PRELIMINARY SCOPING STATEMENT

Case 19-F-0560: South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

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COMMONLY USED TERMS

Facility:	Collectively refers to all components of the proposed project, including: photovoltaic solar modules and their rack/support systems; direct current and communications cables connecting the panels to inverters; the inverters, with their support platforms, control electronics, and step-up transformers; buried and/or overhead alternating current medium voltage collector circuits; fencing and gates around each array of modules; access roads; temporary laydown/construction support areas; medium voltage-to-transmission voltage substation with associated equipment and fenced areas; a short length of transmission voltage line with possible support poles to connect to the existing National Grid 230 kilovolts South Ripley substation or, alternatively, to a new point of interconnection switchyard containing switchgear that loops the existing South Ripley to Dunkirk 230 kilovolts transmission line through the point of interconnection; a battery storage system; and potentially an operation and maintenance building with fenced and parking/storage areas as well as any other improvements subject to the Siting Board's jurisdiction.
Facility Area:	The land area being considered to potentially host the South Ripley Solar Project. This includes parcels currently under, or being pursued, for lease or easement (or other real property interests) by the Applicant for development of the Facility Site.
Facility Site:	The portions of the parcels within the Facility Area that will ultimately host the Facility components and associated facilities.
Project:	Collectively refers to construction and operation of the Facility, as well as proposed environmental protection measures, and other efforts proposed by the Applicant.
Study Area	An area generally related to the nature of the technology and the setting of the proposed site. Various study areas will be discussed in this Preliminary Scoping Statement. The size of a Study Area is configured as appropriate to address the specific features or resources in relation to the Project (e.g., 2-Mile Study Area, 5-Mile Study Area).

COMMONLY USED ACRONYMS AND ABBREVIATIONS

APE	Area of Potential Effect
Applicant	ConnectGen Chautauqua County LLC or ConnectGen
AC/DC	Alternating current/direct current
BBA	Breeding Bird Atlas (New York State)
BESS	Battery Energy Storage System
BMP	Best management practice
CEA	Critical Environmental Areas
CECPN	Certificate of Environmental Compatibility and Public Need
CEF	Clean Energy Fund
CEII	Critical Energy Infrastructure Information
CES	Clean Energy Standard
CFR	Code of Federal Regulations
CLCPA	Climate Leadership and Community Protection Act
CO_2	Carbon dioxide
CRIS	Cultural Resources Information System
DMM	Document and Matter Management System
EAP	Emergency Action Plan
ECL	New York Environmental Conservation Law
ECMP	Environmental Compliance and Monitoring Program
EJ	Environmental justice
EMF	Electromagnetic fields
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
GHG	Greenhouse gas
GIS	Geographic information system
HCA	Host Community Agreement
HDD	Horizontal directional drilling
ISPMP	Invasive Species Prevention and Management Plan
IVM	Integrated vegetation management
kW	Kilowatt
kWh	Kilowatt hour
kV	Kilovolt
LFIP	Large Facility Interconnection Procedures
LSR	large-scale renewables
LSZ	Landscape Similarity Zone
LWRP	Local Waterfront Revitalization Program
MW	Megawatt
MWh	Megawatt hour
NAIP	Natural Agricultural Imagery Program
NLCD	National Land Cover Dataset
NOx	NOx
NRHP	National Register of Historic Places

NWI	National Wetland Inventory
NYAC	New York Archaeological Council
NYCRR	New York Code of Rules and Regulations
NYISO	New York Independent System Operator
NYNHP	New York Natural Heritage Program
NYSDAM	New York State Department of Agriculture and Markets
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
NYSDPS	New York State Department of Public Service
NYSERDA	New York State Energy Research and Development Authority
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation
NYSORPS	New York Office of Real Property Services
O&M	Operations and maintenance
OSHA	Occupational Safety and Health Administration
PDD	Preliminary design drawings
PILOT	Payment in lieu of taxes
PIP	Public Involvement Program
PNIA	Preliminary Noise Impact Assessment
POI	Point of interconnection
PSL	Public Service Law
PSS	Preliminary Scoping Statement
PV	Photovoltaic
REC	Renewable energy credits
REV	Reforming the Energy Vision
ROW	Right-of-way
RPS	Renewable Portfolio Standard
SEP	New York State Energy Plan
Siting Board	New York State Board on Electric Generation Siting and the Environment
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control, and Countermeasure
SPDES	State Pollutant Discharge Elimination System
SGIP	Small Generator Interconnection Procedures
SO_2	Sulfur dioxide
SRHP	State Register of Historic Places
SRIS	System Reliability Impact Study
SGCN	Species of Greatest Conservation Need
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
T&E	Threatened and endangered
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture

USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VIA	Visual Impact Assessment
VSA	Visual Study Area
WHO	World Health Organization

1.0 INTRODUCTION

ConnectGen Chautauqua County LLC (ConnectGen or the Applicant), a direct subsidiary of ConnectGen LLC, has initiated the regulatory review process under Article 10 of New York's Public Service Law (PSL) to construct the South Ripley Solar Project (Project or Facility), a renewable energy electric generating facility in the Town of Ripley, Chautauqua County, New York. ConnectGen is an independent renewable energy developer with substantial experience developing solar, wind, and energy storage facilities across the United States. ConnectGen is currently focusing on developing large-scale solar and energy storage projects in New York State. South Ripley was selected for the development of this Project due to its proximity to an existing transmission system, compatible land use resulting in limited design constraints, and Chautauqua County's goal of expanding renewable energy development.

The Power NY Act of 2011 established a process for the siting of power projects and charged a multi-agency Board on Electric Generation Siting and the Environment (Siting Board) with administering the permitting process for any new major electric generating facility of 25 megawatts (MW) or greater. Instead of requiring a developer or owner of such a facility to apply for numerous state and local permits, Article 10 provides a unified proceeding for the siting review of such facilities in New York State by the Siting Board. The Siting Board consists of seven members, including the Chair of New York State Department of Public Service (NYSDPS), who serves as the Chair of the Siting Board; the Commissioner of the New York State Department of Environmental Conservation (NYSDEC); the Commissioner of the New York State Department of Health (NYSDOH); the Chair of the New York State Energy Research and Development Authority (NYSERDA); the Commissioner of Economic Development (Empire State Development); and two ad hoc public members, one appointed by the President Pro Tem of the Senate and one appointed by the Speaker of the Assembly. The Siting Board ad hoc members must reside within the municipality of the proposed facility.

Pursuant to the rules of the Siting Board, not less than 90 days before the date on which an applicant files an application to construct a major electric generating facility under 16 NYCRR § 1000.5(c), the applicant must submit a Preliminary Scoping Statement (PSS). In addition, under 16 NYCRR § 1000.4(d), an applicant can file a PSS with the Siting Board no earlier than 150 days following the submission of a Public Involvement Program (PIP) Plan. The initial PIP Plan for the Facility was filed on August 30, 2019, and after receipt of comments from NYSDPS staff, a Final PIP Plan was filed on October 30, 2019.

The PSS and related "scoping" process are designed to gather stakeholder input at a relatively early stage, before an applicant has a fully developed proposal, so that issues and environmental and social resources of particular concern to the community can be identified and addressed in the final project design. Consistent with this goal, this PSS provides the scope and methodology of the comprehensive environmental studies required for this Project, as well as

the information required to satisfy the Article 10 regulations. It does not, however, provide specific details about the Facility layout and components, such as the precise locations of solar panels, inverters, or storage facilities. The studies and information outlined in this document will be used to further develop the South Ripley Solar Facility's design and support a formal application, which will provide a much greater level of detail on the proposed Project. This PSS for the South Ripley Solar Project has been prepared in accordance with the requirements set forth by 16 NYCRR § 1000.5. Pursuant to 16 NYCRR § 1000.5(g), within 21 days after the filing of this PSS, any person, agency, or municipality may submit comments on this PSS. Comments should be served on the Applicant and a copy filed with the Secretary to the Siting Board. Further details on filing comments concerning this PSS are provided in the Notice included in Appendix A.

By formally commenting on the PSS, stakeholders and members of the public have the opportunity to ask questions or submit comments on the proposed scope and methodology of ConnectGen's studies. Comments received in the early stages will help ensure that local issues of concern are identified and addressed in the Application and will allow ConnectGen the opportunity to adjust its approach to certain studies and/or information-gathering efforts before the Application is filed. ConnectGen will compile the PSS comments and provide responses within 21 days after the closing of the comment period. The comment-and-response process will also help to narrow the number of issues that parties might potentially disagree about during later phases of the proceeding, which can help reduce the cost and burden for stakeholders participating in the regulatory review process. In accordance with the Article 10 regulations, issues may be resolved through a formal Stipulations process, which commences upon authorization by the Presiding Examiner following a Pre-Application Conference, as set forth at 16 NYCRR § 1000.5(i). ConnectGen will post notices if and when it intends to proceed to a Stipulations phase for this Project.

Once an Article 10 application is submitted, the Chair of the Siting Board has 60 days to review the application and identify any deficiencies that the applicant may need to address. Once the Chair determines an application is compliant, the Siting Board has one year to make a decision on the application. During that one-year period, the Siting Board holds Public Statement Hearings to solicit public comments. In addition, discovery and evidentiary hearings will likely be held as part of the formal litigation phase. A Recommended Decision is then issued by the Presiding Examiners to the Siting Board for its review and consideration. Alternately, if all issues are resolved, the proceeding may be settled through a Joint Proposal executed by interested parties. The Siting Board then decides whether to grant, grant with conditions, or deny a requested certificate under Article 10 of the PSL.

Given the complexity and timelines of the Article 10 process, it is important to ConnectGen that stakeholders come forward as soon as possible to identify potential issues, impacts, or interests that should be addressed in the Application. Throughout the preliminary Project development process, ConnectGen has taken various steps to inform

the public about the Project, including establishing a Project website and actively coordinating with Town and County officials and various stakeholder groups. Also, prior to filing this PSS, an open house was held on December 4, 2019 to provide information about the Project to the general public and obtain feedback. Additionally, prior to filing the PIP Plan, a landowner-specific open house was held on April 8, 2019 to gather owners of parcels potentially included in the Facility and discuss Project specifics. Going forward, ConnectGen will update its Project Website, and will continue its outreach efforts with local, regional, state and federal stakeholders to ensure that its Application provides a complete picture of the benefits, potential impacts, and details of the proposed South Ripley Solar Project.

Additional information on the Article 10 process is available at the Siting Board's website: http://www.dps.ny.gov/SitingBoard.

1.1 FACILITY DESCRIPTION

The proposed Facility includes a 270 megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy generation system with a 20 MW battery storage component.

Siting a major solar energy facility is a complex process involving a variety of considerations. In particular, solar energy-generation facilities require the following:

- proximity to an existing electric transmission system;
- large areas of open, contiguous lands;
- availability of sunlight resource and appropriate land orientation;
- compatibility with land use regulations; and
- participating landowners.

In addition, facility siting requires a firm understanding of sensitive resources at an identified site to ensure that a project is technologically feasible, economically viable, and minimizes environmental impacts. The Town of Ripley was identified as an optimal location for a solar energy generation facility due to its proximity to an existing National Grid transmission line, the availability of open agricultural lands with limited design constraints, and the compatibility with Chautauqua County's goal of encouraging renewable energy development.

For purposes of this PSS, the Facility Area is the land area being considered to potentially host the South Ripley Solar Project, including generating facility components, energy storage, the point of interconnection and related facilities. This includes parcels currently under, or being pursued, for purchase, lease, or other real property interests, by the

Applicant for potential development of the Facility. During project development, the Facility Area is regularly refined based on landowner coordination, environmental sensitivities, and engineering/design considerations. Consistent with this approach, the Facility Area presented in this PSS has been refined in relation to the Facility Area presented in the PIP plan and will continue to be refined prior to the Application. The Facility Area, as presented in this PSS, currently totals approximately 4,510 acres. The regional Facility location and current Facility Area are depicted in Figures 1 and 2, respectively. Not all land included in the Facility Area will ultimately be developed as the Facility Site. The Facility Site will include the final land area within which all Facility components and associated facilities will ultimately be constructed, maintained, and operated, including all areas where permanent or temporary ground disturbance could occur. The Facility Site is expected to include approximately 2,000 acres of leased or purchased private land consisting primarily of open agricultural fields, fallow fields, and large forest stands. In accordance with Article 10, the location of the Facility Area and Facility components will be identified in detail in the Application. The Application will reflect resource avoidance and minimization efforts and may include additional parcels of land as the Facility evolves over the coming months.

Throughout this PSS, references to the Facility include the physical generation, collection and transmission components of the utility-scale solar facility, access roads, interconnection routes, battery storage, temporary features installed during construction such as laydown areas, as well as the vegetative buffers and screening, mitigation measures, and other features which ConnectGen proposes related to its Facility. The Facility will consist of rows of PV panels in discrete sub-arrays dispersed throughout the Facility Site. These arrays will be enclosed by fences for safety and security purposes. In addition, the Facility will include electrical direct current (DC) collection cables that connect the PV solar panels to inverters paired with medium voltage transformers and medium voltage alternating current (AC) cables that deliver the electricity from the medium voltage transformers to the collection substation where the power generated at the Facility will be stepped up to the 230 kilovolt (kV) interconnection voltage. A transmission line will connect the collection substation to a point of interconnection (POI) at or adjacent to the existing National Grid (the Connecting Transmission Owner) 230 kV Ripley to Dunkirk transmission line.

The Facility will also include a 20 MW battery energy storage system (BESS) with up to 80 megawatt-hours (MWh) of energy storage capacity. The battery energy storage system would be charged by energy generated on site, stored, and discharged when needed.

More specifically, the anticipated components of the Facility may include:

- Internal infrastructure including access roads and fencing;

- Uniform rows of PV solar panels producing DC electricity mounted on either fixed-tilt or single-axis tracking structures that follow the sun throughout the day, with a typical maximum height of approximately 12 feet;
- Co-located inverters placed throughout the Facility (internal to the panel arrays) to convert DC electricity to AC electricity;
- Medium voltage transformers co-located with the inverters that will increase the voltage of the electricity to 34.5 kV for the collection system;
- A medium voltage collection system that will aggregate the 34.5 kV AC output from the collocated inverters and transformers and deliver electricity to the Facility substation;
- A collection substation where the Facility's electrical output voltage will be combined, and its voltage increased to the transmission line voltage of 230 kV via a step-up transformer;
- Either a POI with associated transmission equipment connecting directly to the existing National Grid substation or a new switchyard and three-breaker ring bus adjacent to the existing National Grid substation;
- A potential operations and maintenance (O&M) building to be located within the Facility Area;
- Temporary laydown areas for equipment staging during construction; and
- A 20 MW battery energy storage system with up to 80 megawatt-hours (MWh) of energy storage capacity.

1.2 FACILITY BENEFITS

Renewable energy projects, including major solar energy generating facilities such as the proposed Facility, generate electricity without emitting air pollutants or requiring extraction and combustion of fuels such as coal, oil, and natural gas. In recognition of these and other benefits, New York has adopted aggressive policies to modernize the electric system to improve the efficiency, affordability, resiliency, and sustainability of the system, encourage development of renewable energy, and combat climate change. For example, the most recent State Energy Plan (SEP), issued June 25, 2015 by the New York State Energy Planning Board, recognized that "renewable resources will play a significant role in shaping New York's energy future, providing resilient power, reducing fuel cost volatility, and lowering [Greenhouse Gas (GHG)] emissions." The SEP established goals of reducing GHG emissions 40% from 1990 levels by 2030 and obtaining 50% of electricity from renewable energy sources by 2030. Thereafter, the Public Service Commission approved the Clean Energy Standard (CES), which formally adopts and implements the SEP's renewable energy goals. These and other initiatives were specifically targeted at increasing the amount of renewable energy generation in the State and reducing emissions of GHGs that contribute to global climate change.

The State's renewable energy/climate change efforts continue with the enactment of the 2019 Climate Leadership and Community Protection Act (CLCPA), which requires 70% of the State's electricity to be generated through renewable sources by 2030 and 100% by 2040. With respect to climate change, the CLCPA requires a 40% reduction in statewide

GHG emissions from 1990 levels by 2030 and an 85% reduction by 2050. To achieve these goals, the CLCPA mandates that at least 6,000 MW of solar energy be installed to serve New Yorkers by 2025.

New York State cannot satisfy the ambitious CLCPA renewable energy and GHG emission reduction mandates without grid-scale solar projects like the Facility. At an anticipated size of up to 270 MW, the Facility will contribute significantly to the State's clean energy goals, generating enough electricity to meet the average annual consumption of approximately 60,000 New York State households based on average annual electric consumption of 6.8 MWh for New York State (EIA, 2018; EIA, 2019).

The proposed Facility will also diversify energy sources within the State by increasing the amount of electricity produced by non-fuel dependent solar power. By generating electricity without the need for fuel delivery and offsetting the need for facilities that rely on fuel for electrical generation, it is expected that the Facility will contribute toward reducing the demand for fuel thereby alleviating fuel delivery constraints.

Further, it is anticipated that the proposed Facility will have positive socioeconomic impacts. Construction of the proposed Facility will provide temporary employment opportunities, with the primary benefits to those in local construction trades, including equipment operators, truck drivers, laborers, and electricians. Facility operation will generate full time employment for a site manager and solar technicians, and part time contracting service opportunities for electricians, laborers, fencing contractors, and landscaping maintenance crews. The Facility will also increase revenues to county, local municipality, and school district tax bases both directly through payments in lieu of taxes (PILOTs) and payments through a Host Community Agreement (HCA) and indirectly through income, purchases and sales tax associated with the Project. In order to develop the Facility, the Applicant will lease or purchase select parcels from private landowners, which will provide a diversified, stable and predictable revenue stream to the participating landowners.

1.3 SUMMARY OF PRE-APPLICATION ACTIVITIES

As previously noted, prior to this PSS, the Applicant prepared a PIP Plan in accordance with 16 NYCRR § 1000.4, which was filed with the Siting Board (Case No. 19-F-0560). The initial draft of the PIP was submitted to NYSDPS on August 30, 2019, comments on the PIP were received from the NYSDPS on September 30, 2019, and the PIP was updated, finalized, and filed by the Applicant on October 30, 2019. The PIP and other documents relating to the Project can be accessed, viewed, and downloaded at the Siting Board's online Document Matter Management (DMM) website and on the Facility-specific website maintained by the Applicant:

- http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=19-F-0560&submit=Search
- www.southripleysolar.com/article-10-process

According to 16 NYCRR § 1000.4(c), a PIP Plan must include: (1) consultation with the affected agencies and other stakeholders; (2) pre-application activities to encourage stakeholders to participate at the earliest opportunity; (3) activities designed to educate the public as to the specific proposal and the Article 10 review process, including the availability of funding for municipal and local parties; (4) the establishment of a website to disseminate information to the public; (5) notifications; and (6) activities designed to encourage participation by stakeholders in the certification and compliance process. It is anticipated that public outreach will be an ongoing, evolving process throughout all phases of the Article 10 review process (pre-application phase, application phase, hearing and decision phase, and post-certification phase). The goal of this process is to disseminate information regarding the Facility to stakeholders, solicit information from those stakeholders during public outreach events, and generally foster participation in the Article 10 review.

The Applicant has established the following contacts and document repositories that will be available through the duration of the Article 10 process:

Public Contact Information (for public stakeholders to contact with questions and concerns):

- Isaac Philips, Development Associate
  1001 McKinney Street, Suite 700
  Houston, TX 77002
  (800) 338-8905
  info@southripleysolar.com

Local Document Repositories:

- Town of Ripley Town Clerk's Office
  14 North State Street
  Ripley, NY 14775
  Open: 9:00 AM to 12:00 PM and 1:15 PM to 4:00 PM Monday – Tuesday, Thursday – Friday, and 9:00 AM to 12:00 PM Saturday

- Ripley Library

  64 Main Street

  Ripley, NY 14775

  Open: 10:00 AM to 5:00 PM Monday, Wednesday, Friday; 10:00 AM to 7:30 PM Tuesday, Thursday; and 9:00 AM to 2:00 PM Saturday
- Minerva Free Library

  116 Miller Street

  Sherman, NY 14781

  Open: 4:00 PM to 8:00 PM Tuesday; 9:00 AM to 4:00 PM and 6:00 PM to 8:00 PM Thursday; 9:00 AM to 3:00 PM Friday, and 9:00 AM to 12:00 PM Saturday

In support of this PSS, the Applicant has consulted with the public, affected agencies and other stakeholders, as required by 16 NYCRR § 1000.5(b). All such consultations have been documented in a Record of Activity maintained by the Applicant, which will be updated and submitted to the Siting Board on a regular basis (also available on the DMM case record website referenced above). The most recent Record of Activity is included as Appendix B of this PSS. The Applicant will continue to prepare and file a Facility-specific Record of Activity on a regular basis throughout the Article 10 review process. Additional details regarding PIP implementation and outreach to stakeholders is provided in Section 2.2 of this PSS.

1.4 POTENTIAL IMPACTS

The following information regarding potential impacts associated with solar powered electric generating facilities is provided in accordance with 16 NYCRR § 1000.5(l)(2)(ii).

As discussed in Section 1.2 above, potentially positive impacts to the local community resulting from development of the Facility include significant long-term economic benefits to participating landowners, as well as to the Town of Ripley, the local school districts, and Chautauqua County. In addition, relative to conventional energy generation methods of a similar scale, solar facilities result in minimal impacts to the environment. When fully operational, the Facility will provide up to 270 MW of electric power generation with no emissions of pollutants or greenhouse gases to the atmosphere and without the need for water to produce electricity. Conventional electrical generation facilities such as coal and natural gas create atmospheric emissions linked to climate change as well as negative impacts on public health (Confalonieri, et al. 2007). In accordance with the Article 10 regulations, the positive environmental, health and socioeconomic impacts associated with generating electricity from solar energy rather than other fuel sources will be addressed in the Application.

All forms of energy and infrastructure construction and operation, including industrial-scale solar projects, affect the existing natural, cultural, and human environments. Between 2000 and 2019, approximately 2,223 MW of solar capacity has been developed in New York State (NYSUN, 2019). These projects have returned important insights and information regarding the potential environmental impacts associated with the construction and operation of solar energy generating facilities. In developing the Project, ConnectGen reviewed and identified known environmental resources, siting constraints, and community concerns during the early design phase in order to avoid and minimize potentially adverse impacts and design a facility that has the least overall impact on the community, while still meeting the electricity generation and other objectives of the Project.

The primary impacts from the construction and operation of utility-scale solar energy facilities are typically associated with the use of large contiguous land areas for the generation and collection of energy. As noted above, the existing land uses in the Town of Ripley are predominately agricultural, fallow lands, and forested areas. Unlike other areas of Chautauqua County and the Town of Ripley, the Facility Area does not contain active vineyard lands. Siting the Facility in a rural agricultural region will help minimize the need for significant land clearing; however, because timber plots are located within the proposed Facility Area, some tree clearing is anticipated.

Construction of solar energy projects does not typically require significant soil disturbance. In this case, solar panels for the Project will be installed on a low-profile racking system, which typically consists of small I-beam posts, helical piles or ground screw piles driven or screwed into the ground, without the need for excavation, concrete, or other foundations. Where bedrock is shallow, it may be necessary to drill into the bedrock, place the piles in the hole, and grout. In those limited areas where soil disturbance is necessary, topsoil will be stripped and stockpiled for restoration purposes. Following construction, any disturbed areas will be restored with topsoil, and a cover of native grass and/or other vegetation species will be established underneath and around the solar panels. With only minimal soil disturbance required for construction and operation of the Facility, there are no anticipated impacts to soil health or viability of agricultural soils associated with the Project.

The Facility components will be sited to limit impacts to undisturbed habitat by utilizing agricultural lands or previously disturbed areas and minimizing tree clearing to the extent practicable. However, some forested communities are identified in the proposed Facility Area and construction-related ecological impacts are anticipated to include some tree clearing and the removal of stumps and root systems, which may result in increased exposure and disturbance of soil, potentially resulting in a loss of wildlife food and cover, increased soil erosion and sedimentation, and the introduction or spread of invasive plant species. These potential impacts to wildlife and terrestrial habitats associated with the construction of the Facility will be addressed in consultation with the appropriate agencies (e.g., NYSDEC). These impacts are discussed in more detail in Section 2.22 of this PSS.

The Applicant conducted a preliminary desktop stream and wetland reconnaissance and will identify and delineate the boundaries of wetlands and streams within the Facility Site during the 2020 growing season. The Applicant will design the Facility to avoid or minimize potential impacts to these resources to the extent practicable (see Section 2.22 of this PSS for details). The Project may result in conversion of wetland communities as a result of construction activities (e.g., forested to scrub-shrub), and soil disturbance from burial of the electrical 34.5 kV collector lines also may occur. Finally, indirect impacts to wetlands and surface waters may result from sedimentation and erosion caused by adjacent construction activities (e.g., removal of vegetation and soil disturbance). As discussed in Section 1.5 below, the Applicant will implement measures to avoid, minimize, and mitigate these impacts.

Solar energy projects do not generally result in the visual impacts often associated with other large-scale energy projects that require tall structures, including wind energy turbines and smokestacks on coal or natural gas-fired power plants. Photovoltaic panels have a low-profile (typically lower than 12 feet in height), which limits their visibility and the distance associated with any potential visual effect. However, the large areas required to achieve the necessary scale of electrical production for utility-scale solar projects can result in visual impacts for residents located in areas adjacent to the Project. Glare is also frequently raised as a possible visual concern for solar PV installations. However, PV panels are designed to absorb as much of the solar spectrum as possible, and virtually all PV panels installed in recent years have at least one anti-reflective coating to minimize reflection and maximize absorption, thus minimizing the potential for glare (see Section 2.24 of this PSS for additional information on visual impacts).

Similarly, solar projects generally do not produce noise that results in significant impacts or annoyance to neighboring residences, wildlife, or other sensitive receptors. Concerns about the sound emissions from solar projects are largely confined to the step-up transformer at the substation, electrical inverters and medium voltage transformers installed within the interior of the PV solar panel arrays, the HVAC systems and inverters associated with battery storage systems, and some short-lived activities during construction. The potential noise impact from any substation or storage facility is essentially a matter of how clearly the tonal sound emissions from the transformer(s) can be heard at residences in the vicinity of the project. Operational noise is typically described as a hum near the substation or battery storage facilities; however, the prominence of this noise diminishes quickly with distance. The potential noise from the solar generation facilities is typically associated with inverters, which are sited within the interior of the panel array areas and are generally inaudible at distances greater than 150 feet. Noise generated during project construction and maintenance, primarily from vehicles and equipment operating along access routes and at work areas, will be temporary and transient in nature, generally occurring where and when construction activities are taking place (see Section 2.19 of this PSS for additional detail on noise impacts).

Additional information regarding potential environmental impacts that could result from construction or operation of the Facility is included in Section 2.0 below. Potential impacts to wetlands, wildlife, cultural resources and visual impacts will be evaluated through Project and site-specific studies that are described further in this PSS. These studies also will be used to identify measures the Applicant can take to avoid potential impacts or minimize and mitigate those impacts that cannot be avoided to the extent practicable. Note, however, that due to the COVID-19 public health crisis and associated Executive Orders and mandates issued by the State of New York and its agencies, the Applicant's ability to conduct extensive on-site investigations during the 2020 growing season may be delayed. As the health crisis and associated mandates continue to evolve, the Applicant will consult with appropriate agency personnel to determine suitable alternatives to extensive on-site investigations, if necessary. A preliminary assessment of impact avoidance measures is included in Section 1.5 below.

1.5 IMPACT AVOIDANCE MEASURES

Compliance with the New York Certificate of Environmental Compatibility and Public Need (CECPN) and various federal regulations, as well as certain applicable local regulations governing the development, design, construction and operation of the proposed Facility, will serve to avoid and minimize adverse impacts. As previously noted, a final Facility layout and design has not yet been completed for the Project; however, based on the historical information regarding typical impact avoidance, minimization, and mitigation measures for solar-powered electric generation projects, the following information is provided in accordance with 16 NYCRR § 1000.5(l)(2)(v) and (vi) relating to impact avoidance and mitigation.

Typical siting considerations for solar projects include avoidance of areas with sensitive resources, such as wetlands and streams, critical or rare wildlife habitat, cultural sites, significant scenic resources, and areas of public recreation. Additionally, siting project facilities in open fields minimizes the potential need for tree clearing and reduces the likelihood of significant visual changes to the landscape. Existing woodlots and hedgerows around agricultural fields may serve to minimize project visibility from nearby areas. In addition, collocating electrical facilities (such as the substation) with existing electrical infrastructure minimizes visual impacts. The Facility has been sited in a relatively flat to moderately sloping open, rural agricultural area with sections of large forest stands. Portions of the Facility Area to the north and east are characterized by steep ravines associated with Twenty Mile Creek and its tributaries. It is anticipated the land within the Facility Site that will host the equipment will require limited grading to prepare it for construction; however, some tree clearing will be required. Selective tree clearing will be conducted depending on the potential sensitivity associated with each area. For instance, ConnectGen will seek to avoid or minimize planned clearing activities in forested areas associated with wetland communities or those that provide potential protected wildlife habitat. Specific methods to be used to remove trees and vegetation and perform minimal grading have not been determined but are anticipated to be standard for the commercial construction industry.

Most of the land surface within each solar field, including almost all the area below the arrays themselves, will be managed for low-growing vegetation species utilizing integrated vegetation management (IVM) practices. IVM is a system of land management that seeks to balance environmental, social, financial, and administrative concerns, while ensuring the success of low-growing stable plant communities conducive to operation of solar facilities and beneficial to the environmental community. The implementation of IVM practices will help to reduce long-term environmental and human health impacts (including reduced mowing and herbicide use) and maintain and promote natural biological communities within the Facility Site. The incorporation of IVM practices is consistent with federal and state policies promoting pollinator management, such as the 2014 Presidential Memorandum (79 FR 35901, 2014) which pushed for the creation of a federal strategy to promote pollinator health and NYSDEC's subsequent Pollinator Protection Plan (NYSDEC, 2016), which outlines habitat conservation enhancement efforts.

Construction activities and Facility engineering will comply with applicable state and local building codes and federal Occupational Safety and Health Administration (OSHA) guidelines to protect the safety of workers and the public. Federal and state permitting typically required by the U.S. Army Corps of Engineers (USACE) and/or the NYSDEC, including implementation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with a state-approved State Pollutant Discharge Elimination System (SPDES) permit, will protect water resources potentially impacted by the Project. Coordination between the Applicant and state and federal agencies will ensure that natural resource impacts are avoided to the extent practicable and that programs are in place to monitor and minimize potential impacts and ensure effective mitigation is in place. Consultation with the necessary local, county, and state highway entities will assure that transportation safety is maintained, and that traffic congestion and damage to roads in the area is avoided or minimized.

The final Facility will be designed, constructed, and operated in accordance with various criteria, guidelines, and design standards that serve to avoid or minimize adverse environmental impacts. These include:

- Minimizing the number of stream and wetland crossings.
- Siting PV solar panels in open fields, to the extent practicable, in order to minimize forest clearing.
- Following Best Management Practices for sediment and erosion control during construction.
- Designing, engineering, and constructing the Facility in compliance with applicable codes and industry standards to assure safety and reliability.
- Consulting with NYSDAM in an effort to minimize impacts to identified agricultural resources.

There are a variety of visual mitigation options that can be applied to solar projects such as the proposed Facility. For a given project, visual mitigation options are typically evaluated based on the existing visual character, aesthetic features, vegetation, and visual sensitivity of a given project setting. In addition, setback distances are typically determined based on the sensitivity of the adjacent uses and in accordance with any applicable local laws. Larger setbacks are more common for areas adjacent to residences or public recreational areas or along well traveled roads/highways, while smaller setbacks are more common in areas adjacent to agricultural, industrial, forest, or vacant land or along less traveled county or town roads.

Visual screening for solar projects can include the use of earthen structures (i.e., berms) or planting of vegetation intended to block or soften views of the project. Common approaches to visual screening include:

- *Evergreen Hedges*: Use of vegetation for mitigation can include installing a screening hedge made up of evergreen trees and shrubs along roadways and/or selected portions of the exterior fence line of a project. This approach is effective and commonly implemented in many different settings, both urban and rural.
- *Native Shrubs and Plantings*: Evergreen hedges may not appear naturalized or appropriate in many settings. As an alternative, native shrubs and plantings may be planted along road frontages and/or selected portions of the exterior fence line of a project. This approach does not typically result in plantings that completely screen views of the project, but instead serves to soften the overall visual effect of the project and can help to better integrate the project into the surrounding landscape. Plantings should be selected based on aesthetic properties, to match with existing vegetation in the project vicinity, and the ability to grow in the specific conditions of a project area. In addition to helping to blend the project into the surrounding landscape, use of native plant species will also provide environmental benefits to the local animal and insect communities.
- *Pollinator-Friendly Grasses and Wildflowers*: In many agricultural areas, installation of trees, hedges or shrubs may not be in keeping with the existing visual setting, which is typically characterized by open fields backed by occasional hedgerows or woodlots. An alternative form of vegetative screening that may be appropriate in these areas is use of tall native grasses and wildflowers along selected roadsides and other fence lines to soften the appearance of the project and better integrate the project into the landscape. Regionally appropriate plantings can also provide habitat for pollinator species when planted around the periphery of the site and/or in locations on site where mowing can be restricted during the summer months. Leaving the taller plants un-mowed during the summer provides benefits to pollinators, habitat to ground nesting or feeding birds, and cover for small mammals, in addition to softening the appearance of the project. Following this approach, ground cover in the form of low growing native species should be planted under the solar panels and between arrays.

- *Earthworks/berms*: In select locations, altering the topography to aid in the screening of a project from adjacent areas and sensitive sites can be a viable option, while in other areas, such as relatively undeveloped agricultural areas, the introduction of earthen berms (or other earthworks) would result in new visual elements that are not in keeping with the existing landscape. This option will only be implemented in areas in which the introduction of earthen berms (or other earthworks) will not result in visual impacts to the existing Facility Site.

Although security fencing can result in a visual impact for solar projects sited in rural areas, it is required for solar projects for safety and security purposes. Specific fence styles in selected locations can be considered if there are existing styles, materials, or designs that relate to features in the landscape of a given project area. In these cases, fence styles are typically selected to be consistent with existing fencing on adjacent properties or within the local community in order to help the project visually blend into the local setting.

Facility development, construction, and operation will include measures to mitigate potential impacts to specific resources, which could include the following types of measures:

- Developing and implementing various plans to minimize adverse impacts to air, soil, and water resources, including a dust control plan, SWPPP, and Spill Prevention, Control, and Countermeasure (SPCC) plan;
- Employing an environmental monitor/inspector to ensure compliance with all certificate and permit conditions, including best practices to be employed at sensitive areas such as stream and wetland crossings;
- Implementing an Invasive Species Control Plan;
- Developing and implementing a Complaint Resolution Plan to address local stakeholder concerns throughout Facility construction and operation;
- Preparing a historic resource mitigation program, if needed, in consultation with the New York State Historic Preservation Office (SHPO);
- Preparing a compensatory wetland mitigation plan, if needed, to mitigate impacts to streams and wetlands;
- Entering into a PILOT agreement and HCA with the local taxing jurisdictions to provide a significant and predictable level of funding for the host town, county, and school districts;
- Developing a preliminary Operation and Maintenance Plan;
- Developing a preliminary Health and Safety Plan;
- Developing a preliminary Site Security Plan;
- Developing an Emergency and Fire Response Plan with local first responders;
- Implementing a Decommissioning Plan.

1.6 ORGANIZATION OF THE PSS

To aid readers in better understanding the intended content and organization of an Application filed in accordance with the Article 10 regulations, and to identify the proposed methodology or scope of the studies to be conducted in support of those Application exhibits, this PSS has been organized in accordance with the exhibit structure set forth in the regulations at 16 NYCRR Part 1001 (Content of an Application). Specifically, all subsections of Section 2.0 (Content of the Application) of this PSS correspond directly to each Exhibit that will be included in the Application as set forth in 16 NYCRR Part 1001 (e.g., Section 2.1 corresponds to 16 NYCRR § 1001.1, Section 2.2 corresponds to 16 NYCRR § 1001.2, etc.). Exhibits that are not necessarily applicable to the Facility have been included as individual PSS sections in order to maintain consistency, but they are called out in this PSS as not being applicable to the South Ripley Solar Project (e.g., Natural Gas Power Facilities, Nuclear Facilities).

2.0 CONTENT OF APPLICATION

2.1 EXHIBIT 1: GENERAL REQUIREMENTS (16 NYCRR § 1001.1)

2.1.1 Discussion

ConnectGen Chautauqua County LLC (ConnectGen) is a direct subsidiary of ConnectGen LLC. Founded in 2018 by a group of seasoned energy industry professionals, ConnectGen is dedicated to building clean electricity generation and energy storage facilities to enable a sustainable energy future. ConnectGen is focused on developing wind, solar, and energy storage projects across the United States while striving to build mutually beneficial relationships with the local communities.

ConnectGen's current portfolio includes 275 MW of operating solar projects and a pipeline of over 3,500 MW of wind energy, solar energy, and battery storage projects that are currently under active development. ConnectGen possesses the project development experience, technical expertise, and financial resources and commitment to deliver the planned South Ripley Solar Project and storage facility in fulfillment of the goals of New York's Climate Leadership and Community Protection Act enacted in 2019. Rigorous screening and site selection, collaborative stakeholder engagement, and discipline throughout the construction and operations phases have been the basis for ConnectGen's success in developing previous renewable energy projects.

2.1.2 Proposed Contents of the Application

Consistent with the requirements of Section 1001.1 of the Article 10 regulations, the Application will comply with the following general requirements:

(a) The Application will contain the exhibits described 16 NYCRR § 1001 as relevant to the proposed major electric generating facility technology and site and such additional exhibits and information as the Applicant may consider relevant or as may be required by the Siting Board or the Presiding Examiner. Exhibits that are not relevant to the Application may be omitted.

(b) Each exhibit in the Article 10 Application will contain a title page which provides the Applicant's name, the title of the exhibit, and the proper designation of the exhibit.

(c) Each exhibit that contains more than 10 pages will include a table of contents citing by page and section number or subdivision the component elements which are contained in the exhibit.

(d) The Applicant will establish a basis for a statistical comparison with data which will subsequently be obtained under any program of post-certification monitoring.

(e) If the same information is required for more than one exhibit, it may be provided in a single exhibit and referenced in the following exhibits which require that information.

(f) Exhibit 1 of an Article 10 Application shall contain the following information:

(1) Applicant Information

ConnectGen Chautauqua County LLC
1001 McKinney Street, Suite 700
Houston, TX 77002
(800) 338-8905

(2) Facility Website

The Project Website can be found at: www.southripleysolar.com.

