power interconnections (including clearing for interconnections)	A (M1	A (E)	A (M2	A(E)	A (M3	А
Clearing of forest	X	A (M3) **	A (M2	A(E	A (M3)	А
Other activities and structures integral to the project involving placement of fill	Х	A (M3) **	A (M2	A(E)	A (M3)	A
Intermediate Activities	,					
Security fence	X	A(E)	A (M3)	A	A	А
Clearing and manipulation of undisturbed herbaceous vegetation	X	A (E)	A (M3	A	A (M3	A
Other activities integral to the project involving grading	Х	A (E)	A (M3	А	A (M3)	А
Minor Activities Grading and manipulation of disturbed areas (active hay/row crops, existing commercial/industrial development)	Х	A (E)	A (M3	A	A (E)	А
Selective cutting of trees and shrubs	А	А	А	А	А	А
** 75-foot setback from wetland boundary required in undisturbed adjacent area						

^a ECL article 24 classification as determined under 6 NYCRR Part 664.

Section 1101-2.15. Exhibit 15: Agricultural Resources.

Exhibit 15 shall contain:

- (a) An assessment of agricultural resources within the county(ies), town(s), and facility site which shall include the following data sets and illustrations:
 - (1) An analysis of temporary impacts and/or permanent impacts to land used in agricultural production within the facility site, the proposed limits of disturbance, and the facility footprint (including all planned structures, fenced facility areas, etc.). Analysis should identify NYS Certified Agricultural Districts, lands with NYS Agricultural Land Classification Mineral Soil Groups 1-4, and municipal boundaries.
 - (2) Methods available to facilitate farming activity during construction, areas where it will not be feasible to continue farming both during construction and during operation, and areas which will remain in agricultural use during operation.
 - (3) A discussion of the efforts that were taken to avoid or minimize the impact of the facility on land used in agricultural production, with additional consideration for lands located within NYS Certified Agricultural Districts and containing NYS Agricultural Land Classification Mineral Soil Groups 1-4.
- (b) Maps showing the following:
 - (1) the location of the proposed facility and all ancillary features in relation to land used in agricultural production, NYS certified Agricultural Districts, and Mineral Soil Groups 1-4 within the facility site;
 - (2) temporary and permanent impacts to land used in agricultural production and all agricultural production acreage proposed to remain in agricultural use within the facility site;

- (3) any agreed upon landowner-imposed development restrictions (e.g., locations within the facility site on which the landowner will not allow facility development);
- (4) locations of known or suspected sub-surface drainage systems (including outlets), surface drainages, irrigation lines, or other unique agricultural facilities; and
- (5) USDA soil mapping for the facility site.
- (c) An Agricultural Plan to avoid, minimize, or mitigate significant adverse impacts to land used in agricultural production to the maximum extent practicable, with additional consideration for land within a NYS Certified Agricultural District or land that contains NYS Agricultural Land Classification Mineral Soil Groups 1 through 4. The Agricultural Plan shall be consistent with the New York State Department of Agriculture and Markets Guidelines (see sections 1100-17.1(1)(1)(i) and (ii) of this Title) to the maximum extent practicable. The Agricultural Plan shall include identification and detailed description of any necessary mitigation actions that will be undertaken by the permittee. To the extent the office has determined that the facility would result in impacts to lands used in agricultural production requiring mitigation, the office may authorize the permittee to pay a mitigation fee into the Agricultural and Farmland Viability Protection Fund established by State Finance Law section 99-pp. The office may also give the applicant credit for any agricultural mitigation fee paid to another state or Federal agency or authority.
- (d) A Drainage Remediation Plan to address inadvertent damages to surface or sub-surface drainage, including:
 - (1) a demonstration of the likelihood of impacts to surface of subsurface drainage and how the interruption of drainage may impact farmland within and outside of the facility site; and
 - (2) an identification of methods of repair for damaged drainage features.
- (e) Any agricultural co-utilization plan for the lifespan of the facility shall demonstrate that the proposed agricultural co-

utilization will be feasible. The plan shall be assembled by a qualified or accredited third party agricultural professional. The plan should include an itemization of the investments made by the applicant to facilitate the agricultural co-utilization (e.g., grazing plan, planting pasture species, development of watering facilities, modified access for livestock trailers, panel spacing, additional fencing, access roads, gates, housing, etc.).

Section 1101-2.16. Exhibit 16: Effect on Transportation.

Exhibit 16 shall contain:

- (a) A conceptual site plan, drawn at an appropriate scale, depicting all facility site driveway and roadway intersections, showing:
 - (1) horizontal and vertical geometry, the number of approach lanes, the lane widths, shoulder widths, traffic control devices by approaches, and sight distances; and
 - (2) for wind facilities, access road locations and widths, including characterizations of road intersection suitability.
- (b) A description of the pre-construction characteristics of the public roadways in the vicinity of the facility, as determined pursuant to the pre-application meeting(s) required pursuant to section 1100- 1.3(a) of this Part, including:
 - (1) a review of existing data on vehicle traffic, use levels and accidents;
 - (2) a review of transit facilities and routes, including areas of school bus service;
 - (3) an identification of potential approach and departure routes to and from the facility site for police, fire, ambulance and other emergency vehicles; and
 - (4) a review of available load bearing and structural rating information for expected facility traffic routes (existing culverts to be traversed by construction vehicles

shall also be considered in the analyses).

- (c) An estimate of the trip generation characteristics of the facility during construction, including:
 - (1) for each major phase of construction, and for the operation phase, an estimate of the number and frequency of vehicle trips, including an estimation of daily trips (identifying whether trips will occur during day or night) by size, weight and type of vehicle;
 - (2) for major cut or fill activity (spoil removal or deposition at the facility site and affected interconnection areas), a separate estimate of the number and frequency of vehicle trips, including time of day and day of week arrival and departure distribution, and including a delineation of approach and departure routes, by size, weight and type of vehicle; and
 - (3) an identification of approach and departure routes to and from the facility site for construction workers and employees of the facility.
- (d) An analysis and evaluation of the traffic and transportation impacts of the facility, including:
 - (1) for wind facilities, a discussion of projected future traffic conditions with and without the facility, the analysis to be conducted separately for the peak construction impacts of the facility and for the typical operations of the completed facility, including in congested urbanized areas a calculation and comparison of the level of service for each representative intersection, giving detail for each turning movement;
 - (2) an evaluation of the adequacy of the road system, using publicly available and site-specific data, to accommodate the projected traffic, the analysis to be conducted separately for the peak construction impacts of the facility (for both wind and solar facilities) and for the typical operations of the completed facility (analyses to be

provided only for operational wind generation) and to include an identification of the extent and duration of traffic interferences during construction of the facility and any interconnections;

- (3) an assessment of over-size load deliveries, and the adequacy of roadway systems to accommodate oversize and over-weight vehicles, improvements necessary to accommodate oversize or overweight deliveries, impacts associated with such improvements, and mitigation measures appropriate to minimize such impacts; and
- (4) an identification and evaluation of practicable mitigation measures regarding traffic and transportation impacts, including time restrictions, the use of alternative technologies, the construction of physical roadway improvements, the installation of new traffic control devices, and the repair of local roads or other features due to damage by heavy equipment or construction activities during construction or operation of the facility.
- (e) An analysis and evaluation of the impacts of the facility on airports and airstrips, railroads, buses and any other mass transit systems in the vicinity of the facility, as determined pursuant to the pre- application meeting(s) held pursuant to section 1100-1.3(a) of this Title. The analysis and evaluation shall include impacts on military training and frequent military operations in the National Airspace System and Special Use Airspace designated by the FAA.
- (f) If any construction or alteration is proposed that requires a Notice of Proposed Construction to be submitted to the administrator of the FAA in accordance with 14 Code of Federal Regulations Part 77 (see section 1100-15.1(h)(1)(i) of this Title):
 - (1) The application shall include a statement that the applicant has:
 - (i) received an informal Department of Defense review

- of the proposed construction or alteration in accordance with 32 Code of Federal Regulations section 211.7 (see section 1100-15.1(f)(1)(ii) of this Title); or
- (ii) received a formal Department of Defense review of the proposed construction or alteration in accordance with 32 Code of Federal Regulations section 211.6 (see section 1100-15.1(f)(1)(i) of this Title).
- (2) If such construction or alteration of a wind facility is proposed to be located:
 - (i) within twelve (12) miles of the nearest point of the nearest runway of a commercial service, cargo service, reliever or general aviation (public use) airport or a military airport with at least one (1) runway more than three thousand two hundred (3,200) feet in actual length; or
 - (ii) within six (6) miles of the nearest point of the nearest runway of a commercial service, cargo service, reliever or general aviation (public use) airport or a military airport with its longest runway no more than three thousand two hundred (3,200) feet in actual length; or
 - (iii) within three (3) miles of the nearest point of the nearest point of the nearest landing and takeoff area of a commercial service, cargo service, reliever or general aviation (public use) heliport or military heliport:
 - (a) the application shall include a statement that the applicant has consulted with the operators of such airports and heliports that are non-military facilities, has provided a detailed map and description of such construction or alteration to such operators, and has requested review of and comment on such construction or alteration by such operators; and
 - (b) the application shall include a statement

that the applicant has provided a detailed map and description of such construction or alteration to the operators (base commanders) of such airports and heliports that are military facilities.

- (3) The application shall include a detailed description of the responses received in such reviews and consultations required in paragraphs (1) and (2) of this subdivision, including specifically whether and why such operators believe such construction or alteration should be:
 - (i) unrestricted;
 - (ii) subject to site-specific requirements; or
 - (iii) excluded from certain areas.

Section 1101-2.17. Exhibit 17: Consistency with Energy Planning Objectives.

Exhibit 17 shall contain:

- (a) A statement demonstrating the degree of consistency of the construction and operation of the facility with New York State energy policies, including CLCPA targets and long-range energy planning objectives and strategies contained in the most recent State Energy Plan at the time of filing the application, including consideration of the information required by subdivisions (b) through (g) of this section.
- (b) A description of the impact the facility would have on reliability in the State.
- (c) A description of the impact the facility would have on fuel diversity in the State.
- (d) A description of the impact the facility would have on regional requirements for capacity.
- (e) A description of the impact the facility would have on electric transmission constraints.

- (f) An analysis of the comparative advantages and disadvantages of reasonable and available alternative locations or properties identified for construction of the facility.
- (g) A statement of the reasons why the facility will promote public health and welfare, including minimizing the public health and environmental impacts related to climate change.

Section 1101-2.18. Exhibit 18: Socioeconomic Effects.

Exhibit 18 shall contain:

- (a) An estimate of the average construction work force, by discipline, for each quarter, during the period of construction; and an estimate of the peak construction employment level.
- (b) An estimate of the annual construction payroll, by trade, for each year of construction and an estimate of annual direct non-payroll expenditures likely to be made in the host municipality(ies) (materials, services, rentals, and similar categories) during the period of construction.
- (c) An estimate of the number of jobs and the on-site payroll, by discipline, during a typical year once the facility is in operation, and an estimate of other expenditures likely to be made in the host municipality(ies) during a typical year of operation.
- (d) An estimate of incremental school district operating and infrastructure costs due to the construction and operation of the facility, this estimate to be made after consultation with the affected school districts.
- (e) An estimate of incremental municipal, public authority, or utility operating and infrastructure costs that will be incurred for police, fire, emergency, water, sewer, solid waste disposal, highway maintenance and other municipal, public authority, or utility services during the construction and operation the facility (this estimate to be made after consultation with the affected municipalities, public authorities, and utilities).

- (f) An identification of all jurisdictions (including benefit assessment districts and user fee jurisdictions) that levy real property taxes or benefit assessments or user fees upon the facility site, its improvements and appurtenances and any entity from which payments in lieu of taxes will or may be negotiated.
- (g) For each jurisdiction, a description of the host community benefits to be provided, including an estimate of the incremental amount of annual taxes (and payments in lieu of taxes, benefit charges and user charges) it is projected would be levied against the post-construction facility site, its improvements and appurtenances, payments to be made pursuant to a host community agreement or other project agreed to with the host community.
- (h) For each jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the facility to the expected tax revenues (and payments in lieu of taxes, benefit charge revenues and user charge revenues) generated by the facility.
- (i) An analysis of whether all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident can be fulfilled by existing local emergency response capacity, and in that regard identifying any specific equipment or training deficiencies in local emergency response capacity (this analysis to be made after consultation with the affected local emergency response organizations).
- (j) A statement as to the host community benefit(s) to be provided by the applicant.

Section 1101-2.19. Exhibit 19: Disadvantaged Communities and Environmental Justice.

Exhibit 19 shall contain:

(a) An identification and description of any disadvantaged community or potential Environmental Justice area (PEJA) located within the impact study area of the proposed facility. The impact study area for purposes of disproportionate burden analysis shall be at a minimum, within one half mile (0.5) radius around the

proposed facility.

- (b) A figure identifying the location of any disadvantaged communities and/or PEJAs within the impact study area.
- (c) A list of census tracts or block groups comprising each disadvantaged community or PEJA within the impact study area in tabular format.
- (d) An identification and evaluation of the nature and magnitude of potential and significant adverse disproportionate impacts occurring within or impacting disadvantaged communities or PEJAs resulting from the construction and operation of the proposed facility.
- (e) Any analysis required hereunder shall include supporting information, facts, and figures, and provide the proportion of impacts proposed to occur within any disadvantaged communities or PEJAs and the proportion of impacts outside of disadvantaged communities or PEJAs. The evaluation shall be conducted consistent with the applicable requirements of 6 NYCRR section 487.10. The applicant shall provide any studies which were used in the evaluation and identify the author and dates thereof.
- (f) The applicant shall articulate the reasons why the proposed measures to avoid, minimize, or offset any disproportionate environmental impacts of the proposed facility will, to the maximum extent practicable, avoid, minimize, or offset any identified significant and adverse disproportionate impacts, including a description of the manner in which such measures can be verified and a statement of the cost of such measures.

Section 1101-2.20. Exhibit 20: Effect on Communications.