(3) Public Contact

Comments or questions about the Facility should be directed to the Project's point of contact: Isaac Phillips, Development Associate, by phone (800-338-8905) or email (info@southripleysolar.com).

(4) Principal Officers

The Officers for ConnectGen Chautauqua County LLC are:

- Caton Fenz (Chief Executive Officer)

(5) Document Service

The Application will indicate if the Applicant desires service of documents or other correspondence on an agent, and if so, the required contact information will be provided.

(6) Type of Business

ConnectGen Chautauqua County LLC is a limited liability company and is registered to conduct business in New York State. ConnectGen Chautauqua County LLC is a direct subsidiary of ConnectGen LLC.

(7) Documents of Formation

The certificate of formation for ConnectGen Chautauqua County LLC is included as Appendix C to this PSS.

2.2 EXHIBIT 2: OVERVIEW AND PUBLIC INVOLVEMENT SUMMARY (16 NYCRR § 1001.2)

2.2.1 Discussion

ConnectGen applies a community-driven approach to the development of its projects, which involves open and transparent communication with interested stakeholders from initial project outreach through the construction and operation of each project. Ultimately, it is ConnectGen's goal to successfully construct and operate a new energy generation facility in the town of Ripley with the community's support. However, ConnectGen understands there may be questions about how the South Ripley Solar Project may affect the community. ConnectGen has applied and will apply appropriate regulatory standards and development best practices to disseminate information about the Project and gather feedback from stakeholders.

Early outreach and coordination with the South Ripley community and landowners within the Facility Area began in late 2018. The goal of this initial outreach effort was to establish community awareness of the Project and provide an opportunity for landowners to participate in the Project review process and supply valuable development feedback. As required by the Article 10 regulations, the Applicant prepared and submitted a PIP Plan which describes how the Applicant will engage the public and various stakeholders throughout the Article 10 process. The initial draft of the PIP was submitted to NYSDPS on August 30, 2019; comments on the PIP were received from the NYSDPS on September 30, 2019; and the PIP was updated, finalized, and filed by the Applicant on October 30, 2019. Before the PIP was filed, ConnectGen representatives held meetings and discussions with local officials to discuss the proposed Project (see Appendix B – Record of Activity). Additionally, the Applicant invited potential host landowners to two landowner dinners at Meeder's Restaurant in the Town of Ripley on April 4, 2019 and August 6, 2019 to discuss project specifics; both dinners are included in the Record of Activity.

The first goal of the PIP is to identify stakeholders and other interested parties. The PIP presented this information in Exhibit A – Notification List. Since the final submission of the PIP Plan in October 2019, this list has been updated based on the Applicant's consultations and meetings with stakeholders. An updated Master Stakeholder List is presented in Appendix D of this PSS.

A second goal of the PIP is to establish a procedure that will ensure that stakeholder concerns, interests, local knowledge, and recommendations are evaluated, addressed, and considered by the Applicant and Siting Board. Prior to the filing of this PSS, the Applicant held two public open house sessions on December 4, 2019 (morning and evening)

at Meeder's Restaurant in the Town of Ripley. Notice of the open house was published in several local newspapers, including the Westfield Republican, the Jamestown Post-Journal, and the North East News Journal and posted at local document repositories. The open house notices are also provided in Appendix E of this PSS. Additionally, notification letters were sent two weeks prior to the open house to all host and adjacent landowners and all stakeholders on the Master Stakeholder List. As defined in the PIP, host landowners are those owning parcels within the Facility Area and adjacent landowners include those with property within 2,500 feet of proposed Project components. The sessions were well attended by over 50 individuals, not including the ConnectGen South Ripley Solar Project Team. Attendees were able to view posters with information on topics of interest, such as project basics, information on solar photovoltaic and battery storage technology, educational information on the Article 10 process, environmental considerations for project development, instructions on how to access Article 10 documentation and how to file comments on the Siting Board's online DMM system. The Applicant collected names and contact information from individuals interested in hearing more information about the Project and provided the option for attendees to be added to the Article 10 master stakeholder list. During the period leading up to and following the open houses, the Applicant initiated other consultations with stakeholders, including State agencies and local groups. Summaries of these meetings/consultations are included in the Record of Activity (Appendix B). The Record of Activity will continue to be updated and filed on DMM throughout the Article 10 application process.

In addition to the open house meetings, the Applicant has established a Project-specific website (www.southripleysolar.com), a toll-free number (1-800-338-8905), and an email address (info@southripleysolar.com) for stakeholders to communicate questions or comments about the Project. Electronic copies of significant Facility documents (e.g., PIP, PSS, Stipulations, Article 10 Application) are, or will be, posted on the Applicant's website and physical documents will be placed at local repositories. All relevant documents and filings are on the Facility-specific DMM website maintained by the Siting Board:

- http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=19-F-0560&submit=Search.

Also, the Applicant has provided, and will continue to provide, paper copies of significant Facility documents at the following document repositories:

Local Document Repositories	Hours open:
Town of Ripley Town Clerk's Office 14 North State Street Ripley, NY 14775	Monday, Tuesday, Thursday, and Friday: 9:00 AM-12:00 PM and 1:15 PM-4:00 PM Saturday: 9:00 AM-12:00 PM
Ripley Library 64 Main Street Ripley, New York 14775	Monday, Wednesday, and Friday: 10:00 AM-5:00 PM Tuesday and Thursday: 10:00 AM-7:30 PM Saturday: 9:00 AM-2:00 PM

Minerva Free Library 116 Miller Street Sherman, NY 14781	Tuesday: 4:00 PM-8:00 PM Thursday: 9:00 AM-4:00 PM and 6:00 PM-8:00 PM Friday: 9:00 AM-3:00 PM Saturday: 9:00 AM-12:00 PM

The Applicant is evaluating the benefits of opening a local project office in the vicinity of the Facility Site during the development and construction phases of the Project and will provide information regarding location and hours should a project office be deemed necessary. The Applicant is available to meet with stakeholders one on one at a location near the Facility Site as requested.

The Applicant mailed an update on the Project to all identified stakeholders just prior to the submission of this PSS to invite comments and remind stakeholders of the comment period timeframe. The full PSS legal notice was published in local newspapers, including the Westfield Republican, the Jamestown Post-Journal, and the North East News Journal, and mailed to the master stakeholder list, including to host and adjacent landowners. This notice was also emailed and/or mailed to individuals who provided their contact information at the April 2019 and August 2019 landowner dinners and the December 2019 open house, members of the Siting Board's Party List, individuals who asked to be added to the master stakeholder list via the Project website, and those identified on the master stakeholder list for whom an email address was available. In total, 377 notices of the PSS were mailed and/or emailed to identified landowners and stakeholders. Proof of those mailings will be submitted separately to the Secretary.

As Project development continues, the Applicant intends to continue stakeholder outreach. There are numerous resource-specific consultations which will occur with stakeholders to assist in the development of studies needed to assess the environmental and other impacts of the Project. Those consultations will be included in the PIP Tracking Logs and/or discussed in the Application. The Applicant will also continue to attend the Town of Ripley board meetings and meet with other local public stakeholders such as the Town and County highway and emergency services departments as needed.

As will be described in the Application, the Applicant will develop and implement a Facility-specific Complaint Resolution Plan to address potential community complaints and concerns during construction, operation, and decommissioning of the Facility. A draft of this plan will be provided in the Application, and will identify procedures to be used to track, investigate and address complaints, report issues to NYSDPS staff, and provide notifications and information to stakeholders and members of the public. In addition, several sections of this PSS refer to resource or impact-specific complaints, such as potential noise or construction complaints; all such issues will be addressed comprehensively in the Facility's Complaint Resolution Plan, and sections of the Plan will be referenced in the relevant portions of the Application.

2.2.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.2 of the Article 10 regulations, Exhibit 2 of the Application will contain the following information:

(a) Brief Description of the Proposed Facility

The Application will contain a brief description of the major components of the Facility, including all proposed PV module locations and the footprint of all other Facility components. The Applicant agrees that the major components of the Facility are to be described as follows:

- **Project**: Collectively refers to construction and operation of the Facility, as well as proposed environmental protection measures, and other efforts proposed by the Applicant.
- **Facility Area:** The land area being considered to potentially host the South Ripley Solar Project. This includes parcels currently under, or being pursued, for lease or easement (or other real property interests) by the Applicant for development of the Facility Site. A preliminary Facility Area is discussed in this PSS and presented on Figure 2.
- **Facility Site**: The portions of the parcels within the Facility Area that will ultimately host the Facility components and associated facilities. The siting of Facility components is ongoing, and the proposed Facility Site will be identified in the Application.
- **Facility**: Proposed components will include: PV solar modules and their rack/support systems; DC and communications cables connecting the panels to inverters; the inverters, with their support platforms, control electronics, and step-up transformers; buried and/or overhead AC medium voltage collector circuits; fencing and gates around each array of modules; access roads; temporary laydown/construction support areas; medium voltage-to-transmission voltage substation with associated equipment and fenced areas; a short length of transmission voltage line with possible support poles to connect to the existing National Grid 230 kV South Ripley substation or, alternatively, to a new POI switchyard containing switchgear that loops the existing South Ripley to Dunkirk 230 kV transmission line through the POI; a battery storage system; and potentially an O&M building with fenced and parking/storage areas as well as any other improvements subject to the Siting Board's jurisdiction.

(b) Brief Summary of Application Contents

A detailed table that identifies all of exhibits (including associated appendices) required under 16 NYCRR Part 1001. The table will follow the organization of the Application's Table of Contents and will satisfy the requirements of 16 NYCRR § 1001.2(b).

(c) Brief Summary of PIP before Submission of the Application

A brief summary of the PIP conducted by the Applicant prior to submission of the Application and an identification of significant issues raised by the public and affected agencies during such program and the response of the Applicant to those issues, including a summary of changes made to the proposal (if any) as a result of the Public Involvement Program. Specific components of the PIP conducted as of the date of Application filing will be described, including:

- Opportunities for public involvement;
- Development and use of stakeholder list, including host and adjacent landowners;
- Consultation with affected agencies and stakeholders;
- Reference to existing website, email and toll-free phone number established for the Facility;
- Timeline for responding to public comments received through these communication portals;
- When public document repositories will be updated;
- Applicant's efforts relating to language access;
- Identification of any environmental justice areas;
- Use of document repositories;
- Factsheets on the Article 10 process and intervenor funding and other outreach materials; and
- Use of meeting logs tracking PIP activities, significant questions and/or issues raised by the public and the Applicant's response or follow-up action.

The PIP and all other submissions under Article 10 will remain available at the designated repositories and online (www.southripleysolar.com) throughout the application review processes.

(d) Brief Summary of PIP After Submission of Application

A brief description of the PIP after submission of the Application. The Applicant will continue to engage stakeholders following submission of the Application. The Application will describe the proposed post-Application PIP activities, which include the following:

- An updated stakeholder list will be appended to the Application, including host and adjacent landowners and stakeholders identified during implementation of the PIP (Appendix D).

- A discussion of how stakeholders have been identified and subsequently added to the list during the scoping, stipulation, and public involvement processes, and a description of how the list will be used for distribution and notification regarding Project milestones, including submittal of the Application.
- In addition to notifications required under 16 NYCRR § 1000.6 and 1000.7, the Applicant will mail notice of the Application submittal to a project mailing list comprised of the updated stakeholders list, including host and adjacent landowners, and additional addresses received through public outreach. The notice will include information on the Project generally and the Article 10 Application specifically. A copy of the mailing list and documentation indicating the dates and mailings that were made will be provided to the Secretary.
- In addition to newspaper publication as required under 16 NYCRR § 1000.7(a), the Applicant will publish notification about the Project in at least one free local community newspaper circulated in the Project and Study Areas, if available.
- The Applicant agrees to provide a brief description of the Public Involvement Program to be conducted by the Applicant after the submission of the Application, such as hearings, notification of construction activities, and complaint resolution procedures (including the Complaint Resolution Plan included as part of the Application).

(e) Brief Overall Analysis

The Application will include an overall analysis of the relevant and material facts from the Application, together with the information and analysis from the studies conducted in support of the Application, and will contain an evaluation of the potential environmental impacts of the construction and operation of the Facility on:

- Ecology, air, ground and surface water, and wildlife and habitat;
- Public health and safety, including noise;
- Cultural, historic and recreational resources, including visual resources;
- Transportation, communications, utilities and other infrastructure, as required by Article 10 regulations.

In addition, this section will summarize the facts in the Application and explain why the Applicant believes that the requested CECPN can be granted, specifically addressing each required finding, determination and consideration, including the information needed to determine:

- That the Facility is a beneficial addition or substitution for electric generation capacity of the State;
- That the construction and operation of the Facility will serve the public interest;

- That the adverse environmental effects of the construction and operation of the Facility will be minimized or avoided to the maximum extent practicable;
- If the Facility results in or contributes to a significant and adverse disproportionate environmental impact in the community in which the Facility would be located, that the Applicant will avoid, offset or minimize impacts caused by the Facility upon the local community for the duration of the CECPN to the maximum extent practicable using verifiable measures; and
- That the Facility is designed to be constructed and operated in compliance with applicable state and local laws and regulations, or in the alternative that such laws and regulations as applied to the Facility are unreasonably burdensome and therefore not applicable.

This information will provide a basis to make the findings required in order to grant a CECPN to the Applicant for the Facility in accordance with the existing requirements of PSL § 168.

2.3 EXHIBIT 3: LOCATION OF FACILITIES (16 NYCRR § 1001.3)

2.3.1 Discussion

As previously discussed, the current Facility Area encompasses approximately 4,510 acres and is located entirely within the Town of Ripley in Chautauqua County, New York. Figure 1 displays the regional location of the South Ripley Solar Facility while Figure 2 shows the extent of the current Facility Area. The siting of Facility components is ongoing and continues to be refined based on landowner coordination, engineering and design considerations, and the avoidance of sensitive resources. The location of the final Facility Site and Facility components will be provided in the Article 10 Application. Exhibit 3 of the Application will contain maps, drawings, and explanations showing the location of the proposed Facility, including all interconnections and any ancillary feature such as roads, which together comprise the proposed Major Electric Generating Facility, in relation to municipalities (county, city, town, and village) by showing municipal boundaries and taxing jurisdictions associated with any part of the overall development proposal.

2.3.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.3 of the Article 10 regulations, Exhibit 3 of the Application will contain the following information:

(a) Topographic Maps

The Application will include mapping clearly showing the location of the components of the major electric generation and interconnection facilities associated with the proposed South Ripley Solar Project. These components, collectively referred to as the "Facility," will be mapped on the U.S. Geological Survey "(USGS) Topo"

topographic tile cache base map service displayed at a scale of 1:24,000 or greater. This map service combines the most current data (Municipal Boundaries, Elevation, Geographic Names, Hydrography, Land Cover, Structures, Transportation, and other themes) that make up The National Map (USGS, 2018). The National Map is a collaborative effort between the USGS and other federal, state, and local partners to improve and deliver topographic information for the United States (USGS, 2018). The "USGS Topo" map service is designed to provide a seamless view of the data in a geographic information system (GIS) accessible format and depicts information consistent with the USGS 7.5-minute (1:24,000) quadrangle topographic maps at large scales (USGS, 2017). The maps will depict the following:

(1) Proposed Major Electric Generating Facility Locations

The proposed location of specific Facility components including PV modules, an energy storage facility, access roads, electrical collection system, collection substation, POI, staging/laydown areas, and fencing will be provided on the maps and as part of the site plan drawings, as described in Section 2.11 of this PSS. A separate map will be prepared (at an appropriate scale) to depict the collection substation, POI, energy storage facility, and associated voltage. With respect to alternatives, the mapping will depict those alternatives defined in Exhibit 9 of the Application. With respect to the possible O&M building, any preliminary locations under consideration will be identified on the appropriate map(s) in the Application. Although unlikely, to the extent any information is known at the time of the submission of the Article 10 Application regarding potential locations of permanent mitigation/offset sites for wetlands or historic resources, such locations will also be mapped.

(2) Interconnection Location

All Facility components, including the interconnection facilities and vehicle access proposed to those facilities, will be mapped as indicated in Section (a)(1) above.

(3) Location of Ancillary Facilities

It is anticipated that the only off-site ancillary features that could be required for the Facility would be temporary public road improvements. If needed, these features will be depicted on mapping/figures in the Application.

(4) Location of Article VII Transmission Lines Not Subject to Article 10

The Facility is not anticipated to include any components that are subject to Article VII of the Public Service Law.

(5) Study Area

Generally, the area within two miles of the Facility Area was determined to be a relatively conservative study area based on the surrounding landscape and limited visibility anticipated for the Facility. However, the Facility will be subject to a number of studies in support of the Application and a single, universal study area will not be utilized for all studies/analyses. Rather, the various studies will have resource-specific study areas, which will be described in the appropriate section of the Application along with a reference to the exhibit in which additional information is provided. The following represents a summary of the anticipated study areas for the various resource studies to be conducted and included in the Application:

- Land Use: Various aspects of land use such as zoning, land use classification, and existing transmission facilities will be characterized within a 2-mile radius of the Facility.
- Noise: The potential for noise impacts resulting from the construction and operation of the proposed Facility will be assessed for the nearest sensitive receptors located within the Sound Study Area which includes 1,500 feet from the edge of the Facility Area or until the 30-dBA noise contour is reached, whichever is greater.
- Archaeological Area of Potential Effect (Direct APE): Archaeological investigations will be conducted within all areas of soil disturbance associated with proposed PV arrays, inverter pads, access roads, buried collection lines, POI, and laydown area.
- Architectural Survey Area (Indirect APE): A survey conducted to assess if historic properties are located within the 5-Mile Study Area for indirect (visual) effects and the potential effect of the Facility on those resources
- Wetland/Stream Survey Area: Wetland and stream investigations/delineations will be conducted within the entirety of the Facility Site.
- Visual Study Area: The study area to be utilized to conduct visual impact assessments for the proposed Facility will be a 5-mile radius around the Facility Site.
- Communications: The study area for communications facilities differs depending on the particular communications system under review (radio, television, phone, radar, etc.), if any. Further information will be provided in the Application.
- Environmental Justice Study Area: The study area to be utilized to assess the potential impact of the Facility on environmental justice (EJ) communities is defined as a half-mile radius around the Facility Site, consistent with the criteria set forth in 6 NYCRR § 487.4.
- Electric and Magnetic Fields Study Area: The study area to be utilized to conduct electric and magnetic field calculations was defined as the right-of-way associated with underground collection lines

(approximately 3 feet below grade). Note: Some lines may run further than 4 feet underground to avoid any existing conductors.

(b) Municipal Boundary Maps

Exhibit 3(b) will contain maps and figures displaying the location of the proposed Facility with respect to village, town, county, and school district boundaries.

(c) Description of Proposed Facility Locations

Exhibit 3(c) will contain a description of the locational relationship of the Facility to village, town, county, and school district boundaries.

(d) Facility Shapefiles

Facility shapefiles will be provided for the proposed PV module locations, access roads, inverter, and transformer equipment pad locations, medium voltage collection lines, collection substation, POI bay at the substation, energy storage, potential O&M building (as applicable), and construction staging areas.

2.4 EXHIBIT 4: LAND USE (16 NYCRR § 1001.4)

2.4.1 Discussion

The Application will identify the existing and proposed land uses within the Facility Site and in the broader Study Area. As described in the Final PIP for the South Ripley Solar Facility, a two-mile radius around all proposed Facility components is considered appropriate for the Study Area due to the nature of the technology and the rural setting specific to this Facility. This Study Area encompasses portions of the host Town of Ripley, as well as portions of the Towns of Westfield, Mina, and Sherman, all located within Chautauqua County, New York. Any potential impacts to land use resulting from Facility construction and operation will be evaluated within this two-mile Study Area.

Chautauqua County is a rural county with a significant amount of land devoted to agriculture. The 2017 Census of Agriculture indicated that Chautauqua County was comprised of approximately 223,634 acres of farmland with 57% used as cropland and 25% used as timberland (2017 Census of Agriculture). Along with many other areas of New York State, agricultural land use in Chautauqua County has experienced a decline over the last several decades. Chautauqua County was ranked first in the state for number of farms in 1997 (1997 Census of Agriculture). However, according to the 2017 Census of Agriculture, the western New York region has lost the largest number of farms in the State since 2000, with the largest decline in Chautauqua County. Despite this decline, Chautauqua County still ranks 13th in the State for highest agricultural sales and holds the highest farm acreage dedicated to growing grapes in the

State. Additionally, Chautauqua County's economically valuable timber stands of cherry, maple, oak, and other wood comprise 25% of the County's farmland (Chautauqua County Farmland Protection Plan, 2000; 2017 Census of Agriculture Chautauqua County Profile). According to the 2016 National Land Cover Dataset (USGS, 2019), the lands within the Facility Area are primarily comprised of forestland (54.5%), agriculture (36.5%), wetlands and surface waters (5.1%) and developed areas primarily consisting of scattered rural residences (2.4%). Section 2.22 discusses land cover within the Facility Area in more detail.

In accordance with the Article 25-AA of the New York Agriculture & Markets Law, lands are added to an agricultural district to protect New York State farmland from development and promote farming. As shown in Figure 3, a majority of the Facility Area is located within Chautauqua County Agricultural District 1. Figure 3 also displays the extent of lands within the Facility Area that are classified by NYSDAM as Prime Farmland, Prime Farmland if Drained, and Farmland of Statewide Importance. These classifications are an additional measure NYSDAM has taken to identify and protect farmland across the state. Section 2.21 discusses the identification of prime farmlands in more detail. The Application will address impacts to active agricultural lands resulting from Facility construction in relation to the agricultural districts and cumulative impacts on the districts. The Applicant will continue consultations with the NYSDAM throughout the Article 10 process. It should be noted that any impacts to active agricultural lands within the Facility Site will only occur during the life of the Facility. Affected agricultural lands can be reverted back to agricultural use upon the decommissioning of the Facility.

It is anticipated that the Facility Site will be located entirely within the Town of Ripley which has adopted zoning ordinances and local laws specific to solar energy and is currently developing zoning ordinances and local laws specific to energy storage. The Application will provide more detail on existing and proposed zoning within the Study Area and will demonstrate how the Project is consistent with the permitted uses in each district. As previously noted, the Study Area encompasses portions of the Towns of Ripley, Westfield, Mina and Sherman in Chautauqua County. Maps of existing and proposed zoning districts and publicly known proposed land uses within the Study Area will be included in the Application. A more detailed analysis of the Project's compliance with applicable Town of Ripley laws will be found in Exhibit 31 of the Application.

The Applicant will review the regional and municipal planning documents applicable to the Facility Site, and the Application will include a discussion of the proposed Project's consistency with these plans. In brief, the Chautauqua County 20/20 Comprehensive Plan (2011) identifies the expansion of local and green energy resources as a major strategy to benefit the local environment and economy, but also states that the rural character of the landscape is of paramount importance to the County. The Chautauqua County Farmland Protection Plan (2000) does not specifically address renewable energy or its potential implications on agriculture, but does emphasize the importance of farmlands

and forestlands to the County's economy and rural quality of life and its concern over conversion of agricultural lands to other uses, with special concern for vineyards, dairy farms, and forestry and hardwood timber resources. Finally, the Northern Chautauqua County Local Waterfront Revitalization Program (LWRP, 2015) includes several policies which are directly applicable to the portions of the proposed Facility's Study Area which overlap with the LWRP Study Area, including the stream corridors (areas within 250 ft of the stream centerline) of Twenty Mile Creek and Belson Creek. As previously noted, the Applicant does not anticipate significant permanent impacts to agricultural lands and farms since they can be returned to agricultural use at the end of the Facility's life. Additionally, within the Study Area, the Towns of Mina and Westfield have adopted comprehensive plans. In accordance with the Article 10 regulations, the Application will provide a discussion on the available comprehensive plans for the municipalities within one mile of the Facility Area.

The Facility will be sited to avoid or minimize impacts to public recreational areas and sensitive natural, cultural, historic, or visual resources. Recreation areas and other sensitive land uses within the Study Area will be mapped and any anticipated permanent and temporary impacts will be assessed in the Application.

2.4.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.4 of the Article 10 regulations, Exhibit 4 of the Application will contain the following information:

(a) Map of Existing Land Uses

The Application will include a map of existing land uses within the 2-mile Study Area, using publicly available data, including the classification codes of the New York State Office of Real Property Services (NYSORPS). For parcels that are classified as "vacant land," the Applicant will provide applicable information on the existing use of these lands based on field observations and consultation with landowners and/or local municipalities.

A separate map of lands enrolled in New York State Agricultural Districts, conservation programs, New York's 480-a forest management program, or similar long-term conservation agreements within or adjacent to the Facility Site will be included with the Application. If known, the Applicant will discuss the status of conservation enrollments, renewals or recertifications for any property within the Facility Site and the potential impacts of Facility construction or operation.

(b) Transmission Facilities Map

The Application will include a map of any existing overhead and underground transmission facilities for electric, gas, and telecommunications within the Study Area based on publicly available data sources and information obtained by the Applicant through consultation with various public (e.g., NYSDPS) and private (e.g., National Grid) entities. Additionally, any gas lines or wells within the Facility Site will be identified, and the owners of utilities identified.

(c) Tax Parcel Map

The Application will include a tax parcel map of all properties proposed for the siting of Facility components, and all properties adjoining those hosting the Facility. Parcels and land use data will be obtained from Chautauqua County, the host Town of Ripley, and the adjacent Towns of Mina, Westfield, and Sherman, as applicable. The map will depict property lines, current land use, tax parcel number, owner of record, and any publicly known proposed change in land use.

(d) Zoning District Map

The Application will include a map and description of existing and proposed zoning districts within the Study Area based on data obtained from each municipality and the County. The Application will summarize zoning regulations for each municipality and will focus on the permitted and prohibited uses, as applicable to solar energy generation and storage, within each zoning district where Facility components will be located.

(e) Comprehensive Plan

The Application will include a review of existing comprehensive plans adopted by the Town of Ripley, their respective status, and the proposed Facility's consistency with these plans.

(f) Map of Proposed Land Uses

The Application will include a map of publicly known proposed land uses within the Study Area gathered through discussions with local officials, public input, the PIP implementation and PSS development process, and other sources. The Application will identify any permanent, temporary (i.e., during construction) or reversible impacts to each of the existing and proposed land use classes to be directly affected by the Facility.

(g) Map of Specially Designated Areas

The Application will include a map of any designated coastal areas, inland waterways, groundwater management zones, agricultural districts, special flood hazard areas, or other specially designated areas potentially occurring within the Study Area. Data depicted in these maps will be from publicly available datasets maintained by state and federal agencies. There are no designated coastal management areas, groundwater management zones, or critical environmental areas (CEAs) in the designated Study Area.

(h) Map of Recreational Areas and Other Sensitive Land Uses

The Application will include a map depicting recreation areas and sensitive land uses within the Study Area as set forth in 16 NYCRR § 1001.4(h). Data depicted on this map will be from publicly available datasets from both public and private sources. The Application will address the potential for the Facility to have direct and or indirect impacts on the recreational resources and other sensitive areas identified.

(i) Compatibility of the Facility with Existing and Proposed Land Uses

The Application will include an assessment of the compatibility of the proposed Facility with existing, proposed and allowed land uses, as well as local and regional land use plans within a 1-mile radius of the Facility Site. This assessment will include a qualitative evaluation of land use impacts on residential areas, schools, civic facilities, recreational facilities, and commercial areas within 1-mile of the Facility Site. This will include an assessment of the Facility's compatibility with local, State and County planning documents, including but not limited to:

- The 2016 New York Open Space Plan;
- The New York State Historic Preservation Plan 2015-2020;
- The Statewide Comprehensive Outdoor Recreation Plan 2020-2025;
- The New York State Office of Parks, Recreation and Historic Preservation Sustainability Plan (2009);
- Chautauqua County 20/20 Comprehensive Plan;
- The Chautauqua County Agricultural & Farmland Protection Plan (2000);
- The Northern Chautauqua County Local Waterfront Revitalization Plan (2015); and
- Comprehensive plans adopted for the Towns of Ripley, Westfield, and Mina. The Town of Sherman does not currently have a municipal comprehensive planning document.

(j) Compatibility of Above-Ground Interconnection with Existing and Proposed Land Use

The Application will include an evaluation of the compatibility of any proposed above-ground collection line with existing, potential and proposed land uses within 300 feet of the interconnection lines. (Note that Exhibit 24 of the Article 10 Application will address the visual impacts of any above-ground collection lines in greater detail.) The maps included in the Application depicting Project components will include the location of overhead interconnections, POI(s), and associated facilities.

(k) Compatibility of Underground Interconnections with Existing and Proposed Land Uses

The Application will include a discussion of the compatibility of proposed underground interconnections with existing, potential, and proposed land uses within 300 feet from the centerline of such interconnections or related facilities. The Application will also discuss temporary disturbances associated with construction of these Facility components.

(l) Conformance with the Coastal Zone Management Act

The proposed Facility is not located within a coastal area or in direct proximity to an inland waterway; therefore, the requirements of 16 NYCRR § 1001.4(l) will not be addressed in the Application.

(m) Aerial Photographs

Aerial photographs will be provided for the lands within the Study Area at such scale and detail to enable discrimination and identification of all natural and cultural features.

(n) Aerial Photograph Overlays

All Facility components and interconnections will be mapped on aerial photographs at a readable scale using ArcGIS software. Line symbols will be used to depict the centerlines of proposed access roads and electrical collection lines and polygon symbols will be used to depict panel locations, the substation, and construction laydown areas, as well as the O&M building and battery energy storage system. Buffers around each Facility component will show the limits of clearing and disturbance required.

(o) Source of Aerial Photographs.

The Application will identify the source of the aerial photographs required by Sections (m) and (n) above. The photographs must reflect the current situation. Mapping will likely be prepared using the most recently available 1-

meter resolution natural color orthoimagery from the U.S. Department of Agriculture's (USDA) National Agriculture Imagery Program (NAIP).

(p) Community Character

The Application will include a description of community character in the Facility Area, an analysis of proposed impacts of the Facility on community character, and identification of avoidance or mitigation measures that will minimize adverse impacts on community character, if necessary. 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. Information used to describe community character will be based on on-site observations and information included in town, county, and/or regional master plans, among other sources.

2.5 EXHIBIT 5: ELECTRIC SYSTEM EFFECTS (16 NYCRR § 1001.5)

2.5.1 Discussion

The Applicant proposes to interconnect the Facility to the New York State Bulk Power System via a collection substation at a point of interconnection at or adjacent to the existing National Grid 230 kV South Ripley substation. Per the Open Access Transmission Tariff regulations of the New York Independent System Operator (NYISO), the operator of New York's transmission system, the Facility will undergo the NYISO's Large Facility Interconnection Procedures (LFIP) for the solar component of the Facility and the Small Generator Interconnection Procedures (SGIP) for the energy storage component of the Facility. While these components are co-located and do not represent different facilities, NYISO currently requires co-located energy storage components to undergo a separate study process.

The Applicant has filed a large generator interconnection request with the NYISO for interconnection of the 270 MW AC solar component of the Facility to the National Grid 230 kV transmission system. With National Grid's support, the NYISO's process to conduct a Feasibility Study, a System Reliability Impact Study (SRIS), and a Facilities Study is underway. The NYISO conducts its Facilities Study as part of its Class Year process. In this process, projects that have reached certain milestones and are ready to move forward are treated as a single study group. The Applicant completed the Feasibility Study in September 2019, will complete the SRIS in 2020, and intends to enter the next Class Year Facilities Study, anticipated in late 2020.

The Applicant has filed a small generator interconnection request with the NYISO for interconnection of the 20 MW AC energy storage component of the Facility to the National Grid 230 kV transmission system. The SGIPs follow the same structure of the LFIPs; however, the Applicant does not anticipate the completion of a Feasibility Study will be necessary

given the 2019 completion of a Feasibility Study for the solar component. The Applicant anticipates completing the SRIS in 2020 and intends to enter the next Class Year Facilities Study, anticipated in late 2020.

The Applicant will file both SRIS reports separately under confidential cover pursuant to Section 87(2)(d) of the New York State Public Officers Law and the Commission's regulations, in particular 16 NYCRR § 6-1.4.

The SRIS is being performed for summer peak, winter peak and light load system conditions. The study area includes the West Zone (Zone A) in the NYISO system. The Application will describe the impact of interconnection of the proposed Facility on transmission system reliability in the State in more detail.

The Facility components will be designed and constructed in accordance with applicable standards, codes, and guidelines and best industry practices. For the POI, National Grid will utilize its existing design standards which incorporate national and local standards and codes. Additionally, the Application will include descriptions of procedures and controls for Facility inspection, testing, and commissioning. The substation will be inspected, tested and commissioned in accordance with various applicable standards and requirements. Tests will be performed with the equipment de-energized, except where it must be energized for functional testing. The Applicant will be responsible for the operation, inspection, and maintenance requirements of all Facility components except for the POI, which will be the responsibility of National Grid. These activities can generally be classified as scheduled Facility inspection/maintenance, unscheduled Facility maintenance/repairs, or electrical system inspection/maintenance.

The Facility will have a written inspection, testing and commissioning plan that will be adhered to during all stages of construction as well as during a post-construction inspection and testing phase. When completed, all documentation will be provided to the appropriate entities/authorities and stored at the Facility Site for easy access in the future.

The Applicant will prepare a preliminary Operations and Maintenance Plan (O&M Plan), which will be included in the Application. This plan is intended to be the foundation for the final O&M Plan for the Facility. The O&M Plan will be based on the Applicant's experience and the typical O&M requirements for solar and energy storage projects. Ultimately, Facility operations personnel will be responsible for implementation of the O&M Plan. The objective of the O&M Plan is to optimize the Facility's operational capacity and availability through best-in-class maintenance guidelines and inspections that are designed to proactively detect and correct any significant safety or maintenance issues. The O&M Plan will also include vegetation management practices for the Facility.

2.5.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.5 of the Article 10 regulations, Exhibit 5 of the Application will contain the following information:

(a) System Reliability Impact Study (SRIS) Report

A SRIS Report will be completed in accordance with the NYISO's Open Access Transmission Tariff approved by the Federal Energy Regulatory Commission that shows the results of the necessary technical analyses (Thermal, Voltage, Short Circuit, and Stability) to evaluate the impact of the Facility's interconnection to the National Grid 230 kV transmission system.

(b) Potential Reliability Impacts

The Application will evaluate the potential significant impacts of the Facility to transmission system reliability at a level of detail that reflects the magnitude of the impacts as evaluated in the SRIS.

(c) Benefits and Detriments of Facility on Ancillary Services

The Application will discuss the benefits and detriments of the Facility on ancillary services and the electric transmission system as evaluated in the SRIS, including impacts associated with reinforcements and new construction necessary as a result of the Facility

(d) Reasonable Alternatives to Mitigate Adverse Reliability Impacts.

The Application will include a summary of reasonable alternatives that would mitigate adverse reliability impacts (if such impacts are identified), as evaluated in the SRIS.

(e) Estimated Change in Total Transfer Capability

The Application will include an estimate of the increase or decrease in the total transfer capability across each affected interface based on the analysis in the SRIS. If a forecasted reduction in transfer capability across affected interfaces violates reliability requirements, the Application will include an evaluation of reasonable corrective measures that could be employed to mitigate or eliminate the reduction.

(f) Criteria, Plans and Protocols

The Application will include a description of criteria, plans, and protocols for generation and ancillary facilities design, construction, commissioning, and operation, including as appropriate to generation technology:

(1) Applicable engineering codes, standards, guidelines, and practices;
(2) Generation facility type certification;
(3) Procedures and controls for inspection, testing, and commissioning; and
(4) Maintenance and management plans, procedures, and criteria.

(g) Heat Balance Diagrams

There is no thermal component associated with the proposed Facility so this requirement is not applicable and will not be addressed in the Application.

(h) Point of Interconnection Switchyard Transfer Information

If a new POI is required to be built, it will be transferred to the transmission owner (National Grid), and Exhibit 1001.5(h) of the Application will describe:

(1) The POI facilities to be transferred and the contemplated future transaction, including a timetable for transfer;
(2) How the POI design will meet National Grid's requirements; and
(3) The operational and maintenance responsibilities for the POI and how they will meet the transmission owner's standards (only required if there is a significant time period before the transfer of the POI to National Grid).

(i) Facility Maintenance and Management Plans

The Application will include Facility maintenance and management plans, procedures and criteria, addressing any necessary maintenance to the Facility components, including electric transmission collection and interconnect line inspections, maintenance, and repairs, including:

- Vegetation clearance requirements,
- Vegetation management plans and procedures,
- Inspection and maintenance schedules,
- Notifications and public relations for work in public rights-of-way, and
- Minimization of interference with existing transmission and distribution systems.

(j) Vegetation Management Practices in and Around the Collection Substation

The Application will include vegetation management practices in and around the collection substation, including trees that, due to location or condition, are a particular threat to fall on and damage electrical equipment (danger trees); specifications for clearances; inspection and treatment schedules; and environmental controls to avoid off-site effects.

(k) Criteria and Procedures for Sharing Facilities with Other Utilities

If the Applicant will entertain proposals for sharing above-ground facilities with other utilities (communications, cable, phone, cell phone relays, and similar facilities), the Application will include criteria and procedures for review of such proposals.

(l) Availability and Expected Delivery Dates for Major Components

The Application will include a status report on equipment availability and expected delivery dates for applicable major components including, but not limited to, solar panels, inverters, battery modules, and transformers. Heat recovery steam generators, towers, and turbines are not part of the Facility.

(m) Blackstart Capabilities

Solar facilities are not suitable for blackstart because there is no guarantee that the Facility will be generating electricity at a sufficient level at a given time, for example, during the night. As previously noted, the Facility includes installation of a battery energy storage system. Although the BESS may eventually have blackstart capabilities, the Applicant does not currently plan to provide that service. Therefore, the Application will not address blackstart capabilities.

(n) Identification and Demonstration of Degree of Compliance

The Application will include an identification and demonstration of the Facility's compliance with all relevant applicable reliability criteria of the Northeast Power Coordinating Council Inc., New York State Reliability Council, and the local interconnecting transmission utility, developed in consultation with NYISO and National Grid.

2.6 EXHIBIT 6: WIND POWER FACILITIES (16 NYCRR § 1001.6)

The proposed Facility is not a wind power facility, therefore, the requirements of 16 NYCRR § 1001.6 are not applicable and will not be included in the Article 10 Application.

2.7 EXHIBIT 7: NATURAL GAS POWER FACILITIES (16 NYCRR § 1001.7)

The proposed Facility is not a natural gas power facility, therefore, the requirements of 16 NYCRR § 1001.7 are not applicable and will not be included in the Article 10 Application.

2.8 EXHIBIT 8: ELECTRIC SYSTEM PRODUCTION MODELING (16 NYCRR § 1001.8)

2.8.1 Discussion

The Application will include the results of electrical system production modeling, identify the experts conducting that modeling, and include their resumes. Prior to start of electrical system production modeling, the Applicant will consult NYSDPS and NYSDEC to develop an acceptable input dataset. Portions of the data to be provided will include Critical Energy Infrastructure Information (CEII), which will be filed under a protective agreement, as required by law.

An annual hourly generation profile for a representative production year (e.g., 2024) will be developed using a commercially available solar resource dataset of global horizontal irradiance (GHI) that will then be imported into a solar energy production simulation software package called PVsyst Photovoltaic Software ("PVSyst"). Gross annual and monthly energy yield estimates that can be expected from the Facility will be determined from the PVsyst software. The Facility's energy yield estimates will include breakouts including on-peak, shoulder, and off-peak demand periods. Estimated energy losses due to availability and environmental factors will be subtracted from the gross monthly energy production estimates to yield the 12 estimated net monthly productions in MWh. An annual production estimate for the Facility will be determined from the sum of all monthly net energy productions in MWh.

A computer-based modeling tool will be used to simulate the New York electric system for a future, representative year (e.g., 2024) with and without the proposed Facility. The Facility's estimated generation profile will be used within the simulations to model the Facility's participation in the NYISO wholesale energy market. The Applicant will compare the generation dispatch of must-run resources (i.e., existing wind, solar, hydroelectric, and nuclear generation facilities) within the NYISO service territory between the scenario without the Facility and the scenario with the Facility. This analysis will be performed using production simulation software typically utilized for NYISO market studies. The market simulation study will be conducted for the 2024 study year and will consider system constraints that are expected to be modeled in NYISO's wholesale energy market. The comparison of energy dispatch of the must-run resources with and without the proposed Facility will provide information about the effects of the energy production from the Facility on the curtailment that could potentially result from the operation of the proposed Facility.

2.8.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.8 of the Article 10 regulations, Exhibit 8 of the Application will contain the following information:

(a) Computer-Based Modeling Tool

The Application will include the following analyses, which will be developed using UPLAN, PROMOD, or a similar computer-based modeling tool:

(1) The estimated statewide levels of Sulfur Dioxide (SO_2), Nitrogen Oxide (NOx), and Carbon Dioxide (CO_2) emissions, both with and without the proposed Facility.
(2) The estimated minimum, maximum, and average annual spot prices representative of the NYISO Zones within the New York Control Area, both with and without the proposed Facility.
(3) An estimated capacity factor for the Facility.
(4) The estimated monthly, on-peak, shoulder, and off-peak MW output capacity factors for the proposed Facility.
(5) The estimated average annual and monthly production output of the proposed Facility in MWh.
(6) An estimated production curve for the Facility over an average year.
(7) An estimated production duration curve for the Facility over an average year.
(8) The estimated effects of the proposed Facility on the energy dispatch of existing must-run resources (which includes existing wind, solar, hydroelectric, and nuclear facilities, as well as co-generation facilities to the extent they are obligated to output their available energy because of their steam hosts).

The Applicant will consult with NYSDPS and NYSDEC to determine appropriate inputs, assumptions and parameters for the preparation of the modeling for this Exhibit.

(b) Digital Copies of Inputs Used in the Simulations

The Application must include digital copies of the inputs used in the simulations required in Section (a) above.

2.9 EXHIBIT 9: ALTERNATIVES (16 NYCRR § 1001.9)

2.9.1 Discussion

The identification of reasonable alternatives is an important consideration in the development of any energy generation infrastructure project and a requirement of the Article 10 regulations. Project alternatives can be defined in a variety of ways but are most often viewed in the context of a location different from the project site that would meet the goals

and objectives of the proposed project. According to 16 NYCRR § 1001.9, private applicants may limit the alternatives evaluation to sites owned by, or under option to, the private facility applicant or its affiliates. The South Ripley Solar Project is limited in the range of potential sites that might be considered for siting a facility by virtue of the need to form contractual agreements with willing landowners. Alternative siting options are further limited by what the landowner considers to be a reasonable dedication of space and resources to host Facility components.

The Application will provide information regarding the general criteria used to identify and evaluate the suitability of the site for the proposed Facility. A variety of factors influence solar project site selection and ultimately the technical and economic feasibility of a given facility, including the availability of relatively flat, open, and appropriately oriented land, willing landowner participants, compatibility with land use regulations, and consideration of environmental or socially sensitive resources. Another major factor directing the siting of solar facilities is proximity and connection to the transmission grid without prohibitive costs, scheduling challenges, or environmental impacts associated with constructing new transmission infrastructure. The proposed South Ripley Solar Project Area was identified as a suitable location for a solar facility following a comprehensive review of these siting factors.

In addition to location siting alternatives, the alternatives evaluation will also study alternative interconnections, equipment types, and facility layouts, among other considerations. These criteria are described in more detail below. Ultimately, the Application will demonstrate that the proposed Facility Site is suitable for utility-scale solar energy generation and that the selected location and Facility arrangement serves the public interest and the environment.

2.9.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.9 of the Article 10 regulations, Exhibit 9 of the Application will contain the following information:

(a) Description of Reasonable Alternative Location Sites.

As a private facility applicant, the Applicant may limit its discussion of reasonable and available siting alternatives to the lands owned by or under contract/option to the Applicant within the proposed Facility Area.

(b) Comparison of Advantages and Disadvantages of Proposed and Alternative Locations

Given the limitations it faces as a private entity, the Applicant will not provide an evaluation of the comparative advantages and disadvantages of alternate locations. However, the general site selection process and relevant information and analyses associated with the Facility will be provided in relation to the following:

(1) environmental setting;
(2) recreational, cultural and other concurrent uses that the site may serve;
(3) engineering feasibility, including fuel availability and interconnections;
(4) reliability and electric system effects;
(5) environmental impacts, including an assessment of climate change impacts (i.e., whether proposed energy use contributes to global temperature increase);
(6) economic considerations;
(7) environmental justice considerations;
(8) security, public safety and emergency planning considerations;
(9) public health considerations;
(10) the site's vulnerability to potential seismic disturbances and current and anticipated climate change impacts, such as sea level rise, precipitation changes, and extreme weather events; and
(11) the objectives and capabilities of the Applicant;

(c) A Description of Reasonable Alternatives to the Proposed Facility at the Proposed Location.

Traditional energy generation such as fossil fuels and nuclear energy do not meet New York State's energy generation and sustainability goals, including those set forth in the 2019 Climate Leadership and Community Protection Act. Accordingly, other power generation technologies are not reasonable alternatives and will not be considered in the Application. Rather, the Application will provide information on chosen design and technologies of the Facility as described below.

(1) The general arrangement and design.
(2) PV panel and energy storage technology.
(3) Alternate scale, interconnection configuration and magnitude of the facilities in the context of interconnection position, and information on the economic benefit available to local communities because of the introduction of a utility-scale facility.
(4) For wind power facilities, an alternative layout of the turbines within the Facility Site. The proposed Facility is not a wind power facility, and as such, the requirements of Section 1001.9(c)(4) do not apply. Nevertheless, the Applicant agrees to discuss in the Application the practicable and commercially reasonable alternative arrangements of Facility components within the Facility Site, including alternative layouts for PV solar panels and their rack systems. This discussion will include a comparative assessment of the environmental impacts of these alternative layouts, including impacts on vegetation, wildlife, and wildlife habitats. The Application will discuss how alternative layouts could help to avoid, minimize, or mitigate environmental impacts from the Facility and will include the following:

- alternative facility technology, scale, layout, and design considerations that could enable a range of continued agricultural use of the Facility Site;
- alternative configurations that minimize the impact of isolated or "orphaned" field corners and edges that become un-farmable due to size and orientation;
- alternative fencing designs that would support agricultural uses, such as grazing, while maintaining the more traditional appearance of agricultural fencing rather than industrial-security fencing, including reduced use of barbed wire-topped perimeter fencing, particularly along public roads, areas of open views, along recreational trails, and near residences; and
- to the extent that the Facility's location and participating properties allow, consider alternative POI substation locations, and explain advantages and constraints of alternative sites.

(5) The timing of the proposed in-service date for the Facility in relation to other planned additions, withdrawals, or other capacity, transmission or demand reduction changes to the electric system.

(d) Why Proposed Location Best Promotes Public Health and Welfare

The Application will include a statement of reasons why the proposed location is best suited, among alternative locations, to promote public health and welfare, including recreational, cultural, and other concurrent uses which the Facility Site and affected areas may serve.

(e) Why Proposed Facility Best Promotes Public Health and Welfare

The Application will include a discussion of the advantages and disadvantages of the alternatives and reasons why the proposed Facility layout, technology, scale, and timing are best suited to promote public health and welfare, including recreational, cultural, and other concurrent uses.

(f) No Action Alternative

The Application will include an evaluation of "no action/no build" and reasons why the proposed Facility would be better suited than a no action/no build alternative to promote public health and well-being as it relates to recreational, cultural and other concurrent uses that the Facility Site may serve.

(g) Energy Supply Alternatives

The intention of the Facility is to help realize the potential of South Ripley's solar resources and therefore, a discussion of reasonable energy source supply alternatives is not applicable to the proposed Facility and will not be included in the Application.

(h) Source and Demand-Reducing Alternatives

Per Section 1001.9(g) above, source and demand-reducing alternatives are not applicable to the Facility and will not be identified in the Application.

(i) Why the Proposed Project Best Promotes Public Health and Welfare

The Application will include a discussion of the reasons why the proposed Facility is best suited, among the other alternatives identified, to promote public health and welfare, including recreational, cultural, and other concurrent uses the Facility Site and affected areas may serve. The Application will contain a detailed analysis of the Facility's potential benefits and impacts on public health and welfare, in accordance with the requirements of Sections 1001.9 and 1001.10.

2.10 EXHIBIT 10: CONSISTENCY WITH ENERGY PLANNING OBJECTIVES (16 NYCRR § 1001.10)

2.10.1 Discussion

In order to approve the Project, the Siting Board must find, among other things, that the Project (1) is a beneficial addition to the electric generation capacity of the State and (2) will serve the public interest (PSL § 168[3]). These findings will be made, in part, by determining that the Project is consistent with the most recent the State Energy Plan and other State energy policies and programs. PSL § 168(4)(e). Accordingly, the Application will review the Project in relation to State energy plans and programs, including:

- Climate Leadership and Community Protection Act (CLCPA). The 2019 CLCPA sets the nation's most ambitious and comprehensive climate and clean energy goals. The law requires reductions in statewide GHG emissions of 40% from 1990 levels by 2030 and 85% by 2050. It also requires 70% of electricity in the state to be generated from renewable sources by 2030 and 100% by 2040, effectively phasing out all fossil fueled power plants in the state in two decades. The CLCPA specifically calls for 6,000 MW of installed solar by 2025 and 3,000 MW of energy storage capacity by 2030. To achieve these goals, the law calls for the establishment of a Climate Action Council, which will be responsible for preparing a scoping plan containing recommendations on regulations and other state measures to achieve necessary GHG reductions focused on 12 general categories. By the law's fourth anniversary, NYSDEC must adopt regulations to ensure compliance with the statewide emission reduction limits and assist other state agencies in developing their own regulations, as necessary.
- State Energy Plan (SEP): As required by New York State Energy Law § 6-104, the New York State Energy Planning Board adopted a State Energy Plan in 2015. Among other things, the SEP sets forth a broad range of goals for New York's energy system from attracting private investment in New York's energy

sector and encouraging competition and innovation within the energy markets, to decarbonizing New York's energy economy. Of particular note, the SEP established a goal of reducing statewide GHG emissions 40% from 1990 levels by 2030. In addition, the SEP calls for 50% of electricity to be generated from renewable sources by 2030.

- Reforming the Energy Vision (REV) Initiative: In order to transform the aspirational goals of the 2015 SEP into action, the State has undertaken the REV initiative, a multiagency effort to identify regulatory, infrastructure and market-based barriers to realizing the SEP's broad goals and implement reforms that better align State programs with the goals of the SEP.
- Clean Energy Standard (CES): The CES imposes mandatory renewable procurement requirements on the State's electric utilities; establishes a system and market for awarding renewable energy credits (RECs) and zero-emission credits (ZECs) to those injecting renewable or carbon-free power into the New York grid; and adopts measures to send market signals to encourage investment by renewable developers and other in the State's energy sector with the goal of transforming the electrical system.

The goal of the review required by this portion of the Application is to show that the Facility will help the State meet the renewable energy, energy storage, and GHG emission reduction goals articulated in the CLCPA, SEP and REV and provide other important energy, environmental, social and economic benefits consistent with the State's energy policies and programs. In March 2020, NYSERDA awarded the South Ripley Solar Project a long-term contract for the purchase of all RECs produced by the Project through NYSERDA's 2019 solicitation for large-scale renewables. The development, construction and operation of the Project is critical to meeting both the Applicant's specific commitments under the CES and the broader renewable energy production and GHG reduction goals of the SEP and CLCPA. As previously noted, the Applicant also is proposing to install 20 MW of energy storage capacity, which, would enable the Facility to provide electricity to the grid even when the sun is not shining, improving the reliability of the State's energy system and helping New York State meet the energy storage goals of the CLCPA.

The Facility's proposed combination of solar energy generation and energy storage will also advance the State's broader climate and public health goals by generating electricity without harmful air emissions. In addition, the proposed Facility will help reduce the demand for fossil fuel, thereby alleviating delivery constraints and reducing environmental impacts associated with fossil fuel exploration, mining, refining, and transportation activities. These and other aspects of the Project will be reviewed in support of Exhibit 10 of the Application.

2.10.2 Proposed Content of Application

Consistent with the requirements of Section 1001.10 of the Article 10 regulations, Exhibit 10 of the Application will contain the following information:

(a) Consistency with CLCPA and State Energy Plan

As previously noted, New York has adopted strongly proactive policies to combat climate change, reduce harmful air pollution, and modernize the electric system to improve the efficiency, affordability, resiliency and sustainability of the system, as articulated in the 2015 SEP. The goals of the SEP were strengthened in 2019 with the enactment of the CLCPA, which calls for the complete phaseout of fossil fuel-fired electricity generation by 2040 and an 85% reduction in statewide GHG emissions from 1990 levels by 2050. The Application will explain how the Project advances the objectives of the SEP, CLCPA and other state programs and policies designed to increase renewable energy generation and reduce GHG emissions.

(b) Impact on Reliability

An SRIS is expected to be completed for the Facility on behalf of the NYISO in 2020, and the results will be presented in Exhibits 5 and 8 of the Application, with certain issues, such as reliability, addressed in greater detail in Exhibit 10. The objectives of the SRIS are to: (1) confirm that the proposed new or modified facilities associated with the Project comply with applicable reliability standards, (2) assess the impact of the proposed Project on the reliability of the pre-existing power system, (3) evaluate alternatives to eliminate adverse reliability impacts, if any, resulting from the proposed interconnection, and (4) assess the impact of the proposed Project on transmission transfer limits, considering thermal, voltage and stability limitations, and estimate the increase or decrease in the Transfer Capability of affected transmission interfaces. The scope and methodology of the SRIS is set by the NYISO and is uniform across projects of this nature. A number of power flow base cases will be evaluated both with and without the proposed Facility in service, including 2020 summer peak, winter peak, and light load.

A common concern raised about solar energy generation is that its output is variable because such systems generally do not provide electricity when the sun is not shining. To address the variability associated with solar and other renewable energy sources such as wind, the State enacted legislation in 2017 (codified primarily at PSL § 74) that required NYSERDA to establish a statewide energy storage target. Two years later, the legislature went a step farther in the CLCPA when it mandated the installation of 3,000 MW of energy storage by 2030.

As previously noted, the Applicant is proposing to install 20 MW of energy storage as part of the Project. Pairing energy storage with solar will enable the South Ripley Solar Facility to capture and store solar energy when it is valued less by the NYISO's wholesale electricity market and dispatch it into the system when it is most valuable. The addition of energy storage should help reduce demand for less efficient, marginal and polluting "peaker" plants, which are often very old oil-burning plants in poor urban areas that operate only during the summer months when

both electricity demands and air pollution levels are highest. Energy storage will be included as part of the South Ripley Project and will be discussed in the Article 10 Application in the context of energy consistency and reliability.

(c) Impact on Fuel Diversity

The Application will discuss the Facility's impact on fuel diversity in the State. The proposed Facility will improve diversity of fuel sources by increasing the amount of electricity produced by non-fossil fuel dependent solar power. According to the NYISO, although New York has a relatively diverse mix of generation resources, as of 2018 approximately 65% of electricity in the State was still generated by fossil fuel-fired power plants. Under the CLCPA, these sources must be largely phased out by 2040. In addition, over the short term, the CLCPA calls for 6,000 MW of solar energy to be installed by 2025. The Application will discuss the State's current electric generation capacity by fuel type to demonstrate that the addition of the Facility will contribute to fuel diversity.

(d) Impact on Regional Requirements for Capacity

The Application will discuss the Facility's potential impact on regional requirements for capacity. This discussion will include how the Facility impacts regional electricity and capacity demands, taking into consideration the need for additional renewable generation and locational constraints.

(e) Impact on Electric Transmission Constraints

New York State has a diverse mix of generation resources compared to many other states. However, much of the renewable power is provided by hydroelectric projects and wind farms located in the western and northern portion of the State, while the southeastern region hosts power plants fueled primarily by natural gas. Taking full advantage of statewide fuel diversity will require upgrades and enhancements of the transmission system (NYISO, 2019). The Application will discuss the Facility's impact on electric transmission constraints, based on the *New York State Transmission Assessment and Reliability Study* and other NYISO data and reporting.

(f) Impact on Fuel Delivery Constraints

The proposed Facility will generate electricity without the use of fuel. Consequently, there will be no adverse impact on fuel delivery. Rather, it is expected that the Facility will contribute toward reducing the demand for fuel, thereby alleviating possible fuel delivery constraints as well as air emissions and other pollution-related impacts associated with coal, oil, and natural gas exploration, mining, refining, transportation, and use.

(g) Impact on Energy Policy

The Application will discuss the impact of the Facility in relation to New York's energy policy and long-range planning objectives/strategies. The need to increase renewable energy generation and decrease reliance on fossil-fueled generation has been a mainstay of New York's energy policy for decades. Notably, in 2004 the Public Service Commission implemented the renewable portfolio standard (RPS) program to facilitate investment in renewable generation. The RPS initially envisioned a 25% increase in renewable energy production in the State by the year 2013; the State later increased the target to 30% by 2015. The 2015 SEP, as implemented by New York State's REV initiative, supports clean energy market development and innovation, requiring the State to generate 50% of its electricity from renewable sources by 2030, while calling for a 40% reduction in GHG emissions from 1990 levels by 2030. The 2019 CLCPA sets even stricter goals, requiring 70% of the State's electricity to be provided by renewable energy by 2030. Exhibit 10(g) of the Application will address how the Project will affect New York's current and future energy policies as embodied in the SEP, REV, CLCPA and other state energy policies and programs.

(h) Comparison of Advantages and Disadvantages of Proposed and Alternative Locations.

As discussed in Section 2.9, given the unique nature and constraints associated with the siting of solar-powered electric generation facilities, a full comparison between the proposed Facility location and alternative locations will not be contained in the Application. Instead, the Application will focus on comparing alternative facility configurations (e.g., layout, interconnection, potential use of storage, DC/AC ratio, row-spacing, type of PV module) within the proposed Facility Area. Such alternatives may include alternative project layouts or sizes and a no-action alternative as identified in Section 2.9.

(i) Why the Proposed Location and Source Best Promotes Public Health and Welfare

As discussed in Section 2.9, the Application will include a discussion on why the proposed location and source of energy best promotes public health and well-being. The Facility will have a positive impact on public health and welfare by producing electricity with zero emissions. Electricity delivered to the grid from solar energy projects can reduce the growth of existing conventional power plants. The South Ripley Solar Facility will reduce New York's dependency on the combustion of fossil fuels (coal, petroleum, and natural gas), reducing negative impacts on public health, air quality and climate (NYESEP, 2015). Natural gas is the most frequent marginal fuel unit in New York's power pool (Patton et al., 2015). When the proposed Facility is generating solar power, it has the potential to reduce demand for electricity generation from natural gas within the region, together with the associated GHG and other emissions.

2.11 EXHIBIT 11: PRELIMINARY DESIGN DRAWINGS (16 NYCRR § 1001.11)

2.11.1 Discussion

The Applicant will prepare Preliminary Design Drawings (PDDs) depicting the approximate location of all proposed Facility components and anticipated construction staging/material laydown areas and areas of disturbance. The PDDs will depict the Facility footprint using recent aerial imagery, indicating areas where trees may be removed due to construction and operation of the Facility as well as environmentally sensitive areas, such as delineated wetlands. In addition to the PDDs, the Applicant will develop and incorporate into the Application a landscaping plan that will include approximate locations of plantings along the fence line of the Facility that may be proposed as part of visual mitigation.

The PDDs prepared in support of Exhibit 11 of the Article 10 Application will be prepared under the direction of a professional engineer, landscape architect or architect licensed and registered in New York State using computer software (e.g., AutoCAD, MicroStation). The name of the preparer will be clearly printed on the drawings. The PDDs will use a common engineering scale and will be labeled "preliminary" and/or "not for construction purposes". Four full-size copies of the PDDs will be provided to NYSDPS Staff. One full-size PDD set will be provided each to the NYSDEC Central Office, NYSDEC Region 9 Staff, and NYSDAM. All other printed copies of the PDDs (including those found within the Application) will be at a legible and reduced size (i.e., 11 x 17). Additionally, a CD-ROM containing electronic PDF files of the PDDs will be submitted to NYSDPS, NYSDEC, and NYSDAM Staff.

2.11.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.11 of the Article 10 regulations, Exhibit 11 of the Application will contain the following information:

(a) Site Plan

The Application will contain a site plan that includes drawings of all Facility components at a common engineering scale. The drawings will depict site boundaries and adjoining property, all delineated wetlands (including the 100-foot adjacent areas if NYSDEC jurisdictional), and streams. Specific to construction of a solar facility, the Site Plan drawings will include the following features:

- PV panel locations and associated racking structures;
- access roads (temporary and permanent);
- perimeter fencing;
- turn-around areas to be used during construction;
- grading showing proposed final contours;

- electric collection lines, including the required number of circuits for each collection line route, and overhead or underground cable routes differentiated by specific line-types;
- approximate limits of disturbance for all Facility components (PV panels, inverters, access roads, buildings, electric collection lines, substation, POI bay, etc.) based on impact assumptions;
- locations of any energy storage systems associated with the Facility;
- location of back-up generators and fuel storage areas, if proposed;
- locations, layouts, and distances for any trenchless methods of electric cable installation, such as horizontal directional drilling (HDD);
- indication of permanent rights-of-way (ROW) for all electric cable installations;
- location of property lines, existing utility lines and equipment, and utility easements;
- proposed setbacks from occupied structures, property lines, overhead electric lines, gas transmission pipelines, roads, and any easements associated with these items;
- collection substation and POI bay outlines, including local setbacks, access roads, and fence line;
- locations of permanent stormwater retention areas, if any; and
- preliminary location of O&M building, if proposed, and associated setbacks, access roads, parking area, equipment storage areas, and any associated septic or water systems.

(b) Construction Operations Plan

The Application will include a construction operations plan indicating laydown areas, any major excavation and soil storage areas, and construction equipment and worker parking areas.

(c) Grading and Erosion Control Plans.

The Application will include grading and erosion control plans which will provide soil type and depth-to-bedrock information based on publicly available data and test borings at representative locations within the Facility Site. Preliminary cut-and-fill calculations will be presented along with a general description of typical cut-and-fill scenarios. Existing and proposed contours and any permanent stormwater retention areas (if known at the time of Application submittal) will also be included in the Application. Exhibit 21 of the Application will provide boring logs and maps indicating locations of the pre-Application test borings.

(d) Landscaping Plan

The Application will include a landscaping plan discussing the need for landscaping or other forms of visual screening, including preparation of conceptual screening plans, if needed. To determine those areas where trees may be removed, the Facility footprint will be depicted on recent aerial imagery, and the acreage of tree removal

will be discussed. However, an on-site inventory and survey of individual trees to be removed will not be included in the Application. A range of visual screening measures may be proposed to avoid or minimize visual impacts to historic resources, community or cultural sites, visually sensitive resources, or public use areas. Such measures will be presented in Exhibit 20 and/or 24 of the Application.

(e) Lighting Plan

The Application will include a lighting plan showing type, location, and height of installation of proposed exterior lighting fixtures for applicable Facility components, and an indication of the measures to be taken to prevent unnecessary light trespass beyond the Facility property lines. Manufacturer cut sheets of proposed lighting fixtures will be provided, if available. Facility lighting will be limited to the substation and POI.

(f) Architectural Drawings

The Application will include architectural drawings including building and structure arrangements and exterior elevations, indicating the dimensions, material of construction, and color and finish of all buildings, structures, and fixed equipment, including the O&M building, POI, and perimeter fencing, as applicable, in final or preliminary form, depending on availability. Architectural drawings will also be provided for electrical energy storage systems, including energy storage devices.

(g) Typical Design Detail Drawings

The Application will include typical design detail drawings for the following Facility components:

- typical PV panel details, including the configuration of PV panel arrays and mounting details;
- design plans and cross-section details of underground facilities, including single and multiple-circuit layouts with dimensions of proposed depth and level of cover, separation requirements between circuits, clearing width limits for construction and operation of the Facility, limits of disturbance, and required permanent ROW;
- elevation plans for buildings and overhead structures, if proposed, including height above grade, structure layouts, clearing width limits for construction and operation of the Facility, permanent ROW widths, average span lengths for each proposed layout, and structure separation requirements (e.g., for installations requiring more than one pole) for all single and multiple-circuit layouts;
- typical support structures to be used for solar panel installations;
- typical details of energy storage systems, including energy storage devices;
- typical details of any potential protection measures for existing pipelines;

- a circuit map indicating overhead and underground installations and the number of circuits per proposed run;
- typical details associated with stream crossings and trenchless installations, including staging areas, construction machinery arrangements, and bore pits;
- examples of typical technical and safety manuals for the types of solar panels anticipated to be used in the Facility; and
- typical details of proposed changes in grading.

(h) Interconnection Facility Drawings

For interconnection facility drawings, the Application will include a single line drawing of the POI in the SRIS, and the general arrangement of the POI bay in relation to the existing National Grid substation and transmission line.

(i) Engineering Codes, Standards, Guidelines and Practices

The Application will include a thorough list of all relevant engineering codes, standards, guidelines, and practices that the Applicant intends to conform to when planning, designing, constructing, operating, and maintaining the Facility. A preliminary list of codes and guidelines that may be relevant to the Facility and currently enforceable in New York State is provided below.

- 2017 New York State Uniform Code Supplement and all internally referenced codes and standards
- 2016 New York State Energy Code Supplement and all internally referenced codes and standards
- 2017 National Electric Safety Code (NESC) and all internally referenced codes and standards
- New York State Department of Environmental Conservation State Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity GP-0-20-001
- 2016 New York State Standards and Specifications for Erosion and Sediment Control (Blue Book)
- April 2018 New York State Department of Environmental Conservation (NYSDEC) Memorandum on Solar Panel Construction Stormwater Permitting / SWPPP Guidance
- 2018 National Grid ESB 756: Requirements for Parallel Generation Connected to a National Grid Owned EPS
- 2015 U.S. Department of Agriculture Rural Utilities Service (USDA RUS) Bulletin 1724E-200 Design Manual for High Voltage Transmission Lines
- 2018 IEEE 1547: Standard for Interconnecting Distributed Resources with Electric Power Systems
- 2018 NYS Department of Agriculture and Markets Guidelines for Mitigation for Solar Energy Projects
- All current OSHA Regulations

For any energy storage systems proposed as part of the Facility, the following information would also be provided:

- code references and descriptions specific to electrical energy storage systems (e.g. NFPA 855, IFC 2018, 2019 New York Code Supplement);
- a summary of correspondence with the local fire department regarding preliminary site plans and installation of electrical energy storage systems; and
- correspondence with the local fire department specific to site plans and details of proposed electrical energy storage systems.

(j) Protective Measures

Exhibit 11(j) shall include details and descriptions of any protection measures for Facility components within or adjacent to "Flood Hazard Areas". There is no mapped floodplain or flood hazard data available for the Town of Ripley on Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer geospatial database at this time. If this information is not available at the time of the Application, a description of potential measures to be utilized in the event of a flood will be included.

2.12 EXHIBIT 12: CONSTRUCTION (16 NYCRR § 1001.12)

2.12.1 Discussion

Methods used to construct the Facility will be similar to industry-standard methods used to construct utility-scale solar energy facilities across the United States. Construction of the Facility is expected to begin in spring 2022 and be completed in fall of 2023. The primary steps for Facility construction will be the following: (1) securing of the perimeter of each of the areas in which construction will occur; (2) installation of stormwater and erosion management controls; (3) clearing vegetation, if any; (4) minor grading, if any; (5) construction of access roads; and (6) installation of equipment (racking, panels, underground and/or overhead electric and communication lines, inverters, pyranometers, the substation and permanent fencing). Final construction sequencing will be determined by the Contractor and the Application will elaborate on any proposed phasing of construction as a part of the overall design.

Ground-mounted PV projects typically cause minimal impacts to the environment during construction. The PV panels will be installed in uniform rows and secured on a racking system supported by metal piers driven or screwed into the ground by a pile-driving machine to a depth of approximately 5 to 8 feet. The Applicant is considering various racking foundation options in order to accommodate the range of existing geotechnical features and slopes anticipated within the Facility Site and minimize site disturbance. The racking system for the PV panels are likely to be mounted on either a single-axis or fixed-tilt tracking system. Tracker system designs vary by manufacturer, but generally consist of a

series of mechanically linked horizontal steel support beams known as torque tubes, with a drive train system usually located in the center of the rows, dividing the array into two sides. The number of rows within a tracker block is typically limited by the drive system's ability to move multiple torque tube assemblies. This row design is also determined by the amount of the desired solar output to the inverters. Rows would be aligned north to south and the PV panels would pivot, tracking the sun's motion from east to west. The PV panels would have a typical height of approximately up to 12 feet above the ground at their highest point when tracking fully-east or fully-west. The PV array panels would be uniform in height and width, although actual height would vary due to ground elevations.

Within each solar field, a network of electric lines and associated communication lines will collect the electric power from different groups of arrays and transmit it to a central location ("DC Collector System"). Solar panels will be grouped into series of circuits that are routed to combiner boxes. Power from one or more of the combiner boxes then will be transmitted to a group of related components: a DC-to-AC inverter, a step-up transformer that converts the voltage to 34.5 kV, and a cabinet containing power control electronics ("inverter"). The equipment comprising each inverter will be mounted on a foundation such as a metal skid or a concrete block.

The Facility will also necessitate the installation of medium voltage collection lines, which will aggregate the power from the inverters and carry it to the collection substation. The majority of the collection system will be buried to a depth of approximately 36 to 48 inches utilizing a trenching method, although overhead cables may also be used where underground installation is not practicable due to environmental constraints (such as steep slopes, rivers, streams or creek crossings, bedrock etc.) and/or cost considerations.

Final interconnection with the NYISO transmission system will include either a direct connection to the existing South Ripley 230 kV Substation or via the development of a new 230 kV switchyard and three-breaker ring bus adjacent to the South Ripley 230 kV Substation. Additional equipment will be added to the substation to support interconnection of the Facility, and among the major components of the additional equipment will be the following: (1) collection line feeders and breakers; (2) 34.5 kV bus; (3) main power transformer (to increase the voltage from 34.5 kV to 230 kV); (4) high-voltage breaker; (5) metering/relaying transformers; (6) disconnect switches; (7) equipment enclosure containing power control electronics; and (8) a lightning mast. Equipment at the collection substation will be constructed on concrete foundations following prudent industry standards and connecting each component of the equipment to the overall substation grounding system. For equipment security and public safety, a fence with a locked access gate will be installed around the perimeter.

In some places, limited earth moving may be required to level access roads and areas for solar panel installation, create stormwater management structures, level the earth under inverter/substation equipment pads, and dig vaults for step-up transformers. There may also be soil disturbance associated with anticipated tree removal.

Temporary and permanent access roads will use gravel surfacing and will be designed to follow existing roads and tractor paths to the maximum extent practical. Large equipment like the inverters, step-up transformers, energy storage enclosures and associated batteries, may require placement with 25- to 50-foot cranes. Access roads to inverter/medium voltage transformer and substation locations will be designed to accommodate cranes and multi-axle delivery trailers. Equipment laydown areas will be sited near these driveways to minimize the need for extensive access road networks. In addition to cranes, construction equipment associated with access road construction may include excavators, dozers, dump trucks, and compaction equipment.

Because the solar panels will be mounted above the ground, water will be allowed to infiltrate through vegetation. Moreover, the underlying subsurface material will remain undisturbed. Where appropriate, surface drainage will be directed to existing receiving systems (drainage paths, roadside ditches, etc.). Stormwater will be managed in accordance with the *New York State Stormwater Management Design Manual* (NYSDEC 2015) and *New York State Standards and Specifications for Erosion and Sediment Control* (NYSDEC 2016). In addition, the Applicant will seek coverage under NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). As required by the permit, the Applicant will prepare a Stormwater Pollution Prevention Plan (SWPPP) that includes both pre- and post-construction stormwater management components. If more than 5 acres of soil disturbance is required during construction, the Applicant will submit a written request for approval to NYSDEC before proceeding in accordance with the SPDES General Permit. Additional information about stormwater is contained in Exhibit 23 of the Application.

Regular site inspections will be performed to ensure construction follows engineering designs and regulatory requirements. Additional Inspections will be conducted pursuant to the requirements of the SPDES General Permit and accompanying SWPPP. In addition, to monitor compliance with environmental protection commitments and permit conditions, the Applicant will provide funding for an independent third-party Environmental Monitor during Facility construction. The Environmental Monitor will be responsible for ensuring that the Project is constructed in accordance with all environmental requirements contained in the CECPN and any applicable permits.

As discussed below, the Applicant will prepare a preliminary Quality Assurance and Control Plan that will be included in the Application. The Applicant will submit the final Quality Assurance and Control Plan to the Siting Board prior to construction.

The Applicant will require that contractors adhere to Public Service Commission regulations regarding the protection of underground facilities (16 NYCRR Part 753). Additionally, the Applicant will become a member of Dig Safely New York and all Facility construction and maintenance work that requires excavation will follow the One Call process with Dig Safely New York. This process helps prevent damage by alerting the excavator to the locations of underground utilities, including electric, gas, oil, steam, water, sewer, and communication lines. The Applicant will also coordinate with public (e.g., NYSDPS) and private (e.g., National Grid) entities regarding underground utilities. Because the Facility Area is rural in nature, there are relatively few existing utility systems with which the Facility may interfere. Nevertheless, information on the location of existing utilities will be considered during Facility component siting in order to avoid and minimize conflicts with utilities. Post-construction, the Applicant will register with New York's One-Call Center to ensure that its utilities and underground collection lines are not impacted by future earth work.

The Applicant will consult with local stakeholder groups to determine which construction activities, if any, may affect the surrounding community and will take appropriate measures to avoid or minimize noise, light, and construction traffic impacts to the extent practicable. The Applicant will develop a Complaint Resolution Plan that will discuss how public complaints and disputes should be raised, documented, and resolved during Facility construction and operation. The Complaint Resolution Plan will be included in the Application. Additionally, Exhibits 2 and 25 of the Article 10 Application will discuss methods the Applicant intends to use to notify members of the public regarding anticipated road closures and other construction activities which might be disruptive.

2.12.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.12 of the Article 10 regulations, Exhibit 12 of the Application will contain the following information:

(a) Preliminary Quality Assurance and Control Plan

The Preliminary Quality Assurance and Quality Control Plan will include a discussion of the Applicant's proposed environmental compliance monitoring plan (e.g., duties of the monitor(s) and reporting responsibilities) and a description of how the Applicant will ensure conformance with applicable design, engineering, and installation standards, including construction codes applicable to solar panel structures. The Plan will also include a description of the procedures the Applicant will follow to notify the public regarding construction activities and schedule.

(b) Conformance with Public Service Commission Requirements

The Application will include a statement from a responsible company official that the Applicant will:

(1) conform to the requirements for protection of underground facilities contained in the Public Service Law § 119-b, as implemented by 16 NYCRR Part 753; and

(2) comply with pole numbering and marking requirements, as implemented by 16 NYCRR Part 217.

(c) Plans to Avoid Interference with Existing Utility Systems

The Application will include plans to avoid interference with existing utility systems, including:

(1) Preliminary plans (see Section 11 for discussion of PDDs) including delineation of existing underground utility locations and rights-of-way and descriptions indicating:
- Design, location, and construction controls to avoid interference with existing utility transmission and distribution systems;
- Locations and typical separations of proposed Facility components from existing electric, gas, and telecommunications infrastructure; and
- Identification of measures to minimize interference where avoidance cannot be reasonably achieved.

(2) A summary of consultations with owners of operating utility lines (gas pipelines, electric transmission lines, fiber cables, etc.) on the Facility Site. This may include the following:
- Copies of any construction guidelines (available or provided by utility owners) for installation near existing utilities;
- Descriptions of any potential studies (including potential cathodic protection impact studies) required or recommended by the utility owners (along with an indication of timing of the studies); and
- Communications and coordination requirements of the pipeline and electric Facility owner-operator for construction in close proximity to the pipeline or electric right-of-way.

(d) Procedures for Addressing Public Complaints

The Application will include a Complaint Resolution Plan, which includes procedures for notifying the public of upcoming construction activities, addressing public complaints, and resolving disputes during Facility construction and operation. The Complaint Resolution Plan will be easily accessed, tracked to time of resolution, include input from construction managers as appropriate, and clearly define the responsibilities for issue resolution. Personnel

will be assigned to track the resolution of complaints from the time of receipt through confirmation of resolution. The Complaint Resolution Plan will include the following:

- An indication of how complaints can be made (via a toll-free phone line, e-mail, and/or the Facility website). The procedure will address both written and verbal complaints. Verbal complaints received during construction will be converted to written documents that can be tracked by the Applicant and contractors and be reported to NYSDPS Staff.
- Procedures for recording complaints, including maintenance of complaint logs. The complaint log will list all known complaints and resolutions, be maintained during construction and operation of the Facility, and be available to NYSDPS upon request.
- Procedures for investigating and resolving complaints, including procedures or protocols that may be unique to each phase of Facility construction and operation or to particular types of complaints (e.g., noise, dust).
- Procedures for transmittal of complaint logs to NYSDPS.
- A description of actions the Applicant may take if a complaint remains unresolved after all steps are followed.