Exhibit 20 shall contain:

- (a) A detailed description of the proposed telecommunications interconnection, including all interconnecting facilities, line route, design details, size, functions, and operating characteristics.
- (b) For wind facilities, an identification of all existing

broadcast communication sources within a two (2) - mile radius of the facility and the electric interconnection between the facility and the point of interconnection, unless otherwise noted, including:

- (1) AM radio;
- (2) FM radio;
- (3) television;
- (4) telephone;
- (5) microwave transmission (all affected sources, not limited to a two-mile radius);
- (6) emergency services;
- (7) municipal/school district services;
- (8) public utility services;
- (9) doppler/weather radar (all affected sources, not limited to a two (2)-mile radius);
- (10) air traffic control (all affected sources, not limited
 to a two (2)-mile radius);
- (11) armed forces (all affected sources, not limited to a two
 (2)-mile radius);
- (12) global positioning systems (GPS); and
- (13) amateur radio licenses registered to users.
- (c) For solar and wind facilities, an identification of all existing underground cable and fiber optic major transmission telecommunication lines within a one (1)-mile radius of the facility and the electric interconnection between the facility and the point of interconnection.
- (d) A statement describing the anticipated effects of the facility and the electric interconnection between the facility and the point of interconnection on the communications systems

required to be identified pursuant to subdivisions (b) and/or (c) of this section, including the potential for:

- (1) facility structures to interfere with broadcast patterns by re-radiating the broadcasts in other directions;
- (2) structures to block necessary lines-of-sight;
- (3) physical disturbance by construction activities;
- (4) adverse impacts to co-located lines due to unintended bonding; and
- (5) any other potential for interference.
- (e) An analysis demonstrating that there will be sufficient capacity to support the requirements of the facility.
- (f) An evaluation of the design configuration of the facility and electric interconnection between the facility and the point of interconnection demonstrating that there shall be no adverse effects on the communications systems required to be identified pursuant to subdivisions (b) and/or (c) of this section.
- (g) A description of post-construction activities that shall be undertaken to identify and mitigate any adverse effects on the communications systems required to be identified pursuant to subdivisions (b) and/or (c) of this section that occur despite the design configuration of the proposed facility and electric interconnection between the facility and the point of interconnection.
- (h) A description of the status of negotiations, or a copy of agreements that have been executed, with companies or individuals for providing the communications interconnection including any restrictions or conditions of approval placed on the facility imposed by the provider, and a description of how the interconnection and any necessary system upgrades will be installed, owned, maintained and funded.

Interconnection.

Exhibit 21 shall contain:

- (a) A detailed description of the proposed electric interconnection, including:
 - (1) the design voltage and voltage of initial operation;
 - (2) the type, size, number and materials of conductors;
 - (3) the insulator design;
 - (4) the length of the transmission line;
 - (5) the typical dimensions and construction materials of the towers;
 - (6) the design standards for each type of tower and tower foundation;
 - (7) for underground construction, the type of cable system to be used and the design standards for that system;
 - (8) for underground construction, indicate on a profile of the line the depth of the cable and the location of any oil pumping stations and manholes;
 - (9) equipment to be installed in any proposed switching station or substation including an explanation of the necessity for any such switching station or substation;
 - (10) any terminal facility; and
 - (11) the need for cathodic protection measures.

- (b) An analysis of system reliability impacts that shows expected flows on the system under normal, peak and emergency conditions and effects on stability of the interconnected system, including the necessary technical analyses (thermal, voltage, short circuit and stability) to evaluate the impact of the interconnection. The study shall include the new electric interconnection between the facility and the point of interconnection, as well as any other system upgrades required.
- (c) An evaluation of the potential significant impacts of the facility and its interconnection to transmission system reliability at a level of detail that reflects the magnitude of the impacts.
- (d) A discussion of the benefits and detriments of the facility on ancillary services and the electric transmission system, including impacts associated with reinforcements and new construction necessary as a result of the facility.
- (e) An estimate of the increase or decrease in the total transfer capacity across each affected interface, and 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.
- (f) A description of criteria, plans, and protocols for generation and ancillary facilities' design, construction, commissioning, and operation, including as appropriate to generation technology:
 - (1) engineering codes, standards, guidelines and practices that apply;
 - (2) generation facility type certification;
 - (3) procedures and controls for facility inspection, testing and commissioning; and
 - (4) maintenance and management plans, procedures and criteria.

- (g) For facilities where it is contemplated that a portion of a new interconnection substation to be built will be transferred to the transmission owner:
 - (1) describe the substation facilities to be transferred and the contemplated future transaction, including a timetable for the future transfer:
 - (2) describe how the substation-interconnection design will meet the transmission owner's requirements; and
 - (3) define the operational and maintenance responsibilities for the substation and how they will meet the transmission owner's standards.
- (h) If the applicant will entertain proposals for sharing above-ground infrastructure with other utilities (communications, cable, phone, cell phone relays, and similar facilities), criteria and procedures for review of such proposals.
- (i) A status report on equipment availability and expected delivery dates for major components including towers, turbines, solar panels, inverters, transformers, and related major equipment.

Section 1101-2.22. Exhibit 22: Electric and Magnetic Fields.

Exhibit 22 shall contain:

(a) For the entire ROW of the proposed interconnection line rated over sixty-nine (kV), or any collection line rated over sixty-nine (69)-kV, providing the electrical interconnection between the facility, and any transmission line between the facility and the existing electric transmission and distribution system: identify every ROW segment having unique electric and magnetic field (EMF) characteristics due to structure types and average heights, ROW widths, and co-location of other transmission facilities in the ROW.

- (b) For each identified ROW segment, provide both "base case" and "proposed" cross-sections to scale showing:
 - (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 right-of-way 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 the aerial photos/drawings enhanced by showing the exact location of each:
 - (1) identified ROW segment;
 - (2) cross-section; and
 - (3) nearest residence or occupied non-residential building in each identified ROW segment with a stated measurement of the distance between the edge of ROW and the nearest edge of the residence or building.
- (d) An EMF study with calculation tables and field strength graphs for each identified ROW segment cross-section, as follows:
 - (1) the study shall be signed and stamped/sealed by a licensed professional engineer registered and in good standing in the State of New York;
 - (2) provide the name of the computer software program used to model the facilities and make the calculations;

- (3) regarding electric fields, model the circuits at rated voltage and provide electric field calculation tables and field strength graphs calculated at one (1) meter above ground level with five (5)-foot measurement intervals depicting the width of the entire ROW and out to five hundred (500) feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations;
- (4) regarding 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 (1) meter above ground level with five (5)-foot measurement intervals depicting the width of the entire ROW and out to five hundred (500) feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations;
- (5) regarding magnetic fields, also model the circuit phase currents equal to the maximum average annual load estimated to be occurring on the power lines within ten (10) years after the proposed facility is put in operation and provide magnetic field calculation tables and field strength graphs calculated at one (1) meter above ground level with five (5)-foot measurement intervals depicting the width of the entire ROW and out to five hundred (500) feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations;
- (6) regarding magnetic fields, also model a "base case" with the circuit phase currents equal to the maximum average annual load currently estimated to be occurring on the existing power lines within the ROW (without construction or operation of the proposed facility) and provide magnetic field calculation tables and field strength graphs calculated at one (1) meter above ground level with five (5)-foot measurement intervals depicting

the width of the entire ROW and out to five hundred (500) feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations; and

(7) provide a demonstration that the facilities, including interconnection transmission lines, will conform with the Public Service Commission's Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (see section 1100-15.1(m)(1)(i) of this Title) at the proposed ROW edges.

Section 1101-2.23. Exhibit 23: Decommissioning and Site Restoration.

Exhibit 23 shall contain a Decommissioning and Site Restoration Plan consistent with the requirements in sections 1101-3.6(a) of this Part.

Section 1101-2.24. Exhibit 24: Local Laws and Ordinances.

Exhibit 24 shall contain:

- (a) A list of all local ordinances, laws, resolutions, regulations, standards, and other requirements applicable to the construction or operation of the facility, which includes interconnection electric transmission lines, that are of a substantive nature, together with a statement that the location of the facility as proposed conforms to all such local substantive requirements, except any the applicant requests that the Office elect not to apply. Copies of zoning, flood plain and similar maps, tables and/or documents shall be included in the exhibit when such are referenced in such local substantive requirements.
- (b) A list of all local ordinances, laws, resolutions, regulations, standards and other requirements applicable to the interconnection to or use of water, sewer, and telecommunication lines in public rights of way that are of a substantive nature, together with a statement that the location of the facility as proposed conforms to all such local substantive requirements,

except any the applicant requests that the office elect not to apply.

- (c) A list of all local substantive requirements identified pursuant to subdivision (a) or (b) of this section for which the applicant requests that the office elect to not apply to the facility. Pursuant to Public Service Law article VIII, the office may elect to not apply, in whole or in part, any local law or ordinance that would otherwise be applicable if it makes a finding that, as applied to the proposed facility, it is unreasonably burdensome in view of the CLCPA targets and the environmental benefits of the proposed facility. For each local substantive requirement identified by the applicant, a statement justifying the request shall be provided. The statement of justification shall show with facts and analysis the degree of burden caused by the requirement, why the burden should not reasonably be borne by the applicant, that the request cannot reasonably be obviated by design changes to the facility, that the request is the minimum necessary, and that the adverse impacts of granting the request shall be mitigated to the maximum extent practicable consistent with applicable requirements set forth in this Part. If applicable, the statement may include a demonstration:
 - (1) for requests grounded in the existing technology, that there are technological limitations (including governmentally imposed technological limitations) related to necessary facility component bulk, height, process or materials that make compliance by the applicant technically impossible, impractical or otherwise unreasonable;
 - (2) for requests grounded in factors of costs or economics (likely involving economic modeling), that the costs to consumers associated with applying the identified local substantive requirements would outweigh the benefits of applying such provisions; and
 - (3) for requests grounded in the needs of consumers, that the needs of consumers for the facility outweigh the impacts on the community that would result from refusal to

apply the identified local substantive requirements.

- (d) A summary table of all local substantive requirements identified pursuant to subdivisions (a) and (b) of this section in two columns listing the provisions in the first column, and a discussion or other showing demonstrating the degree of compliance with the substantive provisions in the second column.
- (e) A statement identifying the public entity or entities that are responsible for administration and enforcement of the New York State Uniform Fire Prevention and Building Code, the Energy Conservation Construction Code of New York State, and the substantive provisions of any applicable local electrical, plumbing, fire, or building code. The statement should identify any local government that has declined responsibility for the Uniform Code and Energy Code pursuant to 19 NYCRR section 1202.1, and whether the responsibility falls with the county in which the local government is located or with the State.

The statement of identification shall include a description of the preliminary arrangement made between the applicant and the entity that shall perform the review, approval, inspection, and compliance certification, including arrangements made to pay for the costs thereof including the costs for any consultant services necessary due to the complex nature of such facilities.

(f) An identification of the zoning designation or classification of all lands constituting the facility site and a statement of the language in the zoning ordinance or local law by which it is indicated that the facility is a permitted use at the facility site. If the language of the zoning ordinance or local law indicates that the facility is a permitted use at the facility site subject to the grant of a special exception, a statement of the criteria in the zoning ordinance or local law by which qualification for such a special exception is to be determined.

Section 1101-2.25. Exhibit 25: Other Permits and Approvals.

Exhibit 25 shall contain:

(a) A list of any federal or federally-delegated, or Federal or

State recognized Indian Nation, permit, consent, approval or license, including any permit or approval required by local flood plain management regulations adopted pursuant to the National Flood Insurance Program, that will be required for the construction or operation of the facility, which shall specify the date on which an application for any such approval was made or the estimated date on which it will be made. The applicant shall notify the Office of any significant change in the status of each such application.

(b) A statement as to whether the applicant knows of others who have any pending applications or filings for any Federal or federally-delegated, Federal or State recognized Indian Nation, state or local permit, consent, approval or license, including any permit or approval required by local flood plain management regulations adopted pursuant to the National Flood Insurance Program, which concerns the facility. If any such applications or filings are identified, the applicant shall indicate whether the granting of any such application or filing will have any effect on the grant or denial of a siting permit, and whether the grant or denial of a siting permit will have any effect upon the grant or denial of any such other application or filing. The applicant shall notify the office of any significant change in the status of each such application or filing.

Subpart 1101-3. Major Renewable Energy Facility Uniform Standards and Conditions.

Section 1101-3.1. Facility authorization.

- (a) Compliance. The permittee shall implement any impact avoidance, minimization and/or mitigation measures identified in the exhibits, compliance filings and/or contained in a specific plan required under Part 1100 of this Title, as approved by the office. If there is any discrepancy between an exhibit or compliance filing and a permit condition, the permittee shall comply with the permit condition and notify the office immediately for resolution.
- (b) Property rights. Issuance of a siting permit does not convey any rights or interests in public or private property. The permittee shall be responsible for obtaining all real property,

rights-of-way (ROW), access rights and other interests or licenses in real property required for the construction and operation of the facility.

- (c) Eminent domain. Issuance of a siting permit to a permittee that is an entity in the nature of a merchant generator and not in the nature of a fully regulated public utility company with an obligation to serve customers does not constitute a finding of public need for any particular parcel of land such that a condemner would be entitled to an exemption from the provisions of article 2 of the New York State Eminent Domain Procedure Law ("EDPL") pursuant to section 206 of the EDPL.
- (d) Other permits and approvals. Prior to the permittee's commencement of construction, the permittee shall be responsible for obtaining all necessary federal and federally-delegated permits and any other approvals that may be required for the facility and which the office is not empowered to provide or has expressly authorized. In addition, the office expressly authorizes:
 - (1) the PSC to require approvals, consents, permits, other conditions for the construction or operation of the facility under PSL sections 68, 69, 70, and article VII, as applicable, with the understanding that the PSC will not duplicate any issue already addressed by the Office and will instead only act on its police power functions related to the entity as described in the body of this siting permit; provided however that the verified statement of the president and secretary of the corporation showing that it has received the required consent of the proper municipal authorities shall be submitted to the Office and shall not be subject to review under PSL section 68;
 - (2) the NYSDOT to administer permits associated with oversize/overweight vehicles and deliveries, highway work permits, and associated use and occupancy approvals as needed to construct and operate the facility; and
 - (3) the city, town, village, county, or State agency or authority to be responsible for administration and enforcement of the New York State Uniform Fire Prevention

and Building Code (Uniform Code), or other applicable local fire or building code, and State Energy Conservation Construction Code (State Energy Code), or other applicable local energy conservation construction code, with respect to the proposed facility; and

- (e) Water quality certification. Prior to commencing construction, the permittee shall request and obtain from the office a water quality certification pursuant to section 401 of the Clean Water Act, if required.
- (f) Host community benefits. The permittee shall provide host community benefits, such as Payments in Lieu of Taxes (PILOTs), other payments pursuant to a host community agreement or other project(s) agreed to by the host community.
- (g) Notice to proceed with construction. The permittee and its contractors shall not commence construction until a "Notice to Proceed with Construction" or "Conditional Notice to Proceed with Construction" (NTP) has been issued by the office. Such NTP will be issued after all applicable pre-construction compliance filings have been filed by the permittee and approved by the office.