2.13 EXHIBIT 13: REAL PROPERTY (16 NYCRR § 1001.13)

2.13.1 Discussion

An Application filed in accordance with the Article 10 regulations will provide a description of the agreements for parcels that are secured or under option for the Facility, including ingress and egress access to public roads and easements for transmission and collection lines. The Application also will include a statement that the Applicant has or will obtain the necessary real property rights for all parcels needed for the Facility. The Applicant has been working with private landowners to obtain leasing or easement rights for the Facility since late 2018 and will continue to work toward securing land necessary to construct and operate the Facility. No public lands are anticipated to be needed to support the solar generation equipment; however, access easements and crossing agreements may be required from public utilities and rights-of-way holders.

Survey maps will show the boundaries of Facility Area parcels proposed for the location of Facility components, and will include the tax map sheet, block and lot number. The survey maps will also identify public and private roads on or adjoining Facility Area parcels (or proposed for access to Facility Area parcels); the participation status of each parcel; the owner of record for parcels included within the Facility Site and all adjacent parcels; and all existing easements grants or related encumbrances on the site parcels; and zoning designations for Facility Area and adjoining properties.

2.13.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.13 of the Article 10 regulations, Exhibit 13 of the Application will contain the following information:

(a) Real Property Map of Facility Area

The Application will include a tax parcel map of the Facility Area and adjacent parcels which depicts the proposed arrangement in relation to:

(1) The tax parcel IDs for land parcels that are part of, and adjacent to, the Facility Area;
(2) Current land use and zoning for the parcels that are part of, and adjacent to, the Facility Area;
(3) Necessary access and utility easements for the Facility; and
(4) Public and private roads on or adjoining or planned for use as access to the Facility Area.

The data for this map will be obtained from available datasets from local municipalities, the United States Census Bureau (TIGER/Line files), and the NYSGIS Clearinghouse. These data will also be used to identify owners of record of all parcels included within the Facility Area and for all adjacent properties (such information may be depicted on the maps and/or included in associated tables).

(b) Real Property Map of Interconnection Facilities

The Application will include a tax parcel map depicting all proposed interconnection facilities, associated access roads, construction laydown areas, and lands owned by or under contract to the Applicant.

(c) Demonstration that Applicant has Obtained Title or Lease Interest in Facility Area

The Application will include a description of the agreements for parcels that are secured or under option for the Facility, including ingress and egress access to public roads, easements for collection lines, and easement agreements for crossing existing natural gas and/or electric transmission lines. Exhibit 13 will also include a statement that the Applicant has obtained, or will obtain, the necessary real property rights for all parcels needed for the Facility. The Applicant will continue its internal due diligence to ensure that the Facility parcels are not encumbered in a manner that is inconsistent with the proposed solar power use. The Applicant will continue to work toward securing all land necessary to construct and operate the Facility.

(d) Demonstration that the Applicant has Obtained Property Rights to Interconnection Site

The Application will include a demonstration that the Applicant has or will obtain property rights for all proposed interconnection facilities and associated features.

(e) Improvement District Extensions

Based on preliminary discussion with local municipal representatives, the Facility will not need any improvement district extensions, and therefore demonstration that the Applicant can obtain such extensions is not anticipated to be needed.

2.14 EXHIBIT 14: COST OF FACILITIES (16 NYCRR § 1001.14)

2.14.1 Discussion

Solar panel costs have fallen significantly over the last 10 years, dramatically accelerating the role of solar energy in wholesale power supply. The goals CLCPA and other New York State renewable energy initiatives have helped drive down the costs for developing solar facilities and energy storage by encouraging market growth and providing incentives to ensure solar energy continues to be an affordable and attractive option for New York communities. An application pursuant to Article 10 requires an estimate of the capital costs associated with the development, design, equipment, and construction of major electric generating projects, including details on source and assumptions of proposed costs.

2.14.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.14 of the Article 10 regulations, Exhibit 14 of the Application will contain the following information:

(a) Total Capital Costs

The Application will include an estimate of the total capital costs of the Project, broken down into the following major component costs:

- PV modules, inverters, and energy storage;
- Roads, collection lines, fencing;
- Project substation and POI attachment facilities;
- Engineering;
- Construction (including contingency);

- Insurance; and
- Development (including contingency).

(b) Source of Cost Estimates

The Application will include a brief statement of the source of the information used as the basis for the cost estimates identified in Section (a) above. Cost estimates are generally based on the Applicant's previous experience, historical and current price quotes, and solar industry standards.

(c) Work Papers

The Application will include an internal work paper that describes the assumptions made in estimating the total capital costs as described above in Section (a).

2.15 EXHIBIT 15: PUBLIC HEALTH AND SAFETY (16 NYCRR § 1001.15)

2.15.1 Discussion

Solar facilities, unlike conventional fossil fuel power plants, generate electricity without emitting pollutants that damage air quality or harm public health and safety. Solar facilities also do not emit GHGs such as carbon dioxide that contribute to global climate change. These public health and safety benefits have been an important driver of New York's policies and programs promoting renewable energy and GHG emission reductions, including New York State's 2015 SEP, Clean Energy Standard, and 2019 CLCPA, which calls for New York to generate 70% of electricity from renewable sources by 2030 and reduce GHG emissions in the State 85% from 1990 levels by 2050.

PV facilities are not known to pose significant public health risks. To the contrary, they offer public health benefits by displacing sources that emit air pollutants that contribute to smog, acid rain, and climate change. The primary public health and safety issues associated with the construction of solar facilities are risks typically associated with commercial construction projects. Once constructed, the presence of electrical equipment carries some risk of a shock hazard; also, certain equipment, such as inverters, presents a combustion risk. Concerns over glare have also been raised with the installation of solar farms, however, as discussed in Section 2.24, evidence suggests that glare is not an issue. The potential for these risks will be analyzed and addressed in the Application through: (1) development and implementation of Site Security Plans limiting access to the Facility during construction and operation and implementation of security lighting and other programs; (2) compliance with applicable health and safety-related standards; and (3) consultation with local emergency responders and other stakeholders to identify uniquely local public health and safety concerns and develop appropriate measures in response.

2.15.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.15 of the Article 10 regulations, Exhibit 15 of the Application will contain the following information:

(a) Anticipated Wastes to be Produced from the Facility

The Application will include a description of gaseous, liquid and solid wastes to be generated during construction and operation of the Facility. This includes solid waste from standard construction activities, such as plastic, wood and cardboard, packing materials, and general refuse. Construction of the Facility will produce minimal liquid and gaseous wastes. Operation and maintenance of the Facility is expected to generate minimal solid waste, which will likely be limited to packaging materials and waste associated with vegetation management. Also, a minimal amount of water may be required during operation to clean the solar panels based on soiling conditions. No gaseous wastes will be produced during operation.

The Application will also provide information regarding other construction and operation related wastes, including sanitary facilities and cleared vegetation, such as tree debris and stump removal. Potential wastes produced during decommissioning of the Facility will also be discussed and may include trash and refuse as well as equipment that cannot be reused or recycled. All wastes will be disposed of in compliance with applicable state and federal regulations.

(b) Anticipated Volumes of Wastes to be Released to the Environment

This provision is not applicable to solar facilities and will therefore not be discussed in the Application.

(c) Treatment Processes to Minimize Wastes Released to the Environment

This provision is not applicable to solar facilities and will therefore not be discussed in the Application.

(d) Procedures for Collection, Handling, Storage, Transport, and Disposal of Construction Waste

Construction wastes will be handled by the Balance of Plant (BOP) contractor in accordance with all applicable laws and regulations pertaining to such wastes, and materials will be recycled when possible. Solar panels that are broken will be disposed of in accordance with federal and state law. Solar panels that are found to be defective will be returned to the manufacturer. Depleted energy storage batteries will be recycled. Worn inverter parts and transformers will be repurposed or sent to a local scrap yard, when possible. In any case, disposal of such items

will be consistent with all appropriate laws and regulations. Every effort will be made to recycle cardboard and any other materials if services are locally available.

(e) Wind Power Facility Impacts

This provision is not applicable to solar facilities and will therefore not be discussed in the Application.

(f) Public Health and Safety Map(s)

The application will include map(s) of the study area and an analysis showing the relation of the proposed Facility Site to:

- public water supply resources;
- community emergency response resources and facilities (police, fire and emergency medical response facilities and plans);
- emergency communications facilities;
- hospitals and emergency medical facilities;
- designated evacuation routes;
- emergency services land mobile sites;
- existing known hazard risks (geologic, geomorphic or hydrologic hazards, including flood or landslide hazard areas);
- U.S. EPA-regulated facilities (Clean Water Act facilities, Clean Air Act facilities, Resource Conservation and Recovery Act designated facilities, and all active public water systems under the Safe Drinking Water Act);
- dams, bridges, and related infrastructure;
- explosive or flammable materials transportation or storage facilities;
- contaminated sites; and
- local risk factors (air pollution, water pollution, and/or the release of chemicals, heavy metals, or other contaminants).

The map(s) will be prepared using data from the NYS GIS Clearinghouse, FEMA, local municipalities, NYSDEC, NYSDOH, the USGS, and local sources for emergency response resources.

(g) Significant Impacts on the Environment, Public Health and Safety

The Application will include a discussion of significant impacts to the environment, public health, and safety, including any short- or long-term impacts that may result from Facility construction and operation.

(h) Unavoidable Adverse Impacts

The Application will include a discussion of potential adverse impacts on the environment, public health, and safety that cannot be reasonably avoided, and measures for monitoring and mitigating such impacts.

(i) Irreversible and Irretrievable Commitment of Resources

The Application will include a discussion of any irreversible and irretrievable commitment of resources involved in the construction and operation of the Facility.

(j) Impact Minimization Measures

The Application will include additional details regarding proposed measures to minimize public health and safety impacts, if any.

(k) Mitigation Measures

The Application will include a discussion of any proposed measures to mitigate or offset any impacts, to the extent impacts are anticipated. This will include reference to a Complaint Resolution Plan, which will outline communications protocols and contacts for construction and operation; procedures for registering a complaint; a process for gathering and analyzing information about complaints; and tracking and follow up mechanisms.

(l) Proposed Monitoring

The Application will include a description of any proposed public health and safety monitoring programs, although this is not anticipated to be necessary for the proposed Facility.

2.16 EXHIBIT 16: POLLUTION CONTROL FACILITIES (16 NYCRR § 1001.16)

The proposed Facility will not require pollution control facilities, and as such, the requirements of 16 NYCRR § 1001.16 are not applicable and will not be included in the Article 10 Application. Please see Section 2.17 of this PSS for information on temporary air emissions during construction, and Section 2.23 for information on the Facility's SPDES General Permit for construction.

2.17 EXHIBIT 17: AIR EMISSIONS (16 NYCRR § 1001.17)

2.17.1 Discussion

Natural gas combustion accounted for approximately 82% of GHG emissions from electricity generation throughout New York State in 2016 (NYSERDA, 2019). As noted in previous sections, New York State has been very proactive in establishing goals to reduce GHG emissions through energy planning initiatives, legislation and other measures designed to facilitate development of renewable energy in the State. Consistent with these goals, the proposed Facility will produce electricity without burning fuels or generating air emissions.

Potential sources of air emissions associated with the Facility are limited to construction activities, such as emissions from engine exhaust and the generation of fugitive dust from earth moving activities and construction vehicles travelling on unpaved roads. The increased dust and emissions will not be of a magnitude or duration that will significantly impact local air quality. Dust control procedures will be implemented to minimize the amount of dust generated by construction activities consistent with the Standards and Specifications for Dust Control outlined in the *New York State Standards and Specifications for Erosion and Sediment Controls* (NYSDEC, 2016b). The Application will include a discussion of existing ambient air quality and the potential impact from construction and operation of the Facility on air quality.

2.17.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.17 of the Article 10 regulations, Exhibit 17 of the Application will contain the following information:

(a) Compliance with Applicable Federal, State and Local Regulatory Requirements

The Application will include a discussion of compliance with applicable federal, state, and local regulatory air pollution control requirements. Section 111 of the Clean Air Act establishes New Source Performance Standards (NSPSs) to regulate emissions of air pollutants from new, reconstructed and modified stationary sources. These standards apply to a variety of facilities including landfills, boilers, cement plants, and fossil fuel-fired electric-generating units. Since solar facilities generate electricity without releasing pollutants into the atmosphere, the proposed Facility will not be subject to NSPS or other federal and New York State air pollution control standards, and will not require air pollution control permits (e.g., registration, state facility permit, or Title V facility permit).

(b) Ambient Air Quality

The Application will include an assessment of existing ambient air quality trends in the region, using information from the most recent available New York State Air Quality Report (NYSDEC, 2018), which describes ambient air

quality and long-term air quality trends measured at public and private (e.g., industrial, utility) monitoring stations across the state.

(c) Combustion Source Emissions Table

Solar generation facilities generate electricity without combusting fuel or releasing pollutants into the atmosphere. Therefore, the table required by 16 NYCRR § 1001.17(c) summarizing the rate and amount of emissions from combustion sources is not applicable to the Facility and will not be included in the Application.

(d) Potential Impacts to Ambient Air Quality

The Application will include a discussion of the potential impacts to air quality that may be expected from Facility construction and operation. As previously noted, solar facilities generate electricity without combusting fuel or releasing pollutants into the atmosphere. Accordingly, the Facility will not adversely impact air quality once operating. Temporary impacts to air quality from the construction of the Facility (e.g., engine exhaust, fugitive dust from earth moving or unpaved roads) will be short-term and transient in nature and are not expected to significantly impact local air quality. This Exhibit will provide an analysis on the extent of temporary impacts to air quality during construction and will discuss the anticipated overall positive impact the Facility will have on air quality.

(e) Off-site Consequences Analysis for Ammonia Store On-site

No ammonia will be stored onsite during Facility construction or operation. Therefore, the offsite consequence analysis required by 16 NYCRR § 1001.17(e) is not applicable to the Facility and will not be included in the Application.

2.18 EXHIBIT 18: SAFETY AND SECURITY (16 NYCRR § 1001.18)

2.18.1 Discussion

Overall safety and security risks associated with the Facility are anticipated to be minimal. Based on experience with other solar projects and reasonable expectations for the Facility, the Applicant will develop preliminary site security, health and safety, and emergency action plans. The Applicant will coordinate with local emergency departments, first responders, and the New York State Division of Homeland Security and Emergency Services to ensure appropriate actions are taken in the event of an emergency during both construction and operation.

The BOP contractor will develop a site security plan for itself and all subcontractors for the Facility prior to construction and will submit it as a compliance filing prior to construction. A similar site security plan will be prepared prior to

commencing Facility operation. The PV modules, inverters, and energy storage equipment will be contained within perimeter fencing with locked gates. The POI at the existing National Grid substation and transmission line will be kept inside the locked gates currently present at the substation. The general public will not be allowed on the construction site and vehicular access will be blocked by fencing with locked gates. The construction and operational site security plans also will specifically address security lighting.

An Application prepared in accordance with the Article 10 regulations will provide a discussion of how the Applicant will comply with the North American Electric Corporation's (NERC) Critical Infrastructure Protection (CIP) standards (NERC, 2013). These mandatory Reliability Standards include CIP standards 001 through 009, which address the security of cyber assets essential to the reliable operation of the electric grid. The Application will describe the Project's NERC compliant operations and control system including, a description of typical operations efforts such as remote monitoring, diagnostics, troubleshooting, and cybersecurity measures.

The Application will also include a Preliminary Emergency Action Plan (EAP), which will outline the procedures to follow in the event of an emergency. This Plan will be developed in consultation with local emergency service providers and relevant stakeholders. The EAP will be consistent with the response strategies in the Chautauqua County Multi-Jurisdictional Hazard Mitigation Plan (2015) and will include an adaptive management framework in order to evolve as first responder organizations change. The EAP will be made available to all employees and subcontractors of the BOP contractor, local emergency personnel and first responders serving the area of the Facility Site, and authorized visitors to the Facility Site. The Application also will include a Preliminary Health and Safety Plan, which is focused on ensuring the safety of workers on the Facility Site during construction and operation.

In addition, a Spill Prevention, Control and Countermeasure (SPCC) plan will be prepared and implemented for both the construction and operation phases of the Facility. The SPCC plan will provide a detailed assessment of potential hazardous substances that could be present during the construction, operation or maintenance of the Facility and the measures in place to prevent and respond to releases of those substances. Typically, hazardous substances would consist of oils such as fuel oil, hydraulic oil, mineral oil and lubricating oil.

2.18.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.18 of the Article 10 regulations, Exhibit 18 of the Application will contain the following information:

(a) Preliminary Plans for Site Security During Facility Construction

The Application will include a preliminary site security plan for construction, which will likely include the following:

(1) Access controls including fences, gates, bollards, and other limitations;
(2) Electronic security and surveillance facilities;
(3) Security lighting, including specifications for lighting and controls to address work-site safety requirements and avoid off-site light trespass; and
(4) Setback considerations for Facility components which may present hazards to public safety.

(b) Preliminary Plans for Site Security During Facility Operation

The Application will include a preliminary site security plan for operation, which will likely include the following:

(1) Access controls including fences, gates, bollards, and structural limitations;
(2) Electronic security and surveillance facilities;
(3) Security lighting, including specifications for lighting and controls to address work-site safety requirements and avoid off-site light trespass;
(4) Lighting of facility components
(5) Setback considerations for Facility components which may present a hazard to public safety; and
(6) A description of a cyber security program to be used for the protection of digital communication systems and networks that support the Facility.

(c) Preliminary Safety Response Plan

The Application will include a Preliminary Emergency Action Plan to ensure the safety and security of the local community. The EAP will include:

(1) Identification of contingencies that would constitute an emergency;
(2) Emergency response measures by contingency;
(3) Evacuation control measures by contingency; and
(4) Community notification procedures by contingency. Stakeholders include the Chautauqua County Office of Emergency Services and the Town of Ripley Emergency Services, who will be provided with a preliminary draft of the EAP to review, as well as copies of the final EAP.

In addition, the Application will include a Preliminary Health and Safety Plan containing the procedures for ensuring the health and safety of workers during construction and operation of the Facility.

(d) Provision of Security and Safety Plans to NYS Division of Homeland Security

The Application will include documentation of submittal and request for review and comment of the preliminary Site Security Plan and EAP to the New York State Division of Homeland Security and Emergency Services.

(e) Provision of Security and Safety Plans to Local Office of Emergency Management

The Facility Site is not located within any part of a city that has a population of over one million; therefore, a review by the local office of emergency management is not required. However, the Applicant will coordinate with the Chautauqua County Office of Emergency Services and the Town of Ripley Emergency Services and provide a copy of the EAP to each of them.

(f) On-Site Equipment to Respond to Fire Emergencies or Hazardous Substance Incidents

The Application will include a list of equipment available for responding to fire emergencies or hazardous substance incidents.

(g) Contingency Plans for Fire Emergencies or Hazardous Substance Incidents

The Application will include a description of contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident.

(h) Provision of Security and Safety Plans to Local Emergency First Responders

The Application will include a statement that the Applicant has provided a copy of the plans listed above to local emergency personnel and first responders serving the area of the Facility Site, has requested review and comment on such plans, and has reviewed responses received, if any.

2.19 EXHIBIT 19: NOISE AND VIBRATION (16 NYCRR § 1001.19)

2.19.1 Discussion

For purposes of assessing the impact of energy generation projects, noise can be characterized as unwanted sound that disrupts normal human activities or interferes with the quality of life of those living in the vicinity of the project. The human ear typically hears sound in the frequency range of 20 to 20,000 Hertz (Hz) while the volume of a noise is

commonly measured in decibel (dB) units. Sound can be heard as low as 0 dB (for frequencies around 1,000 Hz) with a threshold for pain that can be over 120 to 130 dB.

The human ear is not equally sensitive to all frequencies. The greatest sensitivity is between 500 Hz and 4,000 Hz. Human response to sound can depend on a variety of factors. Some of these factors are objective characteristics of the sound, such as the magnitude, frequency, temporal variation, time of day it occurs, and the magnitude of the sound relative to other sound sources in the same context. Others are more subjective such the listener's attitude to the sound source, the source's appearance, and the listeners relationship to the owner of the sound source. In combination, subjective factors can have a larger influence over human response than objective factors, especially at relatively lower levels of sound.

Compared with most other types of power generation facilities, the potential for community noise impacts from a PV solar energy project is very low (Guldberg, 2012). Such facilities have the unique characteristic of operating primarily during the day and evening hours when noise is much less likely to adversely affect neighboring residences. Moreover, sound emissions from operating solar projects are largely confined to electrical inverters and medium voltage transformers, which are within the PV panel arrays and to substation step-up transformers and energy storage systems. This equipment generally does not produce noise that results in significant impacts on neighboring residences, wildlife, or other sensitive receptors.

The Facility is situated in a primarily rural agricultural area. Farming machinery, equipment, and operations, vehicle traffic, wind, and biogenic sound (insects, frogs, and birds) contribute to existing background noise in the vicinity of the Project. Noise generated during Project construction and maintenance will be temporary and come primarily from vehicles and equipment operating along access routes and at work areas. These vehicles will typically not result in sounds louder than existing ambient noise in the area, such as farm equipment and other traffic passing on the road. Construction of the Facility may include pile driving or drilling machines to construct solar panel foundations. This process could create noise impacts in the immediate vicinity during construction, though in any one location it is anticipated to be short lived. Although construction throughout the site will take approximately one year, activities that produce notable sound levels will be transient, only occurring in specific portions of the Facility Site at a given time.

Vibration impacts from solar projects are associated with certain short-lived construction activities such as pile driving. There are no vibration impacts associated with the operation of a solar facility.

The Application will describe the construction process and will address potential noise and vibration impacts during any construction activities on nearby sensitive receptors, nearby facilities sensitive to vibrations (such as laboratories

or medical facilities), wells and buried infrastructure such as gas pipelines, and nearby historic or cultural resource sites which might incur foundational or structural damage as a result of pile driving or drilling.

The electricity generated by the Facility will be collected and routed to a step-up transformer in a new substation associated with the Facility. This substation will be similar in design and operation to other like-sized 34.5/230 kV substations. The potential noise impact from any substation is a function of how prominent and audible the tonal sound from the transformer(s) are at the nearest receptors. Tones at 120 hertz (Hz) and its harmonics are generated by all transformers and when audible are typically described as a hum near the unit; however, the prominence of these tonal peaks diminish quickly with distance as they are masked by background sounds. Additionally, the Facility will include an energy storage system located near the substation. Energy storage systems produce sound associated with HVAC equipment and inverters and will be controlled as needed to meet the Project's noise design goals. The projected sound levels from the collection substation and energy storage system will be modeled and included in the Application.

Apart from the substation transformer and energy storage system, other sound sources of possible significance are the electrical inverters used to convert generated DC power into AC power and medium voltage transformers that increase the voltage of the power from 1.5 kV to 34.5 kV. Typically, the inverter/medium voltage transformers and storage electrical cabinets are situated within and near the center of each solar array, or independent group of solar panels, which are usually a considerable distance from the perimeter fence and potential neighbors beyond. The location of inverters and medium voltage transformers in relation to potentially sensitive receptors will be considered in the Facility design and layout and will be further described in the Application. There may also be small tracking motors at each string of solar panels. These motors only operate during the day to optimize the angle of the panels to the sun, and typically generate less sound than other Facility noise-generating components, thereby minimally increasing the overall projected sound levels at the Facility. Nonetheless, the potential impact of projected sound levels from all sources will be evaluated.

Background sound monitoring surveys will be conducted during both winter and summer conditions to measure the existing sound levels at different soundscapes in the Facility Area that are representative of potentially impacted homes. This is the first step in a modified Composite Noise Rating analysis to establish baseline background conditions (BBN, 1983). The results will be included in a Pre-construction Noise Impact Assessment (PNIA). The PNIA will also include the projected sound emissions from the proposed Facility components and the estimated Project sound levels at the sensitive receptors nearest to the substation and other Facility noise-generating components. The PNIA will also address construction-related noise and will include the name and qualifications of the preparers of the noise study, as well as a description of the noise assessment methodology standards used during its preparation.

The sound propagation modeling of the PNIA will be used to determine what noise abatement measures, if any, should be incorporated into the Facility design to meet applicable local noise ordinances and Project design goals. The analysis will include an assessment of possible tonal noise from the Facility and reasonable avoidance or minimization measures that may be implemented.

2.19.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.19 of the Article 10 regulations, Exhibit 19 of the Application will contain the following information:

(a) Sensitive Sound Receptor Map(s)

The Application will include map(s) in digital format of the Sound Study Area that will extend, at a minimum, 1,500 feet from the edge of the Facility components or until the 30-dBA noise contour is reached, whichever is greater. The maps will show all sensitive sound receptors and boundary lines (differentiating participating and non-participating parcels); noise sources within the Sound Study Area (including transformer(s), inverters, and other noise sources, if any). Full-size hard copy maps (22"x34") in 1:12,000 scale will be submitted to NYSDPS Staff with the Application.

Sensitive sound receptors include residences, hospitals, schools, libraries, parks, camps, summer camps, places of worship, cemeteries, and federal and State lands. All residences will be included as sensitive sound receptors regardless of participation in the Project (e.g., participating, potentially participating, and non-participating residences) or occupancy (e.g., year-round, seasonal use). Seasonal receptors will include, at a minimum, cabins and hunting camps identified by property tax codes, and any other seasonal residences with septic systems/running water within the Sound Study Area. With respect to parks and federal and State lands, only public facilities and publicly accessible areas are considered noise-sensitive receptors. The Applicant will coordinate with landowners and local authorities to identify existing or proposed sound sensitive receptors within the Study Area.

(b) Ambient Pre-Construction Baseline Noise Conditions

The Application will include an evaluation of ambient pre-construction baseline noise conditions, including A-weighted (in dBA) sound levels and prominent discrete (pure) tones, at representative potentially impacted noise receptors using actual measurement data recorded in winter and summer and during day and night as a function of time and frequency using a suitable and suitably calibrated sound level meter (SLM) and octave band frequency spectrum analyzer, or similar equipment. The ambient pre-construction baseline sound level will be filtered to

exclude seasonal and anomalous sound. The Applicant will conduct sound collections by following the most relevant and applicable portions of the most recent versions of ANSI/ASA standards for measurement of sounds, including ANSI S12.18 (ANSI, 2009) and ANSI S12.9 Part 3 (ANSI, 2018).

The baseline ambient sound monitoring will follow a protocol that includes the following recommendations:

- Equipment
    - Sound instrumentation: Class 1 sound level meters (SLMs) and Class 1 acoustical calibrators (sensitivity checkers).
    - Wind screens: 7"-diameter-foam wind screen or equivalent.
    - Temperature of operation for SLMs: From 14° to 110° Fahrenheit, unless SLMs are validated outside this range.
    - Relative humidity ranges for SLMs: From 20 to 90%, approximately, unless microphones and SLMs are validated outside this range.
    - Range of sound frequencies to be measured: 20 to 10,000 Hz. 1/3 octave bands.
    - Calibration recommendations: Acoustical calibrator/sensitivity checker calibrated within 1 year; SLMs: 2 years.
    - Meteorological data: Portable anemometers at each sound measurement location to continuously document wind speed. Relative humidity, wind direction and precipitation can be obtained with on-site instrumentation or the closest/most representative nearby airport or Mesonet station.

- Positions to be evaluated. Sound monitors are placed at representative soundscapes in areas impacted by the Project that are representative of residential locations, including representative setbacks from roads and other potential background sound sources. Figure 4 displays the proposed sound monitoring locations for the Facility. (Note, the Winter sound monitoring at these locations was conducted in March 2020.)
    - Location A is representative of the homes along Sherman Rd to the west.
    - Location B is representative of the rural residences along Miller Rd.
    - Location C is representative of potentially impacted receptors near the substation.
    - Location D is representative of the residences along NE Sherman Rd to the east.
    - Location E is representative of more remote rural residential and agricultural along Sulfur Springs Rd.
    - Location F is located near the more heavily traveled intersection of NY 76 and NE Sherman Rd.
    - Microsited locations will:

        - Avoid or minimize the influence of any mechanical or electrical noise sources such as air conditioners, air condensers, heaters, boilers, fans, pumps, transformers, lighting, etc.
        - Avoid or minimize the influence of sounds from flowing or moving water.
        - Minimize the influence of reflections of any buildings and other small reflective surfaces as follows: Sound microphones will not be located closer than 7.5 meters (25 feet.) from any reflective surface; Sound microphones will not be located closer than 1.5 meters (5 feet.) from any reflecting object with small dimensions such as small trees, telephone poles, etc. to the extent feasible.
        - Sound monitors will be placed at a microphone height of 1.5 ± 0.10 meters above ground elevation (5 feet ± 4 inches).
    - Proposed schedules and time frames: test during winter and summer, alternatively during the leaf-on and leaf-off seasons. Monitors will collect, at a minimum, 48 hours of valid data on each season (after exclusions).

- Data Analysis:
    - Data collected during the following conditions will be excluded: periods of rain, thunderstorms, sleet, freezing rain, and wind speed exceeding 5 m/s (11 mph) at the microphone.

- A-weighted sound levels: Measure A-weighted sound levels directly, if possible. In not, measure, at a minimum, 1/3 octave bands from 20 Hz to 10,000 Hz.

- Prominent tones: Follow ANSI S12.9 Part 4 Annex C (ANSI, 2015), unless otherwise noted.

- A report of ambient pre-construction baseline noise conditions will be included in the PNIA. Specifically, this will include:
    - The coordinates of selected measurement locations, satellite pictures, and photos for all tested locations. This will include justifications for location selection and specify how selected locations are representative of potentially impacted receptors.
    - Descriptions of the soundscape for each monitoring location will be included, along with identification of dominant sound sources. Sound sources with strong low-frequency content, if any, will be identified.
    - Broadband A-weighted sound levels will be reported in graphs plotted as a function of time at each evaluated position showing exclusions.

- Sound levels will be plotted as a function of 1/3 octave band frequencies for the L90 metric (for winter, summer, daytime and nighttime). The 1/3 octave minimum $L90_{10min}$, maximum $L90_{10min}$ and arithmetic average $L90_{10min}$ for each evaluated location will be included in the plot.
- Additional information can be included in the body or as an Appendix to the Application, including sound instrumentation specifications, certificates of calibration, summary of weather conditions during the survey, tested locations and additional results.

(c) Modeling of Construction Sound Levels

The Application will include an evaluation of future noise levels during construction of the Facility including predicted A-weighted/dBA sound levels, at potentially impacted and representative noise receptors, using computer noise modeling. The PNIA will use the most common sound propagation modeling algorithm in the United States, (ISO) 9613-2 (ISO, 1996). The PNIA will follow, at a minimum, the guidelines and recommendations of the Federal Highway Administration (FHWA) Highway Construction Noise Handbook (FHWA, 2006) and/or National Cooperative Highway Research Program (NCHRP) 25-49 (Gannet Fleming, Inc., 2018) that are applicable to the Project. As part of this analysis, the Applicant will consult these and their own databases for construction equipment sound emissions and determine whether those emissions resemble the noise emissions of the Project's anticipated construction equipment.

To the extent the information is known, the PNIA will include a discussion of time frames for construction activities indicating seasons of the year, days of the week, hours of the day, and whether construction activities will be performed during evening time (6:00 p.m. to 10 p.m.), nighttime (after 10:00 p.m. or before 7:00 a.m.), during weekends (Saturdays or Sundays), or national holidays.

The PNIA will use a computer noise sound propagation modeling software that incorporates the ISO-9613-2 propagation standard (ISO, 1996) for the main phases of construction (e.g., clearing, foundation, and installation of solar panels and transformers) at one or more worst-case receptors. The PNIA will show operational sound level contours within the Sound Study area (graphical format) and sound levels at the most impacted receptors (in tabular format).

(d) Modeling of Operational Sound Levels

The Application will include an estimate of the noise level to be produced by operation of the Facility. Modeling will assume stable atmospheric conditions, as appropriate, and will not include any attenuation of sound that transiently occurs due to weather or temperature, other than the default conditions at 70% humidity and 10˚C temperature.

The PNIA will use the ISO-9613-2 standard with no meteorological correction (C_{met}) and will discuss ground absorption values and sound power level assumptions for computer noise modeling. The model will assume a temperature of 10°C and 70% relative humidity. These assumptions generally yield the lowest sound absorption provided by the air.

The PNIA will also discuss the accuracy of computer noise modeling when using the ISO 9613-2 propagation standard. If any corrections are applied to any model results, both corrected and uncorrected results will be presented along with a discussion, documentation, and justification for any corrections.

(e) Future Sound Levels at Receptors During Facility Operation

The Application will include an evaluation of future noise levels during operation of the Facility including predicted A-weighted/dBA sound levels, prominent discrete (pure) tones, and amplitude modulated sound, at potentially impacted and representative noise receptors, using computer noise modeling, and an analysis of whether the Facility will produce significant levels of low frequency noise or infrasound.

The computer propagation modeling will use full-octave band sound frequencies from 31.5 Hz up to 8,000 Hz to generate A-weighted sound levels. Tonality values will be evaluated using the simplified definition of prominent tones in ANSI S12.9 Part 4 Annex C (ANSI, 2015). The PNIA will state that there is no amplitude modulated sound or infrasound generated by solar projects. To the extent that any fans generate low-frequency sound (31.5 Hz and 63 Hz octave bands), the impact will be evaluated using outdoor criteria established in ANSI S12.9 Part 4 Annex D (ANSI, 2015).

(f) Predicted Sound Levels Table

The Application will include a table of the A-weighted/dBA sound levels, to be calculated in the PNIA, indicated by measurements and computer noise modeling at the representative external property boundary lines of the Facility, and at the representative nearest and average noise receptors, for the scenarios summarized in the table below.

Table 2.19-1. Summary of Exhibit 19(f) Tabular Requirements (See 16 NYCRR § 1001.19(f) for details.)

1001.19(f) #	Scenario	Period[1]	Duration	Metric
1	Daytime ambient	Daytime	Year	Existing L_{90}
2	Summer ambient	Nighttime	Summer	Existing L_{90}
3	Winter ambient	Nighttime	Winter	Existing L_{90}
4	Worst case future	Daytime	Year	Existing L_{90} + Project L_{10}
5	Worst case future	Nighttime	Summer	Existing L_{90} + Project L_{10}

1001.19(f) #	Scenario	Period[1]	Duration	Metric
6	Worst case future	Nighttime	Winter	Existing L_{90} + Project L_{10}
7	Daytime ambient average	Daytime	Year	Existing L_{eq}
8	Typical facility	Overall	Year	Project L_{50}
9	Typical future	Daytime	Year	Existing L_{eq} + Project L_{50}

[1]Daytime: 7 AM to 10 PM. Nighttime: 10 PM to 7 AM

(g) Applicable Noise Standards

The Application will describe the noise standards applicable to the Facility, including any local requirements, and noise design goals for the Project at representative potentially impacted noise receptors, including residences, outdoor public facilities and areas, hospitals, schools, other noise-sensitive receptors, and at representative external property boundary lines of the Facility.

(h) Noise Standards Comparison Table

The Application will include a tabular comparison of the noise standards applicable to the Facility, including any local requirements, and noise design goals for the Facility, and the degree of compliance indicated by the PNIA at the representative external property boundary lines of the Facility, and at the representative nearest and average noise receptors. Results of the PNIA will be presented in tabular format (for sensitive sound receptors) and in graphical format (sound contours for property lines).

(i) Noise Abatement for Construction Activities

The Application will identify and evaluate reasonable noise abatement measures for construction activities, including a description of a complaint-handling procedure that shall be provided during the construction period. A noise-specific Complaint Resolution Plan will be prepared and included in the Application. The Applicant will implement best management practices for sound abatement during construction, including use of appropriate mufflers, limiting hours of construction operation, when appropriate, and turning off construction vehicles and equipment when not in use. Other possible noise abatement measures will be identified in the PNIA.

(j) Noise Abatement for Facility Operation

As previously noted, operating solar energy generating facilities are comparatively quiet. If the PNIA identifies potential noise concerns, the Application will identify and evaluate reasonable noise abatement measures for the final design and operation of the Facility, including the use of alternative technologies, alternative designs, and alternative facility arrangements. Such alternative measures may also include increased setback distances, or barriers to absorb or block the sound, mitigating equipment enclosures, and different models/manufacturers of equipment.

(k) Community Impact Assessment

The Application will evaluate the following potential community noise impacts:

(1) Hearing damage will be addressed per the requirements of OSHA Standard 29 CFR § 1910.95 and the World Health Organization (WHO) Guidelines for Community Noise (WHO 1999). The WHO recommends a limit of 70 dBA Leq-24-hour for long-term operational sound levels and 120- and 140-dB peak sound levels for impulsive sounds (e.g., blasting) for children and adults, respectively.

(2) Interference impacts on indoor and outdoor speech and the use of outdoor public areas and facilities will be addressed per WHO Guidelines (WHO, 1999) and USEPA criteria (USEPA, 1974).

(3) Community complaint potential will be evaluated by using the modified Composite Noise Rating methodology as detailed in the Electric Power Plant Environmental Noise Guide (BBN, 1983).

(4) Structural damage impacts will be evaluated by assessing the potential for some construction activities (such as blasting, excavation, pile driving, HDD or rock hammering, if any) to produce any cracks, settlements or structural damage on any existing proximal buildings or infrastructure, as well as any residences and historical buildings. The Application will use, at a minimum, the FHWA Highway Construction Noise Handbook (FHWA, 2006) for the discussion of noise and vibration impacts from blasting, if any.

(5) Interference impacts on technological, industrial, or medical activities that are sensitive to vibration or infrasound will be addressed by evaluating the potential for construction activities to create perceptible vibrations or infrasound. The operation of solar facilities does not produce any substantive ground-borne vibration or infrasound, as will be stated in the PNIA.

(l) Post-Construction Noise Evaluation Studies

The Application will include a description of a proposed Post-Construction Noise Compliance Protocol that will be performed to establish conformance with operational noise design goals in the event of noise complaints. This protocol may incorporate applicable portions of ANSI S12.18 (ANSI, 2009) and other standards as appropriate.

(m) Identification of Practicable Post-Construction Operational Controls/Mitigation

The Application will identify practicable post-construction operational controls and other mitigation measures that will be available to address reasonable complaints, including a description of a complaint-handling procedure that will be followed during periods of operation. Mitigation measures will focus on barriers and berms to control sound levels and proper maintenance of equipment to prevent unnecessary noise.

(n) Computer Noise Modeling

The computer noise modeling values used for the major noise-producing components of the Facility will fairly match the unique operational noise characteristics of the particular equipment models and configurations proposed for the Facility. Sound power level information from the relevant equipment manufacturers will be included in the Application, if available. If sound power level information is not available from the manufacturers, it will be estimated using acoustical formulae or measurements of similar equipment. The methodologies for estimation and results will be described in the Application. If sound power level information is based on actual sound readings from a similar piece of equipment, the procedure for determination will be described along with a discussion of similarities and differences regarding the proposed equipment and whether any corrections to the input data or output results were applied and if so, provide justification.

The Application will provide input data such as: sound power levels from the noise sources; source location coordinates, ground elevations, and heights; receptor location coordinates, ground elevations, and heights; ground absorption factors (G); temperature and relative humidity; and other data as included in the computer model. GIS files used for computer noise modeling including noise source and receptor locations, topography, and boundary lines will be forwarded to NYSDPS Staff in digital media, if requested.

2.20 EXHIBIT 20: CULTURAL RESOURCES (16 NYCRR § 1001.20)

2.20.1 Discussion

The Applicant has initiated consultation with the New York State Historic Preservation Office (SHPO) to develop the scope and methodology for cultural resources (i.e., archaeological sites and historic properties) studies for the Facility. Cultural resources studies will be conducted in accordance with the requirements of 16 NYCRR § 1001.20, as described below, and will include research and field surveys to identify archaeological sites and historic properties that could be affected by construction or operation of the Facility either directly or through visual and auditory effects. Historically significant properties are defined herein to include buildings, districts, objects, structures and/or sites that have been listed on or formally determined eligible for listing on the State and/or National Register of Historic Places (S/NRHP). These studies include desktop reviews of previously recorded cultural resources in the Cultural Resource

Information System (CRIS) database, a review of professional research materials, with particular emphasis on historic cartographic sources, and consultation with local historians, historical societies, and other stakeholders with knowledge of archaeological and/or historic resources in the vicinity of the Facility.

EDR has performed a preliminary review of CRIS and historical documentation relevant to the Facility Area. No previously identified pre-contact Native American and/or historic-period archaeological sites have been identified within, or immediately adjacent to the Facility Area, and the Facility is not located in an area of elevated archaeological sensitivity (per the CRIS database). Several pre-contact Native American sites are located approximately 7 miles north of the Facility Area along the Lake Erie shoreline in the Town of Ripley. Another cluster of pre-contact Native American sites is located approximately 3 miles southeast of the Facility Area, in the Town of Sherman. According to the CRIS review, no previous archeological surveys have been conducted in the immediate vicinity of the Facility. In addition, no S/NRHP-listed or eligible resources have been identified within or immediately adjacent to the Facility Area, per the CRIS database. Figure 5 displays the nearest S/NRHP-listed resources identified in the vicinity of the Facility Area.

Due to the relatively minimal amount of ground disturbance required to construct solar projects, the Applicant does not anticipate significant impacts to archaeological resources due to construction and operation of the Facility. Facility layout will be designed to avoid any identified archaeological resources, and construction activities will utilize low-impact methods to minimize the extent of soil disturbance, as practicable. Additionally, as currently designed, construction of the Facility is not anticipated to require the demolition or physical alteration of any buildings, and no direct physical impacts to historic properties are currently anticipated. In general, the potential for solar facilities to impact to historic resources is associated with changes in the visual and/or auditory setting of a given historic property. Therefore, the Area of Potential Effect (APE) for Indirect Effects for historic properties will be based on the results of the preliminary viewshed analysis. As discussed in Section 2.24, a 5-mile Study Area will be evaluated for potential visual impacts of the Facility. However, due to the nature of the landscape surrounding the Facility Area and the limited height of Facility components, visual impacts of the Facility are anticipated to be limited to a radius of approximately two miles around the Facility.

2.20.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.20 of the Article 10 Regulations, Exhibit 20 of the Application will contain the following information:

(a) Archaeological Resources

The Application will contain a full analysis of the potential impacts of the construction and operation of the Facility on archaeological resources, including the following components:

(1) Summary of Impacts and Avoidance Measures.

The Applicant will seek to avoid and/or minimize impacts to archaeological sites identified within the Facility Site and will conduct various studies to identify potential impacts. All required archaeological studies for the Facility will be conducted under the supervision of an archaeologist who meets the Secretary of the Interior's minimum qualifications for archaeology (36 CFR Part 61) and in a manner consistent with the SHPO *Phase I Archaeological Report Format Requirements* and the New York Archaeological Council (NYAC) *Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State* (the NYAC *Standards*).

(2) A Phase IA Archaeological Resources Survey

The Application will include a Phase IA Archaeological Resources Survey, which will define the Facility's APE for Direct Effects to archaeological resources to include all areas of ground disturbance for Facility components. The Phase IA report—which will be submitted to SHPO's CRIS database—will review previously identified archaeological resources within the Facility Site and propose a methodology for subsequent Phase IB archaeological survey discussed in Section (a)(3) below. Based on a preliminary review of SHPO databases and historical documentation relevant to the Facility Area, there are no previously identified pre-contact Native American and/or historic-period archaeological sites within or immediately adjacent to the Facility Area, and the Facility is not located in an area of elevated archaeological sensitivity (per SHPO's CRIS database). In addition, no previous archeological surveys have been conducted in the immediate vicinity of the Facility.

(3) Phase IB Archaeological Resources Survey

In consultation with SHPO, the Applicant will conduct a Phase IB Archaeological Survey to determine whether intact archaeological resources are located within the areas of significant proposed ground disturbance for the Facility. The Phase IB survey will be conducted in a manner consistent with the SHPO Guidelines (2005) and the NYAC Standards (1994) and in accordance with the methods proposed in the Phase IA archaeological survey, based on consultation with SHPO. Due to the relatively minimal ground disturbance required to construct solar projects, the SHPO has developed a standard protocol for Phase IB archaeological survey for solar facilities:

> *Phase IB archaeological testing is recommended for the locations of proposed roads, facilities, retention ponds, staging areas, utility trenches over a foot wide, drainages over a foot wide, and areas of grubbing and grading. Phase IB archaeological testing is NOT recommended for panel arrays, perimeter fencing and utility poles if their associated posts are driven into the ground and no grubbing or grading is involved. However, if the installation of the panel array supports, fencing or utility poles requires excavation or grubbing and grading then Phase IB archaeological testing is recommended (Bagrow, 2018).*

The Phase IB Archaeological Survey report will be submitted to CRIS and summarized in and appended to the Application.

(4) Phase II Study

If required based on the results of the Phase IB Archaeological Survey as determined in consultation with SHPO, a Phase II Archaeological Site Investigation(s) based on intensive archaeological field investigations may be conducted to assess the boundaries, integrity, and significance of archaeological sites identified in the Phase IB Archaeological Survey. The Phase II surveys will be designed to obtain detailed information on the integrity, limits, structure, function, and cultural/historic context of an archaeological site, as feasible, sufficient to evaluate its potential eligibility for listing on the S/NRHP. If no potentially significant archaeological sites are identified within the APE for Direct Effects, then no Phase II Archaeological Site Investigations will be necessary.

(5) Archaeological Material Recovered During Studies.

If any artifacts are recovered during the cultural resource studies for the Facility, the materials will be cleaned, catalogued, inventoried and curated according to NYAC standards; to the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological associations, style and function; and the facility archaeologists will provide temporary storage for artifacts until a permanent curatorial facility is identified. A complete listing of any recovered artifacts will be included in the Phase IB Archaeological Survey Report.

(6) Unanticipated Discovery Plan

An Unanticipated Discovery Plan will be prepared as part of the Application to identify the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance or human remains are encountered during Facility construction. The Plan will include a provision for work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, will be conducted by a professional archaeologist, qualified according to the NYAC Standards (NYAC, 1994). The Unanticipated Discovery Plan will specify the degree to which the methodology used to assess any discoveries follows the most recent Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State.

(b) Historic Resources

The Application will include a full analysis of the potential impacts of the construction and operation of the Facility on historic resources, including the results of field investigations and consultations with local historic preservation groups to identify sites or structures listed or eligible for listing on the S/NRHP within the viewshed of the Facility and the study area, including an analysis of potential impact on any standing structures which appear to be at least 50 years old and potentially eligible for listing on S/NRHP, based on an assessment by a person qualified pursuant to federal regulation (36 CFR Part 61). The historic resources analysis will include the following components:

Historic Resources Survey

The Applicant will conduct a Historic Resources Survey and prepare an associated technical report. The Historic Resources Survey will: define the Facility's APE relative to aboveground historic resources (the APE for Indirect Effects) following the process set forth below; conduct a field review of previously identified historic resources (i.e., sites identified through review of SHPO's database) located in the APE as well as their visual setting; assess if additional historic properties are located within the APE for Indirect Effects; and propose a methodology to assess the potential visual and auditory effect of the Facility on those resources. Historically significant properties are defined herein to include buildings, districts, objects, structures and/or sites that have been listed on or formally determined to be eligible for listing on the State and/or National Register of Historic Places. An inventory of local historic properties, including any locations/resources identified through consultation with involved agencies and municipalities as well as local stakeholders (such as municipal historians and regional historical societies), will be compiled in support of the Historic Resources Survey as well as the Visual Impact Analysis (see Section 2.24 of this PSS) and will be evaluated for potential visual impacts thereon.

Area of Potential Effect Relative to Historic Resources

As currently designed, construction of the Facility is not anticipated to require the demolition or physical alteration of any buildings, and no direct physical impacts to historic properties are currently anticipated. The Facility's potential effect on above-ground historic properties is limited to the potential for a change (resulting from the introduction of PV panels or other Facility components) in the visual or auditory setting associated with a given historic property. Therefore, the APE for Indirect Effects on historic resources includes those areas where Facility components (including PV panel arrays) will be visible and where there is a potential for a significant visual or auditory effect. 16 NYCRR § 1000.2(ar) generically recommends that a 5-mile radius Study Area be evaluated for potential visual effects on historic properties. However, as described in Section 2.24 (Visual Impacts) of this PSS, preliminary viewshed analysis indicates that visibility would be largely restricted to locations within 2 miles of the Facility Area. Concurrent with the design of the Facility, a lidar-based viewshed analysis (see Section 2.24.2(b)(1) of the PSS) will be prepared to determine areas of potential visibility for the Facility. The Applicant will rely on this

lidar-based viewshed analysis to determine the APE for Indirect Effects and geographic scope of the Historic Resources Survey.

Methodology to Identify Historic Resources and Assess Potential Effects of the Facility

Historically significant properties are defined herein to include buildings, districts, objects, structures and/or sites that have been listed on the S/NRHP, as well as those properties that SHPO has formally determined are eligible for listing on the S/NRHP. Criteria set forth by the National Park Service (NPS) for evaluating historic properties (per 36 CFR § 60.4 and NPS, 1990) state that:

> *The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:*
>
> *(A) that are associated with events that have made a significant contribution to the broad patterns of our history; or*
> *(B) that are associated with the lives of persons significant in our past; or*
> *(C) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
> *(D) that have yielded, or may be likely to yield, information important in prehistory or history.*

New York has adopted virtually identical criteria for evaluating historic properties under state law, which are set forth at 9 NYCRR § 427.3. The methods and results of the survey will be summarized in an illustrated Historic Resources Survey report, along with an annotated properties table that will include an entry for each identified property. The annotated properties table will include one or more photographs of each property, a brief description of the property (name, address, estimated age, architectural style, materials, etc.), an assessment of its condition, and an evaluation of significance. The initial survey results and recommendations of S/NRHP eligibility will be provided to SHPO via the CRIS database. Following receipt of comments from SHPO, the Applicant will evaluate the potential visual and auditory effects of the Facility on S/NRHP listed historic properties as well as those historic properties determined to be S/NRHP-eligible by SHPO.

Summary of Nature of Probable Impact of Facility Construction and Operation on Historic Resources

After SHPO completes its review of the Historic Resources Survey, discussed above, the Applicant will complete an above-ground historic resources effects analysis that will evaluate the potential visual and auditory effects of the Facility on properties determined by SHPO to be S/NRHP listed or eligible. The above-ground historic resources effects analysis will be provided to SHPO via the CRIS database. The Applicant will continue consultation with NYSOPRHP/SHPO (and other applicable stakeholders/consulting parties) regarding the impacts

of the Facility on above-ground historic resources and anticipates that SHPO's evaluation of potential effects and/or identification of any required mitigation will be determined as part of SHPO review of the Facility under Section 14.09 of the New York State Historic Preservation Act of 1980 and Section 106 of the National Historic Preservation Act, as applicable. As previously noted, direct impacts to historic resources are not anticipated as a result of construction and operation of the Facility. Furthermore, as discussed in Sections 2.19 and 2.24, noise and visual impacts associated with the Facility are not anticipated to be significant, and the Facility will implement measures such as setback distances and vegetative screenings, as applicable, to minimize effects.

2.21 EXHIBIT 21: GEOLOGY, SEISMOLOGY, AND SOILS (16 NYCRR § 1001.21)

2.21.1 Discussion

The Application will include a review of the geology, seismology, and soil conditions of the Facility Site. The review will include the identification and mapping of existing conditions, an impact analysis, and proposed impact avoidance and mitigation measures, to the extent such measures are required.

The Facility Area totals approximately 4,510 acres located in Chautauqua County. Chautauqua County spans two physiographic provinces—the Allegheny Plateau, which covers approximately 80% of the County, and the Erie-Ontario Plain, a lowland belt along the shores of Lake Erie. The Facility Area falls within the Cattaraugus Hills sub-region of the Allegheny Plateau province, an area characterized by steep valley walls with wide ridgetops or flat-topped hills separated by broad glacial valleys (USDA 1994, NYSDOT 2013). The lands within the Facility Area exhibit gentle to moderate slopes with some areas of steep ravines and plateaus. Elevations range from 1,140 feet to 1,635 feet and are underlain by shales and siltstones from the Upper Devonian geologic period (USDA 1994).

The NYSDEC's Environmental Resources Mapper was consulted in December 2019 and March 2020 to determine the presence of unique geological features in and around the Facility Area; no such unique geological features were identified. The closest mapped unique geological feature is approximately 5 miles northeast of the Facility Area and is identified as the Taylor Road – Chautauqua Gulf quarry, which consists of the remains of gravel pits in kames, an area with a high possibility of containing fossils.

According to the USGS Mineral Resources Program, there are no unique topographic features that traverse the Facility Area that would suggest the presence of faults. Data from the USGS Earthquake Hazards Program suggests that no significant faults, young faults, or faults that have had displacement in the Holocene epoch exist in or around the Facility Area (New York State Museum, 1997; USGS, 2018). Based on the 2014 New York State Hazard Map (USGS, 2014), the Facility Area is located in an area of relatively low seismic hazard, with a 2% chance that an earthquake exceeding

a four to eight peak ground acceleration will occur within a 50-year window. Chautauqua County has had no recorded earthquakes since 1900 (USGS, 2020).

A number of soil types are documented within the Facility Area. The Erie-Langford and Busti-Chautauqua units, which consist of soils formed in loamy glacial till, comprise nearly 75% of the Facility Area. Most areas within these soil units were cleared and converted for agricultural use. Cleared lands within the Erie-Langford units are primarily used for dairy farming while the major soil types within the Busti-Chautauqua units are more widely used for crop production, including corn, small grain, and hay at lower elevations. Many of the cleared areas within Busti-Chautauqua units found at higher elevations and on slopes have been left vacant or reverted to woodland (USDA 1994). The major soil associations found within the Facility Area (defined as covering 100 acres or more), along with their primary characteristics, are presented in Table 2.21-1 below.

Table 2.21-1. Soil Associations in the Facility Area

Soil Series	Main Characteristics
Alden	• Very deep soils • Very poorly drained • Slopes from 0-3 percent • Fine loamy texture • Associated with depressions
Ashville	• Very deep soils • Poorly drained • Slopes from 0-3 percent • Fine loamy texture • Associated with depressions
Busti	• Very deep soils • Somewhat poorly drained • Slopes from 0-15 percent • Coarse-loamy texture • Associated with drumlinoid ridges, hills, hills on uplands, till plains
Chadakoin	• Very deep soils • Well drained • Slopes from 8-50 percent • Coarse-loamy texture • Associated with drumlinoid ridges, hills, till plains
Chautauqua	• Very deep soils • Moderately well drained • Slopes from 3-25 percent • Coarse-loamy texture • Associated with drumlinoid ridges, hills, hills on uplands, till plains
Erie	• Very deep soils • Somewhat poorly drained • Slopes from 0-15 percent • Fine-loamy texture • Associated with drumlinoid ridges, hills, hills on uplands, till plains

Soil Series	Main Characteristics
Langford	• Very deep soils • Well drained and moderately well drained • Slopes from 3-15 percent • Fine-loamy texture • Associated with drumlinoid ridges, hills, and till plains
Volusia	• Very deep soil • Somewhat poorly drained • Slopes from 0-8 percent • Fine-loamy texture • Associated with hills and mountains on uplands, and ground moraines

Source: USDA Natural Resource Conservation Service Web Soil Survey. Accessed at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

The National Resources Conservation Service (NRCS), in coordination with other Federal (e.g., USDA), State (e.g., NYSDAM), and local governments, has inventoried prime and important farmland to identify the locations and extent of land to be utilized and protected for producing the nation's food supply. Three farmland classes are recognized in New York State including prime farmland, prime farmland if drained, and farmland of statewide importance. Soil map units receive a farmland classification based on their chemical and physical characteristics and suitability for crop production. Prime Farmland has the best combination of chemical and physical parameters to support agriculture and are highly productive. Prime Farmland if Drained exhibits many of the same criteria as Prime Farmland but must be drained seasonally to support crop production. Farmland of Statewide Significance can be nearly or as productive as Prime Farmland if treated and managed successfully. Approximately four percent of soils within the Facility Area are classified as Prime Farmland, 11.4% are classified as Prime Farmland if Drained, 71.2% are classified as Farmland of Statewide Significance, and 13.2% are not classified. Figure 3 displays the prime farmland soil classifications within the Facility Area along with Chautauqua County's designated agricultural district overlays.

In addition, the NYSDAM has developed a land classification system to identify and classify important farmland throughout the State based the differences in soil productivity. The soil map units identified above in Table 21-1 are ranked into 10 mineral soil groups or four organic soil (muck) groups and rated in terms of their ability to support crop production. Mineral soil groups 2 through 9 are present within the Facility Area. Prime Farmland within the Facility Area generally consists of soil groups 2, 3, and 4 while Prime Farmland if Drained includes groups 5 and 6. Farmland of Statewide Importance in the Facility Area consists of soil groups 3 through 8. Soil groups 2 through 4 comprise approximately 16.5% of the Facility Area. Mineral soil groups found in the Facility Area are displayed in Figure 6. The Application will evaluate the potential impacts of the Facility on farmland soils.

The Applicant does not anticipate significant ground disturbance and removal of soils from the site during construction. As a result, the Applicant does not expect that Facility-related excavation will result in adverse impacts to geology or soils. Solar facilities have relatively minor impacts on soils and geology when compared to conventional energy

production, which requires substantially more excavation. Throughout the majority of the Facility Site, earthwork is expected to be limited to minor site grading, as needed to create finished grade slopes suitable for racking installation and stormwater management. The Application will include a detailed description of construction methodologies and activities associated with the Facility, including anticipated excavation techniques. Further, the Application will identify restoration practices and environmental protection measures that when implemented will avoid or minimize adverse impacts to geology and soils.

Potential impacts of construction or operation of the Facility on regional geology are anticipated to be minor but will be evaluated in the Application. The Application will include a Preliminary Geotechnical Investigation that will define the soil and geological characteristics of the Facility Site and address their suitability for Facility construction. This stand-alone report will be based on a Facility-specific site visit conducted by a geotechnical expert, review of publicly available data, and test borings to be completed at a subset of PV panel and other Facility component locations. Following the Application, additional geotechnical investigations will be conducted as needed, to verify subsurface conditions and facilitate the development of final Facility construction designs.

Based upon a review of publicly available data and the Applicant's experience with solar facility construction, blasting is not anticipated to be required for the construction of the Facility. Results from the Preliminary Geotechnical Investigation will further inform blasting needs. Should the results indicate that blasting will be required, it will be conducted in accordance with a Facility-specific blasting plan, a preliminary draft of which will be included in the Application. In addition, if blasting is required, pre- and post-blasting surveys will be conducted as a groundwater well mitigation measure, and the Application's Complaint Resolution Plan will include measures to address community concerns relating to blasting. The blasting plan will include measures to protect features such as natural gas pipelines. Although not anticipated, any environmental or community impacts associated with blasting will be addressed on a case-by-case basis and appropriately mitigated.

2.21.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.21 of the Article 10 regulations, Exhibit 21 of the Application will contain the following information:

(a) Existing Slopes Map

The Application will include a map delineating the existing slopes (0-3%, 3-8%, 8-15%, 15-25%, 25-35%, 35% and over) on and within the drainage area potentially influenced by the Facility Site, based on the USGS National Elevation Dataset. Digital elevation model data will be processed using ESRI ArcGIS® to delineate drainage areas

and develop slope mapping. The map will depict surface water features in and around the Facility Site (e.g., streams, rivers, lakes, reservoirs). A preliminary Stormwater Pollution Prevention Plan (SWPPP), as described in Section 2.23 below, will outline how and where site stormwater is discharged and will reference associated tributaries and other waterbodies that appear on the mapping.

(b) Proposed Site Plan

Facility design and site layout is ongoing. Details on the preliminary design drawings to be included in the Application are provided in Section 2.11. These drawings will show existing and proposed contours at two-foot intervals for the Facility Site at a scale sufficient to show all proposed buildings, structures, paved and vegetative areas, and construction areas.

(c) Cut and Fill

The Application will include preliminary cut and fill calculations for construction of the Facility based on 2-foot contours. Separate calculations for topsoil, sub-soil, and rock will be roughly approximated based on publicly available data from the Chautauqua County Soil Surveys, USDA NRCS Web Soil Survey (WSS), and results of the Preliminary Geotechnical Analysis. This discussion will include a description of typical scenarios that would result in cut and fill necessary to construct the Facility, such as constructing an access road on a side slope.

The Application will include information regarding invasive species, including a plan to identify the presence of invasive species in spoil material and to prevent the introduction and/or spread of invasive species by the transport of fill material to or from the Facility Site. Additional information about the invasive species plan can be found in Section 2.22 below.

(d) Fill, Gravel, Asphalt and Surface Treatment Material

Preliminary calculations of the amount of required fill, gravel, asphalt, and surface treatment material needed to construct the Facility will be based on the proposed layout of PV panels, collection lines, substations, access roads, and other Facility components and construction areas. Calculations will be based on the anticipated dimensions of Facility components and limits of grading. For example, typical access road designs with details of length, width, and depth provide an estimate of the amount of gravel required for road construction.

(e) Type and Amount of Materials to be Removed from the Facility Site

Although not anticipated, if applicable, the Application will include a description and preliminary calculation of the proposed type and amount of any cut material or spoil to be removed from the Facility Site.

(f) Excavation Techniques

The Application will discuss the following excavation techniques to be employed during construction of the Facility:

- Trenching using chain trenchers, small scale track excavators, and backhoes.
- General land and road grading using bulldozers.
- Stormwater facility construction including ditching and small ponding areas using similar earth moving equipment as above.
- If horizontal directional drilling is proposed for Facility construction, an evaluation of the feasibility of HDD within the Facility Site will be included in the Application as well as an Inadvertent Return Plan. The Inadvertent Return Plan will establish proposed setbacks of HDD operations from stream banks, drinking water wells, and other known potential sensitive receptors and resources, and include a description of inadvertent return mitigation and response measures. The Plan will also include a scaled drawing showing typical HDD equipment staging layout and design. A frac-out risk evaluation based on known and suspected soil and bedrock conditions and identification of any locations where HDD or other trenchless installation methods were considered but determined to be infeasible will also be included.

(g) Temporary Cut and Fill Storage Areas

The Application will include a map showing anticipated locations of temporary cut and fill storage areas to be employed during Facility construction.

(h) Suitability for Construction

The Application will include a description of the characteristics of the material to be excavated for the Facility, and of the deposits found at foundation level, including factors indicating their suitability for construction, such as soil corrosivity, bedrock competence, and subsurface hydrologic characteristics.

This discussion of the suitability of existing soils for construction purposes will include frost action risk, soil shrink-swell potential, and corrosion potential, including separate evaluations of the potential for corrosion of uncoated steel and the potential for corrosion and degradation of concrete, as applicable. If existing soils are proposed for re-use as structural and/or compacted fill, the Application will assess the suitability of existing soils specifically for those purposes and describe screening measures to remove materials that do not meet the fill composition characteristics recommended by the Applicant's geotechnical expert.

The results of a Preliminary Geotechnical Investigation will also be presented, and are anticipated to include the following:

- A detailed summary of preliminary geotechnical investigations performed, including a description of the rationale for the selection of boring/deep test locations and how the data collected will be applied to evaluate the suitability of soils for construction of Facility components and use as backfill.
- Results of test borings conducted at a subset of PV module and inverter locations, including copies of field logs for each boring.
- Literature review and publicly available data regarding surface and subsurface soil, bedrock, and groundwater conditions.
- A detailed report with suitability analysis and recommendations.
- Identification of additional pre-construction geotechnical and geophysical investigations that are recommended for final design of the Facility.

The Preliminary Geotechnical Investigation Report will be included as an Appendix to Exhibit 21.

(i) Preliminary Blasting Plan

Based on the results and data obtained from the Preliminary Geotechnical Investigation, the Application will include either a statement that no blasting will be required, or, if blasting is required, a preliminary Blasting Plan describing all aspects of planned blasting operations. This preliminary Blasting Plan may include:

- 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;
- details on the use of blasting mats;
- procedures for a pre-blasting condition survey of nearby buildings and improvements to assess potential impacts, if any, from blasting operations;
- procedures and timeframes for notifying municipal officials and property owners (or persons residing at the location, if different) within one-half mile radius of the blasting site;

- coordination with local safety officials; and
- maps showing the locations of known and permitted quarries and natural gas wells (and associated infrastructure and existing access roads), and the operating status of such quarries and gas wells, to the extent that information is available to the Applicant.

(j) Potential Blasting Impacts

If blasting is anticipated, the Application will include an assessment of potential impacts of blasting to environmental features, above-ground structures, and below-ground structures such as pipelines and wells, along with a discussion of:

- procedures and timeframes for notifying host communities and property owners within a one-half mile radius of blasting locations;
- plans for pre- and post-blasting surveys of wells and foundations potentially affected by blasting operations; and
- plans for securing timely compensation for damages to wells and foundations that may occur due to blasting.

(k) Mitigation Measures for Blasting Impacts

If blasting is anticipated, the Application will identify and evaluate reasonable mitigation measures regarding blasting impacts, including the use of alternative technologies and/or location of structures, and securing compensation for damages that may occur due to blasting.

(l) Regional Geology, Tectonic Setting and Seismology

The Application will include a description of the regional geology (including any known or suspected areas of karst topography within the Facility Site), tectonic setting, and seismology of the area in the vicinity of the Facility.

(m) Facility Impacts on Regional Geology

The Application will include an analysis of the expected impacts, if any, of construction and operation of the Facility on regional geology.

(n) Impacts of Seismic Activity on Facility Operation

The Application will analyze the impacts of typical seismic activity experienced in the Facility Area based on current seismic hazard maps and the location and operational characteristics of the Facility, while identifying potential receptors in the event of failure. No young faults exist in the vicinity of the Facility; therefore, these will not be addressed in the Application.

(o) Soil Types Map

The Application will include a map of soil types at the Facility Site which will be delineated using data from the USDA NRCS WSS. Soil mineral groups will be mapped based on data obtained from the Soil Survey Geographic Database (SSURGO) and through consultation with the NYSDAM and local NRCS office (assuming the local NRCS office is able to identify the location of such soils). A discussion of the current agricultural use and productivity of farmlands within the Facility Site as informed by local farmers and landowners, and the County Soil and Water Conservation District will be presented. The Application will identify those agricultural lands which are used for row crops, regularly or in rotation, as well as agricultural lands used for pasture, hay, or other purposes. The location of drainage tiles will also be identified to the greatest extent possible based on information from landowners and publicly available information, along with a discussion of potential impacts to drainage tiles and other features.

(p) Characteristics of Each Soil Type and Suitability for Construction

The Application will include a description of the characteristics of each soil type identified in the Facility Site, including a description of the soil structure, texture, percentage of organic matter, recharge/infiltration capacity, and suitability for construction purposes. Any areas where dewatering is anticipated will be identified and the need for continuous dewatering at facilities below grade will be determined. Typical dewatering methods, if applicable, will also be described.

As indicated above, the Preliminary Geotechnical Analysis will address the suitability and limitations of existing soils and depth to bedrock for the proposed site development, including excavation stability, erosion hazard, corrosion potential, and structural integrity. These discussions will be supported by published information on specific soil types and the findings of a limited drilling program (including data regarding soil consistency, composition, density, presence of water/bedrock, etc.). Best Management Practices (BMPs) that should be employed by the designer/contractor to help minimize potential risks/hazards will be identified.

(q) Bedrock Analyses and Maps

The Application will include maps, figures, and analyses of depth to bedrock, underlying bedrock types, and vertical profiles of soils, bedrock, water table, and seasonal high groundwater using USGS Online Spatial Geology Data, and the USDA NRCS WSS. Typical PV module support structures and inverter foundation depths (which typically require minimal excavation) will also be described, including an evaluation of potential impacts. The maps included in the stand-alone Preliminary Geotechnical Analysis will show all Facility components, including access roads and interconnections. Vertical profiles will be associated with test boring locations only, and the locations of borings advanced during the preliminary geotechnical investigations will also be identified on maps included with the report. Areas designated for stockpiling of spoils and fill materials will be identified. If spoil materials will be temporarily stockpiled adjacent to access roads and trench locations, typical layouts will be provided.

(r) Evaluation of Construction Suitability

The Application will include an evaluation to determine suitable building and equipment foundations that contains the following:

(1) A preliminary engineering assessment to determine the types and locations of foundations to be employed. The assessment will investigate the suitability of the various foundations under consideration, such as concrete pads (for inverters and energy storage), or piles (for racking/PV panels), including a statement that all such techniques conform to applicable building codes and industry standards.

(2) If piles are to be used, the Application will provide 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. Exhibit 19 of the Application will discuss methods for minimizing the risk of post and pile-driving vibrational impacts (if proposed) on nearby buildings, water wells, or other infrastructure. Exhibit 12 will include a description and justification of any proposed pile-driving setback distances.

(3) Identification of measures proposed to mitigate pile-driving impacts, if necessary, including a plan for securing compensation for damages that may occur due to pile driving.

(s) Vulnerability to Earthquakes and Tsunamis

The Application will include a discussion of the Facility's vulnerability to damages from earthquakes and tsunami events. As previously indicated, the Facility appears to have minimal vulnerability associated with seismic events based on a review of publicly available data. Vulnerability to tsunami events will not be discussed in the Application

as the Facility is located at a distance from major waterbodies and at an elevation that would be unaffected by a tsunami event.

2.22 EXHIBIT 22: TERRESTRIAL ECOLOGY AND WETLANDS (16 NYCRR § 1001.22)

2.22.1 Discussion

The Application will evaluate the Facility's potential impact on ecological resources, including wildlife, wildlife habitat, and wetland resources. This evaluation will be based on the results of multiple targeted studies of existing ecological conditions within the Facility Site. The methodology for many of these studies has already been developed in consultation with NYSDEC. The Application will include information and results from on-site surveys and analyses conducted for the Facility, supplemented by data gathered from existing databases, review of existing relevant conservation and planning documents, and consultation with resource experts. The Application will also include detailed descriptions of measures undertaken by the Applicant to avoid, minimize, or mitigate significant impacts to ecological resources, to the extent practicable. This may include, but is not limited to, identification of sensitive terrestrial and wetland habitats for consideration in Facility siting and design, as well specific construction and operation practices that would avoid or minimize effects to these resources.

Land Cover and Plant Communities

The Facility will be located at the southwestern corner of New York State in Chautauqua County, primarily in Low Lime Drift Plains, a subregion of the Erie Drift Plains Ecoregion of New York State (Bryce et al., 2010), which is characterized as an area of rolling terrain where the Northern Allegheny Plateau descends towards the Great Lakes. The Low Lime Drift Plain is associated with irregular terrain containing numerous glacial landscapes such as moraines, kames, kettle ponds, and poorly drained depressions. The natural vegetation within the Low Lime Drift Plain historically included species of beech and maple with witch hazel, viburnum, maple leaf, and several fern species in the understory. Several streams in this sub-region have been known to support a diverse collection of fish and mussel species. The extent of poorly drained soils throughout this region makes agricultural uses better suited for dairy farming than row crops (Bryce et al., 2010).

Based on a preliminary evaluation, the major land cover types within the Facility Area include deciduous forests and pasture/hay. These cover types are associated with a variety of plant communities, which provide varying degrees of habitat for wildlife. Table 2.22-1 below and Figure 7 present the land cover types likely to be found within the Facility Area.

Table 2.22-1. Vegetation Communities in Facility Area

Community Type	Acres	Percent Cover (%)
Deciduous Forest	1994.99	44.2%
Pasture/Hay	1570.36	34.8%
Mixed Forest	355.19	7.9%
Woody Wetlands	197.64	4.4%
Evergreen Forest	109.88	2.4%
Developed/Disturbed	108.35	2.4%
Cultivated Crops	77.31	1.7%
Grassland/Herbaceous	51.55	1.1%
Emergent Herbaceous Wetlands	27.95	0.6%
Shrub/Scrub	11.81	0.3%
Open Water	5.74	0.1%
TOTAL	4,510.78	100

Source: 2016 National Land Cover Dataset. Accessed at: https://www.mrlc.gov/viewer/

According to the 2016 NLCD in Table 22-1 above, agricultural lands and forestland comprise a significant portion of the Facility Area. Additionally, as previously discussed in Sections 2.4 and 2.21, the majority of the Facility Area is within an established agricultural district and have been classified as farmland of statewide significance. It is anticipated that tree clearing will be required within some timber stands for the construction of the Facility, however, significant ground disturbance is not anticipated for the lands where Facility components are proposed, with the exception of the substation and energy storage. These lands will remain productive and may return to agricultural or timber use at the end of the life of the Facility. Loss or conversion of farmland will not pose a threat to the lands under lease to the Applicant, and the Applicant will site Facility components to avoid valuable forest habitat where practicable. The Application will identify the location and extent of tree clearing within the Facility Site and will evaluate the potential impacts on these vegetative communities and habitats. Additionally, the Applicant will consult with NYSDAM and other relevant agencies and stakeholders to determine appropriate environmental protection measures to implement during construction and operation of the Facility.

The Applicant will further evaluate land cover types by conducting a desktop analysis through use of GIS software to identify and map ecological communities, as defined by Edinger et al. 2014. These communities will be described in the Application along with an analysis of potential Facility impacts to individual communities. Data collected in support of ecological field surveys relating to land cover and habitat will also be included in the Application.

Invasive species are defined as those non-native terrestrial and aquatic species whose introduction can cause economic or environmental harm, and unless otherwise specifically noted, refer to the species listed at: http://www.dec.ny.gov/docs/lands_forests_pdf/islist.pdf. Additional invasive species not included on this list (e.g., reed canary grass and wild parsnip) may also warrant consideration, depending on current populations of such species within the Facility Site. The Application will include a preliminary Invasive Species Prevention and Management Control Plan for the Facility that will apply to all prohibited and regulated invasive species. The plan will include a preliminary identification of such species based on incidental observations made during field investigations conducted as part of the Application and describe methods for conducting a pre-construction invasive plant survey.

The Application will also include a Wildlife and Plant Species Inventory, which will be based on existing data, on-site surveys conducted prior to filing the Application, and/or the availability of suitable habitat, and will identify species that may occur in the Facility Site at some time during the year.

Threatened and Endangered Species

In order to assess the potential occurrence of state- and federally-listed threatened and endangered species within the Facility Area, the Applicant has coordinated with the state and federal agencies that document and protect these species. The Applicant reviewed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system to identify federally listed threatened and/or endangered species that may occur in the vicinity of Facility Area. According to the IPaC system, the federally threatened northern long-eared bat (NLEB; *Myotis septentrionalis*) potentially occurs within the Facility Area. Although review of a separate NYSDEC database (NYSDEC, 2018) indicates that there are no known NLEB winter hibernacula located in Chautauqua County, it identifies known NLEB summer habitat in Chautauqua County, with the closest location in the Town of Westfield, over 7 miles away. A review of USFWS maps of known NLEB locations indicate that the closest known NLEB winter hibernacula is located over 100 miles to the northeast of the Facility Site.

In addition to reviewing the IPaC system described above, the Applicant consulted with the New York Natural Heritage Program (NYNHP) to obtain information regarding the presence of significant natural communities and state-listed threatened or endangered species within the Facility Area. The response letter, received on September 15, 2019, identified two significant natural communities within the Facility Area, a Confined River community associated with Twenty Mile Creek and Hemlock-Northern Hardwood Forest. Additionally, the NYNHP identified the potential presence of the state-endangered tall ironweed *(Vernonia gigantea*) approximately 0.35 mile south of the Facility Area. The USFWS IPaC review and NYNHP correspondence is provided in Appendix F.

The Applicant also coordinated with the NYSDEC to obtain additional information regarding state-listed species in the vicinity of the Facility Area. The NYSDEC provided a summary document and map on November 6, 2019 that identified known locations of significant natural communities and state-listed rare, threatened, and/or endangered species. In addition to the two significant natural communities identified by NYNHP, several fish species, five bald eagle (*Haliaeetus leucocephalus*) nests, and two NLEB occurrences were documented within five miles of the Project. However, none of the identified fish, bald eagle nests, or NLEB occurrences were located within the Facility Area.

Following consultation with the NYSDEC, the Applicant conducted winter raptor surveys between November 2019 and March 2020 to identify and document habitat areas and site usage patterns of raptor species, with the focus on two grassland raptor species that are known to occur in Chautauqua County: the state-listed endangered short-eared owl (*Asio flammeous*) and the state-listed threatened northern harrier (*Circus hydsonius*). Additionally, the Applicant intends to conduct breeding bird surveys during the spring of 2020, in order to identify and document avian species that utilize habitats within the Facility Area, with a specific focus on grassland birds. The work plans for both surveys were prepared in consultation with the NYSDEC. Results from these surveys will be summarized in the Application and final survey reports will be shared with NYSDEC and included in the Application.

Wetlands

Wetland delineations for the Facility Site are anticipated to be conducted in spring and summer 2020. Desktop review of aerial imagery and approximate wetland boundaries within the Facility Area supported by review of existing state and federal wetland databases has been ongoing since March 2019. Ultimately, wetland delineations will be conducted in accordance with the three-parameter methodology described in the U.S. Army Corps of Engineers (USACE) *Wetland Delineation Manual* (Environmental Laboratory, 1987), as further described by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeastern Region* (USACE, 2012), and will also adhere to NYSDEC delineation requirements. The Application will include mapping of all identified wetlands as well as any associated reporting necessary to summarize the results of wetland identifications.