(h) Project phasing.

- (1) The permittee may request phased construction by submitting a comprehensive Project Phasing Plan, including a detailed narrative of the scope of work, and anticipated compliance filings for each phase, in consultation with the office. Such Phasing Plan shall be submitted no later than upon filing of the first pre-construction compliance filing.
- (2) To receive a NTP approval for any phase, the permittee shall have submitted to the office all applicable preconstruction compliance filings consistent with the Project Phasing Plan.
- (i) Expiration. The siting permit will automatically expire if the facility does not achieve commencement of commercial

operation within three (3) years from the date of issuance.

- (j) Partial cancellation. If the permittee decides not to commence construction of any portion of the facility, it shall so notify the office promptly after making such decision. Such decisions shall not require a modification to the siting permit unless the office determines that such change constitutes a major modification to the siting permit pursuant to section 1100-11.1 of this Title.
- (k) Deadline extensions. The office may extend any deadlines established by the siting permit for good cause shown. Any request for an extension shall be in writing, include a justification for the extension, and be filed at least fourteen (14) days prior to the applicable deadline. The office may decline to consider any request for extension received less than fourteen (14) days prior to applicable deadline.
- (1) Enforcement authority. The permittee shall regard the office and NYSDPS staff, authorized pursuant to PSL section 66(8) and 144(4), as the office's representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate, or may violate, the terms of the siting permit, compliance filings, or any other supplemental filings, such Staff may issue a stop work order for that location or activity pursuant to section 1100-12.1 of this Title.

Section 1101-3.2. Notifications.

- (a) Pre-Construction notice methods. At least fourteen (14) business days prior to the permittee's commencement of construction date, the permittee shall notify the public as follows:
 - (1) provide notice by mail to all persons residing within one (1) mile of a solar facility or within five (5) miles of a wind facility;
 - (2) provide notice to local Town and County officials and emergency personnel;

- (3) provide notice for display in public places, which shall include, but not be limited to, the town halls of the host municipalities, at least one (1) library in each host municipality, at least one (1) post office in each host municipality, the facility website, and the facility construction trailers/offices; and
- (4) file notice with the Office for posting on the Office website.
- (b) Proof of notice to office. At least fourteen (14) business days prior to commencement of construction, the permittee shall file with the office an affirmation that it has provided the notifications required by subdivision (a) of this section and include a copy of the notice(s), as well as a distribution list.
- (c) Post-construction notice. Prior to the completion of construction, the permittee shall notify the entities identified in paragraphs (a) (1)-(5) of this section with the contact name, telephone number, email and mailing address of the facility operations manager, as well as all information required in paragraphs (d) (1)-(2) and (4)-(7) of this section.
- (d) Contents of notice. The permittee shall write the notice(s) required in subdivisions (a) and (c) of this section in plain language reasonably understandable to the average person and shall ensure that the notice(s) contain(s):
 - (1) a map of the facility;
 - (2) a brief description of the facility;
 - (3) The construction schedule and transportation routes;
 - (4) the name, mailing address, local or toll-free telephone number, and email a ddress of the appropriate facility contact for development, construction and operations;
 - (5) the procedure and contact information for registering a complaint, consistent with section 1102-4.2(e)(7) of this Title;
 - (6) contact information for the office;

- (7) the facility website; and
- (8) a list of public locations where information on the facility, construction, and the permittee will be posted.
- (e) Notice of completion of construction and restoration. Within fourteen (14) days of the completion of final post-construction restoration, the permittee shall notify the NYSDPS, with a copy to the office, that all such restoration has been completed in compliance with the siting permit and applicable compliance filings and provide an anticipated date of commencement of commercial operation of the facility.

Section 1101-3.3. General requirements.

- (a) Local laws. The permittee shall construct and operate the facility in accordance with the substantive provisions of the applicable local laws as identified in section 1100-2.25 of this Title, except for those provisions of local laws that the office determined to be unreasonably burdensome, as stated in the siting permit.
- (b) Federal requirements. The permittee shall construct and operate the facility in a manner that conforms to all applicable Federal and federally-delegated permits identified in section 1100-2.26 of this Title. If relevant facility plans require modifications due to conditions of Federal permits, the final design drawings and all applicable compliance filings shall be revised accordingly and submitted for review and approval pursuant to section 1100-11.1 of this Title.
- (c) Traffic coordination. The permittee shall coordinate with State, county, and local highway agencies to respond to and apply applicable traffic control measures to any locations that may experience any traffic flow or capacity issues.

Section 1101-3.4. Facility construction and maintenance.

(a) Construction hours. Construction and routine maintenance activities on the facility shall be limited to 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of delivery activities,

which may occur during extended hours beyond this schedule on an as-needed basis.

- (1) Construction work hour limits apply to facility construction, maintenance, and to construction— related activities, including maintenance and repairs of construction equipment at outdoor locations, large vehicles idling for extended periods at roadside locations, and related disturbances. This condition shall not apply to vehicles used for transporting construction or maintenance workers, small equipment, and tools used at the facility site for construction or maintenance activities.
- (2) If, due to safety or continuous operation requirements, construction activities are required to occur beyond the allowable work hours, the permittee shall notify the NYSDPS, the Office, affected landowners and the municipalities. Such notice shall be given at least twenty-four (24) hours in advance, unless such construction activities are required to address emergency situations threatening personal injury, property, or severe adverse environmental impact that arise less than twenty-four (24) hours in advance. In such cases, as much advance notice as is practical shall be provided.
- (b) Environmental and agricultural monitoring.
 - (1) The permittee shall hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and siting permit requirements. The environmental monitor shall perform regular site inspections of construction work sites and, in consultation with the NYSDPS, issue regular reporting and compliance audits.
 - (2) The environmental monitor shall have stop work authority over all aspects of the facility. Any stop work orders shall be limited to affected areas of the facility. Copies of the reporting and compliance audits shall be provided to the host town(s) upon request.
 - (3) The permittee shall identify and provide qualifications and contact information for the independent, third-party environmental monitor to the office.

- (4) If the environmental monitor is not qualified, the permittee shall also retain an independent, third-party agriculture-specific environmental monitor as required in section 1100-6.4(s) of this Title.
- (5) The permittee shall ensure that its environmental monitor and agricultural monitor are equipped with sufficient access to documentation, transportation, facility areas, and communication equipment to effectively monitor the permittee's contractor's compliance with the provisions of the siting permit with respect to such permittee's facility components and to applicable sections of the Public Service Law, Executive Law, Environmental Conservation Law, and Clean Water Act section 401 Water Quality Certification. The environmental and agricultural monitors may communicate directly with office staff.
- (c) Pre-construction meeting. At least fourteen (14) days before the commencement of construction, the permittee shall hold a pre-construction meeting with staff of the office, NYSDPS, NYSDEC, NYSAGM, NYSDOT, municipal supervisors/mayors and highway departments, and county highway departments. The balance of plant (BOP) construction contractor, the agricultural monitor and environmental monitor shall be required to attend the pre-construction meeting.
 - (1) An agenda, the location, and an attendee list shall be agreed upon between staff of the office and the NYSDPS and the permittee and distributed to the attendee list at least one (1) week prior to the meeting.
 - (2) Maps showing designated travel routes, construction worker parking and access road locations and a general facility schedule shall be distributed to the attendee list at least one (1) week prior to the meeting.
 - (3) The permittee shall supply draft minutes from this meeting to the attendee list for corrections or comments, and thereafter the permittee shall issue the finalized meeting minutes.
 - (4) If, for any reason, the BOP contractor cannot finish the

construction of the facility, and one (1) or more new BOP contractors are needed, there shall be another preconstruction meeting with the same format as outlined in this section.

- (d) Construction reporting and inspections. During facility construction, the permittee shall report construction status and support inspections as follows:
 - (1) Every two (2) weeks, the permittee shall provide NYSDPS and office staff, and the host municipalities with a report summarizing the status of construction activities, and the schedule and locations of construction activities for the next two (2) weeks.
 - (2) Prior to entry onto the facility site for on-site inspections, the permittee shall conduct a tailgate meeting to communicate required safety procedures and worksite hazards to site inspectors.
 - (3) The permittee shall accommodate reviews of any of the following during a monthly inspection and at other times as may be determined by NYSDPS staff:
 - (i) the status of compliance with siting permit conditions;
 - (ii) field reviews of the facility site;
 - (iii) actual or planned resolutions of complaints;
 - (iv) significant comments, concerns, or suggestions made by the public, municipalities, or other agencies and indicate how the permittee has responded to the public, local governments, or other agencies; and
 - (v) the status of the facility in relation to the overall schedule established prior to the commencement of construction; and
 - (vi) other items the permittee, NYSDPS staff, or office staff consider appropriate.

- (4) After every monthly inspection, the permittee shall provide the municipalities and agencies involved in the inspection with a written record of the results of the inspection, including resolution of issues and additional measures to be taken.
- (e) Flagging. At least two (2) weeks before tree clearing or ground disturbing activities, the permittee shall stake or flag the planned limits of disturbance (LOD), the boundaries of any delineated NYS-regulated wetlands, waterbodies or streams in the LOD (as identified in the delineations prepared pursuant to sections 1100-1.3(e) and (f) of this Title), and any known archeological sites identified in the approved Cultural Resources Avoidance, Minimization and Mitigation Plan required in section 1100-10.2(g) of this Title, all on or off ROW access roads, limits of clearing and other areas needed for construction, including, but not limited to, turbine or solar array work areas, proposed infiltration areas for post-construction stormwater management, and laydown and storage areas. In addition, archeological sites shall be surrounded with construction fencing and a sign stating restricted access.
- (f) UDig NY. Prior to the commencement of construction, the permittee shall become a member of UDig New York. The permittee shall require all contractors, excavators, and operators associated with its facilities to comply with the requirements of the PSC's regulations regarding the protection of underground facilities at 16 NYCRR Part 753.
- (g) Natural gas pipeline cathodic protection. The permittee shall contact all pipeline operators within the facility site and land owners, if necessary, on which facility components are to be located or whose property lines are within the zone of safe siting clearance, if any, and shall reach an agreement with each operator to provide that the facility's collection and interconnection systems will not damage any identified pipeline's cathodic protection system or produce damage to the pipeline, either with fault current or from a direct strike of lightning to the collection and interconnection systems, specifically addressing section 255.467 of this Title(External corrosion control; electrical isolation).
- (h) Pole numbering. The permittee shall comply with all

requirements of the PSC's regulations regarding identification and numbering of above ground utility poles at Part 217 of this Title.

- (i) Fencing. All mechanical equipment, including any structure for storage of batteries, shall be enclosed by fencing of a minimum height of seven (7) feet with a self-locking gate to prevent unauthorized access.
- (j) Air emissions. To minimize air emissions during construction, the permittee shall:
 - (1) prohibit contractors from leaving generators idling when electricity is not needed and from leaving diesel engines idling when equipment is not actively being used;
 - (2) implement dust control procedures to minimize the amount of dust generated by construction activities in a manner consistent with the Standards and Specifications for Dust Control, as outlined in the New York State Standards and Specifications for Erosion and Sediment Control (see section 1100-15.1(i)(1)(i) of this Title);
 - (3) use construction equipment powered by electric motors where feasible, or by ultra-low sulfur diesel; and
 - (4) dispose or reuse cleared vegetation in such a way that that minimizes greenhouse gas emissions (e.g., lumber production or composting).
- (k) Construction noise. To minimize noise impacts during construction, the permittee shall:
 - (1) Comply with all applicable substantive provisions of all local laws regulating construction noise.
 - (2) Implement noise or vibration mitigation measures associated with specific construction activity(ies) as identified in the application on or before the start of such activity(ies).
 - (3) Maintain functioning mufflers on all transportation and construction machinery.

- (4) Respond to noise and vibration complaints according to the noise complaint resolution protocol approved by the Office (see Section 1101-4.2 (e) (7)) of this Part.
- (1) Visual mitigation.
 - (1) Wind facilities. The permittee shall implement the approved Visual Impacts Minimization and Mitigation Plan required in section 1100-2.9 of this Title, including the following:
 - (i) adoption of visual design features requirements;
 - (ii) visual contrast minimization and mitigation
 measures;
 - (iii) operational effects minimization measures, including shadow flicker minimization mitigation and other measures necessary to achieve a maximum of thirty (30) hours annually at any non-participating residential receptor, subject to verification using shadow prediction and operational controls at appropriate wind turbines;
 - (iv) Lighting Plan; and
 - (v) Screen Planting Plans.
 - (2) Solar facilities. The permittee shall implement the approved Visual Impacts Minimization and Mitigation Plan as required in section 1100-2.9 of this Title, including the following:
 - (i) visual contrast minimization and mitigation measures;
 - (ii) Lighting Plan;
 - (iii) Solar glare mitigation requirements; and
 - (iv) Screen Planting Plans.
 - (3) Screen planting plans. The permittee shall retain a

qualified landscape architect, arborist, or ecologist to inspect the screen plantings for two (2) years following installation to identify any plant material that did not survive, appears unhealthy, and/or otherwise needs to be replaced. The permittee shall remove and replace plantings that fail in materials, workmanship or growth within two (2) years following the completion of installing the plantings.