Review of NYSDEC mapping indicates that two state-mapped freshwater wetlands exist within the Facility Area. A review of National Wetland Inventory (NWI) mapping indicates 68 wetlands totaling 192.3 acres exist within the Facility Area. The NWI wetlands are mapped as individual community types and, in many cases, together may comprise a larger wetland complex. The NWI data indicate that the majority of wetland communities on-site, totaling approximately 133.1 acres, are forested wetlands. Other NWI-mapped wetland communities on-site include riverine features (26.0 acres), scrub-shrub wetlands (20.6 acres), 22 freshwater ponds (9.6 acres), and emergent wetlands (2.9 acres). Federal and State mapped wetlands are displayed on Figure 8.

The Application will discuss measures to be implemented to avoid, minimize, or mitigate wetland impacts. It is anticipated that direct impacts to wetlands/streams will be minimized by avoiding siting PV panels in wetlands where possible and utilizing existing or narrow crossing locations for linear Facility components such as access roads and collection lines. Additional measures may include special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sediment control measures. Compensatory mitigation measures may be considered, depending on level of impacts anticipated.

2.22.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.22 of the Article 10 regulations, Exhibit 22 of the Application will contain the following information:

(a) Existing Plant Communities

The Application will identify and describe all plant communities present within the Facility Site and adjacent properties. Each community type will be described according to Ecological Communities of New York State (Edinger et al., 2014) based on field observations. Maps, at a scale of 1":500' based on aerial photography, will be provided, showing approximate locations and extent of identified plant communities throughout the Facility Site.

(b) Impacts to Plant Communities

The Application will include an analysis of the proposed temporary and permanent impacts to plant communities associated with the construction and operation of the Facility, including permanent conversion of one cover type to another. A summary impact table quantifying anticipated temporary and permanent impacts associated with various project components in relation to the identified vegetation cover types will be included. Maps and associated GIS shapefiles showing all areas of clearing and disturbance will be provided to NYSDEC. The Application will also include a plan to identify the presence of invasive species and prevent the spread or introduction of invasive species.

(c) Avoidance, Minimization and Mitigation of Impacts to Plant Communities

The Application will discuss the reasonable environmental protection measures the Applicant will implement to avoid and minimize impacts to sensitive plant communities, such as alternative siting of specific components, co-locating linear project components, and maximizing use of areas already developed or disturbed to the maximum extent practicable. In addition, the Application will discuss mitigation measures proposed by the Applicant for appropriate post-construction vegetative restoration and management regimes, including the potential for

reseeding disturbed areas with native seed mixes. Consultations with NYSDEC regarding proposed impacts will also identify the need for any potential mitigation required under applicable regulations. The Application will provide a discussion and a summary table identifying all proposed environmental protection and mitigation measures, as well as any required mitigation.

(d) Existing Vegetation, Wildlife and Wildlife Habitat

The Application will include a characterization of the existing aquatic and terrestrial vegetation, wildlife, and wildlife habitat that occur in the vicinity of the Facility Site. Available ecological data will be collected from various databases including the NYNHP, the New York State Amphibian and Reptile Atlas Project, the NYS Breeding Bird Atlas and range maps, Breeding Bird Survey Routes, Christmas Bird Counts, and other available data sources, to identify federal or state-listed threatened and endangered (T&E) species, state species of special concern (SSC), and state species of greatest conservation need (SGCN), and any Significant Coastal Fish and Wildlife Habitat Areas as designated by NYSDEC and/or New York Department of State. On-site field investigations conducted prior to filing the Application will supplement the data obtained from the previously mentioned sources. Ecological cover type assessments and habitat assessments, classified according to *Ecological Communities of New York State* (Edinger et al., 2014), will identify wildlife habitat that could potentially support T&E species, SSC, and/or SGCN. T&E species identified as potentially occurring or known to occur within the Facility Site will be described in the Application, including details on conservation status in New York State; habitat preference; identification of potential habitat mapped within the Facility Site; and source of identification (e.g., database or field observation).

Maps and associated shapefiles delineating breeding bird survey transects/points; boundaries of all habitats, including delineated wetlands, adjacent areas, and streams; and the location(s), observation date(s), species, and behavior(s) of all T&E and SSC individuals observed during pre-construction surveys and incidentally within and adjacent to the Facility Site will be provided to NYSDEC. Shapefiles will be considered business confidential and shall not be shared outside of the agency staff involved in reviewing the Project. Draft reports or summaries of results of all bird, habitat, and wetland surveys will be submitted to NYSDEC prior to the filing of the Application (if available). These reports will include maps and shapefiles provided confidentially to NYSDEC depicting the location(s), observation date(s), species, and behavior(s) of all T&E and SSC individuals observed during pre-construction surveys and incidentally in the Facility Area. Final reports of all wildlife, habitat, and wetland surveys will be included in the Application.

(e) Wildlife Species List

The Application will include a plant and wildlife species inventory based on the existing available data sources identified above and the results of on-site field investigations. The inventory will include the typical species of birds, mammals, herpetofauna, and terrestrial invertebrates found in the region and likely to occur within or in the vicinity of the Facility Site. The inventory will specify whether species are known to occur in the Facility Site based on existing available data and/or observations in the field or are predicted to occur based on habitat characteristics and historical records.

(f) Analysis of Impacts from Construction and Operation

The Application will include an analysis of impacts from construction and operation on vegetative cover types, wildlife, wildlife habitats, and wildlife travel corridors, including an evaluation of expected impacts of the Facility on declining species, SGCN, T&E species, SSC, and the habitats of such species. Direct and indirect construction-related impacts may include incidental injury and mortality from construction vehicles and the use of biocides, habitat disturbance and loss associated with clearing and earth moving activities, and indirect displacement of wildlife from Facility components such as fences, roads, buildings, and lighting. Direct and indirect operation and maintenance related impacts may include incidental injury and mortality from operational vehicles and the use of biocides during vegetation maintenance, indirect displacement of wildlife travel corridors or concentration areas. A cumulative impact analysis will be conducted to evaluate the expected impacts from the construction, operation and maintenance of the Facility as they relate to other proposed and operating solar energy projects near the Facility. As discussed in Section (b) above, a summary table will be provided identifying the extent of temporary and permanent impacts anticipated to habitats.

(g) Avoidance, Minimization and Mitigation of Impacts to Wildlife Species

The Application will include an evaluation of reasonable avoidance, minimization, and mitigation of impacts to vegetation, wildlife, and wildlife habitat during siting and development of the Facility, including the use of alternative PV technologies and other details of Facility design and operation, construction controls, site restoration, and maintenance measures. Avoidance and reduction of direct and indirect impacts to federal- and state-listed and protected species may include appropriate project siting, adhering to designated construction limits and seasonal restrictions, and other BMPs. If any unavoidable impacts to listed T&E species or their habitats are anticipated as a result of the Project, a commitment to mitigate, in an appropriate and timely manner, will also be discussed. Such mitigation will be determined only after avoidance and minimization measures are evaluated; these mitigation measures must result in a net conservation benefit to the target species. Measures to avoid, minimize or mitigate impacts to vegetation will be addressed in Exhibit 22(c).

(h) Wind Powered Facilities

The Applicant is proposing a solar powered facility; therefore, the requirements set forth in 16 NYCRR § 1001.22(h) do not apply.

(i) Wetland Delineation and Mapping

Delineation as used in reference to wetland and stream delineation throughout this document refers to the placement in the field of sequentially numbered pink surveyor's flagging marked "wetland delineation" with the locations of individual flagging points documented using Global Positioning System (GPS) technology with reported sub-meter accuracy. The use of Wetland Delineation Data Forms (or comparable forms) to fulfill USACE requirements, and field verification by the USACE and the NYSDEC, are not required to obtain a finding by the Chair of the Siting Board that a developer's Article 10 Application complies with the statute. However, such information and verifications will be necessary to obtain USACE approval outside of the Article 10 process and to reach agreement with NYSDEC Staff in the Article 10 proceeding on the extent and nature of wetlands impacts.

The Application will include maps and shapefiles showing delineated wetland boundaries for federal- and state-regulated wetlands and adjacent areas within the Facility Site and occurring within 100 feet of the edge of ground disturbance for all proposed Facility components, where property access is available. For adjacent properties without accessibility, identification will be based on remote-sensing data, interpretation of published wetlands and soils mapping data, and aerial photography.

A final wetland and stream delineation report will be provided to the District Office of the USACE and the Regional NYSDEC offices and will be included with the Application. The report will include results of the field delineation including descriptions of the delineated wetlands as discussed below in Section (j). The Applicant will coordinate with NYSDEC and USACE to schedule a jurisdictional determination field visit to review/confirm the findings of the wetland delineations if applicable. The Applicant will provide maps and GIS shapefiles of delineated wetlands to the NYSDEC when these materials are finalized.

(j) Description of Delineated Wetlands

The Application will describe the locations, size, characteristics, and Cowardin classification of all identified wetland communities, including a summary of the data collected in relation to identification of wetland boundaries and a description of the vegetation, soils, and hydrology data collected for each of the wetland sites identified. The Application will also discuss the likely jurisdictional status of delineated wetlands. Information will be provided indicating which delineated wetlands are likely to be state-regulated, including those that are part of wetland

complexes that meet New York State criteria for jurisdiction (e.g., 12.4 acres or larger, of Unusual Local Importance, and/or known to support listed species) but are not currently mapped by the state. All state-regulated wetlands under New York Environmental Conservation Law (ECL) Article 24 will be identified by NYSDEC's alpha-numeric code. Study areas for wetland delineations may be extended in order to make these anticipated jurisdictional determinations. At a minimum, the desktop mapping approach described in Section (i) above will identify all wetlands that potentially meet state criteria for jurisdiction.

(k) Wetland Functional Assessment

The Application will include a qualitative and descriptive wetland functional assessment, including seasonal variations, for all delineated wetlands. Qualitative scores that assess functions and values for each wetland will be based on a methodology similar to *The Highway Methodology Workbook Supplement, Wetlands Functions and Values: A Descriptive Approach* published by the U.S. Army Corps of Engineers New England District in 1999. The functions/values evaluated using this method will include:

1. groundwater recharge/discharge;
2. flood-flow alteration;
3. fish and shellfish habitat;
4. sediment/toxicant/pathogen retention;
5. nutrient removal;
6. production export;
7. sediment/shoreline stabilization;
8. wildlife habitat;
9. recreation;
10. educational/scientific value;
11. uniqueness/heritage;
12. visual quality/aesthetics; and
13. protected, threatened or endangered species habitat.

Potential vernal pools will also be inventoried in accordance with methods developed through consultations with NYSDEC. The Application will identify potential vernal pools that could be disturbed by construction, operation, restoration or maintenance of the Facility. The Application will include an evaluation of the potential use of the identified vernal pools by amphibians and reptiles, and the potential impacts to those species from construction, operation, restoration and/or maintenance of the Facility.

(l) Off-site Wetland Analysis

Wetland boundaries and adjacent areas within 100 feet of proposed limits of disturbance will be delineated in the field. The Application will also include an analysis of offsite wetlands that may be hydraulically or ecologically influenced by the development of the Facility and the wetlands identified within the Facility Site. For adjacent properties without accessibility, the desktop mapping approach described in Section (i) above will be utilized to identify potential wetlands and hydraulic or ecological connections.

(m) Identification of Temporary and Permanent Impacts to Wetlands

The Application will evaluate and quantify temporary and permanent impacts to wetlands and state-regulated 100-foot adjacent areas based on the proposed footprint of all Facility components and associated impact assumptions. This assessment will also include a description of applicable permanent wetland forest conversion, if any, which would occur as a result of the construction or maintenance of the Facility. Additionally, while the Facility will be designed to avoid wetlands to the extent possible, and the PV panels will not exceed 12 feet in height, the Application will provide a discussion on the potential impacts of shade on wetlands. A summary of the type and extent of proposed impacts will be presented in a table, broken down by wetland community types and anticipated jurisdiction. In addition, for each proposed impact, the Application will describe if it could be reasonably avoided, proposed environmental protection measures to be implemented, and, if impacts cannot be reasonably avoided, a discussion of proposed mitigation measures and/or potential compensatory mitigation as required by USACE and/or NYSDEC. Impacts to wetlands will also be presented on a separate set of plan drawings at an appropriate scale, showing wetland and stream boundaries, relevant Facility components, stream crossings, roads, and limits of disturbance.

(n) Avoidance, Minimization and Mitigation of Wetland Impacts

The Application will evaluate reasonable measures for avoiding, minimizing, and mitigating impacts to wetlands. The Applicant intends to design the Facility to avoid impacts to wetlands to the maximum extent practicable. Setbacks from delineated wetland and stream resources and adjacent areas to NYSDEC-mapped wetlands will be discussed in the Application. Where impacts are unavoidable or minimized to the greatest extent possible, subsequent required mitigation measures to offset impacts to streams, wetlands, and state-regulated 100-foot adjacent areas will be discussed. Final impact calculations to wetlands and state-regulated 100-foot adjacent areas and associated mitigation will be based on consultation with NYSDEC regarding jurisdiction. If required, pursuant to 6 NYCRR § 663.5(g), a conceptual mitigation plan for impacts to state-regulated wetlands and adjacent areas must be included in the Application and at a minimum must meet the following provisions:

- The mitigation must occur on or in the immediate vicinity of the Facility (preferably elsewhere in the same wetland);
- The area affected by the proposed mitigation must be regulated by the Freshwater Wetlands Act and 6 NYCRR Part 663 after mitigation measures are completed, and;
- The mitigation must provide substantially the same or more benefits than will be lost through the proposed activity.

The Application will also describe the anticipated Environmental Compliance and Monitoring Program (ECMP) to be implemented during Facility construction to ensure compliance with all relevant permit conditions to protect wetlands, streams, and other waterbodies. The Facility's ECMP will include the duties of an Environmental Monitor(s) designated for construction and restoration activities.

(o) Identification of State and Federal Threatened and Endangered Species

The Application will identify T&E species, SSCs and SGCNs documented within or adjacent to the Facility Site, if any, and discuss potential impacts to these species. If required based on ongoing consultations with NYSDEC, NYSDPS, and USFWS, an Endangered Species Avoidance, Minimization and Mitigation Plan may be included to determine an appropriate post-construction monitoring protocol.

(p) Invasive Species Prevention and Management Plan

An Invasive Species Prevention and Management Plan (ISPMP) that addresses the non-native invasive species listed in 6 NYCRR Part 575 and identified per Section (b) above that may occur within the Facility Site. The ISPMP will include measures that will be implemented to minimize the introduction or spread of such species during construction. A baseline invasive species survey will be conducted prior to construction to identify all prohibited and regulated invasive species in the Facility Area. The results of the baseline survey and an action plan for pre-construction management of non-native invasive species will be included in the ISPMP, together with threshold(s) for action. Specific methods the Applicant will use to ensure that packing material, imported fill, and fill leaving the Facility Site are free of non-native invasive species material to the extent practicable will be described. These methods will include 1) proper removal of non-native invasive species material from equipment and personnel; 2) proper disposal of materials known to be or suspected of being infested; 3) other BMPs such as cleaning procedures and inspection methods; and 4) worker education. The ISPMP will also include treatment methods and procedures for invasive species that were introduced or spread during construction, operation, or maintenance of the Facility (based on comparisons of surveys against the baseline pre-construction survey), as appropriate. These may include landscape and re-vegetation plans using appropriate native wildflower or grass seed mixes.

(q) Impacts to Agricultural Resources

As discussed in Sections 2.4 and 2.21, the Application will provide an analysis of temporary and permanent impacts to agricultural land associated with the construction, operation, and maintenance of the Facility, including the number of acres that would be permanently converted to nonagricultural use and appropriate mitigation measures.

2.23 EXHIBIT 23: WATER RESOURCES AND AQUATIC ECOLOGY (16 NYCRR § 1001.23)

2.23.1 Discussion

The Application will include a review of the groundwater, surface water, stormwater, and aquatic ecology impacts from construction and operation of the Facility, including the identification and mapping of existing conditions, an impact analysis, and proposed impact avoidance and mitigation measures.

Groundwater

Based on preliminary evaluations conducted in support of this PSS, depth to groundwater ranges from the ground surface to greater than 6.5 feet throughout the Facility Area. Depth to bedrock ranges from 2.5 feet to greater than 6.5 feet, with the majority of the Facility Area having bedrock depths of 6.5 feet or greater (Soil Survey Staff, 2019).

The Facility Area does not border or contain any part of a primary aquifer, a designation applied by USGS and NYSDEC for aquifers that are highly productive and utilized by major municipal water supply systems (NYSDEC, 2011). The nearest primary aquifer is approximately 18 miles east of the Facility Area. The nearest sole source aquifer (a designation by USEPA for aquifers that supply at least 50% of drinking water to a given area) is located over 40 miles northeast of the Facility Area (USEPA, 2016). Therefore, the Facility is not expected to result in impacts to any primary or sole-source aquifers. Although the Facility Area is not located near any confined aquifers, it is approximately 2 to 3 miles from several unknown, mid-yield, and high-yield unconsolidated aquifers as mapped by NYSDEC Division of Water, Bureau of Water Resources Management (NYSDEC, 2008). However, construction and operation of the Facility is not expected to impact these aquifers.

Additionally, the Project is not expected to result in impacts to nearby private water wells. The Applicant will coordinate with landowners within the Facility Site and field-confirm the locations of any water wells identified on lands where construction activities are planned. The results of the study will be used to enable the Applicant to avoid these features during the final siting/design of the Facility and will support review of potential impacts to private water sources, if any.

The Facility is not anticipated to result in any significant impacts to groundwater quality or quantity, drinking water supplies, or aquifer protection zones. Excavations associated with the proposed Facility (e.g., inverters, underground collection lines and interconnection, energy storage facility, roadways) are expected to be relatively shallow and are not anticipated to intercept groundwater within the surrounding aquifers. The Facility will add only small areas of impervious surface, which will be dispersed throughout the Facility Site. The limited impervious surfaces within the Facility Area, along with implementation of stormwater management practices will result in a negligible effect on groundwater recharge. Anticipated impervious surfaces at the Facility include parking lots and access roads, concrete pads for the inverters and substation as well as the battery energy storage system foundations and the O&M building, if constructed. Potential areas of dewatering will be identified prior to construction through the identification and mapping of groundwater and surface water features and the results of geotechnical borings and well surveys. Proposed methods and BMPs for dewatering will be provided in the Application, if applicable. Additional detail regarding groundwater impacts will be provided in the Application, including results from a preliminary geotechnical evaluation, as well as specific avoidance, minimization, and mitigation measures that will be implemented to protect groundwater resources during construction of the Facility.

Surface Water

The Facility Area is primarily located in the Chautauqua-Conneaut Basin (USGS Hydrologic Unit 04120101), a sub-basin of the Lake Erie-Niagara River major drainage basin. A small portion of the Facility Area and the surrounding Study Area also overlaps the French Basin (USGS Hydrologic Unit 05010004), a sub-basin of the Allegheny River major drainage basin. The Lake Erie-Niagara River Basin drains more than 265,000 square miles in the north-central United States and south-central Canada and drains approximately 2,280 square miles of New York State. The Chautauqua-Conneaut Basin drains Chautauqua County, as well as a small portion of Cattaraugus County in New York, while the rest of the watershed lies in Pennsylvania's Erie and Crawford Counties and Ohio's Ashtabula County. The Allegheny River Basin drains 1,920 square miles of New York State. The French Watershed drains a small portion of Chautauqua County with the majority of the watershed draining Pennsylvania's Erie, Crawford, Mercer, and Venango Counties.

Twenty Mile Creek and its tributaries are the most prominent surface water features in the Facility Area. Several tributaries to French Creek also flow through the Facility Area before entering French Creek, approximately 0.6 mile south of the Facility Area. Figure 8 identifies prominent surface water features including wetlands, streams, and lakes as mapped by NYSDEC, NWI, and NLCD. Identification of surface waters within the Facility Site, as well as their NYSDEC classification and standard, will be included in the Application.

The Application will identify the locations of surface water intake sites for public use within one mile of the proposed Facility Site through correspondence with local municipalities and the New York State Department of Health (NYSDOH), and will discuss the type, nature, and extent of services provided by each source based on the information received. If there are no such intake sites, the nearest intakes downstream of the Facility Site will be identified.

Facility components will be sited to avoid or minimize both temporary and permanent impacts to surface waters to the extent practicable. Components of the Facility, including PV racking systems, inverters, transformers, energy storage components, the collection substation, and the POI at the existing National Grid substation, as well as temporary construction yards, are anticipated to avoid surface waters to the maximum extent practicable. To the extent practicable, the overall impacts due to linear component crossings such as access roads and collection lines will be minimized by utilizing existing crossings and narrow crossing locations, along with buried collection circuits.

During construction, potential direct or indirect impacts to surface waters may occur as a result of pre-construction site preparation, the installation of the Facility components, the installation of above-ground or buried electrical lines, and temporary workspaces around the substation. Direct impacts could include (1) an increase in water temperature and conversion of cover type due to clearing of vegetation, (2) siltation and sedimentation due to earthwork, such as excavating and grading activities, (3) disturbance of stream banks and/or substrates resulting from buried cable installation, and (4) the direct placement of fill in surface waters to accommodate road crossings. Indirect impacts to surface waters may result from erosion and sedimentation caused by construction activities (e.g., removal of vegetation and soil disturbance). Based on the Facility layout (i.e., proposed footprint of all Facility components) and the location of delineated stream and wetland boundaries, GIS calculations will be performed to determine the approximate acreage of surface waters that may be temporarily and permanently impacted.

Direct impacts to surface waters will be minimized by designing the Facility layout to avoid surface water impacts or utilizing existing or narrow crossing locations whenever possible. The results of on-site wetland and stream delineations that are anticipated to be conducted during the growing season of 2020 will be incorporated into the Facility design for impact avoidance purposes and presented in a Wetland and Stream Delineation Report, to be included with the Application. Upgrading any existing crossings that are under-maintained/undersized will have a long-term beneficial effect on water quality, as it will help to keep farm equipment or other vehicles out of surface waters. Special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures will be utilized to reduce adverse impacts to water quality, surface water hydrology, and aquatic organisms. In addition, clearing of vegetation and disturbance along stream banks will be kept to a minimum.

Where crossings of surface waters are required, BMPs will be utilized, as required by the NYSDEC and USACE. Specific environmental protection measures for protecting surface water resources will be described in the Application, and may include, but are not limited to, the following:

- No Equipment Access Areas: Except where crossed by permitted access roads or through non-jurisdictional use of temporary matting, streams will be designated "No Equipment Access," thus prohibiting the use of motorized equipment in these areas.
- Restricted Activities Area: A buffer zone of 100 feet, referred to as "Restricted Activities Area", will be established where Facility construction traverses streams, wetlands and other bodies of water.
- Sediment and Siltation Control: An erosion and sedimentation control plan will be developed and implemented as part of the Applicant's compliance with the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) (SPDES General Permit, discussed below). Specific control measures will be identified in the Facility Stormwater Pollution Prevention Plan (SWPPP), and the location of these features will be indicated on construction drawings and reviewed by the contractor and other appropriate parties prior to construction.

After implementing such environmental protection measures, if impacts to surface waters are anticipated, the Application will discuss proposed mitigation.

Stormwater

Prior to construction, the Applicant will seek coverage under the SPDES General Permit by submitting a Notice of Intent to NYSDEC. A preliminary SWPPP will be prepared in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control Standards* (NYS Standards) and the *New York State Stormwater Management Design Manual* and consistent with the SPDES General Permit. The preliminary SWPPP will include typical information on permanent, post-construction erosion and sediment control measures (vegetative and structural), along with the anticipated stormwater management practices that will be used to reduce the rate and volume of stormwater runoff after construction has been completed. The preliminary SWPPP will also describe how stormwater controls, and drainage features during site restoration will be designed to avoid post-construction negative impacts to water wells and surrounding agricultural land uses. However, the preliminary SWPPP will not include pre- or post-construction stormwater runoff calculations.

Chemical and Petroleum Bulk Storage

It is not anticipated that the Facility will require on-site storage of large volumes oil or chemicals The Application will describe the BMPs to be implemented during construction to prevent and contain spills. A Spill Prevention, Control

and Countermeasure (SPCC) Plan will be created and implemented during Facility construction and operation to minimize the potential for unintended releases of petroleum and other hazardous chemicals. The SPCC Plan will include information such as nearest waterbodies, procedures for loading and unloading transfers of oil, discharge or drainage controls, procedures in the event of discharge discovery, a discharge response procedure, a list of spill response equipment to be maintained on-site, methods of disposal of contaminated materials in the event of a discharge, and spill reporting requirements.

Aquatic and Invasive Species

As described in Section 2.22, the presence of aquatic invasive species within the Facility Site will be documented through incidental observations that occur during wetland and stream delineations and other on-site investigations. As discussed in Section 2.22, based on consultations with NYNHP, no aquatic threatened and/or endangered species or their habitats were identified as potentially occurring within the Facility Area. No pre-Application, species-specific surveys for invasive or aquatic species are planned. To the extent it is determined that occupied T&E habitat exists within the Facility Area and that impacts to that habitat and/or the associated species are unavoidable, the Application will explain why complete avoidance of impacts is not feasible, explain how the proposed minimization actions will reduce impacts to the maximum extent practicable, and propose mitigation activities if required.

2.23.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.23 of the Article 10 regulations, Section 2.23 of the Application will contain the following information:

(a) Groundwater

The Application will include a discussion of groundwater resources within the Facility Area that includes:

(1) A site map showing depth to bedrock, depth to water table, and karst features throughout the Facility Site, based on the Soil Survey of Chautauqua County, New York.

(2) A map identifying and delineating all groundwater aquifers, recharge areas, flow direction, quality, and the locations, depth, yield, and use of public and private groundwater wells or other points of groundwater extraction. This should include the identification of well head and aquifer protection zones. Information will be gathered through publicly available data, requested from NYSDOH, NYSDEC, USGS Office of Groundwater, USDA Soil Conservation Service, USDA NRCS WSS, the Chautauqua County Soil and Water Conservation Districts, and local municipalities, as well as data collected during subsurface investigations on the Facility Site and from the private well survey.

(3) An analysis of potential impacts of the construction and operation of the Facility on groundwater. This evaluation will consider potential impacts to drinking water supplies, groundwater quality and quantity within the Facility Area, and public and private water supplies under both normal and drought conditions, including private wells within one mile of the Facility Site, and wellhead and aquifer protection zones. Information on the areas of potential dewatering during construction of the Facility will be provided based on publicly available information, results of geotechnical borings, and results of the well survey. Proposed methods of dewatering will be described in the Application, as applicable. Additionally, the Application will discuss potential sources of water for concrete mixing operations, if needed. Details associated with the design and layout of facilities for withdrawal and transport of source water will be provided post-Certification once the Applicant engages a BOP contractor.

(b) Surface Water

The Application will include a discussion of surface water resources within the Facility Area which will include:

(1) A map identifying all surface waters, including intermittent and ephemeral streams, within the study area. The map will be created using publicly available stream data from NYSDEC, ESRI, USGS, and NWI as well as from data collected during on-site water resource surveys where landowner permission for access is available. This information will also be provided in a table that can be cross-referenced to the maps and shapefiles.

(2) A description of each waterbody based on the New York State listed Water Quality Standards and Classification, pursuant to 6 NYCRR Parts 800-941. The description will include part numbers, Water Index Numbers (WIN), physical water quality parameters, and flow rate as well as biological aquatic resource characteristics, including incidentally observed species of vertebrates and invertebrates, if any, habitat characteristics, and presence of invasive aquatic species. The descriptions will be supplemented when necessary by field data collected during wetland and stream delineations, if available.

(3) An identification of all downstream surface drinking water intakes within 1 mile of the Facility and contained within the drainage basin in which the Facility is located, or if none are located within 1 mile, the nearest downstream surface drinking water supply intake. Location(s) of the intakes will be given by longitude and latitude. A discussion of potential impacts to surface drinking water supplies due to the Facility, including characterization of the type, nature, and extent of service provided from the identified source, will also be included.

(4) An analysis of all potential impacts of construction and operation of the Facility on surface water resources, including surface drinking water sources, and an identification of reasonable avoidance measures. A table will be provided identifying all impacts to surface waters, including

i. calculations of the approximate acreage and linear distance of surface waters temporarily or permanently impacted based on the proposed Facility footprint and identified stream boundaries;

ii. the construction impact type at each waterbody and, as applicable, the crossing methodology impact (e.g., buried collection, access road), construction technique used (e.g., HDD, permanent road culvert), and associated design parameters (e.g., culvert design that adheres to requirements of NYSDEC Water Quality Certifications and NYSDEC's Stream Crossing Guidelines available at http://www.dec.ny.gov/permits/49060.html); and

iii. general descriptions of BMPs to be used; detailed descriptions will be provided for each construction technique as appendices to the Application.

(5) An identification and evaluation of reasonable avoidance and minimization measures, such as alternatives in Facility layout design and/or time restrictions on work associated with the crossings of State-protected stream. Additionally, Environmental Protection Measures may include the use of water storage, stormwater reuse, and offsetting water conservation.

(c) Stormwater

The Application will include a discussion of stormwater discharges associated with the Facility, which will include a preliminary SWPPP for the management of stormwater discharges in anticipation of seeking coverage under the SPDES General Permit discussed above (GP-0-20-001). The preliminary SWPPP will contain the following information:

- Anticipated stormwater management practices, including temporary and permanent erosion and sediment control measures (vegetative and structural), and post-construction practices;
- Anticipated construction activities, including a preliminary construction phasing schedule and definition of disturbance areas;
- Site waste management and spill control measures;
- Proposed site inspection and maintenance measures, including construction site inspection, and construction site record keeping; and
- Conditions what will allow for the termination of permit coverage.

The Applicant will identify as necessary the post-construction stormwater management practices that are anticipated to be implemented to meet the stormwater quality and quantity requirements of the SPDES General Permit on the preliminary design drawings. Hydrologic modeling and complete design of the post-construction stormwater management will be completed prior to construction as part of a final SWPPP.

(d) Chemical and Petroleum Bulk Storage

The Application will include information on anticipated chemical and petroleum bulk storage activities, including:

(1) A description of the preliminary SPCC Plan including spill containment requirements for relevant components of the Facility.
(2) With respect to item 2, it is not anticipated that the Facility will conduct any chemical or petroleum bulk storage activities subject to regulation under the State of New York's chemical and petroleum bulk storage programs. In the event NYSDEC's programs become applicable, the Application will demonstrate the Facility's compliance with such regulations.
(3) With respect to item 3, it is not anticipated that the Facility will conduct any chemical or petroleum bulk storage activities subject to regulation under local laws. In the event local laws become applicable, the Application will demonstrate the Facility's compliance with such local laws.

(e) Aquatic Species and Invasive Species

The Application will include information on aquatic species and invasive species, including:

(1) An analysis of the impact that construction and operation of the Facility is likely to have on biological aquatic resources (and related critical and sensitive habitat), including species listed as endangered, threatened, or species of special concern in 6 NYCRR Part 182, if any, as well as species of greatest conservation need, that are known or suspected of being present within the Facility Site. This analysis will include a discussion of the potential for introducing and/or spreading aquatic invasive species. Exhibit 22 of the Application will include more details on the Invasive Species Management and Control Plan.
(2) An identification and evaluation of reasonable avoidance measures and, where impacts are unavoidable, mitigation measures regarding impacts on such biological aquatic resources, including native and invasive species impacts (if any) and assure compliance with applicable water quality standards (6 NYCRR Part 703).

(f) Cooling Water

The proposed Facility does not involve the use of cooling water, and as such, the requirements of this section are not applicable to this Facility and will not be included in the Application.

2.24 EXHIBIT 24: VISUAL IMPACTS (16 NYCRR § 1001.24)

2.24.1 Discussion

Visual quality is the significance given to a landscape based on its intrinsic physical properties and cultural importance. The Application will evaluate potential visual impacts that could result from introducing the Facility into the landscape. This evaluation will be presented in a Visual Impact Assessment (VIA) to be included in Exhibit 24 of the Application and will assess the extent and significance of Facility visibility. Components of the VIA will include the following:

- A description of the character and visual quality of the existing landscape.
    - Define landscape similarity zones and user groups.
- Identification of visually sensitive resources, including recreational areas, residences, businesses, historic sites (listed or eligible for listing on S/NRHP), and travelers (interstate and other highway users), as well as specific locations identified by municipal planning representatives, NYSDPS, NYSDEC, and NYSOPRHP.
- An evaluation of potential Facility visibility.
- Photographic overlays (visual simulations) of the Facility from representative views.
- An assessment of the potential visual impacts associated with the Facility.
- A description of the visual resources potentially affected by the Facility.
- A description of proposed measures that may be implemented to avoid, minimize, or mitigate visual effects.

PV panel visibility is anticipated to be relatively limited because the PV panels and associated equipment are not expected to extend more than 12 feet above grade and the forested areas and topography surrounding the Facility Site significantly restrict visibility. A preliminary viewshed analysis based on simulated solar panel coverage of several agricultural fields within the Facility Area showed that visibility would be largely restricted to locations within two miles of the Facility Area. However, a 5-mile radius study area (Visual Study Area or VSA) will be evaluated in the VIA to ensure that potential visual effects on regional visually sensitive resources are adequately considered. Figure 9 displays a preliminary identification of visually sensitive resources within the 5-Mile Visual Study Area as well as the anticipated 2-mile viewshed area. Visually sensitive resources occurring within the VSA will be identified and evaluated in the VIA. This will include resources proposed for inclusion by agencies and municipalities through ongoing outreach efforts. Although the PV panels would be the most widespread Facility component, the tallest structures associated with the Facility would be substation equipment such as the overhead gantry (which allows the powerlines to connect

to the existing transmission line), lightning protection masts, and possible telecommunication structures that each could have a height of 70 feet or more. Above-ground collector lines, if these are determined to be necessary, may also have a height of more than 18.5 feet. To the extent these details are available, the potential visibility of these features will be addressed in the VIA.

Possible glare impacts have been raised as a concern at other solar projects. Regarding the potential for glare, there is an inverse correlation between light absorption and reflection. As a result, PV panels are designed to absorb as much of the solar spectrum as possible to maximize efficiency. Virtually all PV panels manufactured in recent years have at least one anti-reflective coating to minimize reflection and maximize absorption, thus limiting the potential for glare. However, at high incident angles above approximately 60 degrees, reflectance increases and can cause some glare. Using basic geometry and seasonal sun paths, the potential for glare can be predicted at times when the sunlight will shine on the panels at high incident angles. These predictions will be included in the Application and used to inform measures to avoid or minimize glare.

With respect to visible impacts generally, to illustrate anticipated visual change from areas where PV panels and other equipment will be visible, photographic simulations of the completed Facility from representative viewpoints within the viewshed will be prepared and presented in the VIA. Review of these images alongside the original, unaltered photos will allow for comparison of the aesthetic character of each view with and without the proposed Facility in place. These "before" and "after" photographs, identical in every respect except for the Facility components shown in the simulated views, will be presented to a panel of experts who will be asked to rate and describe the effect of the proposed Facility in terms of its contrast with existing elements of the landscape. The rating results will be presented in the VIA and Application along with an interpretive summary of their significance.

The VIA submitted as part of the Application will also include a discussion of measures that when implemented may avoid, minimize or mitigate potential effects of the Project on visually sensitive resources. Approaches to address visual sensitivities may include selection of equipment/technology, siting/setbacks, row spacing, fencing, and screening. It is anticipated that vegetation screening will be utilized to mitigate views of the Facility along select public rights-of-way. These and other measures may be considered once final Facility design, viewshed analysis, and field review have been completed.

2.24.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.24 of the Article 10 regulations, Exhibit 24 of the Application will contain the following information:

(a) Visual Impact Assessment

A VIA will be conducted to determine the extent and assess the significance of Facility visibility. The VIA will be conducted in accordance with the general methodologies developed by various state and federal agencies including the U.S. Department of the Interior, Bureau of Land Management Visual Resource Management [(BLM VRM) (1984)], the NYSDEC Program Policy, *Assessing and Mitigating Visual and Aesthetic Impacts* (2019), and the National Park Service's *Guide To Evaluating Visual Impact Assessments for Renewable Energy Projects* published in 2014 (Natural Resource Report NPS/ARD/NRR-2014/836). The VIA will include the following components:

(1) Character and Visual Quality of Existing Landscape

The Application will describe the character and visual quality of the existing landscape within the VSA. As previously noted, the VSA will be conservatively established to encompass an area of 5 miles surrounding the Facility for the purpose of identifying visually sensitive resources. However, visual impacts are expected to be limited to a radius of approximately 2 miles around the Facility given the comparatively low height of the Facility components and the nature of the surrounding landscape. Distinct Landscape Similarity Zones (LSZs) within the VSA will be identified and defined (including discussion and analysis of the existing landscape setting, land uses and visual characteristics of the VSA) and the approximate location of these LSZs will be illustrated in the Application.

(2) Visibility of Facility

The Application will evaluate the visibility of the Facility during operation. Viewshed analysis maps will be created to identify geographic areas of potential Facility visibility. The viewshed analysis will include the following components:

i. Public vantage points from which the Facility may be visible will be illustrated in the viewshed analysis maps.
ii. Photographs will be taken from representative locations within the VSA and will document the potential Facility visibility from publicly accessible vantage points, various LSZs, distance zones, visually sensitive resources, and areas of high public use. Photographers will utilize a focal length between 28 and 35 mm to best approximate normal human perception of spatial relationships and scale in the landscape. When directly adjacent to the Facility, wide angle views will be photographed to provide better context in the images.
iii. The results of the field review will be presented in the VIA and Application.

(3) Appearance of the Facility upon Completion

The Application will evaluate the visibility of above-ground interconnections and roadways to be constructed as part of the Facility. PV panels, inverters, energy storage systems, fences, access roads, POI switchyard, and other above-ground/visible Facility components will be included in all visual simulations in which they would be visible. It is anticipated that the collection system for the Facility will be buried underground. If overhead collection lines are necessary, they will be depicted in the visual simulations in which they appear.

(4) Appearance of Building(s) upon Completion

The Application will discuss the anticipated appearance of any buildings upon completion, including building/structure size, architectural design, façade colors and texture, and site lighting, including the O&M building, if constructed.

(5) Facility Lighting

The Application will describe Facility lighting. While no lighting will be installed as part of the PV arrays, it will be installed at the collection substation and at the O&M building, if constructed. Additional dark sky compliant lighting may be installed at the inverter/transformer locations and energy storage enclosures. Additional information regarding lighting at the Facility will be included as part of Exhibit 11 of the Application.