- (m) General environmental requirements.
 - (1) Limits of disturbance (LOD). Construction shall not directly disturb areas outside the construction limits shown on the design drawings.
 - (2) Blasting. Blasting shall be designed and controlled to meet the limits for ground vibration set forth in United States Bureau of Mines Report of Investigation 8507 Figure B-1 (see section 1100- 15.1(k)(1)(i) of this Title) and air overpressure shall be under the limits set forth in the Conclusion Section in United States Bureau of Mines Report of Investigation 8485 (USBM RI 8507 and USBM RI 8485 (see section 1100-15.1(k)(1)(ii) of this Title) to protect structures from damage.
 - (3) Karst. Blasting operations in locations where geotechnical investigations confirm the presence of subsurface karst features shall be limited or performed under specific procedures recommended for those locations by a geotechnical engineer licensed to practice in the State of New York.
 - (4) E&S materials. Permanent erosion control fabric or netting used to stabilize soils prior to establishment of vegetative cover or other permanent measures shall be one hundred (100) percent biodegradable natural product, excluding silt fence. Use of hay for erosion control or other construction-related purposes is prohibited to minimize the risk of introduction of invasive plant species.
 - (5) Spill kits. All construction vehicles and equipment shall be equipped with a spill kit. All equipment shall be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if

found to be free of any leakage. Any leaks shall be stopped and cleaned up immediately. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the NYSDEC's Spill Hotline within two (2) hours, in accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance (see section 1100-15.1(i)(1)(iii) of this Title). The office and the NYSDPS shall also be notified of all reported spills in a timely manner.

- (6) Construction debris. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials is allowed.
- (7) Clearing areas. Tree and vegetation clearing shall be limited to the minimum necessary for facility construction and operation, and as detailed on final construction plans.
- (8) Clearing methods. When conducting clearing, the permittee shall:
 - (i) comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL section 9-1303 and any quarantine orders issued thereunder;
 - (ii) not create a maximum wood chip depth greater than three (3) inches, except for chip roads (if applicable), nor store or dispose wood chips in wetlands, within stream banks, delineated floodways, or active agricultural fields;
 - (iii) not dispose of vegetation or slash by burning anywhere or burying within a wetland or adjacent area; and
 - (iv) coordinate with landowners to salvage merchantable logs and fuel wood. Where merchantable logs and fuel wood will not be removed from the facility site during clearing activities, final construction plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery.

- (9) Invasive insects. To control the spread of invasive insects, the permittee shall provide training for clearing and construction crews to identify the Asian Longhorn Beetle and the Emerald Ash Borer and other invasive insects of concern as a potential problem at the facility site. If these insects are found, they shall be reported to the NYSDEC as soon as practicable.
- (n) Water supply protection.
 - (1) For wind facilities:
 - (i) No wind turbine shall be located within one hundred (100) feet of an existing, active water supply well or water supply intake.
 - (ii) Blasting shall be prohibited within five hundred (500) feet of any known existing, active water supply well or water supply intake on a non-participating property.
 - (iii) The permittee shall engage a qualified third party to perform pre- and post- construction testing of the potability of water wells within the below specified distances of construction disturbance before commencement of construction and after completion of construction to ensure the wells are not impacted, provided the permittee is granted access by the property owner:
 - (a) collection lines or access roads within one hundred (100) feet of an existing, active water supply well on a non-participating property;
 - (b) blasting within one thousand (1,000) feet of an existing, active water supply well on a non-participating property; and
 - (c) Horizontal directional drilling (HDD) operations within five hundred (500) feet of an existing, active water supply well on a non-participating property.

Should the third-party testing, as required by (iv) subparagraph (iii) of this paragraph, conclude that the water supplied by an existing, active water supply well met Federal (see section 1100-15.1(j)(1)(i) of this Title) and state standards for potable water (see 10 NYCRR Part 75, Appendix 75-c) prior to construction, but failed to meet such standards after construction as a result of facility activities, the permittee shall cause a new water well to be constructed, in consultation with the property owner, at least one hundred (100) feet from collection lines and access roads, and at least five hundred (500) feet from wind turbines, as practicable given siting constraints and landowner preferences. The results of such tests and reports shall be made available to the relevant municipalities upon request.

(2) For solar facilities:

- (i) Pier and post driving activities, except for fence and utility poles, shall be prohibited within one hundred (100) feet of any existing, active drinking water supply well; use of earth screws is permitted.
- (ii) If required, blasting shall be prohibited within five hundred (500) feet of any known existing, active water supply well or water supply intake on a non-participating property.
- (iii) The permittee shall engage a qualified third party to perform pre- and post- construction testing of the potability of water wells within the below specified distances of construction disturbance before commencement of civil construction and after completion of construction to ensure the wells are not impacted, provided the permittee is granted access by the property owner:
 - (a) collection lines or access roads within one hundred (100) feet of an existing, active water supply well on a non-participating property;

- (b) blasting within one thousand (1,000) feet of an existing, active water supply well on a non-participating property;
- (c) pier or post installations within two hundred (200) feet of an existing, active water supply well on a non-participating property; and
- (d) Horizontal directional drilling (HDD) operations within five hundred (500) feet of an existing, active water supply well on a non-participating property.
- (iv) Should the third-party testing conclude that the water supplied by an existing, active water supply well met Federal (see section 1100-15.1(j)(1)(i) of this Title) and state standards for potable water (see 10 NYCRR Part 75, Appendix 75-c) prior to construction, but failed to meet such standards post construction as a result of facility activities, the permittee shall cause a new water well to be constructed, in consultation with the property owner, at least one hundred (100) feet from collection lines and access roads, and at least two hundred (200) feet from all other facility components. The results of such tests and reports shall be made available to the relevant municipalities upon request.
- (o) Threatened and endangered species.
 - (1) For facilities that would impact NYS threatened or endangered species other than NYS threatened or endangered grassland birds or their habitat, the permittee shall implement a Net Conservation Benefit Plan (NCBP) that is approved by the office which shall include:
 - (i) a demonstration that the NCBP results in a benefit for each of the affected species;
 - (ii) detailed explanation of the net conservation benefit to the species based on the actual location and type of minimization measures to be taken for each of the affected species;

- (iii) full source information supporting a determination as to the net conservation benefit for each of the affected species;
- (iv) a consideration of potential minimization and mitigation measures for each of the affected species;
- (v) a consideration of potential sites for mitigation measures for each of the affected species;
- (vi) the identification and detailed description of the mitigation actions that will be undertaken by the permittee to achieve a net conservation benefit to the affected species, including, if applicable, payment of a required mitigation fee into the Endangered and Threatened Species Mitigation Fund established pursuant to section 99(hh) of the New York State Finance Law. The office may give the permittee credit for any mitigation fee paid to another State or Federal agency or authority; and
- (vii) to the extent that physical mitigation will be performed, a letter or other indication of the permittee's financial and technical capability and commitment to fund and execute such management, maintenance and monitoring for the life of the facility/term of the siting permit.
- (2) For facilities determined pursuant to the procedures set forth in section 1101-2.12(f)(2) of this Part to have de minimis impacts to NYS threatened or endangered grassland birds:
 - (i) If an active nest is identified within the facility site prior to or during construction, and the facility results in adverse impacts to the nest or grasslands twenty-five (25) acres or more in size that were previously (during pre-application) or newly (prior to or during construction) determined to be occupied habitat, then the permittee shall coordinate with the NYSDPS and the Office to adjust the limits of disturbance and/or adjust the construction schedule to

avoid work in the area until nesting has been completed or the permittee shall pay into the Endangered and Threatened Species Mitigation Bank Fund the required mitigation fee commensurate with the acreage of mitigation that would be required for permittee-implemented grassland bird habitat conservation, calculated pursuant to subparagraph (ix) of paragraph (4) of this subdivision. The office may give the permittee credit, in whole or in part, for any mitigation fee paid to another State or Federal agency or authority.

- (3) For facilities that will have more than a de minimis impact on NYS threatened or endangered grassland birds, the permittee shall implement the following as part of the NCBP:
 - (i) The permittee shall implement environmental monitoring immediately prior to and during construction in the occupied habitat to search for NYS threatened or endangered species occurrence based on the species' seasonal windows for presence.
 - (ii) If active nests of the NYS threatened or endangered species are found within the occupied habitat, then the permittee shall coordinate with the NYSDPS and the office to adjust the limits of disturbance and/or adjust the construction schedule to avoid work in the area until nesting has been completed.
 - (iii) To avoid direct impacts to NYS threatened or endangered grassland bird species, the following work windows apply for all ground disturbance and construction-related activities, including restoration and equipment/component staging, storage, and transportation, within occupied habitat:
 - (a) in NYS threatened or endangered grassland bird occupied breeding habitat, work shall be conducted only between August 16 and April 22;
 - (b) in NYS threatened or endangered grassland bird occupied wintering habitat, work shall be conducted only between April 1 and November 14;

- (c) in areas of the facility where both breeding and wintering occupied habitat occurs, work shall be conducted only between August 16 and November 14, and between April 1 and 22.
- (iv) If fields within identified occupied breeding habitat are planted with row crops (e.g., corn, beans, or vegetables) in the farming season prior to the commencement of facility construction and such fields were historically used for row crops during at least one of the prior five (5) years, these fields will not be subject to the construction timing restrictions set forth in subparagraphs (iii) (a) and (c) of this paragraph.
- (v) If the permittee has identified construction activities that must occur between November 15 and March 31 in identified NYS threatened or endangered grassland bird occupied wintering habitat, or between April 23 and August 15 in identified NYS threatened or endangered grassland bird occupied breeding habitat outside of row crop areas described above, the occupied habitat area(s) proposed for active construction shall be assessed by an on-site environmental monitor or biologist who shall conduct surveys for NYS threatened or endangered grassland bird species. The surveys shall occur weekly until construction activities have been completed in the occupied habitat area, unless otherwise agreed to by the office. If no NYS threatened or endangered grassland bird species are detected during the survey, the area shall be considered clear for seven (7) days, when another survey shall be performed. If NYS threatened or endangered grassland bird species are detected, the permittee shall comply with paragraph (9) of this subdivision.
- (vi) All temporary disturbance or modification of established grassland vegetation communities that occurs as a result of facility construction, restoration, or maintenance activities shall be restored utilizing a native or naturalized herbaceous seed mix or the pre-existing grassland vegetative

conditions by re-grading and re-seeding with an appropriate native or naturalized seed mix after disturbance activities are completed, unless returning to agricultural production or otherwise specified by the landowner. These temporarily disturbed or modified areas include all areas within the facility site that do not have impervious cover, such as temporary roads, material and equipment staging and storage areas, and electric line rights of way.

- (vii) The permittee shall implement the avoidance and minimization measures identified in section 1101-2.12 of this Part and the other conditions herein to minimize potential take of the species.
- (viii) To the extent that the office has determined that the facility would result in impacts to grassland bird occupied habitat requiring mitigation, the permittee shall pay the required mitigation fee commensurate with the acreage of mitigation that would be required for permittee-implemented grassland bird habitat conservation, calculated pursuant to subparagraph (ix) of this paragraph. The mitigation fee shall be paid into the Endangered and Threatened Species Mitigation Bank Fund with the sole purpose to conserve habitat of similar or higher quality or otherwise achieve a net conservation benefit to the impacted species. The Office may give the permittee credit for any mitigation fee paid to another state or federal agency or authority.
- (ix) If the permittee proposes a NCBP involving permittee-implemented grassland bird habitat conservation in lieu of payment of a mitigation fee pursuant to subparagraph (viii) of this paragraph, the required mitigation ratio shall be 0.4 acres of mitigation for every acre of occupied grassland bird breeding habitat determined to be taken and 0.2 acres of mitigation for every acre of occupied grassland bird wintering habitat determined to be taken. These mitigation requirements are based upon multiplying impacts by the ratios described above and dividing impacts by five lifecycles of habitat succession (e.g.,

- a 30-year mitigation project term and 5-year timeframe in which unmanaged grassland would naturally succeed into scrub/shrub habitat, minus one lifecycle to provide a net conservation benefit).
- (4) To avoid and minimize impacts to NYS threatened or endangered bat species, the permittee shall implement the following conditions during facility construction and operation:
 - (i) No facility component shall be sited or located within one hundred fifty (150) feet of any known northern long-eared bat maternity roost, within five hundred (500) feet of any known Indiana bat maternity roost, or one quarter (0.25) mile of any known northern long-eared bat or Indiana bat hibernaculum.
 - (ii) If at any time during the life of the facility, an active NYS threatened or endangered bat species maternity colony roost tree (or structure) is discovered within the facility site, the NYSDPS and the office shall be notified within twenty-four (24) hours of discovery (during construction) and twenty-four (24) hours of discovery (during operation), and the colony site shall be marked. A five hundred (500)-foot radius around the colony shall be posted and avoided until notice to continue construction, ground clearing, grading, non-emergency maintenance or restoration activities, as applicable, at that site is granted by the NYSDPS or the office. A re-evaluation of the potential impacts of the project on listed bat species shall be provided to the NYSDPS and office.
 - (iii) Tree clearing limitations for Northern Long-eared bats.
 - (a) No tree clearing activities shall occur at any time within one hundred fifty (150) feet of any known maternity roost or one quarter (0.25) mile of any known hibernaculum.
 - (b) All tree clearing activities (except for hazard tree removal to protect human life or

property) occurring within one and a half (1.5) miles of a maternity roost site or five (5) miles of a hibernaculum site, but not subject to clause (a) of this subparagraph, shall be conducted during the hibernation season (between November 1 and March 31) without further restrictions unless otherwise approved by the office. This limitation does not include trees less than or equal to four (4) inches in diameter at breast height (DBH).

- (c) From April 1 to October 31, the following restrictions shall be implemented for all tree clearing activities in the facility site, unless otherwise agreed by the office:
 - (1)The permittee shall leave uncut all snag and cavity trees, as defined under the NYSDEC Program Policy ONRDLF-2 Retention on State Forests, unless their removal is necessary for protection of human life and property. This restriction pertains to trees that are greater than or equal to four (4) inches DBH. When necessary, snag or cavity trees may be removed in consultation with the office and United States Fish and Wildlife Service (USFWS). Removal of less than or equal to ten (10) potential roost trees may be removed after being cleared by an environmental monitor who shall conduct a survey for bats exiting the tree. This survey shall begin thirty (30) minutes before sunset and continue until at least one (1) hour after sunset or until it is otherwise too dark to see emerging bats. Unoccupied snag and cavity trees in the approved clearing area shall be removed within twenty-four (24) hours of negative survey results.
 - (2) If any bats are observed flying from a tree, or from a tree that has been cut, tree clearing activities within distances required in clause (a) of this subparagraph, depending on the potential species present, shall be

suspended and the NYSDPS and the office shall be notified as soon as possible. The permittee shall have an environmental monitor present on site during all tree clearing activities. If any bat activity is noted, a stop work order will immediately be issued and shall remain in place until such time as the NYSDPS and the office have been consulted and authorize resumption of work.

- (iv) Tree clearing limitations for Indiana bats.
 - (a) No tree clearing activities shall occur at any time within five hundred (500) feet of any known maternity roost or one quarter (0.25) mile of any known hibernaculum.
 - (b)All tree clearing activities (except for hazard tree removal to protect human life or property) occurring within two and a half (2.5) miles of a maternity roost site or hibernaculum site, but not subject to clause (a) of this subparagraph, shall be conducted during the hibernation season (between November 1 and March 31), without further restrictions unless otherwise approved by the office. This limitation does not include trees less than or equal to four (4) inches in DBH or locations above three hundred (300) meters in elevation.
 - (c) From April 1 to October 31, tree clearing within two and a half (2.5) miles of a maternity roost site or hibernaculum site is limited to trees less than or equal to four (4) inches in DBH or locations above three hundred (300) meters in elevation.
 - (d) Tree clearing may not reduce forest habitat below thirty-five (35) percent of the landcover within two and a half (2.5) miles of the maternity roost site or hibernaculum site.
 - (v) To minimize impacts to bats from wind facilities,

the permittee shall comply with the following requirements:

- (a) Curtailment is required for all wind facilities from July 1 October 1 when wind speeds are at or below five and a half (5.5) m/s and temperatures are at or above ten (10) degrees Celsius (fifty (50) degrees Fahrenheit) from thirty (30) minutes before sunset to thirty (30) minutes after sunrise. Curtailment shall be on an individual turbine basis and shall be determined by weather conditions as measured by each individual weather station on the turbine nacelle.
- (b) The permittee shall submit a review of curtailment operations to the office as part of the post-construction bat mortality monitoring requirements set forth in the NCBP or every five (5) years (or sooner if requested by the permittee). The review shall assess if changes in technology or knowledge of impacts to bats supports modification of the existing curtailment regime. Modifications to the existing curtailment regime that further decrease mortality may be proposed or negotiated. Any such modifications shall not be costlier than the existing curtailment regime, unless voluntarily supported by the permittee.
- (5) For Facilities that would impact NYS threatened or endangered reptile andor amphibian species, the permittee shall implement the following conditions during facility construction:
 - (i) Employ dedicated T&E monitor(s) to be present for all work within known occupied and identified habitats, respectively, and implement a Monitoring and Handling Protocol.
 - (ii) The monitor(s) shall have the necessary Endangered/Threatened Species License obtained from NYSDEC's Special License Unit or be listed as a Designated Agent on such a license.

- (iii) The number of necessary T&E Monitor(s) shall be determined in consultation with the office staff.
- (iv) The T&E Monitor(s) shall be present to inspect work areas ahead of daily construction activities and shall continue to inspect periodically until construction activities stop for the work day. A daily inspection log shall be maintained and provided to the office staff upon request.
- (v) The T&E Monitor(s) shall handle the species consistent with the conditions set forth in the Monitoring and Handling Protocol identified in section 1101-2.132 of this Part.
- (vi) Avoid construction activities within occupied habitat(s) to the maximum extent practicable. Where avoidance is not possible, the permittee will implement an Avoidance and Minimization Plan identified in section 1101-2.132 of this Part that meets the requirements of 6 NYCRR Part 182.
- (6) For each applicable NCBP, the permittee shall pay the required mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund commensurate with the anticipated number of individuals taken with the sole purpose to achieve a net conservation benefit to the impacted species. The office may credit the permittee for any mitigation fee paid to another state or federal agency or authority.
- (7) To avoid and minimize impacts to bald eagles, the permittee shall implement the following:
 - (i) If, at any time during construction and operation of the facility, an active bald eagle nest or roost is identified within the facility site, the NYSDPS and the office shall be notified within twenty-four (24) hours of discovery and prior to any disturbance of the nest or immediate area.
 - (ii) An area one quarter (0.25) mile for nests without

a visual buffer and six hundred sixty (660) feet in radius for nests with a visual buffer from the nest tree shall be posted and avoided to the maximum extent practicable until notice to continue construction at that site is granted by the NYSDPS and the office.

(iii) Tree removal is not allowed:

- (a) within six hundred sixty (660) feet from an active nest during breeding season (January 1 September 30);
- (b) within one quarter (0.25) mile from an
 important winter roost during the wintering period
 (December 1 March 31); or
- (c) of overstory trees within three hundred thirty (330) feet of an active nest at any time.
- (iv) Operational Impacts from Wind Facilities. If at any time during the operation of the facility a bald eagle is injured or killed due to collision with project components, the permittee shall pay the required mitigation fee into the Endangered and Threatened Species Mitigation Bank Fund commensurate with number of eagles taken with the sole purpose to achieve a net conservation benefit to the impacted species.
- (8) Record all observations of NYS threatened or endangered species. During construction and restoration of the facility and associated facilities, the permittee shall maintain a record of all observations of NYS threatened or endangered species as follows:
 - (i) Construction. During construction, the on-site environmental monitor shall be responsible for recording all occurrences of NYS threatened or endangered species within the facility site. All occurrences shall be reported in a biweekly monitoring report submitted to the NYSDPS, with a copy to the office, and such reports shall include the information described in subparagraph (iii) of this paragraph. If a NYS threatened or

endangered bird species is demonstrating breeding behavior, it shall be reported to the NYSDPS and the office within twenty-four (24) hours.

- (ii) Restoration. After construction is complete, incidental observations of any NYS threatened or endangered species shall be documented and reported to the NYSDPS, with a copy to the office, in accordance with the reporting requirements in subparagraph (iii) of this paragraph.
- (iii) Reporting requirements. All reports of NYS threatened or endangered species shall include the following information: species; number of individuals; age and sex of individuals (if known); observation date(s) and time(s); Global Positioning System (GPS) coordinates of each individual observed (if operation and maintenance staff do not have GPS available, the report shall include the nearest turbine number or solar panel array and cross roads location); behavior(s) observed; identification and contact information of the observer(s); and the nature of and distance to any facility construction, maintenance or restoration activity.
- (9) Discovery of nests or dead or injured NYS threatened or endangered species.
 - (i) Excluding Bald Eagles, if an active nest of a federally or NYS threatened or endangered species is discovered (by the permittee's environmental monitor or other designated agents) within the facility site, the following actions shall be taken:
 - (a) the NYSDPS and the office shall be notified within twenty-four (24) hours of discovery and prior to any further disturbance around the nest, eggs, roost, or area where the species were seen exhibiting any breeding or roosting behavior;
 - (b) an area at least five hundred (500) feet in radius around the active nest shall be posted and avoided until notice to continue construction,

ground clearing, grading, maintenance or restoration activities are granted by the Office; and

- (c) the active nest(s) or nest tree(s) shall not be approached under any circumstances unless authorized by the office.
- (ii) If any dead or injured federal or NYS threatened or endangered species, or eggs or nests thereof, are discovered by the permittee's on-site environmental monitor or other designated agent at any time during the life of the facility, the permittee shall immediately (within twenty four (24) hours) contact the NYSDEC and the USFWS for federally-listed species, to arrange for recovery and transfer of the specimen(s). The NYSDPS and the office shall also be notified. The following information pertaining to the find shall be recorded:
 - (a) species;
 - (b) number, age, and sex of the individual(s), if known;
 - (c) date of discovery of the animal or nest;
 - (d) condition of the carcass, or state of the nest or live animal;
 - (e) GPS coordinates of the location(s) of discovery;
 - (f) name(s) and contact information of the
 person(s) involved with the incident(s) and
 find(s);
 - (g) weather conditions at the facility site for the previous forty-eight (48) hours;
 - (h) photographs, including scale and of sufficient quality to allow for later identification of the animal or nest; and

(i) an explanation of how the mortality/injury/damage occurred, if known.

Electronic copies of each record, including photographs, shall be kept with the container holding the specimen(s) and given to the NYSDEC or the USFWS at the time of transfer. If the discovery is followed by a non-business day, the permittee shall ensure all the information listed above is properly documented and stored with the specimen(s). Unless otherwise directed by the NYSDEC or the USFWS, after all information has been collected in the field, the fatality specimen(s) shall be placed in a freezer, or in a cooler on ice until transported to a freezer, until it can be retrieved by the proper authorities.

- (10) The provisions of subdivision (o) of this section shall remain in effect for as long as the relevant species is listed as endangered or threatened in New York State.
- (p) Wetlands, waterbodies, and streams. The permittee shall implement the following procedures for construction within, or potentially affecting, wetlands (and regulated one hundred (100) foot adjacent areas as applicable), and waterbodies and streams regulated pursant to ECL articles 24 and 15 respectively and Waters of the United States pursuant the Federal Clean Water Act(as identified in the delineations approved by the office pursuant to sections 1100-1.3(e) and (f) of this Title):
 - (1) Environmentally sensitive area (ESA) flagging. Prior to performing construction in an ESA, defined herein as any regulated wetlands, waterbodies or streams and associated adjacent areas identified in the delineations approved by the office pursuant to section 1100-1.3(e) and (f) of this Part, the permittee shall mark the boundaries of the ESA with colored flagging, "protected area" signs, or erosion and sediment control measures specified by the SWPPP. As necessary to prevent access by motorized vehicles into ESAs where no construction is planned, the permittee shall install additional markers or signs stating, "No Equipment Access."
 - (2) Equipment maintenance and refueling. Equipment storage,

refueling, maintenance, and repair shall be conducted and safely contained more than one hundred (100) feet from all wetlands, waterbodies, and streams and stored at the end of each workday unless moving the equipment will cause additional environmental impact. Dewatering pumps operating within one hundred (100) feet of wetlands, waterbodies, or streams may be refueled in place and shall be within a secondary containment large enough to hold the pump and accommodate refueling. All mobile equipment, excluding dewatering pumps, shall be fueled in a location at least one hundred (100) feet from wetlands, waterbodies and streams unless moving the equipment will cause additional environmental impact.

- (3) Fuel storage. Fuel or other chemical storage containers shall be appropriately contained and located at least three hundred (300) feet from wetlands, waterbodies, and streams.
- (4) Clean fill. All fill shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, fly ash, demolition debris, broken concrete, garbage, household refuse, tires, woody materials, and metal objects. Reasonable efforts shall be made to use fill materials that are visually free of invasive species based on onsite and source inspections. The introduction of materials toxic to aquatic life is expressly prohibited.
- (5) Turbid water. Turbid water resulting from dewatering operations shall not be allowed to enter any wetland, waterbody, or stream. Water resulting from dewatering operations shall be discharged directly to settling basins, filter bags, or other approved device. All necessary measures shall be implemented to prevent any substantial visible contrast due to turbidity or sedimentation downstream of the work site.
- (6) Truck washing. Washing of trucks and equipment shall occur one hundred (100) feet or more from an ESA, and waste concrete and water from such activities shall be controlled to avoid it flowing into a wetland or adjacent area, waterbody or stream. If runoff from such activities flows into any wetlands and adjacent areas subject to ECL article 24, or waterbodies and streams regulated pursuant to ECL

article 15, the NYSDEC Regional Supervisor of Natural Resources shall be contacted within two (2) hours.

- (7) Concrete washouts. Concrete washouts and batch plants, or concrete from truck cleanout activity, any wash water from trucks, equipment, or tools, if done on site, shall be located and installed to minimize impacts to water resources. Locations should be at least one hundred (100) feet from any wetland, waterbody or stream, and located outside wetland adjacent areas to the maximum extent practicable.
- (8) Use of Horizontal Directional Drilling (HDD). Installation of underground collection lines across wetlands, waterbodies and streams shall be performed via HDD to the maximum extent practicable.
- (9) Trenching. Open cut trenching in wetlands, waterbodies and streams shall be conducted in one continuous operation and shall not exceed the length that can be completed in one (1) day.
- (10) Inadvertent returns. Horizontal directional drilling under wetlands, waterbodies and streams shall be performed in accordance with the inadvertent returns plan required pursuant to section 1100-10.2(f) (5) of this Title.
- (11) Discharge notice and response. If construction activities undertaken by the permittee result in a discharge to a wetland, waterbody or stream that violates New York Water Quality Standards at 6 NYCRR Part 703, the permittee shall notify the office and NYSDPS within two 2 (hours) and, in coordination with the environmental monitor, take appropriate corrective action. Following the implementation of appropriate corrective actions, if New York Water Quality Standards are not met the permittee shall stop work in the affected area of the Facility until authorized to proceed by the environmental monitor in consultation DPS Staff and/or the office.
- (q) Wetlands. The permittee shall implement the following requirements for freshwater wetlands and adjacent areas subject to ECL article 24 and all wetlands regulated under section 404 of

the Clean Water Act:

- (1) Construction in wetlands and adjacent areas. All construction activities completed within wetlands and/or adjacent areas shall adhere to the following requirements:
 - (i) In breeding areas for NYS threatened or endangered amphibian species, construction should not occur during the peak amphibian breeding season (April 1 to June 15) unless additional measures are implemented to prevent impacts or exclude species from the workspace, such as silt fences.
 - (ii) Work should be conducted during dry conditions without standing water or when the ground is frozen, where practicable.
 - (iii) Excavation, installation, and backfilling in wetlands shall be performed in one continuous operation.
 - (iv) Temporary construction matting in wetlands shall be used as necessary to minimize disturbance to the wetland soil profile during all construction and maintenance activities. All temporary construction matting shall be removed when it is no longer needed as a best management practice (BMP). Matted wetland crossings shall be monitored to assure correct functioning of the mats. Mats that become covered with soils or construction debris shall be cleaned and the materials removed and disposed of in an upland location. Where necessary, mats that become imbedded shall be reset or layered to prevent mud from covering them or water passing over them. Following removal from the wetland, mats shall be cleaned of any invasive species (seed, plant materials, insects, etc.). Matting shall be removed by equipment stationed on a mat or areas outside the wetland.
 - (v) In the event that construction results in an unanticipated alteration to the hydrology of a wetland (i.e., lowering), the breach shall be immediately sealed, and no further activity shall take place until the NYSDPS and the office is notified and a remediation plan to restore the wetland and prevent future

dewatering of the wetland has been approved.