(6) Representative Views/Photographic Overlays

The Application will include representative views of the Facility in the form of photographic simulations. Photographic simulations will be developed by constructing a three-dimensional computer model of the proposed PV panels, inverters, transformers, energy storage battery containers, and other visible components of the Facility based on specifications provided by the manufactures and/or the Applicant. The photographic simulations also will illustrate proposed vegetation clearing and screening. At least one simulation will show the collection substation and/or POI switchyard. Also, a photographic simulation of the O&M building (including exterior color and finish) will be included if the location and design are known at the time of VIA preparation, and if there is confirmed visibility from a public vantage point.

(7) Visual Change During Facility Construction

The Application will discuss the nature and degree of visual change during construction of the Facility. Visual impacts may result from temporary construction activities including tree clearing, construction of access roads, installation of PV panels, overhead lines, and other Facility components and other general construction activities.

(8) Visual Change Associated with Facility Once Constructed

The Application will discuss the nature and degree of visual change associated with the Facility once it has been constructed and is operating. Photographic simulations will be developed by using Autodesk 3ds Max® to create a simulated perspective (camera view) to match the location, bearing, and focal length of each existing conditions photograph. Highly detailed lidar data will be used to accurately align 3D elements to the features present in the existing conditions photograph. As such, modeled Facility components in the view will be true to scale and location within the existing conditions photograph. Tree clearing and mitigation will also be included in the 3D model and the Facility will be made to match the lighting conditions present in the photograph. Adobe Photoshop® will be used to complete the final integration of the model into the photograph.

An evaluation of Facility visibility and visual impact during operation will be conducted by a panel of three visual professionals using a standardized rating form. The rating form was developed by EDR in 1999 by incorporating aspects of the BLM VRM process with a numerical scoring system to determine the potential visual contrast presented by the Facility. Completed forms and the rating form instructions will be included with the Application.

(9) Operational Effects of the Facility

The Application will discuss the anticipated operational effects of the Facility. Operation of the Facility will not have visible effects related to plumes, off-site shading, and shadow-flicker. Accordingly, the operational impacts discussion will focus on the visual appearance of the PV panels and other Facility components, including a consideration of solar glare.

Regarding the potential for glare, a separate preliminary analysis to determine the occurrence and duration of solar glare on sensitive receptors will be provided in the Application. The glare analysis will utilize the viewshed analysis to identify residences within 1,500 feet of Facility components and roadways within one mile of Facility components with potential direct line of sight visibility of the proposed Facility. The tool used to evaluate glare occurrence and duration will be the Sandia National Laboratories' Solar Glare Hazard Analysis Tool (SGHAT) (through a licensed contractor). The SGHAT is a web-based glare assessment tool that provides an assessment of when and where solar glare may occur throughout the year from a solar installation (https://share-ng.sandia.gov/glare-tools/). The output of the SGHAT will be used to help the Applicant identify environmental protection measures, including vegetation planting and/or revisions to the Facility layout, that may avoid, minimize, or mitigate the effects of glare.

(10) Visual Impact Mitigation Measures

The Application will assess various environmental protection measures to mitigate visual impacts, including landscape screening, setbacks, architectural design, visual offsets, Facility color and design, and lighting options, among other strategies. The analysis of alternative Facility layouts and technologies, presented in Exhibit 9 of the Application, may include discussion of visual impact mitigation. Mitigation will also be considered in relation to NYSDEC Program Policy DEP-00-2 (NYSDEC, 2019).

(11) Description of Visual Resources to be Affected

The Application will describe the visual resources that may be affected. Visually sensitive resources will include those resources identified through desktop analysis, field review, and specific locations identified by municipal planning representatives, NYSDPS, NYSDEC, NYSOPRHP, and other state agencies.

(b) Viewshed Analysis

Exhibit 24(b) will include a viewshed analysis that identifies the locations in the Visual Study Area where it may be possible to view the proposed PV modules and other Facility components from ground-level vantage points. The viewshed analysis portion of the Application will include the following components:

(1) Viewshed Maps

The Application will include viewshed maps showing the results of viewshed analyses based on the screening effects of topography, vegetation, and built structures (as defined by the lidar data). Viewshed maps will be presented on the most recent edition USGS 1:24,000 scale topographic base map. Additionally, viewshed maps will depict visually sensitive resources, cultural and historical resources, viewpoint locations, near foreground, foreground, middle ground, and background distance zones, and LSZs. Based on the accuracy provided by lidar data in the viewshed analysis, it is not anticipated that line of sight cross sections will be required. However, if specific resources require further analysis to determine the degree of visibility, a line of sight cross section will be generated.

The Application also will include a detailed description of the methodology used to develop the viewshed maps. The viewshed maps will be prepared by generating multiple sample points representing PV array areas based on the Facility layout presented in the Application, an assumed maximum PV panel height of 12 feet or less (depending on final proposed Facility design); an assumed viewer height of six feet; and ESRI ArcGIS® software with the Spatial Analyst extension. The elevation, vegetation, and buildings within the VSA will be represented by a lidar-derived digital surface model (DSM). The resulting viewshed

map will define the maximum area from which PV module sample points could potentially be seen within the VSA.

(2) Sensitive Viewing Areas

The Application will identify sensitive viewing areas and locations of viewer groups in the vicinity of the Facility. Visually sensitive resources will be identified using a variety of data sources including digital geospatial data (shapefiles) obtained primarily through the NYS GIS Clearinghouse or ESRI, national, state, county and local agency/program websites as well as websites specific to identified resources; USGS 7.5-minute topographical maps; and web mapping services such as Google Maps. Visually sensitive resources also may be identified based on outreach to municipal representatives. The visual outreach letter is provided in Appendix G. Possible visually sensitive resources include:

- **Properties of historic significance** (National Historic Landmarks, Sites Listed on the S/NRHP; Properties Eligible for Listing on the S/NRHP; National or State Historic Sites).
- **Designated scenic resources** (Rivers Designated as National or State Wild, Scenic, or Recreational; Sites, Areas, Lakes, Highways or Overlooks Designated or Eligible for Designation as Scenic; Scenic Areas of Statewide Significance; Other Designated Scenic Resources).
- **Public lands and recreational resources** (National Parks, Recreation Areas, Seashores, and/or Forests; Heritage Areas; State Parks; State Nature and Historic Preserve Areas; State Forest Preserve Lands; Wildlife Management Areas & Game Refuges; State Forests; Other State Lands; State Boat Launches/Waterway Access Sites; Designated Trails; Local Parks and Recreation Areas; Publicly Accessible Conservation Lands/Easements; Rivers and Streams with public fishing rights easements; Named Lakes, Ponds, and Reservoirs).
- **High use public areas** (State, U.S., and Interstate Highways, Cities, Villages and Hamlets; Schools).
- **Locally identified resources** (Other resources identified through the agency/public outreach process – see discussion below)**.**

Previously identified aesthetic resources of statewide or local significance within the VSA will be included with the Application. Visually sensitive resources will also include locations identified by municipal planning representatives, NYSDPS, NYSDEC and NYSOPRHP as part of the application process.

(3) Representative Viewpoint Selection

Representative viewpoints will be selected based upon outreach to and consultation with members of the public, engaged stakeholders, municipal planning representatives, NYSDPS, NYSDEC and NYSOPRHP

along with the criteria outlined below to ensure that a variety of views are represented. The Applicant will include a list of visual stakeholders and copies of viewpoint selection correspondence in the Application. The selection criteria are:

- Representative or typical views from unobstructed or direct line-of-sight views;
- Significance of viewpoints, designated scenic resources, areas or features, including but not limited to: forest preserve lands, sites listed on the S/NRHP, public parks or recreation areas;
- Level of viewer exposure, i.e., frequency of viewers or relative numbers, including residential areas or high-volume roadways;
- Proposed land uses;
- Input from local public sources; and
- Building/structure data collected for each potentially eligible property prepared in a format acceptable to NYSOPRHP and NYSDPS and submitted to NYSOPRHP and NYSDPS for review prior to completing the viewpoint selection.

The viewshed analysis should include the important or representative viewpoints identified during consultations with municipal planning representatives, NYSDPS, NYSDEC, and NYSOPRHP.

(4) Photographic Simulations

Photo-realistic simulations of the completed Facility will be conducted from each of the selected viewpoints to demonstrate the post-construction appearance of the Facility. Where vegetation screening is relied on for Project mitigation, leaf-off and leaf-on simulations will be provided.

(5) Mitigation Simulations

Visual simulations or other representative images will illustrate the various visual mitigation measures (such as fence styles or plantings) that are being considered for the Facility. Common approaches to visual vegetative screening include evergreen hedges, native shrubs and plantings, and pollinator-friendly grasses and wildflowers. The Applicant has and will continue to coordinate with representatives of the Town of Ripley to develop an appropriate approach to mitigation.

(6) Simulation Rating and Assessment of Visual Impact

As previously discussed, a composite contrast rating will be applied to each set of existing and simulated views of the Facility and comparisons will be made for each viewpoint. All rating forms will be included in the Application along with a narrative description of the existing view and overall visual effect representing the

nature and degree of visual change resulting from construction and operation of the Facility on scenic resources and viewers represented by each of the selected viewpoints using comments provided by the rating panel members. Additionally, recommendations for potential mitigation of visual impacts would be included on the rating forms (if applicable). The credentials for each rating panel member will be provided in the Application.

(7) Visual Effects Created by the Facility

The Application will discuss the visual effects created by the Facility. As previously discussed, except for the potential for glare from the PV panels, operation of the Facility is not anticipated to result in operational visual effects. Accordingly, the discussion of operational visual effects will be limited to the predicted extent, frequency, and duration of visible effects resulting from PV panel glare.

2.25 EXHIBIT 25: EFFECT ON TRANSPORTATION (16 NYCRR § 1001.25)

2.25.1 Discussion

This Exhibit will evaluate the suitability of, and potential impacts to, the transportation networks to be used in the construction and operation of the Facility. As previously discussed, the Facility Area is situated in a rural area with only county and local roads traversing the Facility Area. The Application will include an evaluation of existing conditions, including typical traffic volumes and accidents; school district and emergency service provider routes; and current road conditions/limitations and the potential impacts to these resources. A Route Evaluation Study will be included with the Application that identifies public road constraints, potential haul routes, and impacts to transportation systems associated with construction and operation of the Facility.

Employees and workers accessing the site with heavy haul/construction equipment will follow the identified specified haul routes. Trucks carrying water, fuels, or chemicals will utilize the same haul routes used by other construction vehicles and component delivery haulers, as identified in the Route Evaluation Study. Workers and employees in standard size vehicles (pick-up truck size and smaller) will access the construction site and worker parking areas through use of whichever public road route is most logical and efficient for the respective individual or vehicle.

As part of the Route Evaluation Study, the New York State Department of Transportation's (NYSDOT) Highway Data Services website will be reviewed to determine potential load capacity restrictions for public roads near the Facility. The Application will also include an identification of the possible extent and duration of traffic interferences resulting from construction of the Facility and any interconnects. Final transportation routing will be coordinated with the County and Town's Highway Superintendents to avoid and/or minimize safety issues associated with the use of the approved

haul routes, which will confine the heavy truck travel to a few select roads. Generally, the potential impacts associated with Facility construction are expected to be limited to localized temporary increases in traffic and possible road damage from construction vehicles and workers. Once the Facility is commissioned and construction activities are concluded, traffic associated with Facility operation will be limited to trips associated with routine operations and maintenance activities. As such, no new traffic control devices are anticipated to be necessary, and no damage to roads due to normal operation of the Facility is expected to occur.

The Application will summarize meetings and consultations held with local County and Town Highway Departments and emergency service providers. The intent of these meetings is to discuss the proposed Facility, the Article 10 process, road use agreements, and the general construction and transportation process when constructing the Facility.

2.25.2 Proposed Content of the Application

Consistent with the requirements Section 1001.25 of the Article 10 regulations, Exhibit 25 of the Application will contain the following information:

(a) Conceptual Site Plan

The preliminary design drawings prepared for Exhibit 11 of the Application will include a conceptual site plan, drawn at an appropriate scale, depicting all Facility site driveway and roadway intersections. These drawings will include, as appropriate, horizontal and vertical geometry, the number of approach lanes, the lane widths, shoulder width, traffic control devices (if needed), and sight distance of all Facility Site driveways and roadway intersections.

(b) Description of Pre-construction Characteristics of Roads in the Area

The Application will include a description of the pre-construction characteristics of roads in the Study Area, which may include the following:

(1) Data obtained from the NYSDOT Traffic Data Online Viewer to review existing traffic volumes along proposed approach and departure routes for the Facility. Accident information along those routes contained in the Accident Location Information System (ALIS) will be requested from the local police agencies and/or NYSDOT regional office. These data will be compared with the Transportation Study Area identified in the Application.
(2) A review of transit facilities and routes, including school district routes for the districts serving the Facility Site, as well as senior citizen transportation, ARC transportation (for individuals with disabilities), and public transportation, as applicable and publicly obtainable. Information related to school district busing activities,

including school bus routes, number of buses, and times, will be obtained from the Ripley and Sherman Central School Districts.

(3) A review of locations of emergency service provider stations (police, fire, ambulance, and hospitals) that serve the Facility Site. The Application will include a map of service provider locations and routes, which will also be provided to operations and maintenance staff during Facility operation.

(4) An identification of load-restricted bridges and/or roadways along the proposed approach and departure routes for the Facility. For non-posted bridges along those routes, information from the NYSDOT's Highway Data Services website will be reviewed to determine potential load capacity restrictions. Consultations with local highway supervisors concerning possible local load capacity restrictions will also be summarized in the Application.

(5) The Facility is not within a congested urbanized area; therefore, the requirements of 16 NYCRR § 1001.25(b)(5) will not be discussed in the Application.

(c) Facility Trip Generation Characteristics

The Application will include an estimate of Facility trip generation characteristics, including:

(1) An estimate of the number, frequency and timing of vehicle trips based on anticipated delivery routes, site plan, and location of Facility components as presented in the Application. Exact scheduling of construction work and required vehicles will be determined by the Applicant's contractor prior to construction. Therefore, the study to be conducted and included in the Application will only provide an estimate based on the anticipated volume of materials and number of vehicles. The Application will tabulate construction vehicle volumes for the Facility broken down by Facility component/truck type.

(2) An identification of approach and departure routes for trucks carrying water, fuels, or chemicals from the Facility Site out to a 5-mile distance.

(3) A separate estimate of the number and frequency of vehicle trips needed for major cut and fill activity, including spoil removal or deposition at the Facility Site. The Applicant does not expected significant cut and fill will be required for the development of the Facility. As a result, this activity will not result in traffic impacts. If further investigation shows that significant cut and fill will be required, the Application will provide details of vehicle trips and transportation routes resulting from this activity. Any cut and fill activity will be subject to the conditions of the Facility-specific SWPPP.

(4) An identification of conceptual haul routes and approach and departure routes for workers and employees. Approach and departure routes will be based on the anticipated type of delivery vehicle to be used, and such routes will be identified to and from the Facility Site for employees and construction workers of the Facility.

(d) Traffic and Transportation Impacts

The Application will include an analysis and evaluation of the traffic and transportation impacts of the Facility, including:

(1) A comparison of projected traffic conditions with and without the proposed Facility. Synchro and HCS software (or similar software generally accepted by the industry) will be utilized to determine levels of service for linear segments of highways used by construction and delivery vehicles. The anticipated extent and duration of traffic interferences/delays during construction will be described. The Facility is not in a congested urbanized area requiring detailed intersection analysis.

(2) An evaluation of the adequacy of the road system to accommodate projected traffic. The Route Evaluation Study will include anticipated delivery routes and analyses of the adequacy of these routes to accommodate vehicles associated with construction and operation of the Facility. The possible extent and duration of traffic interferences resulting from construction of the Facility and interconnects will be discussed.

(3) A review of aerial photography and online street view maps in conjunction with driving all potential haul routes to identify physical restrictions. Anticipated temporary improvements will be identified and a corresponding location map will be included in the Application.

(4) An identification and evaluation of practicable measures to mitigate traffic and transportation impacts will be presented in the Route Evaluation Study. This analysis will include any potential time restrictions regarding delivery of Facility components, the use of alternative technologies, the construction of physical roadway improvements, the installation of new traffic control devices, and provisions for repair of roads damaged by heavy equipment or construction activities during construction or operation of the Facility.

(5) A description of road use and restoration agreements, if any, between the Applicant and landowners, municipalities, or other entities, regarding the repair of local roads damaged by heavy equipment or construction activities. Anticipated local or State permits required for construction and/or post-construction use of public roads, including highway work permits and special use permits from NYSDOT, will be identified. If applicable, a draft road use agreement will be included as an Appendix to the Application. This section will also discuss use agreements with private landowners which may be required for construction use of private property along public roads. If road use agreements are not proposed, the Application will specify an alternative method for ensuring that required repairs due to damage caused by Project construction are made.

(e) Impact of the Facility on Mass Transit Systems

Railroad tracks are not present within the Facility Area (New York State Department of Transportation, 2019). However, railroad tracks operated by the CSX Transportation Inc/Amtrak Railroad do cross through the 5-mile Study Area. The Application will include a discussion of potential impacts to this railway, if identified. No other mass transit systems are located in the vicinity of the Facility.

(f) Federal Aviation Administration Review.

The proposed Facility does not fall under any of the categories for which Federal Aviation Administration (FAA) review is triggered under 14 CFR § 77.9. In particular, no structure is proposed which exceeds 200 feet in height above ground level and nearby public airports are outside the designated range requiring notice to the FAA. Therefore, no FAA filing or review is required.

Prior to the submission of the Application, letters regarding the Facility's development and status will be sent to any airports or heliports identified on the Facility's stakeholder list with runways more than 3,500 feet in length. In addition, if necessary or requested, the Applicant will meet with aviation stakeholders to discuss Facility-specific information and provide a summary of such consultations in the Application. Construction and operation of the Facility is not expected to impact local airports or heliports.

2.26 EXHIBIT 26: EFFECT ON COMMUNICATION (16 NYCRR § 1001.26)

2.26.1 Discussion

Potential impacts to communication transmissions may result from signal disruption by certain electrical frequencies of physical objects (e.g., buildings, trees, landforms). As required by 16 NYCRR § 1001.26, the Application will identify all existing broadcasting communication sources within a 2-mile radius of the Facility and any associated interconnections unless otherwise noted. The Facility is not expected to have an impact on broadcasting communication technologies because it will not include any tall structures and will generate only weak electromagnetic fields (EMFs). Studies show that "PV arrays generate EMF in the same extremely low frequency (ELF) range as electrical appliances and wiring found in most homes and buildings" (Massachusetts Department of Energy Resources, 2015). In a study of three solar arrays in Massachusetts, EMF levels measured along the boundary of each project were not elevated above background levels (Massachusetts Clean Energy Center, 2012). Because any EMFs generated by the Facility will dissipate rapidly within relatively short distances, they are not expected to interfere with nearby communications systems.

Similarly, the Facility is not expected to have an impact on military or civilian radar systems because it does not include tall structures that could block radar signals. The FAA has concluded that solar arrays do not cause radar interference:

> "Radar interference occurs when objects are placed too close to a radar sail (or antenna) and reflect or block the transmission of signals between the radar antenna and the receiver (either a plane or a remote location).
> …
> Due to their low profiles, solar PV systems typically represent little risk of interfering with radar transmissions. In addition, solar panels do not emit electromagnetic waves over distances that would interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current are buried beneath the ground and away from any signal transmission.
> …
> Off-airport solar projects are even more unlikely [than on-airport solar projects] to cause radar interference unless located close to airport property and within the vicinity of a radar equipment and transmission pathways" (FAA Guidance, 2018).

While the Facility is not anticipated to adversely impact broadcasting communication systems, an analysis of potential impacts will be provided in the Application. Additionally, as described in Section 2.12, the Applicant will develop a Complaint Resolution Plan through which residents can issue a formal complaint should any communication-related issues arise as a result of construction and operation of the Facility.

LORAN radio signals will not be addressed because transmission of all signals was terminated in 2010 by the Department of Homeland Security Appropriations Act.

2.26.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.26 of the Article 10 regulations, Exhibit 26 of the Application will contain the following information:

(a) Existing Broadcast Communication Sources

The Application will identify all existing broadcasting communication sources within a 2-mile radius of the Facility, unless otherwise noted, which may include the following:

- AM/FM radio;
- Television;
- Telephone;
- Microwave transmission (all affected sources, not limited to a 2-mile radius);
- Emergency services;

- Municipal/school district services;
- Public utility services;
- Doppler/weather radar (all affected sources, not limited to a 2-mile radius);
- Air traffic control (all affected sources, not limited to a 2-mile radius);
- Armed forces (all affected sources, not limited to a 2-mile radius);
- GPS; and
- Amateur radio licenses registered to users.

(b) Existing Underground Cable and Fiberoptic Lines

The Application will identify the locations of underground cable and fiber optic major transmission telecommunication lines within 2 miles of the Facility.

(c) Anticipated Effects on Communication Systems

The Application will describe the potential impacts of the Facility on communication systems identified in Sections (a) and (b) above. This section will include a discussion of the potential for scenarios including:

- Structures interfering with broadcast patterns by re-radiating the broadcast patterns in other directions;
- Structures blocking necessary lines-of-sight;
- Physical disturbance by construction activities; and
- Adverse impacts to co-located lines due to unintended bonding; and
- Any other potential for interference.

(d) Evaluation of Design Configuration

The Application will include an evaluation of the design configuration of the proposed Facility demonstrating that there will be no adverse effects on the communications systems identified in Sections (a) and (b) above.

(e) Post-construction Activities to Identify and Mitigate Adverse Effects on Communications Systems

If necessary, the Application will include a description of post-construction activities that may be undertaken to identify and mitigate adverse effects on the communications systems identified in Sections (a) and (b) above that occur despite the design configuration of the proposed.

2.27 EXHIBIT 27: SOCIOECONOMIC EFFECTS (16 NYCRR § 1001.27)

2.27.1 Discussion

The Application will include a Socioeconomic Report that quantifies the potential countywide and statewide socioeconomic impacts of the Facility based on current socioeconomic conditions of the area. The Facility Area is sited in rural Chautauqua County in the Town of Ripley. Preliminary demographic information within the Town of Ripley is summarized below in Table 2.27-1.

Table 2.27-1. Preliminary Demographic Information for the Town of Ripley

Population	
2018 ACS 5-Year Population Estimate	787
Median Age	43.1
Educational attainment	
% high school graduate or higher	89.9%
Total housing units	371
Median household income	$32,321
Foreign born population	9
Unemployment rate	2.5%
Veterans	73
Race and Hispanic Origin	
White alone	732
Black or African American alone	8
American Indian and Alaska native alone	0
Asian alone	0
Native Hawaiian & Other Pacific Islander	0
Some Other Race alone	22
Two or more Races	25
Hispanic or Latino (or any race)	27
White alone, not Hispanic or Latino	727
Data source: 2018 American Community Survey 5-Year Estimate Profile	

The proposed Facility will provide a wide range of socioeconomic benefits to the surrounding community throughout its development, construction, and operation. Long-term, lease or purchase agreements with private landowners within the Facility Site will provide a steady, predictable, and diversified source of revenue. In addition, development of the Facility will result in revenue to local businesses including hotels, restaurants, and local service companies, and donations and sponsorships for local community events. Construction of the Facility is expected to generate temporary, local employment opportunities to those in the construction trades, including operators, truck drivers, laborers, and electricians. Permanent employment opportunities associated with Facility operation are expected as well. Operation

of the Facility is expected to contribute millions of dollars in additional revenue to Chautauqua County, the Town of Ripley, and the local school districts in the form of a payment in lieu of taxes (PILOT) agreement and a host community agreement (HCA).

The Application will include an overview of socioeconomic conditions in the area as well as a detailed analysis of anticipated socioeconomic impacts associated with construction and operation of the Facility. Three levels of impact will be analyzed including:

(1) **On-site labor impacts**: These are the direct impacts experienced by the companies engaged in the construction and operation of the Facility. This value estimates the dollars spent on labor and professional services by Facility developers, consultants, and construction contractors, as well as O&M personnel. On-site labor impacts do not reflect material expenditures.
(2) **Local revenue and supply chain impacts**: These impacts measure the estimated increase in demand for goods and services in industry sectors, such as local food and hotel industries, that supply or otherwise support the companies engaged in construction and operation (also known as "backward-linked" industries).
(3**) Induced impacts**: Induced impacts measure the estimated effect of increased household income resulting from the Facility. Induced impacts reflect the reinvestment of earned wages, as measured throughout the first two levels of economic impact. This reinvestment can occur anywhere within the economy, on household goods, entertainment, food, clothing, transportation, etc.

Each of these three levels can be measured in terms of three indicators: jobs (as expressed through the increase in employment demand), the amount of money earned through those jobs, and the overall economic output associated with each level of economic impact. The Applicant will make available any workpapers associated with its socioeconomic impact estimates. The Applicant will track and report the number of direct jobs created during the construction and operational phases of the Project, as well as tax payments made to local jurisdictions during the course of the Project.

2.27.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.27 of the Article 10 regulations, Exhibit 27 of the Application will contain the following information:

(a) Construction Workforce

The Application will contain an estimate of the average work force, by discipline, for each quarter, during the phase of construction based on industry experience and budget information for this Project. An estimate of the peak construction employment levels will also be provided.

Workpapers, including any models, for the Applicant's job estimates, as well as the basis for economic multipliers and assumptions used, will be made available for NYSDPS review. Further, the Application will include a description of actual direct jobs and economic impact numbers from similar projects, if available and feasible at the time of filing, to supplement its job and economic impact estimates.

(b) Construction Payroll

The Application will include estimated annual construction payroll and non-payroll expenditures associated with the Facility. The estimate will include the annual construction payroll, by trade, for each year of construction and an estimate of likely annual direct non-payroll expenditures (materials, services, rentals, etc.) in the vicinity of the Facility during the period of construction.

(c) Secondary Employment and Economic Activity Generated by Facility Construction

The Application will include an estimate of annual secondary employment and economic activity associated with Facility construction. This analysis will state the basis of any economic multiplier factor or other assumption used. The results of the analysis will be included in the Application and the economic multiplier factors or other assumptions used will be described.

(d) Workforce, Payroll and Expenditures During Facility Operation

The Application will include an estimate of the number of jobs and the on-site payroll, by discipline, during a typical year likely to be associated with Facility operation. This will include an estimate of other local expenditures likely to be made during a typical year of Facility operation.

(e) Secondary Employment and Economic Activity Generated by Facility Operation

The Application will include information regarding secondary employment and the economic benefits associated with Facility operation, including those benefits linked to payments to local landowners in association with the lease and/or purchase agreements executed to host Facility components.

(f) Incremental School District Operating and Infrastructure Costs

The Application will confirm that the Facility is not expected to result in any additional operating or infrastructure costs to local school districts during construction and operation.

(g) Incremental Municipal, Public Authority, or Utility Operating and Infrastructure Costs

The Application will confirm that the Facility is not expected to result in any additional operating or infrastructure costs to local municipalities, authorities, or utilities during construction and operation.

(h) Tax/Benefit-Collecting Jurisdictions

The Application will discuss the jurisdictions that will collect taxes or benefits from the Facility, which are anticipated to include:

- Chautauqua County
- Town of Ripley
- Ripley and Sherman Central School Districts
- Ripley Fire District

(i) Incremental Amount of Annual Taxes or Payments

For each jurisdiction identified above, the Application will include an estimate of the incremental amount of annual taxes (or other payments to local taxing jurisdictions in lieu of taxes) it is projected would be levied against the post-construction Facility Site, its improvements and appurtenances. The Applicant expects to enter into a PILOT agreement with the County, Town, and local school districts identified above. The specific terms of the PILOT and HCA are being negotiated and updates will be provided in the Application. The PILOT and HCA payments will increase the revenues of the local taxing jurisdictions and will represent a significant contribution to the total tax levy.

(j) Comparison of Incremental Costs and Benefits

The Application will compare incremental fiscal costs of the Facility for the host jurisdictions against the benefits in the form to expected tax revenue as a result of the Facility. As indicated above, the Facility is not expected to result in any additional costs to local tax jurisdictions but will result in significant benefits through implementation of a PILOT and HCA.

(k) Emergency Response Capacity

The Application will include an analysis of whether emergency response contingency plans can be fulfilled by local emergency response capacity, including identification of any equipment or training deficiencies, if applicable. Exhibit 18 of the Application (along with an appended Preliminary Health and Safety Plan and Emergency Action Plan) will provide specific detail on emergency equipment that the Applicant may maintain for the Facility. The Applicant has consulted and will consult with local emergency service providers to confirm that that all emergency equipment and training needs associated with the Facility will be met.

(l) Consistency with State Smart Growth Public Infrastructure Criteria

The Application will assess the Facility's consistency with the smart growth criteria as defined in ECL § 6-0107(2). The Facility does not include any infrastructure that will promote or facilitate secondary growth or sprawl as specified in this law.

2.28 EXHIBIT 28: ENVIRONMENTAL JUSTICE (16 NYCRR § 1001.28)

2.28.1 Discussion

Exhibit 28 of the Article 10 Application requires the Applicant to provide sufficient information for the NYSDEC and other agencies (e.g., NYSDOH, NYSDPS) to assess the potential impact of the Facility on Environmental Justice (EJ) communities. The intent of an EJ evaluation is to identify whether there are any EJ communities within the applicable study area and, if yes, to determine whether the construction and operation of the Facility will result in significant and disproportionate adverse environmental impacts to the EJ communities identified.

As established in NYSDEC Commissioner Policy 29 on Environmental Justice and Permitting, EJ areas are U.S. Census block groups that have populations that meet or exceed at least one of the following statistical thresholds:

- At least 51.1% of the population in an urban area reported themselves to be members of minority groups; or
- At least 33.8% of the population in a rural area reported themselves to be members of minority groups; or
- At least 23.59% of the population in an urban or rural area had household incomes below the federal poverty levels.

The requirements governing EJ analyses for major electric generating facilities regulated under Article 10 are set forth in 6 NYCRR Part 487. Consistent with the criteria set forth in 6 NYCRR § 487.4, the Applicant has defined the "Impact Study Area" for the Facility as the area within a 0.5-mile radius of the Facility Site. The nature, scope, and magnitude

of the environmental impacts anticipated as a result of the construction and operation of the Facility guided the Applicant's decision to select the default study area of 0.5 miles set forth in 6 NYCRR § 487.4 for the Facility.

Figure 10 displays potential EJ areas in the vicinity of the Facility. Based on 2014-2018 American Community Survey (ACS) data, the nearest EJ area is Census Tract 364.02, Block Group 2, located approximately 7.73 miles northeast of the Facility Area in the Town of Chautauqua. There are no potential EJ areas within the Impact Study Area, therefore no analysis of the impact of construction and operation of the Facility on EJ areas is required under Article 10. Moreover, given (1) the distance between the Facility Area and the nearest EJ Area and (2) the nature of the environment impacts associated with solar energy generating facilities, the Facility is not expected to have any impact on the EJ area identified, let alone result in "significant and adverse disproportionate environmental impacts" on that area. Therefore, the EJ analysis outlined in 6 NYCRR § 487.6 and 16 NYCRR § 1001.28 is not required for the Facility and will not be provided in the Application. The Application will, however, explain the basis for the Applicant's determination that an EJ analysis is not required for the Facility.

2.29 EXHIBIT 29: SITE RESTORATION AND DECOMMISSIONING (16 NYCRR § 1001.29)

2.29.1 Discussion

Solar power facilities have an expected useful life of up to 40 years (NYSUN, 2019). At the end of its useful life, the Facility will be decommissioned, and the areas hosting Facility components will be restored. No adverse impacts to the future use of parcels hosting the Facility are expected as a result of Facility construction or operation. The proposed Facility Area includes undeveloped agricultural lands, fallow lands, timber lands, as well as rural residential parcels. Upon decommissioning of the Facility, open agricultural lands or fallow lands where Facility components were sited will again be available for agricultural or other use. Some tree clearing on timber lots and other forested land will be required for placement of solar panels and other Facility components. The locations and extent of anticipated tree clearing will be described in the Application. The forested areas cleared during construction could be reclaimed following decommissioning of the Facility and returned to active timberlands. The Facility is not anticipated to require significant grading for installation; the extent of grading will be described in the Application. Disturbed areas will be planted with native seed mixes or allowed to return to their use prior to Facility construction.

2.29.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.29 of the Article 10 regulations, Exhibit 29 of the Application shall contain the following information:

(a) Performance Criteria

A statement of the performance criteria proposed for the restoration or decommissioning of the Facility, including a discussion of why the performance criteria are appropriate. The statement will address:

- safety and the removal of hazardous conditions;
- environmental impacts;
- aesthetics;
- salvage and recycling;
- potential future uses for the site; and
- the useful life of the Facility.

(b) Site Decommissioning and Restoration Plan

The Application will include a Site Restoration and Decommissioning Plan following NYSDAM guidelines (NYSDAM, 2019) on agricultural lands and all applicable local, state, and federal regulations, including provisions requiring/demonstrating:

- Decommissioning will be triggered if the Facility is non-operational for a continuous period of 12 months, unless granted an extension by NYSDPS and the Town of Ripley or a force majeure is in effect;
- All above-ground structures, including PV panels, racking, inverters, energy storage systems, fencing, poles, and the collection substation addition, will be removed. Underground collection lines buried less than 48-inches must be removed by means causing the least amount of disturbance possible. Buried collection lines at a depth of 48 inches or more will be de-energized and remain in place, unless otherwise agreed by the landowner;
- Access roads within agricultural areas will be removed, unless otherwise agreed by the landowner;
- To the extent practicable, the Applicant will leave in place any access roads, fences, gates, buffer plantings, and/or buildings which the landowners asked to retain following decommissioning of the Facility;
- To the extent practicable, ground disturbance during decommissioning will be minimized and the site will be restored to its original condition, including re-seeding soil areas with native and/or suitable plant species. In the event the lands are meant to be returned to agricultural production, the landowner will be responsible for re-seeding the lands.
- Solid and hazardous wastes generated during decommissioning will be recycled or disposed of in accordance with applicable local, state, and federal regulations;

- The Applicant will provide written notification to the Town and to impacted landowner(s) at least two weeks prior to the commencement of decommissioning and site restoration activities;
- The type of financial assurance secured by the Applicant for the purpose of adequately performing decommissioning will be described. The value of the financial assurance will be based on a Professional Engineer's certified estimate of decommissioning cost, less the expected salvage value and/or resale value of components. The Plan will include clear instructions for the Town as to how it will can access the financial assurance should the Applicant fail to decommission the Project in accordance with the Plan.
- A representative schedule for conducting decommissioning and site restoration activities will be included;
- The Plan will be binding upon the Applicant, or any of its successors, or assigns; and
- The Plan will include a provision which ensures appropriate Town officials are granted access to the Facility Site, pursuant to reasonable notice to the Applicant, to inspect the completed decommissioning activities.

Additional detail regarding decommissioning of the Facility and restoration will be provided in the Application.

(c) Decommissioning/Restoration Agreements Between Applicant and Landowners

All Facility components will be located on private land under lease and/or purchase agreement with the landowners, and all leases with private landowners do, or will, contain a provision on decommissioning. Although the specific terms of these lease agreements are confidential, decommissioning provisions in the leases outline a plan substantially similar to the one described above. Information on the method and schedule for updating the cost of decommissioning and restoration, the method of ensuring funds will be available for decommissioning and restoration, and the method by which the Facility will be decommissioned and the site restored will be provided in the Application.

(d) Nuclear Power Facilities

This section is not applicable to the proposed Facility and therefore will not be addressed in the Application.

2.30 EXHIBIT 30: NUCLEAR FACILITIES (16 NYCRR § 1001.30)

The proposed Facility is not a nuclear facility, and as such, the requirements of 16 NYCRR § 1001.30 are not applicable and will not be addressed in the Article 10 Application.

2.31 EXHIBIT 31: LOCAL LAWS AND ORDINANCES (16 NYCRR § 1001.31)

2.31.1 Discussion

The Facility will be located entirely within the Town of Ripley, Chautauqua County, New York. Throughout the development of the Project, the Applicant will consult with the host municipalities on a range of issues, including identifying local laws and ordinances that are relevant to the Facility. For purposes of identifying local laws for this PSS, the Applicant has reviewed all resources available online, including the Town of Ripley Zoning Law (available on the Town's website), the Chautauqua County laws (available on the County Legislature's website) and the Town laws adopted since January 1, 1998 that are posted on the New York Department of State's Local Law Search website. The Applicant will continue to work with the Town and County to identify local laws potentially applicable to the Project.

The Town of Ripley has adopted local regulations specifically addressing solar and wind systems as part of the Town's Zoning Law. Although the Town's Zoning Law does not specifically address battery energy storage systems, the Town is in the process of developing regulations and has adopted a three-month moratorium on the installation of BESS in the interim.

This PSS reflects the local laws as they existed at the time of the submission and is intended to identify the areas of local laws relevant to the proposed Facility. However, the Application will account for any amendments or additional local laws enacted in the host municipality between the submission of this PSS and the Application. The list provided below is intended to give a general overview of the types of local regulations which are potentially applicable to the Facility as proposed, and the areas of local law which will need to be discussed further in the Application.

2.31.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.31 of the Article 10 regulations, Exhibit 31 of the Application will contain the following information:

(a) List of Applicable Local Ordinances of a Procedural Nature

The Application will include a list of all applicable local laws and ordinances of a procedural nature that would be potentially applicable to the Facility in the absence of Article 10. The list below provides a preliminary identification of such laws and ordinances. This list will be updated when the Application is submitted should any changes occur in the intervening months and/or if applicable additional laws or ordinances are identified based on further consultation with the local governments. Generally, it is not known at this early stage whether the Facility will trigger certain identified regulations listed below; the list is meant to provide a broad overview based on an initial screening of Town and county laws. These provisions are included because of their potential application to the

Facility, but the Facility layout set forth in the Application may not include components or aspects which trigger some of the requirements identified below.

- Town of Ripley Zoning Law
  - Section 620, Signs
  - Section 620, Solar and Wind Systems. Note: The letters refer to the relevant subsection of Ripley Zoning Law
    - A. Solar or Wind Permit and Placement
    - B. Notification
    - D. Minimum Requisites for Application Submission and County Referral
    - D.6 Approval Standards for Large-Scale Solar Systems as Special Use
    - D.7 Abandonment and Decommissioning
  - Section 703, Zoning Permits
  - Section 905, Mandatory Referral (General Municipal Law 239-L & M)
  - Section 1101, Duties: Amendments and Special Use/Site Plan
    - B. Special Use Permit / Site Plan Review
- Administration and Enforcement of New York State Building and Fire Code, Local Law No. 4, 2006, as amended
- Adoption of Amendment to Town of Ripley Comprehensive Plan, Local Law No. 1, 2017.