- (vi) Before trenching occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of possible turbid trench water from entering the wetland.
- (vii) Trench breakers/plugs shall be used at the edges of wetlands as needed to prevent wetland draining during construction.
- (viii) In wetland areas, the topsoil shall be removed and stored separate from subsoil. Both the topsoil and subsoil shall be placed adjacent to the trench on geotextile blankets.
- (ix) Trenches and excavations shall be backfilled with wetland subsoil and then covered with wetland topsoil, such that the restored topsoil is the same depth as prior to disturbance. Only the excavated wetland topsoil and subsoil shall be utilized as backfill, except where clean bedding material for electrical collection lines and/or conduits is required or where trenches or excavations occur in areas with permanent fill. All excess materials shall be completely removed to upland areas and suitably stabilized.
- (x) All temporarily disturbed wetlands not located on land where agricultural production will resume during operations shall be seeded with an appropriate native wetland seed mix, shrubs, live stakes, or tree planting, as site conditions and design allow, as appropriate for existing land uses. Straw mulch shall be maintained until the disturbed area is permanently stabilized. Hay shall not be used for mulching of wetlands.
- (xi) All temporarily disturbed wetlands located on lands where agricultural practices will resume during operations, shall be managed in accordance with the NYSAGM "Guidelines for Solar Energy Projects Construction Mitigation for Agricultural Lands."
- (xii) Installation of underground collection lines in wetlands shall be performed using the following methods:

- (a) the permittee shall implement best management practices to minimize soil compaction;
- (b) during excavation, all topsoil shall be stripped and segregated from subsoils. The permittee shall consolidate trenching areas to the maximum extent practicable to minimize impacts to agricultural soils;
- (c) all reasonable efforts shall be made to conduct excavation, installation, and backfilling activities in one continuous operation; open trenches shall be backfilled within the same workday if rain is predicted, wherever practicable; and
- (d) all excess wetland subsoil shall be completely removed to upland areas.

(2) Wetland restoration.

- (i) Wetland restoration shall be completed according to the approved Wetland Restoration and Mitigation Plan submitted pursuant to section 1101-4.2(f)(2) of this Part.
- (ii) The permittee shall restore all temporarily disturbed areas within wetlands to original grades and conditions with permanent native re-vegetation and erosion controls appropriate for those locations.
- (iii) Restoration of temporary impacts to wetlands to pre- construction contours shall be completed within forty-eight (48) hours of final backfilling of the trench/excavated areas.
- (iv) Immediately upon completion of grading, and as consistent with existing land use/land cover, the area shall be seeded with an appropriate native species mix for wetlands and upland areas adjacent to wetlands, except that adjacent areas may be reseeded differently at the request of the landowner.

- (v) The permittee shall attain eighty (80) percent vegetative cover across all disturbed soil areas by the end of the first full growing season following construction. Overall vegetative cover in restored areas shall be monitored for a minimum of five (5) years. Post- construction monitoring shall continue until an eighty (80) percent survivorship of native woody species or eighty-five (85) percent absolute cover of native herbaceous species appropriate wetland indicator status has been reestablished over all portions of the replanted area.
- (3) Cut vegetation. Cut vegetation in wetlands, with the exception of invasive species, may be left in place (i.e., drop and lop or piled in dry or seasonally saturated portions of wetlands and adjacent areas to create wildlife brush piles).
- (4) Access roads through wetlands. Installation of access roads through wetlands shall be performed using the following methods:
 - (i) Temporary access roads shall use timber/construction matting that is completely removed after construction/maintenance activities are completed and removal shall be verified with the NYSDPS by the on-site environmental monitor after construction, or by the facility operator after maintenance work is completed.
 - (ii) Permanent access roads shall use a layer of geotextile fabric and a minimum of six (6) inches of gravel shall be placed in the location of the wetland crossing after vegetation and topsoil is removed. Access roads shall be designed and constructed to adequately support the type and frequency of the anticipated vehicular traffic and include suitable culverting or other drainage infrastructure as needed to minimize the impact to wetland hydrology.
- (5) Solar panel support installation. Installation and construction techniques shall minimize the disturbance of the wetland soil profiles (e.g., the use of helical screws and driven H-pile with no backfilling for solar arrays sites in

wetlands).

- (6) Tree clearing. Tree clearing shall be minimized to the extent practicable in wetlands and adjacent areas.
- (7) Fill placement. The placement of fill in wetlands shall be designed to maintain pre-construction surface water flows/conditions between remaining on- or off-site waters and to prevent draining of the wetland or permanent hydrologic alteration. This may require the use of culverts and/or other measures. Construction activity and final design shall not restrict or impede the passage of normal or expected high flows.
- (8) Concrete use. For activities involving the placement of concrete into regulated wetlands, watertight forms shall be used. The forms shall be dewatered prior to the placement of the concrete. The use of tremie-supplied concrete is allowed if it complies with NYS water quality standards.
- (9) Stormwater setback. Any new stormwater management infrastructure shall be located outside of the wetland and adjacent area to the extent practicable.
- (10) Mitigation. The permittee shall implement the approved Wetland Restoration and Mitigation Plan submitted pursuant to section 1100-10.2(f)(2) of this Title.
- (r) Work in streams. The permittee shall implement the following:
 - (1) Dry conditions. In-stream work shall only occur in dry conditions, using appropriate water handling measures to isolate work areas and direct stream flow around the work area. Any waters accumulated in isolated work areas shall be discharged to an upland settling basin, field, or wooded area to provide for settling and filtering of solids and sediment before water is return to the stream. If measures fail to divert all flow around the work area, in-stream work shall stop until dewatering measures are functioning properly.
 - (2) In-water work windows. In-stream work shall be prohibited from September 15 through May 31 in cold water

fisheries and March 15 through July 15 in warm water fisheries unless the permittee receives site-specific approval from the office.

- (3) Stream channels. The restored stream channel shall be equal in width, depth, gradient, length and character to the pre-existing stream channel and tie in smoothly to the profile of the stream channel upstream and downstream of the disturbance. The planform of any permanent stream shall not be changed, unless dictated by restoration or mitigation objectives. All disturbed stream banks shall be mulched within two (2) days of final grading, stabilized with one hundred (100) percent natural or biodegradable fiber matting, and seeded with an appropriate riparian seed mix.
- (4) Felled trees in an ESA. Trees shall not be felled into an ESA stream or its stream bank. Snags which provide shelter in streams for fish shall not be disturbed unless they cause serious obstructions, scouring or erosion.
- (5) Culvert repairs. If a culvert is blocked or crushed, or otherwise damaged by construction or maintenance activities, the permittee shall repair the culvert or replace it with alternative measures appropriate to maintaining proper drainage, embedment and aquatic connectivity.
- (6) Access road crossings of streams. The creation, modification or improvement of any permanent road crossing of a NYS-protected waterbody shall meet the following requirements:
 - (i) culvert pipes shall be embedded beneath the existing grade of the stream channel;
 - (ii) width of the structure shall be a minimum of one and a quarter (1.25) times the width of the mean highwater channel, as practicable; and
 - (iii) the culvert slope shall remain consistent with the slope of the adjacent stream channel. For slopes greater than three (3) percent, an open bottom culvert shall be used.

- (7) Overhead lines across protected streams. If construction of overhead power line crossings requires cutting of trees or shrubs within fifty (50) feet of a NYS-protected waterbody:
 - (i) cut materials shall be left on the ground; and
 - (ii) stumps and root systems shall not be damaged to facilitate stump sprouting.
- (8) Stream flows. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site. If measures fail to divert all flow around the work area, in-stream work shall stop until dewatering measures are functioning properly.
- (9) No aquatic impediments. In-stream work, including the installation of structures and bed material, but excluding dewatering associated with dry trench crossings, shall not result in an impediment to aquatic organisms. All fish trapped within cofferdams shall be netted and returned, alive and unharmed, to the water outside the confines of the cofferdam, in the same stream.
- (10) Drop height. Any in-stream structures placed in a stream shall not create a drop height greater than six (6) inches.
- (11) Restoration and mitigation. The permittee shall implement the approved Stream Restoration and Mitigation Plan submitted pursuant to section 1100-10.2(f)(3) of this Title.
- (s) Agricultural resources.
 - (1) In all instances in which the applicant for a solar or wind facility proposes to permanently or temporarily impact land used in agricultural production the permittee shall:

- (i) Hire an independent, third-party agricultural monitor to oversee compliance with agricultural conditions and requirements, including the approved Agricultural Plan required pursuant to section 1101-2.15(c) of this Part, the approved Drainage Remediation Plan required pursuant to section 1101-2.15(d) of this Part and any approved co-utilization plan prepared according to section 1101-2.15(e) of this Part. The office, in consultation with the NYSAGM, shall verify and approve the qualifications required to fulfill the role of the agricultural monitor have been met. If the office, in consultation with the NYSAGM, agrees that the independent third-party monitor is qualified on agricultural issues, one monitor can act as both the general environmental monitor as well as the agricultural-specific environmental monitor.
- (ii) Implement the approved Agricultural Plan required pursuant to section 1101-2.15(c) of this Part.
- (iii) Implement the approved Drainage Remediation Plan required pursuant to section 1101-2.15(d) of this Part.
- (t) Hazardous materials. The permittee shall comply with the NYSDEC-approved Site Management Plan for the facility site, or any portion thereof, if applicable.
- (u) Cultural Resources Avoidance, Minimization, and Mitigation Plan. The permittee shall implement the approved Cultural Resources Avoidance, Minimization and Mitigation Plan (CRAMMP) required in section 1101-4(g) of this Part, and shall ensure consistency between the CRAMMP, the approved Site Avoidance Plans, and the project location, design, and construction and vegetation management measures specified in the EM&CP.

Section 1101-3.5. Facility operation.

- (a) Noise limits for wind facilities.
 - (1) Noise levels by all noise sources from the wind facility(ies) shall:

- (i) comply with a maximum noise limit of forty-five (45) dBA Leq (2-hour) outside of any non-participating type 1 sensitive sound receptors (see section 1101-2.7(h)(1)(i)) of this Part, subject to the prominent tone penalties specified (in section 1101 2.7(b)(3)(i) of this Part), and fifty-five (55) dBA Leq (2-hour) outside of any participating type 1 sensitive sound receptors existing as of the issuance date the application is deemed complete by the office;
- (ii) comply with a maximum noise limit of sixty-five (65) dB Leq (1-hour) at the full octave frequency bands of sixteen (16), thirty-one and a half (31.5), and sixty-three (63) Hertz (Hz) in accordance with Annex D of ANSI/ASA standard S12.9-2005/Part 4 Section D.2.(1) (Analysis of sounds with strong low-frequency content) (see section 1100-16.1(a)(1)(iii) of this Title) outside of any non-participating type 1 sensitive sound receptor existing as of the date the application is deemed complete by the office; and
- (iii) not produce human perceptible vibrations inside any non-participating type 1 sensitive sound receptor existing as of the date the application is deemed complete by the office that exceed the limits for residential use recommended in ANSI/ASA Standard S2.71-1983 "Guide to the evaluation of human exposure to vibration in buildings" (see section 1100-16.1(a)(1)(i) of this Title).
- (2) Noise exceedances from wind facilities. If the results of the first or second post-construction sound compliance test, or any subsequent test, or any compliance or violation test, indicate that the facility does not comply with any siting permit conditions on noise and vibration, the permittee shall:
 - (i) Present minimization options to the office, within sixty (60) days after the filing of a non-compliant test result or the finding of a noncompliance or a violation of siting permit conditions on noise, as follows:
 - (a) operational minimization options related to

noise or vibrations caused by the wind turbines that shall be considered, including, at a minimum, modifying or reducing times or duration of turbine operation, incorporating noise reduced operations, shutting down relevant turbines, and modifying operational conditions of the turbines;

- (b) physical minimization options related to noise or vibration caused by the wind turbines that shall be considered, including installation of serrated edge trails on the turbine blades, replacement or maintenance of noisy components of the equipment, and any other measures as feasible and appropriate; and
- (c) if applicable, any minimization measures related to noise from transformers (such as walls or barriers), diesel, gasoline, or natural gas generators (such as installation of noise walls or barriers, adding or replacing enclosures or silencers to the generator), or any other noise sources (such as HVAC equipment or energy storage systems), shall be considered, as well as any other mitigation measures as feasible and appropriate.
- (ii) Upon approval from the office, the permittee shall implement any operational noise or vibration mitigation measures within ninety (90) days after the finding of a non-compliance or siting permit violation, as necessary to achieve compliance.

- (iii) Upon approval from the office, the permittee shall implement any physical noise or vibration mitigation measures within one hundred fifty (150) days after the finding of a non-compliance or siting permit violation, as necessary to achieve compliance.
- (iv) If the permittee cannot meet the timelines for implementation of mitigation measures set forth in subparagraphs (ii) and (iii) of this paragraph, permittee shall cease operation of the turbines of the facility that caused the non-compliance or siting permit violation until the operational or physical minimization measures that are presented and approved by the office have been implemented.
- (v) Once implemented, the permittee shall not operate the facility without the mitigation measures presented and approved by the office.
- (vi) Test, document and present results of any minimization measures and compliance with all siting permit conditions on noise, no later than ninety (90) days after the minimization measures are implemented.
- (3) Noise and vibration complaints from wind facilities. The permittee shall adhere to the following conditions regarding noise complaints:
 - (i) The permittee is required to maintain a log of complaints received relating to noise and vibrations caused by the construction, commissioning, operation, and decommissioning of the facility. The log shall include name and contact information of the person that lodges the complaint, name of the property owner(s), address of the property where the complaint originated, the date and time the event occurred, and a summary of the complaint.
 - (ii) The permittee shall provide the host municipalities with a phone number, email address, and mailing address where complaints can be notified.
 - (iii) All complaints received shall be reported to the

Office, monthly during construction, commissioning, and the first year of commercial operations and quarterly thereafter, by filing during the first ten (10) days of each month (or the first ten (10) days of each quarter after the first year of operation). Reports shall include copies of the complaints and, if available, a description of the noise or vibration, and probable cause (e.g., outdoor or indoor noise, tones, low frequency noise, amplitude modulation [e.g., "swishing", "whooshing", "pulsating", "thumping" sounds], vibrations, rumbles, rattles, icing noise) if known; the status of the investigation (indicating dates of the most recent testing), summary of findings and whether the facility has been tested and found in compliance with applicable siting permit conditions on noise and applicable substantive local noise limits; and whether operational or physical minimization measures have been implemented. If no noise or vibration complaints are received, the permittee shall submit a letter indicating that no complaints were received during the reporting period.

Should complaints related to excessive and persistent amplitude modulation occur (e.g., "swishing", "whooshing", "pulsating", "thumping" sounds) at any nonparticipating type 1 sensitive sound receptor indicated in section 1101-2.7(h)(1)(i) of this Part, existing as of the date the application was deemed complete by the office, with measured or modeled sound levels exceeding forty (40) dBA Leg (1-hour), the permittee shall investigate and measure amplitude modulation at the affected receptors during the time frame when the worst amplitude modulation conditions are known, or, if not known, expected to occur. To the extent practicable, the permittee shall identify the conditions associated with the worst amplitude modulation, as well as the frequency of occurrence. If the Leg-10-minute noise levels (dBA), including any amplitude modulation and prominent tone penalties exceed a noise level of fortyfive (45) dBA and amplitude modulation is in excess of a five (5) dB modulation depth at the evaluated receptor(s) for more than five (5) percent of the time during the identified time frame of evaluation (which

shall not exceed two (2) consecutive hours), the permittee shall propose minimization measures indicated in section 1101-3.5 a) (2) (i) of this Part as appropriate. Minimization measures shall be identified filed with the office for review and approval. Compliance shall be demonstrated by conducting a test that shows that the Leq-10-minute sound levels (dBA), including a five (5)-dBA penalty for amplitude modulation (if amplitude modulation depth is in excess of five (5) dB for more than five (5) percent of the time in any two (2) consecutive hours) at that particular location and any additional prominent tone penalties when combined in a two (2) hour period, are lower than or equal to forty-five (45) dBA Leg 2-hour. Amplitude modulation depth will be evaluated as indicated in the document entitled "A Method for Rating Amplitude Modulation in Wind Turbine Noise", 09 August 2016, Version 1 (see section 1100-16.1(c)(1)(i) of this Title).

- (v) The permittee shall investigate all other noise and vibration complaints by following the noise complaint resolution protocol approved by the office, and consistent with the limits imposed by the siting permit.
- (5) Facility logs for wind facilities. The permittee is required to maintain a log of operational conditions of all the turbines to include, at a minimum, wind velocity and wind direction at the hub heights, angular speed of the rotors, and generated power with a ten (10) minute time interval, including notes indicating operational conditions that could have affected the noise levels (e.g., maintenance, shutdown, icing). A schedule and log of noise-reduced operations applied for individual wind turbines shall also be kept and updated as necessary. These records shall be maintained by the permittee for at a minimum five (5) years from occurrence.
- (b) Noise mitigation measures. To minimize noise impacts during facility operation, the permittee shall:
 - (1) For wind facilities: If noise reduction operations

- (NROs) were utilized to demonstrate conformance with any design goal, limit, or local law on noise, those NROs shall be implemented on or before the start date of operations.
- (2) For wind facilities, solar facilities, and substations: the permittee shall implement any operational noise or vibration mitigation measures on or before the start date of operations.
- (c) Operational compliance. The permittee shall operate the facility to abide by applicable rules and regulations of the PSL and 16 this Title with respect to matters such as enforcement, investigation, safety and reliability. The permittee shall abide by standard Good Utility Practice, and abide by all rules, guidelines and standards of the serving utilities, the New York Independent System Operator (NYISO), the Northeast Power Coordinating Council (NPCC), the New York State Reliability Council (NYSRC), the North American Electric Reliability Corporation (NERC) and successors. When applied to the permittee, the term "Good Utility Practice" shall mean the standards applicable to an independent power producer connecting to the distribution or transmission facilities or system of a utility.
- (d) Annual inspection. The permittee shall have an annual inspection program for its facilities. An annual inspection report shall summarize maintenance and inspection activities performed and include details of any repairs undertaken. Reports shall identify any major damage, defects or other problems, or indicate that no such damage, defect or problem was found. Reports shall be made readily available upon request by the NYSDPS or the office.
- (e) Interconnection changes. Throughout the life of the facility, the permittee shall provide a copy of the following interconnection documents to the secretary of the NYSDPS, with a copy to the office:
 - (1) any updates or revisions to the Interconnection Agreement or Facility Agreements between the permittee, the serving utilities and NYISO; and
 - (2) any system reliability impact study required as part of a future facility modification or uprate.

- (f) Facility transmission interconnection related incidents.
 - (1) The permittee shall contact the NYSDPS Emergency Line within one (1) hour to report any transmission related incident on its owned and operated interconnection facilities which affects the operation of the facility, or that poses a public safety concern, and shall provide notification to the office within twenty-four (24) hours.
 - (2) The permittee shall file with the secretary of the NYSDPS a report on any such incident, upon request within seven (7) days, and provide a copy of the report to the serving utility and the office. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented.
- (g) Facility malfunction.
 - (1) In the event of any unforeseen incident, including fire, flood, blade failure, and tower damage, at the facility or its associated equipment, that results in a partial or complete unplanned shutdown of the facility, the permittee shall notify the office no later than twelve (12) hours following such an event.
 - (2) In the event of a malfunction of the facility or facility components which causes a significant reduction in the capability of such facility to generate power for an extended duration (i.e., expected to last longer than one (1) month), the permittee shall promptly file with the office, and provide to the serving utility and the office, copies of all notices, filings, and other substantive written communications with the NYISO as to such reduction, any plans for making repairs to remedy the reduction, and the schedule for any such repairs.

Section 1101-3.6. Decommissioning.

(a) The permittee shall implement an approved Decommissioning and Site Restoration Plan for site restoration in the event the facility cannot be completed or after the end of the useful life of the facility. The permittee shall adhere to all state laws and

regulations in effect at the time of decommissioning regarding the removal, disposal, and recycling of all facility components. The Decommissioning and Site Restoration Plan shall, at minimum, address the following:

- (1) The anticipated useful life of the proposed facility, including all facility components.
- (2) Safety and the removal of hazardous conditions.
- (3) Environmental impacts.
- (4) Aesthetics.
- (5) Recycling.
- (6) Potential future uses for the site.
- (7) Funding.
- (8) Schedule.
- (9) For facilities to be located on lands owned by others, the permittee shall provide:
 - (i) procedures and timeframes for notifying municipal officials and landowners and residents (if different from landowners) of all properties hosting facility components, of plans for decommissioning activities; and
 - (ii) a description of all site restoration, decommissioning, and security agreements between the permittee and landowner and resident (if different from landowner) and/or the permittee and the municipality including provisions for turbines, foundations, electrical collection, transmission, and interconnection facilities.
- (10) For facilities located on lands owned by the permittee, the permittee shall provide:
 - (i) procedures and timeframes for notifying municipal officials in whose jurisdiction the facility is located

of plans for decommissioning activities; and

- (ii) a description of all plans for site restoration and decommissioning municipality including provisions for turbines, foundations, electrical collection, transmission, and interconnection facilities.
- (b) The Decommissioning and Site Restoration Plan shall include gross and net decommissioning and site restoration estimates. The net cost estimate may include salvage value (providing reference to cost and value data sources and assumptions).
- (c) The gross cost estimates shall include line items and associated dollar amounts for decommissioning of all facility components removed four (4) feet below grade in lands used in agricultural production and three (3) feet below grade in non-agricultural land, and site restoration, including permitting and other overhead costs.
- (d) The net cost estimates shall include a fifteen (15) percent contingency on the gross decommissioning and site restoration estimates. The net amount shall be shown in aggregate and as allocated between each city, town, or village based on the estimated cost associated with the removal and restoration of the facilities located in the jurisdiction of each city, town, or village.
- (e) The financial security agreements shall provide that, subject to the conditions of the siting permit, if the permittee is not diligently implementing the Decommissioning Plan, the beneficiary thereof may exercise its right to draw on the financial security and carry out the Decommissioning Plan following the occurrence of any of the following events:
 - (1) the project's construction has halted for a period of twelve (12) continuous months, unless the 12-month period of inactivity is the result of reasonably unforeseen circumstances, recommencement is being actively pursued in good faith by the permittee, the permittee otherwise obtains approval from the office for such construction inactivity; or

- (2) after commercial operation of the project commences, the project has not generated electricity for a period of eighteen (18) continuous months, unless the 18-month period of no energy output is due to Force Majeure event or the result of a repair, restoration, or improvement to an integral part of the project that affects the generation of electricity and that repair, restoration, or improvement is being actively pursued in good faith by the permittee, or the permittee otherwise obtains approval from the office that the project will not generate electricity for such period of time.
- (f) The financial security regarding decommissioning and site restoration activities shall be in the form of a letter of credit (LOC) or other financial assurance approved by the office, and shall be established by the permittee to be held by each municipality hosting facility components.
 - (1) The financial security shall remain active until the facility is fully decommissioned. The LOC shall be irrevocable and state on its face that it is expressly held by and for the sole benefit of each specific host municipality.
 - (2) If the permittee and the host municipality(ies) cannot come to an agreement as to the appropriate amount of financial security to be provided, the office shall make the final determination.
- (g) The permittee shall file notice with the office and each municipality hosting facility components if it is anticipated that repairs or completion of construction (or similar) will extend beyond a 12-month inactive period or lack of generation will extend beyond an 18-month period. Such notice shall be provided prior to the conclusion of the inactive period and within thirty (30) days of the permittee becoming aware of the anticipated need for additional time to complete the repairs, construction, or similar. The permittee shall describe the circumstances, the permittee's good faith efforts to complete construction or restore electric generation, or intent to decommission the facility.

Subpart 1101-4. Pre-Construction Compliance Filings.

Section 1101-4.1. Environmental management and construction plans.

- (a) Prior to commencement of construction, the permittee shall file for approval by the office an Environmental Management and Construction Plan (EM&CP). The EM&CP may be phased to facilitate construction sequencing, provided that at least fifteen (15) days prior to the first EM&CP phase, the permittee identify all EM&CP phases or segments and expected filings for office approval, and each EM&CP package clearly describes the associated scope of work.
- (b) The EM&CP for each phase or segment shall include the preconstruction compliance filings required in this section as applicable to the project phase and scope of work proposed in the EM&CP as a single filing package. If any particular requirement of the EM&CP is not applicable, not provided, or otherwise not addressed, the permittee shall so indicate and include supporting justification.
- (c) The EM&CP shall include a narrative description of the scope of work and a statement of objectives, techniques, procedures, requirements, and impacts avoidance, minimization, and mitigation. A table of contents will be included for the EM&CP and each section, appendix, or exhibit containing ten or more pages. The narrative shall include a description of construction techniques, vegetation clearing and disposal methods, site restoration methods, agricultural and archeological avoidance/ protection methods, and other measures to be used to ensure compliance with the permit.

Section 1101-4.2. Pre-construction compliance filings.

- (a) Copies of all federal and federally-delegated permits and approvals required for construction and operation of the facility.
- (b) Final decommissioning.
 - (1) Final Decommissioning and Site Restoration Plan

consistent with the requirements in section 1101-3.6 of this Part.

- (2) Proof of executed financial security for municipality hosting facility components based on the estimated cost associated with the removal and restoration of the facilities located within each such city, town, or village, in accordance with section 1101-3.6 of this Part.
- (c) Plans, profiles, and detail drawings.
 - (1) Final design plans, profiles, and detail drawings shall be signed and sealed by the professional engineer responsible for their design. If the drawings submitted pursuant to section 1101-2.5 of this Part are unaltered, a statement shall be provided indicating that a professional engineer has reviewed facility details and attests to the accuracy of the final design as reflected in revised and initially filed (unaffected material) maps, site plans, profile figures, and environmental controls and construction details in accordance with sections 1100-2.6 and 1100-2.17 of this Title.
 - (2) Foundation drawings, including plan and sections details, to be used for wind turbines or solar facility installations; if multiple foundation designs are to be utilized for the facility, the foundation type at each location will be specified on foundation plans (listed in a table or indicated on corresponding site plans). Applicable criteria regarding foundation design and installation shall be listed and described in the drawings. Foundation drawings shall be stamped and signed by a professional engineer, licensed and registered in New York State.
 - (3) Updated design, safety, and testing information consistent with section 1101-2.5(f)(5) of this Part.
 - (4) Copies of any agreements entered with the owners/operators of existing high-pressure gas pipelines regarding the protection of those facilities.
- (d) Wind turbine certifications.

- (1) A design verification, confirming that the wind turbines were designed in accordance with the applicable ANSI safety standards, including International Electrotechnical Commission (IEC) 61400-1:2019 (see section 1100-15.1(b)(1)(i) of this Title).
- (e) Construction management.
 - (1) A Quality Assurance and Control Plan, which shall include job titles and qualifications necessary, demonstrating how the permittee will monitor and assure conformance of facility design, engineering and installation, including general concrete testing procedures with a plan outlining the monitoring and testing of concrete procedures in conformance with and reference to all applicable codes and standards.
 - (2) A Construction Operations Plan, which shall indicate all material lay-down areas, construction preparation areas, temporary concrete batch location, major excavation and soil storage areas, and construction equipment.
 - (3) A Facility Maintenance and Management Plan, which shall include plans, procedures and criteria specifically addressing the following topics:
 - (i) inspections, maintenance, and repairs of turbines, solar panels, inverters, and associated equipment, including conformance with manufacturer's required maintenance schedules, safety inspections, and tower integrity; and
 - (ii) electric collection, transmission, and interconnect line inspections, maintenance, and repairs.
 - (4) A Vegetation Management Plan, which shall include, at a minimum, the following:
 - (i) vegetation management practices for switchyard and substation yards and for transmission and

interconnection facilities, including danger trees (trees that due to location and condition are a particular threat to fall on and damage electrical equipment) around transmission and interconnection facilities, specifications for clearances, inspection and treatment schedules, and environmental controls to avoid off-site effects;

- (ii) vegetation management recommendations, based on on-site surveys of vegetation cover types and growth habits of undesirable vegetation species;
- (iii) planting of native vegetation, based on onsite surveys of vegetation cover types and growth habits of undesirable vegetation species;
- (iv) restoration of disturbed areas, ruts, and rills to original grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations;
- (v) all proposed chemical and mechanical techniques for managing undesirable vegetation. Herbicide use and limitations, specifications, and control measures shall be included;
- (vi) substation fence-line clearances, and overhead wire security clearance zone specifications, indicating applicable safety, reliability and operational criteria;
- (vii) inspection and target treatment schedules and exceptions;
- (viii) standards and practices for inspection
 of facilities easements for erosion hazard,
 failure of drainage facilities, hazardous
 conditions after storm events or other incidents;

- (ix) review and response procedures to avoid conflicts with future use encroachment or infrastructure development; and
- (x) host landowner notification procedures.
- (5) Facility Communications Plan, which shall include the permittee's construction organizational structure, contact list, and protocol for communication between parties. The permittee shall provide to office staff and the municipalities the names and contact information of all individuals responsible for facility oversight.
- (6) Environmental Monitoring Plan, including names and qualifications of companies that will serve as environmental monitors (including agricultural monitor).
- (7) A Complaint Management Plan, which shall describe, at a minimum, the following:
 - (i) methods for registering a complaint, which shall include a phone number, email address, mailing address, and a form to report complaints;
 - (ii) notification to the public of the complaint procedures;
 - (iii) process for responding to and resolving
 complaints in a consistent, timely, and respectful
 manner;
 - (iv) logging and tracking of all complaints received and resolutions achieved, with records of the following for each complaint containing:
 - (a) the name and contact information of the person filing the complaint;
 - (b) location and owner of the property where the complaint originated;

- (c) date and time of the underlying event causing the complaint;
- (d) description of the complaint; and
- (e) current status and description of measures taken to resolve complaint.
- (v) reporting to the office and the NYSDPS any complaints not resolved within thirty (30) days of receipt;
- (vi) mediating complaints not resolved within sixty (60) days; and
- (vii) providing annual reports of complaint resolution tracking to the office staff and NYSDPS staff, which shall also be filed with the Executive Director of the office and Secretary of the NYSDPS.
- (8) A Traffic Control Plan shall be in effect during facility construction, to ensure safety and minimize potential delays to local traffic during construction, which shall describe, at a minimum, the following:
 - (i) Maps and plans showing final haul routes developed in consultation with the host municipalities and State, county and municipal highway officials in coordination with the turbine manufacturer. Final haul routes shall be accurately depicted in drawings submitted with the Traffic Control Plan.
 - (ii) Copies of all necessary transportation permits from the affected State, County, and municipal agencies for such equipment and/or materials on such route. Such permits shall include but not be limited to: Highway Work Permits to work within the ROW, permits to exceed posted weight limits, Highway Utility Permits to construct facilities within ROW, Traffic Signal Permits

to work within ROW, Special Haul Permits for oversize/overweight vehicles, and Divisible Load overweight Permits.

- (iii) Copies of all necessary agreements with utility companies for raising or relocating overhead wires where necessary to accommodate the oversize/overweight delivery vehicles, if applicable.
- (iv) A copy of all road use and restoration agreements, if applicable, between the permittee and landowners, municipalities, or other entities, regarding repair of local roads damaged by heavy equipment, construction or maintenance activities during construction and operation of the facility.

(f) Environmental.

- (1) Proof that the required payment was made into the Endangered and Threatened Species Mitigation Bank Fund, if required.
- (2) A copy of the Wetland Restoration and Mitigation Plan, if required.
- (3) A copy of the Stream Restoration and Mitigation Plan, if required.
- (4) A copy of the Invasive Species Control and Management Plan (ISCMP), prepared in compliance with 6 NYCRR Part 575, which shall include the following information:
 - (i) Baseline mapping of all invasive species within the facility area and for one hundred (100) feet beyond the facility's limit of disturbance (LOD). The baseline mapping and data shall include the relative abundance and distribution of each invasive species prior to the commencement of any construction activities.

- (ii) Identification of specific control, removal, and disposal measures to be implemented for each identified and mapped invasive species/plant community during construction activities. The ISCMP shall include a detailed sequence and schedule for all mechanical and chemical control measures to be implemented during construction activities.
- (iii) A detailed monitoring plan and specific sampling protocols for each identified and mapped invasive species/plant community within the facility area and for one hundred (100) feet beyond the LOD.
- (iv) Identification of specific control contingency measures to be implemented as part of the ISCMP for each identified and mapped invasive species for the duration of the facility adaptive management and monitoring period (i.e., 5 years, unless extended). The ISCMP shall include a detailed sequence and schedule for all contingency mechanical and chemical control measures to be implemented during the monitoring period.
- (v) Specific contingency measures to be implemented (i.e., regrading, re-planting of native species etc.) to achieve the final site restoration criteria (i.e., eighty (80) percent survivorship of appropriate native species reestablishment over all portions of the replanted areas, unless the baseline survey indicates a smaller percentage of appropriate species exists prior to construction).
- (vi) Details regarding the responsible party or parties designated to implement the ISCMP and what financial assurances exist to ensure successful monitoring and ISCMP implementation.

- (5) A copy of an Inadvertent Returns Plan containing the following requirements:
 - (i) Erosion and sediment control shall be used at the point of horizontal directional drilling (HDD), so that drilling fluid shall not escape the drill site and enter NYS-regulated wetlands, waterbodies and streams (as delineated pursuant to section 1100-1.3(e) and (f) of this Title). The disturbed area shall be restored to original grade and reseeded upon completion of HDD.
 - (ii) Drilling fluid circulation shall be maintained to the extent practical.
 - (iii) If inadvertent returns occur in upland areas, the fluids shall be immediately contained and collected.
 - (iv) If the amount of drilling fluids released is not enough to allow practical collection, the affected area shall be diluted with freshwater and allowed to dry and dissipate naturally.
- (6) For wind facilities, a Final Geotechnical Engineering Report verifying subsurface conditions within the facility site, including the results of borings and/or test pits at each turbine location.
- (g) Cultural Resources Avoidance, Minimization, and Mitigation Plan. A copy of a Cultural Resources Avoidance, Minimization and Mitigation Plan (CRAMMP), providing:
 - (1) A narrative summary and demonstration that impacts of construction and operation of the facilities on cultural resources (including archeological sites and historic/above ground resources) will be avoided or minimized to the extent practicable by selection the proposed facility's location, design and/or implementation of identified mitigation measures. At a minimum, the Cultural Resources Avoidance, Minimization and Mitigation Plan shall consist of any

approved Site Avoidance Plan prepared pursuant to section 1101-1.1(d) of this Part, and incorporate any additional avoidance, minimization, or mitigation measures identified by the office, in consultation with OPRHP/SHPO.

- (2) A Final Unanticipated Discovery Plan pursuant to section 1101-2.9(c) of this Part, which shall be updated, at a minimum, to include the current names, titles, and contact information of individuals within the permittee's construction organizational structure, agency contacts, and indigenous nation contacts as referenced within the Unanticipated Discovery Plan.
- (3) A Cultural Resources Mitigation and Offset Plan, either as adopted by Federal permitting agency in subsequent National Historic Preservation Act (NHPA) section 106 review, or as required by the office, in consultation with OPRHP/SHPO, in the event that the NHPA section 106 review does not require that the mitigation plan be implemented. Proof of mitigation funding awards for offset facility implementation to be provided within two (2) years of the start of construction of the facility shall be included.
- (h) Visual Impacts Minimization and Mitigation Plan (VIMMP).
 - (1) The permittee shall implement the approved Final Visual Impacts Minimization and Mitigation Plan required by section 1101-2.8(d) of this Part, including the following:
 - (i) adoption of visual design feature requirements;
 - (ii) visual contrast minimization and mitigation measures; and
 - (iii) final Screen Planting Plans, details, specifications, and master plant list.
 - (2) Construction period oversight. The permittee shall retain a qualified landscape architect, arborist, or certified nursery and landscape professional (CNLP), to

inspect the screen plantings for two (2) years following installation to identify any plant material that did not survive, appears unhealthy, is damaged, and/or otherwise needs to be replaced. Such plant material that fails to provide proper mitigation in workmanship or growth shall be removed and replaced within two years following the completion of the installation of the plantings and maintained accordingly for the life of the project.

- (3) Long term/operational screen plantings management. Provide an inspection and maintenance program for the life of the project, including plans for replacement of plantings where such visual screenings have failed. The permittee shall at a minimum provide detailed maintenance measures for screen plantings; make any required updates to the master plant list of replacement plants; provide a regular inspection schedule; and conduct an annual screening effectiveness review.
- (i) Real property rights.
 - (1) A copy of all necessary titles to or leasehold interests in the facility, including ingress and egress access to public streets, and such deeds, easements, leases, licenses, or other real property rights or privileges as are necessary for all interconnections for the facility.
 - (2) Map of survey of facility site properties with property lines based on metes and bounds survey.
 - (3) Notarized memos or similar proof of agreement for any participating property whose owner has signed a participation agreement or other type of agreement addressing potential facility impacts (e.g., noise, shadow flicker, setback, etc.).
- (j) A copy of any Interconnection Agreements (IA).
- (k) Documentation of all host community benefits to be provided

by the permittee.

Subpart 1101-5. Post-Construction Compliance Filings.

Section 1101-5.1. Post-construction compliance filings.

- (a) Any updated information regarding the design, safety and testing for the wind turbines, solar panel, inverters, substation, transformer, and battery storage equipment to be installed during construction as well as information regarding the design, safety, and testing for any equipment installed during facility operation as a replacement of failed or outdated equipment shall be filed within fourteen (14) days of completion of all final post-construction restoration. Replacement of major facility components with different make, model, size, or other material modification shall be subject to review and approval of the office pursuant to section 1100-11.1 of Part 1100 of this Title.
- (b) As-built plans in both physical and electronic copies shall be filed within nine (9) months of the commencement of commercial operations of the facility and shall include the following:
 - (1) spatial data showing all components of the facility (wind turbine locations, solar panel array locations, electrical collection system, substation, buildings, access roads, met towers, point of interconnection, etc.);
 - (2) collection circuit layout map; and
 - (3) details for all facility component crossings of, and co-located installations of facility components with, existing pipelines: showing cover, separation distances, any protection measures installed, and locations of such crossings and co-located installations.
- (c) The decommissioning and site restoration estimates contained in the approved Final Decommissioning and Site Restoration Plan required by section 1101-4.2(b) of this

Part shall be updated based on the as-built project, and to reflect inflation and any other increases due to labor or other costs, by a qualified independent engineer licensed in the State of New York, after one (1) year of project operation, and every fifth year thereafter, provided that the permittee may submit an attestation with appropriate justification if there are no material changes to the previously filed decommissioning estimates. The value of the letters of credit, or other financial security, secured for decommissioning purposes shall not be reduced below the initial Final Decommissioning Cost Estimate submitted in compliance with Section 1101-4.2(b) of this Part without the express approval of the oOffice, based on a new analysis demonstrating a significant change in market conditions.

(d) Noise.

- (1) Post-construction noise compliance and monitoring for wind facilities. To evaluate compliance with noise-related conditions, the permittee shall comply with the following requirements:
 - (i) use the Sound Testing Compliance Protocol (STCP) approved by the office for post-construction noise performance evaluations;
 - (ii) at least two sound compliance tests conforming to the sound testing compliance protocol shall be performed by the permittee after the commercial operation date of the facility: one during the "leafoff" season and one during the "leaf-on" season;
 - (iii) within eight (8) months after the commercial operation date of the facility, the permittee shall perform the first sound compliance test and submit a report indicating whether the facility complies with all noise-related permit conditions during the "leaf-off" or "leaf-on" season as applicable; and

- (iv) within fourteen (14) months after the commercial operation date of the facility, the permittee shall perform a second sound compliance test and submit a report indicating whether the facility complies with all noise-related permit conditions during the "leaf-off" or "leaf-on" season as applicable.
- (2) Noise exceedances from wind facilities. If the results of the first or second post-construction sound compliance test, or any subsequent test(s), indicate that the facility does not comply with any noise-related permit conditions, the permittee shall:
 - (i) Present minimization options to the office, within sixty (60) days after the filing of a non-compliant test result, or a finding of noncompliance with the siting permit, as follows:
 - (a) operational minimization options related to noise or vibrations caused by the wind turbines that shall be considered, including, at a minimum, modifying or reducing times or duration of turbine operation, incorporating noise reduced operations, shutting down relevant turbines, and modifying operational conditions of the turbines;
 - (b) physical minimization options related to noise or vibration caused by the wind turbines that shall be considered, including installation of serrated edge trails on the turbine blades, replacement, or maintenance of noisy components of the equipment, and any other measures as feasible and appropriate; and
 - (c) if applicable, any minimization measures related to noise from transformers (such as walls or barriers), diesel, gasoline, or natural gas generators (such as installation of noise barriers, adding or replacing enclosures or silencers to the generator), or any other noise

sources (such as HVAC equipment or energy storage systems), shall be considered, as well as any other mitigation measures as feasible and appropriate.

- (ii) Upon approval from the office, the permittee shall implement any operational noise or vibration mitigation measures within ninety (90) days after the finding of a non-compliance or siting permit violation, as necessary to achieve compliance.
- (iii) Upon approval from the office, the permittee shall implement any physical noise or vibration mitigation measures within one hundred fifty (150) days after the finding of a non-compliance or siting permit violation, as necessary to achieve compliance.
- (iv) If the permittee cannot meet the timelines for implementation of mitigation measures set forth in sections 1101-5(c)(3)(ii) and (iii) of this Part, permittee shall cease operation of the turbines of the facility that caused the non-compliance or siting permit violation until the operational or physical minimization measures that are presented and approved by the office have been implemented.
- (v) Once implemented, the permittee shall not operate the facility without the mitigation measures presented and approved by the office.
- (vi) Test, document and present results of any minimization measures and compliance with all siting permit conditions on noise, no later than ninety (90) days after the minimization measures are implemented.