In addition, in 2020, the Town of Ripley adopted Local Law 2020-1, Adoption of a Three-Month Moratorium on the Development of Energy Storage Facilities within the Town of Ripley. The law, which took effect on April 22, 2020 (the date of filing with the Department of State), declares a three-month moratorium on the establishment, placement, construction, enlargement, and erection of a BESS in the Town.

- Chautauqua County Department of Public Facilities, Division of Transportation and Engineering
  - Right-of-Way (ROW) Permit
  - Special Hauling Permit: Over dimensional and/or Overweight (OD/OW) Permit
  - Permit to Exceed the Weight Limit as Posted (EX)

- Chautauqua County Sanitary Code
  - Article I: Definitions and General Provisions
    - Section 9: Permits Generally

- Article IV: Private Sewage

(b) Local Procedural Provisions Requiring Siting Board Authorization

The Application will include a list of all local procedural requirements requiring Siting Board authorization. By law, all local procedural requirements are supplanted by Article 10 unless otherwise expressly authorized by the Siting Board. At this time, the Applicant has not identified any local procedural requirements requiring Siting Board authorization.

To the extent the Town and/or County requires any permit or approval to perform work within municipal rights-of way, or on municipally owned roads, the Applicant may request that the Board grant the local government the authority to issue such permits or approvals, separately or in connection with a local Road Use Agreement, if one is proposed. The Applicant will work with the Town and County to understand the procedural and substantive requirements for highway work permits and any issues of local concern.

(c) Identification of Municipal Agencies Qualified to Review and Approve Building Permits

The Application will identify any municipal agencies qualified to review and approve building permits for the Facility. Town Code Enforcement Officers are generally responsible for reviewing and approving local building permits and ensuring compliance with the New York State Fire Prevention and Building Code and Energy Conservation Code of New York State. However, towns may choose to contract with qualified consultants to assist their review and approval of a given project. The Applicant will work with the Town of Ripley to identify the individuals and/or entities who will be responsible for reviewing the Project for the Town. Any arrangements between the Applicant and municipality regarding the scheduling of such consultants will be described and included as part of the Article 10 Application.

The Chautauqua County Department of Health is a full-service health department, which manages permitting and regulations related to sanitary septic systems and drinking water wells. If the Facility includes a new O&M building, it will likely require a septic system and/or drinking water well, in which case, the Applicant may request that the Siting Board authorize the County to issue these ministerial permits, to the extent they are required. The Application will provide further information on the potential need an individual water or septic system as part of the Project.

(d) List of Applicable Local Ordinances and Laws of a Substantive Nature

Below is a preliminary list of local laws and ordinances of a substantive nature that may be applicable to the Facility. Generally, it is not known at this early stage whether the Facility will trigger any of the identified regulations listed below; the list is meant to provide a broad overview based on an initial screening of Town laws. These provisions are included because of their potential application to the Facility, but the Facility layout set forth in the Application may not include components or aspects which trigger some of the requirements identified below. More generally, further review of the laws in relation to the Facility may result in a determination that a particular provision is not applicable.

- Town of Ripley Zoning Law
    - Section 505, Visibility at Intersections
    - Section 507, Topsoil Excavation
    - Section 603, Cesspools and Septic Tanks
    - Section 610, Signs
    - Section 618, Off-Street Parking (for operations)
    - Section 620, Solar and Wind Systems. Note: The letters refer to the relevant subsection of Ripley Zoning Law § 620.
        - A. Solar or Wind Permit and Placement
        - D.6.C. Substantive requirements relating to approval for large-scale solar systems as special use
        - D.7. Abandonment and Decommissioning
    - Section 628, Trash Storage

- Chautauqua County Sanitary Code
    - Article IV: Private Sewage
    - Article VIII: General Sanitation
        - Section 8, Temporary Toilet Facilities on Construction Sites
    - Article IX: Offensive Material
    - Article XIX: Refuse Disposal
        - Section 4, Transportation of Refuse

(e) List of Substantive Local Ordinances/Laws that the Applicant Requests the Board Not Apply

The Application requires a list of substantive local ordinances/laws that the Applicant requests the Board not apply. At this time, the Applicant anticipates complying with all substantive local laws and ordinances to the greatest extent practicable and has not identified any specific substantive local laws for which it seeks a waiver. The Applicant will work with the Town of Ripley to identify potential substantive provisions of local law for which it may need to seek a waiver from the Siting Board, and will include those provisions, if any, in the Application, together with the justification required under Article 10 to support a waiver of local laws or ordinances.

(f) List of Procedural Local Ordinances/Laws Related to Use of Water, Sewer or Telecommunications Lines

If an O&M building is constructed for the Facility, the Application will include a review of applicable local procedural ordinances and laws, if any, regarding the installation or water, sewer, or telecommunication facilities. See Section (b) above for procedural local ordinances or laws related to the interconnection of water, sewer, or telecommunications lines.

(g) List of Substantive Local Ordinances/Laws Related to Water, Sewer or Telecommunications Lines

If an O&M building is constructed for the Facility, the Application will include a review of local substantive ordinances and laws, if any, regarding the installation of water, sewer, or telecommunication facilities. See Section (d) above for substantive local ordinances or laws related to the interconnection of water, sewer, or telecommunications lines.

(h) List of Substantive Local Ordinances/Laws Related to Water, Sewer of Telecommunications Lines that the Applicant Requests that the Board Not Apply

At this time, the Applicant does not anticipate requiring waivers of local laws or ordinances relating to water, sewer or telecommunication facilities that will apply to the Facility. If circumstances change, the need for waivers from the relevant standards will be addressed in the Application.

(i) Summary Table of Substantive Local Requirements

The Application will include a summary table of substantive local requirements, laws, and ordinances identified in Sections (d) and (g) above. The table will identify and summarize the requirement in the first column and discuss the Project's compliance with the requirement in the second column.

(j) Zoning Designations

The Application will identify the zoning designation or classification of all lands within the proposed Facility Site and specify whether the proposed Facility is a permitted use. If the zoning ordinance indicates that the proposed Facility is a permitted use at the proposed site subject to the grant of a special exemption, the Application will include a statement of the criteria in the zoning ordinance by which qualification for such exemption is to be determined.

The Town of Ripley has adopted zoning regulations which include local requirements for solar and wind systems (Section 620 of the Town of Ripley Zoning Law). Large-scale solar energy systems, such as the proposed South Ripley Solar Facility, are permitted through the issuance of a special use permit within R-1, R-2, C-1 and C-2 zones and are permitted by right with a zoning permit in RURA and M/I zones.

2.32 EXHIBIT 32: STATE LAWS AND REGULATIONS (16 NYCRR § 1001.32)

2.32.1 Discussion

Throughout development of the Project, the Applicant will coordinate with State agencies and authorities to identify all state laws and regulations that may be relevant to construction and operation of the Project. To the extent the substantive requirements below are applicable to the Project, the Applicant intends to comply with such requirements unless specifically requesting relief from the Siting Board.

2.32.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.32 of the Article 10 regulations, Exhibit 32 of the Application will contain the following information:

(a) List of State Approvals, Consents, Permits, Certificates, or Other Conditions of a Procedural Nature

The Applicant has compiled a preliminary listing of state approvals, consents, permits, or other conditions of a procedural nature required for the construction or operation of the proposed Facility, as summarized in Table 32-1 and Table 32-2. Table 32-1 identifies state approvals, consents, permits, certificates, and other procedural requirements relevant to the Project and how they will be addressed in the application (e.g., supplanted by Article 10, issued by the Siting Board or other agency). Table 32-2 identifies permits the Applicant seeks to have issued by the issuing agency.

Table 2.32-1. Preliminary List of State Approvals, Consents, Permits, Certificates or Other Conditions that are Procedural in Nature

State Agency	Requirement	Discussion
NYSOPRHP	Consultation Pursuant to §14.09 of the New York State Historic Preservation Act	The Applicant will consult with the NYSOPRHP to ensure compliance with §14.09 of the New York State Historic Preservation Act.
NYSDEC	Water Quality Certification (WQC), Section 401 of the Clean Water Act	The request for a Section 401 WQC will not be filed until a U.S. Army Corps of Engineers permit application is filed (if necessary). Under Article 10, the WQC must be issued by the Siting Board.
NYSDEC	Permit for Protection of Waters, New York Environmental Conservation Law (ECL) Article 15, 6 NYCRR Part 608	This permit is required for the disturbance of the bed or banks of a State-protected stream or other watercourse and/or excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands. If this permit is required, the procedural requirements are supplanted by Article 10.
NYSDEC	Permit for Freshwater Wetlands ECL Article 24, 6 NYCRR Part 663	This permit is required for the crossing of regulated freshwater wetlands or adjacent areas by Facility components. Regulated freshwater wetlands are designated and mapped by the NYSDEC and are generally 12.4 acres or larger. The 100-foot adjacent area surrounding each NYSDEC wetland is also regulated to provide protection for the wetland. If this permit is required, the procedural requirements are supplanted by Article 10.
NYSDEC	Endangered and Threatened Species Incidental Take Permit ECL Article 11, 6 NYCRR Part 182	The NYSDEC may issue a permit to "take" any species listed as endangered or threatened by New York State. This permit may be required if, in consultation with state agencies, it is determined that the Project could result in incidental take of any State-listed endangered or threatened fish or wildlife species from occupied habitat. If this permit is required, the procedural requirements are supplanted by Article 10.
NYSDEC	SPDES General Permit for Stormwater Discharges from Construction Activity	This permit is required for construction projects that disturb one or more acres of soil (less in certain circumstances). This permit is issued under authority delegated to New York State under the federal Clean Water Act. As a result, consistent with 16 NYCRR § 1001.32(a), this permit will be issued by the NYSDEC independent of the Article 10 process and is not supplanted by Article 10.
New York State Public Service Commission	Certificate of Public Convenience and Necessity NY PSL § 68	No electric corporation shall begin construction of an electric plant, having a generating capacity of at least 80 MW, without first having obtained the permission and approval of the commission. This approval is not supplanted by Article 10.

Consistent with 16 NYCRR § 1001.32(a), most state procedural requirements are supplanted by PSL Article 10, except for permits issued by NYSDEC that are authorized pursuant to Federal recognition of State authority, or pursuant to federally delegated or approved authority, in accordance with the Clean Water Act, the Clean Air Act and the Resource Conservation and Recovery Act, and permits pursuant to Section 15-1503, Title 9 of Article 27, and Articles 17 and 19 of the ECL.

Table 2.32-2. List of All State Approvals Related to the Construction of the Facility to be Obtained from Issuing Agency

State Agency	Requirement	Discussion
NYSDOT	Highway Work Permit NYS Highway Law, Article 3, Section 52	A highway work permit may be required by NYSDOT. This includes permits for crossing state highways, using highway for access, or for curb cuts.
NYSDOT	Special Use Permit for Oversize/Overweight Vehicles (OS/OW), New York State Vehicle and Traffic Law § 385	Special hauling permits from the NYSDOT are required for loads that exceed legal dimensions or weights. Although these ministerial permits are supplanted by Article 10, the Applicant will request that the Siting Board authorize the NYSDOT to issue these permits, if needed.
NYSDOT	Highway Use and Occupancy Permit, 17 NYCRR Part 131	The installation of utility facilities, including transmission lines, in highway rights-of-way must be carried out in accordance with the terms and conditions of a highway use and occupancy permit issued by NYSDOT. The proposed Facility may need such a permit to construct improvements in the New York State highway ROW. These permits are not supplanted by Article 10 to the extent they relate to State property rights.

As indicated in the table above, the Applicant may request that the Siting Board authorize the NYSDOT to issue the applicable highway work permit(s) and other ministerial permit(s) associated with road work in State highways or rights-of-ways. Generally, these approvals are issued immediately prior to construction and are submitted by the contractor. It is anticipated that the information required to be included in the submission will not be available until after a contractor is selected and post-Certification. The Applicant will provide an additional explanation of why such an authorization would be desirable and/or appropriate in the Article 10 Application.

(b) List of Procedural State Approvals/Permits/Etc. that the Applicant Requests the Board Not Apply

The Applicant does not anticipate any procedural state approvals/permits/etc. that the Applicant will request the Board not apply. However, should any be identified, they will be discussed in the Application.

(c) List of State Approvals, Consents, Permits, Certificates, or Other Conditions of a Substantive Nature

The Applicant will construct and operate the Facility in a manner that conforms to all State substantive requirements for those approvals, consents, permits, certificates, or other conditions, to the greatest extent practicable. Table 32-1 above lists the substantive state requirements, which may or may not be applicable to the Facility.

(d) Summary Table of Substantive State Requirements

The substantive state requirements preliminarily identified above in (c) will be presented in a table in the Article 10 Application and formatted per the associated requirements.

(e) State Approvals/Permits/Etc. for Offsite Features Not Encompassed by Major Electric Generating Facility

To the extent that offsite ancillary features, which are not considered part of the Major Electric Generating Facility, are needed, a list of all state approvals, consents, permits, certificates, or other conditions for the construction or operation of said offsite ancillary features will be listed in the Article 10 Application. The Applicant does not anticipate that the proposed Project will include offsite interconnections or ancillary features not otherwise encompassed by the Major Electric Generating Facility, which would make this subsection inapplicable.

2.33 EXHIBIT 33: OTHER APPLICATIONS AND FILINGS (16 NYCRR § 1001.33)

2.33.1 Discussion

This section of the Application is intended to capture those submissions and filings which do not fall within the jurisdiction of the Siting Board but are nevertheless directly related to the construction or operation of the Project. In this case, such filings are limited to federal permits and approvals which may be required for the construction or operation of the Facility, but which must be issued by federal agencies, and not by the State Siting Board.

2.33.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.33 of the Article 10 regulations, Exhibit 33 of the Application will contain the following information:

(a) Other State or Federal Applications or Filings Concerning the Subject Matter of the Proceeding

The Applicant does not have, and is not aware of, any other application or filing pending before any governmental agency, department or court which concerns the subject matter of this proceeding (i.e., South Ripley Solar Project). Should that change, additional information will be added to the Application.

(b) Federal Permits, Consents, Approvals, or Licenses Required for Construction or Operation

Table 2.33-1 summarizes any anticipated federal permit, consent, approval, or license needed for the proposed Facility. This information will be confirmed and/or updated in the Article 10 Application.

Table 2.33-1. Federal Permits and Approvals that May be Applicable to the Facility

Agency	Anticipated Application Date[1]	Description of Permit or Approval Required
U.S. Army Corps of Engineers	TBD	• Section 404 Clean Water Act Nationwide Permit for Placement of Fill or Dredge in Federal Jurisdictional Wetlands/Waters of the U.S.

[1] The anticipated application submittal date will be identified in the Article 10 Application.

2.34 EXHIBIT 34: ELECTRIC INTERCONNECTION (16 NYCRR § 1001.34)

2.34.1 Discussion

Interconnection of the Facility to the electric grid requires an understanding of how the electricity gets converted and transformed before it ultimately gets to the grid. The PV panels produce power at a low direct-current (DC) voltage and are connected along wires (called "strings") which, in turn, connect to inverters at up to 1500 Volts (V) DC. The inverters convert the power from DC to alternating current (AC). Co-located with the inverters are medium-voltage (MV) transformers that will increase the AC voltage output from the inverters to 34.5 kV (i.e., the collection system voltage). A 34.5 kV collection system, comprised of underground cables, will transmit the power from the MV transformers to the collection substation. In areas where deemed necessary, or to reduce adverse impact, overhead 34.5 kV collection lines may be used. The collection substation will step-up the voltage from 34.5 kV to 230 kV with the use of at least one main power transformer, which allows the power to be delivered to the POI. Final interconnection with the NYISO transmission system will require either a direct connection with the existing South Ripley 230 kV substation (i.e., the POI) or the development of a new 230 kV switchyard and three-breaker ring bus adjacent to the existing South Ripley 230 kV substation. The Applicant anticipates providing additional detail regarding potential transmission system interconnection facilities once further interconnection studies have been completed by the NYISO regarding this Facility and other facilities with potential electrical impacts on the transmission grid at the POI location (namely NYISO Queue Position 684). Energy storage is also proposed as part of the Facility. The energy storage system (NYISO Queue Position 1014) will be collocated within the Facility Site and will connect to the POI utilizing shared facilities.

The types, design standards, and descriptions of the electric interconnection components will be included in the Application. All components will meet applicable state and federal codes and specifications. Direct burial methods using a trencher, cable plow, excavators, and/or similar equipment, will generally be used during the installation of the underground electrical collection system. Direct burial will involve the installation of bundled cable (electrical and fiber optic bundles of insulated cable) into an excavated trench or directly into a "rip" in the ground created by the plow. The trench may disturb an area up to approximately 36 inches wide, depending on the number of circuits required, with bundled cable installed to a minimum depth of 36 to 48 inches. If more than one electrical circuit is required in a trench,

a larger width will be required. Side-cast (i.e., spoils) material will be replaced as backfill into the cable trenches with a small excavator or small bulldozer. All areas will be returned to approximate pre-construction grades and restored following installation of the collection lines. When necessary, collection lines may be installed using horizontal directional drilling. Further information regarding HDD will be presented in Exhibit 21, and preliminary locations of HDD will be shown on the site plans in Exhibit 11.

2.34.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.34 of the Article 10 regulations, Exhibit 34 of the Application will contain the following information:

(a) Design Voltage and Voltage of Initial Operation

The Application will include the number and specifications for the inverters and medium voltage transformers, the length and anticipated number of circuits for the electrical collection system, and the design voltage and voltage of initial operation.

(b) Type, Size, Number and Materials of Conductors

The Application will include the type, size, number, and materials of conductors. Additionally, this Exhibit will describe the length of the collection system, broken down by anticipated length of overhead (if any) and underground collection lines.

(c) Insulator Design

The Application will include a description of insulator design, including the typical utility-grade ceramic/porcelain, glass, or polymer insulators to be used, and a statement that overhead collection lines (if any) will be designed and constructed in accordance with ANSI C29.

(d) Length of Transmission Line

The Facility will not include construction of a new high-voltage transmission line. Therefore, 16 NYCRR § 1001.34(d) will not be addressed in the Article 10 Application.

(e) Typical Dimensions and Construction Materials of Towers

The Application will include a description of any overhead collection lines as well as any line support structures between the collection substation, POI switchyard and existing transmission line, which could be required in some areas where geologic conditions or the potential for buried cultural artifacts prevents underground installation.

(f) Design Standards for Towers and Tower Foundations

The Application will include design standards for any overhead line support structures and foundations, including type of tower and tower foundations, if applicable.

(g) Type of Cable and Design Standards for Underground Construction

The Application will specify the type of cable system to be used for underground construction and the design standards for that system.

(h) Profile of Underground Lines

For underground construction, the Application will include a typical profile drawing of the underground collection cable indicating the depth of the cable. Oil pumping stations and manholes are not anticipated.

(i) Equipment to be Installed in Substations and Switching Stations

The Application will describe the POI equipment and collection substation and explain the necessity of the new POI bay or switching station, including a plan/overview of the POI and collection substation.

(j) Terminal Facility

The Application will describe any terminal facilities expected to be constructed for the Facility (POI and the collection substation).

(k) Need for Cathodic Protection

The Application will discuss the potential need for cathodic protection measures.

2.35 EXHIBIT 35: ELECTRIC AND MAGNETIC FIELDS (16 NYCRR § 1001.35)

2.35.1 Discussion

Electric and magnetic fields (EMFs) are produced by power lines, electric wiring, and electric equipment and appliances. The strength of a magnetic field is dependent on equipment design and current flow while the strength of an electric field increases along with increasing voltage. High magnetic fields are associated with larger electric systems, including electric power generation, transmission, and use. Exposures to high EMF frequencies have the potential to create human health risks and therefore the existing and proposed EMFs associated with the construction

and operation of a major electric generating facility, along with potential impacts, must be evaluated. According to the New York Public Service Commission Standards, the maximum allowable limits are 200 milligauss (mG) for magnetic fields and 1.6 kilovolt/meter (kV/m) for electric fields at the edge of the ROW at one meter above ground level. The Applicant will prepare an EMF study for the South Ripley Solar Facility. The EMF Study will identify segments of electrical lines that will have unique EMF characteristics, depict these segments on aerial photos or drawings, and indicate the distance to the nearest residence or occupied building in each ROW segment. The EMF Study will also model the strength and locations of EMFs that will be generated by the Facility.

2.35.2 Proposed Content of the Application

Consistent with the requirements of Section 1001.35 of the Article 10 regulations, Exhibit 35 of the Application will include the following information:

(a) Identification of ROW Segments with Unique EMF Characteristics

The Application will identify every ROW segment with unique EMF characteristics. None of the electrical lines from the inverters/medium voltage transformers to the collection substation/POI bay will exceed 34.5 kV; therefore, the Facility will not have a ROW associated with high voltage transmission lines. However, the Application will identify 34.5 kV ROW segments, both overhead and underground, with unique EMF characteristics, which will be evaluated in the EMF study. Modeling calculations will identify existing EMFs and future EMFs that will result from construction and operation of the Facility. For the purpose of calculations, the ROW is anticipated to be approximately 30 feet (15 feet from centerline) for all segments. The Application will identify the name and calculation number of each segment.

(b) Base Case and Proposed Cross-Sections for Identified ROW Segments

For each identified ROW segment, the Application will provide both base case (where existing facilities are present) and proposed cross sections that will show, to scale, the following features for each of the unique ROW segments:

(1) Any known overhead electric transmission, sub-transmission, and distribution facilities, showing structural details and dimensions and identifying phase spacing, phasing, and any other characteristics affecting EMF emissions;
(2) Any known underground electric transmission, sub-transmission (e.g., 34.5 kV collection system), and distribution facilities;
(3) Any underground gas transmission facilities;
(4) ROW boundaries;

(5) Structural details and dimensions for all built and proposed structures (dimensions, phase spacing, phasing, and similar categories) and an overview map showing locations of structures.

(c) Enhanced Aerial Photos/Drawings

The Application will include a set of aerial photos/drawings showing the exact location of each unique ROW segment and each cross-section and any residences or occupied non-residential buildings within the ROW segments. If no residence or occupied building is within the ROW segment, the distance between the edge of the ROW segment and the nearest residence or occupied building will be indicated.

(d) Electric and Magnetic Field Calculation Tables and Field Strength Graphs

The Application will include an EMF Study with calculation tables and field strength graphs calculated at one meter above ground level with 5-foot measurement intervals depicting the width of the entire ROW, extending to 500 feet from the edge of the ROW on both sides for each unique ROW cross section. The EMF Study will include information for locations where the maximum current flow will result from co-located collection lines during peak load conditions. The EMF Study will also involve and/or include:

(1) The study will be signed and stamped/sealed by a licensed professional engineer registered and in good standing in the State of New York.
(2) Identification of the software to be used in the EMF study.
(3) A model of the strength and locations of electric fields to be generated by the Facility. Modeling will be conducted at rated voltage, and the measurement location and interval will be described in the Application. Electric field strength graphs depicting electric fields along the width of the entire ROW and out to 500 feet on either side of the Facility will be included in the EMF study. Digital copies of all input assumptions and outputs for the calculations will be provided under separate cover.
(4) A model of the strength and locations of magnetic fields to be generated by the Facility. Modeling will be conducted at rated voltage, and the measurement location and interval will be described in the Application. There is no expected change in amperage under any of the following conditions: summer normal, summer short term emergency, winter normal, and winter short term emergency. Therefore, the magnetic field modeling to be performed will be applicable to any of these conditions. Magnetic field strength graphs depicting magnetic fields along the width of the entire ROW and out to 500 feet on either side of the Facility will be included in the EMF study. Digital copies of all input assumptions and outputs for the calculations will be provided under separate cover.
(5) There is no expected change in amperage in initial maximum average load compared with maximum average load 10 years after initiation of operation. Therefore, the modeling of magnetic fields described

above (including both the graphs and tables included in the EMF study) will be applicable to both initial operation and operation after 10 years.

(6) A "base case" model of the maximum average annual load currently estimated to occur on the existing power lines without the proposed Facility, including field calculation tables and field strength graphs.

2.36 EXHIBIT 36: GAS INTERCONNECTION (16 NYCRR § 1001.36)

The proposed Facility will not require gas interconnection facilities, and as such, the requirements of 16 NYCRR § 1001.36 are not applicable and will not be included in the Article 10 Application.

2.37 EXHIBIT 37: BACK-UP FUEL (16 NYCRR § 1001.37)

The proposed Facility will not require back-up fuel, therefore, the requirements of 16 NYCRR § 1001.37 are not applicable and will not be included in the Article 10 Application.

2.38 EXHIBIT 38: WATER INTERCONNECTION (16 NYCRR § 1001.38)

The proposed Facility will not require water interconnection facilities, therefore, the requirements of 16 NYCRR § 1001.38 are not applicable and will not be included in the Article 10 Application. The Applicant anticipates that water supply needs during construction and for the proposed O&M and BESS facilities will be satisfied through use of a private water well, which would be drilled by a NYSDEC-approved water well driller. The Applicant will work with the Chautauqua County Department of Public Health during this process.

2.39 EXHIBIT 39: WASTEWATER INTERCONNECTION (16 NYCRR § 1001.39)

The proposed Facility will not require wastewater interconnection facilities, therefore, the requirements of 16 NYCRR § 1001.39 are not applicable and will not be included in the Article 10 Application.

2.40 EXHIBIT 40: TELECOMMUNICATIONS INTERCONNECTION (16 NYCRR § 1001.40)

2.40.1 Discussion

It is not anticipated that the Facility will require telecommunication interconnections as defined by 16 NYCRR § 1000.2. It is likely that data will be transmitted to National Grid and others using existing telecommunications facilities since the area is generally served by existing cellular and broadband services. However, the Applicant will conduct a review of existing communications facilities to determine whether new facilities will be required to meet off-site communication needs prior to the Application submittal. If any additional facilities are identified, a detailed description of such facilities will be provided in the Application.

2.40.2 Proposed Content of the Application

If a telecommunications interconnection is proposed for the Facility, consistent with the requirements of Section 1001.40 of the Article 10 regulations, Exhibit 40 of the Application will contain the following information:

(a) Operational Data Submitted to National Grid/NYISO

The Application will include information on the Facility's meter location, the means of providing operational data to National Grid/NYISO, and the secure communications network for this operational data. It is anticipated that the Facility's operational generating data will be transmitted to National Grid/NYISO through either an underground conduit or duct from the collection substation or a fiber wire on an overhead transmission or sub-transmission (e.g., 34.5 kV) circuit into the POI, and will include generation data (MW output, mega volt amps (reactive) output, circuit breaker statuses, etc.) and environmental data.

(b) Facility Operations Communications Method

The Application will include an analysis demonstrating that there will be sufficient network capacity to support the requirements of the Facility. This analysis will include information regarding establishment of a high-speed internet connection and the means of transmitting the necessary data and other information to the appropriate parties for monitoring and reporting purposes.

(c) Status of Negotiations

The Application will include a discussion of the status of negotiations with communications providers, 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 by the provider, if applicable. Such negotiations have not yet been initiated for the Facility because, at this time, the need for these agreements has not been identified. Although not anticipated, any changes in status will be discussed in the Application.

2.41 EXHIBIT 41: APPLICATIONS TO MODIFY OR BUILD ADJACENT (16 NYCRR §1001.41)

The Applicant is not proposing to modify or build adjacent to an existing Article 10 facility, therefore, the requirements of 16 NYCRR § 1001.41 are not applicable and will not be included in the Article 10 Application.

3.0 SUMMARY AND CONCLUSIONS

This Preliminary Scoping Statement has been prepared in order to outline the scope and methodology of studies being performed for the proposed South Ripley Solar Project. This Preliminary Scoping Statement also provides a description of the proposed Facility to solicit further input from the various stakeholders and satisfy the requirements of 16 NYCRR § 1000.5(l).

The proposed Facility is a utility-scale PV solar project located in the Town of Ripley, Chautauqua County, New York, which will generate up to 270 MW of renewable energy with no operational emissions of pollutants, including greenhouse gases, and without using significant quantities of water or requiring the extraction of fuel. Proposed Facility components include PV panels, mounting systems, underground and/or overhead electrical collection lines, inverters, transformers, a battery energy storage system, a collection substation, a POI at the existing National Grid 230 kV Ripley Substation, access roads, fencing, a possible O&M building, and temporary laydown/construction areas. The proposed Facility Area (Figure 2) consists of approximately 4,510 acres of private land, which is primarily agricultural in use. The final Facility Site, where Facility components will ultimately be sited, will not use all the lands within the Facility Area but is anticipated to include approximately 2,000 acres.

The Applicant prepared a Public Involvement Program Plan in accordance with 16 NYCRR § 1000.4. The initial draft of the PIP was submitted to the Siting Board on August 30, 2019, comments on the PIP were received from the NYSDPS on September 30, 2019, and the PIP was updated, finalized, and filed by the Applicant on October 30, 2019. The PIP, as well as electronic copies of this PSS and other case documents, can be accessed, viewed, and downloaded on the online case record maintained by the Siting Board, and on the Facility-specific website maintained by the Applicant:

- http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=19-F-0560&submit=Search.
- www.southripleysolar.com

The Applicant has established a toll-free number (1-800-338-8905) to call with any questions and comments on the Facility. The Applicant has also held various public meetings/open houses, which provided answers to questions from area residents, as well as the following information:

- Facility and company fact sheet
- Article 10 Process
- Preliminary Facility Area Map

- An overview of anticipated economic benefits

The Applicant has provided paper copies of all major filings, as well as documents presented at the open houses, at the following repositories:

- Town of Ripley Town Clerk's Office
- Ripley Library
- Minerva Free Library

Following submission of this PSS, stakeholders and members of the public will have 21 days to review and comment on the document, and the Applicant will formally respond to those comments by filing a PSS Comment Response within 21 days thereafter. Within 60 days of this PSS filing, a pre-application conference is expected to be held, at which time the Presiding Examiners will consider requests for intervenor funding from municipalities and qualified local parties and will authorize the commencement of the voluntary pre-application Stipulations process, if pursued. The Applicant will continue to implement studies, outreach efforts, and information-gathering committed to in this PSS, and in preparation of the South Ripley Solar Facility Article 10 Application.

During the time between filing this PSS and submission of the Application, the Applicant intends to continue stakeholder outreach. The Applicant will send a mailing to all stakeholders prior to the submission of the PSS to provide an update on the Facility and invite comments during the 21-day comment period. The Applicant will continue municipal and stakeholder coordination prior to submitting the Application. Outreach efforts will be tracked in the meeting logs.

Section 2.0 (Content of Application) of this PSS has been organized in accordance with 16 NYCRR § 1001 (Content of an Application). Specifically, all sub-sections of Section 2.0 correspond directly to the exhibits outlined in 16 NYCRR § 1001. These subsections of the PSS identify numerous Facility-specific support studies that will be conducted and included in the Article 10 Application. These include, but are not limited to:

- Preliminary Emergency Action Plan
- Complaint Resolution Plan
- Preliminary Noise Impact Assessment
- Archaeological Surveys
- Historic Architectural Resources Survey
- Preliminary Geotechnical Investigation
- Invasive Species Control Plan

- Preliminary Stormwater Pollution Prevention Plan
- Preliminary Spill Prevention, Control and Countermeasure Plan
- Plant and Wildlife Species Inventory
- Wetland and Stream Delineation Report
- Route Evaluation Study
- Draft Decommissioning Plan
- Electric and Magnetic Field Study

As noted in Sections 1.0 and 2.0, the Applicant's ability to conduct extensive on-site investigations during the 2020 growing season may be affected by the ongoing COVID-19 public health crisis. The Applicant will continue consultations with appropriate agency personnel to determine suitable alternatives to extensive on-site investigations, if necessary.

Finally, the Applicant has filed this PSS in accordance with the requirements of 16 NYCRR § 1000.5(l). This PSS contains as much information on existing site conditions and potential impacts of the proposed Facility as is reasonably available at this stage in the Article 10 process. The Article 10 Application will expand on all topics introduced in this PSS and provide a detailed analysis of survey results and an evaluation of potential impacts of the Facility.

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Appendix A

PSS Filing Notice

South Ripley Solar Project
Town of Ripley, Chautauqua County, NY

NOTICE OF SUBMISSION OF PRELIMINARY SCOPING STATEMENT

ConnectGen Chautauqua County LLC ("ConnectGen" or "Applicant"), a subsidiary of ConnectGen LLC, is proposing to construct a major solar electric generating facility up to 270 megawatts ("MW") in capacity in the Town of Ripley, Chautauqua County, New York (the "South Ripley Solar Project," "Project" or "Facility"). To construct the Facility, the Applicant must obtain a Certificate of Environmental Compatibility and Public Need ("CECPN") from the New York State Board on Electric Generating Siting and the Environment ("Siting Board") pursuant to Article 10 of the New York Public Service Law and the Siting Board's rules (16 NYCRR Part 1000). This notice announces that on or about May 22, 2020, the Applicant will file a Preliminary Scoping Statement ("PSS"), pursuant to 16 NYCRR § 1000.5, which is designed to gather input from the public and interested agencies on the scope and methodology of studies to be conducted in support of a future CECPN application. The filing of the PSS will start a 21-day public comment period on the scope and methodology of the studies proposed for the South Ripley Solar Project.

The PSS filing marks the beginning of a formal public scoping process for the Project. The PSS document will, among other things, describe and identify: the environmental setting in the area where the Facility is proposed, the potential environmental and community impacts from construction and operation of the Facility, and anticipated benefits of the Facility for the environment and local community, including its contribution to achievement of New York's renewable energy generation and greenhouse gas emission reduction goals. The PSS will identify and describe the proposed environmental studies the Applicant plans to conduct during the Article 10 process in order to assess, among other things, potential impacts to land uses in the Facility area; public health and safety; ecological resources, protected species and habitats, and water resources; communications, transportation, and utilities; cultural, historical and recreational resources; visual impacts and screening; sound; and impacts on the statewide electrical system. Further, the PSS will outline potential measures to minimize environmental impacts from the Facility, as well as reasonable alternatives, other required permits/authorizations, applicable local laws, and other relevant information to be provided in the Article 10 Application.

The Facility will be constructed in the southern part of the Town of Ripley along the border with the Town of Mina. It will consist of rows of photovoltaic panels, approximately 12 feet in height and arranged in discrete subarrays dispersed throughout the Facility Site, as well as associated electrical collection lines, inverters, transformers, fencing, access roads, and temporary construction laydown yards. The Facility also may include a 20 MW battery storage component and an operation and maintenance building. The medium voltage collection system will aggregate the 34.5 kilovolt ("kV") output from the co-located inverters and transformers and deliver it to a new collection substation located immediately adjacent to National Grid's existing 230 kV Ripley Substation. A short transmission line will connect the collection substation to a point of interconnection at the Ripley substation, which will deliver power to the existing 230 kV Ripley to Dunkirk transmission line. More information on the proposed Facility can be found on the Siting Board's website under Case 19-F-0560, on the Project's website (https://www.southripleysolar.com), and at the local document repositories listed at the end of this notice.

Within 21 days after the filing of the PSS, any person, agency or municipality may submit comments on the PSS by serving such comments on the Applicant and filing a copy with the Secretary to the Siting Board at the addresses provided below. The Applicant will prepare a summary of the material comments and its reply within 21 days after the close of the comment period. Once the PSS is filed, the New York State Department of Public Service ("DPS") will assign Hearing Examiners, who are responsible for overseeing and mediating the scoping process. The Hearing Examiners will schedule a pre-application meeting, which will begin the process of mediating issues relating to the PSS (the "Stipulations process") and address the award of intervenor funding. Additional notice of the pre-application meeting will be published by the Examiners.

To facilitate participation by local municipalities and community groups, the Applicant will provide $94,500 (or $350 per MW) toward an intervenor fund, which will be disbursed by the Hearing Examiners to groups seeking assistance with expenses associated with their participation in the Article 10 process during the pre-application review phase. By law, at least fifty percent of these intervenor funds are reserved for host municipalities. Once the PSS is filed, the Hearing Examiners will issue a notice that such intervenor funds are available, will describe the kinds of expenditures which are eligible for receipt of those monies, and will provide instructions and a schedule for interested groups to apply for pre-application intervenor funds. Later in the Article 10 process, when the formal Article 10 Application is submitted, additional application-phase intervenor funding will be made available to facilitate municipal and party participation in the Application and Hearing phase.

Contact Information

To obtain information regarding the Project, please contact:

Isaac Phillips, Development Associate
1001 McKinney Street, Ste. 700
Houston, TX 77002
Toll-Free Phone: (800) 338-8905
Email: info@southripleysolar.com

Contact information for the DPS Public Information Coordinator:

James Denn, Public Information Coordinator
NYS Department of Public Service
3 Empire State Plaza
Albany, NY 12223-1350
(518) 474-7080
james.denn@dps.ny.gov

Hard copies of the PSS and related Project documents are available for review at the following local document repositories: Town of Ripley Town Clerk's Office, 14 North State Street, Ripley, NY 14775; Ripley Library, 64 Main Street, Ripley, NY 14775; and Minerva Free Library, 116 Miller Street, Sherman, NY 14781.

Digital copies of the PSS and related Project documents are available on the Siting Board's Docket for this case, which can be accessed by visiting http://www.dps.ny.gov/, going to "Search" on the top of the webpage and then searching using the Case Number 19-F-0560, or by going to the Project website maintained by the Applicant at https://www.southripleysolar.com.

Requests for Notices

Any interested member of the public may file a request with the DPS Secretary to receive copies of all notices concerning the Project, including but not limited to notices regarding any proposed pre-application stipulations. Written requests should be sent to the DPS Secretary at secretary@dps.ny.gov or by mail to the following address:

Honorable Michelle L. Phillips
Secretary to the Commission
NYS Public Service Commission
Agency Building 3
Albany, New York 12223-1350

Appendix B

Record of Activity

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
3/5/2019	Town of Ripley Meeting Location: Ripley Town Hall	**ConnectGen:** • Caton Fenz (CDO) • Colleen Nash (Director) • Isaac Phillips (Analyst) **Ripley Town Supervisor:** • Doug Bowen **Ripley Town Deputy Supervisor:** • Mike Rowe	South Ripley Project Introduction/Update	None	
3/20/2019	Chautauqua County Industrial Development Agency (CCIDA) Meeting Location: Chautauqua County Industrial Development Agency Offices	**ConnectGen:** • Colleen Nash (Director) **CCIDA:** • Linda Burns (Manager)	ConnectGen to introduce the South Ripley Solar Project and gather information about the CCIDA	None	
4/8/2019	Landowner Dinner and Open House Location: Meeder's Restaurant	**ConnectGen:** • Caton Fenz (CDO) • Colleen Nash (Director) • John Kuba (Director) • Henry Woltag (Manager) • Isaac Phillips (Analyst) **EDR:** • Bill Whipps (Project Manager) • Jacob Runner (Project Manager)	Gathering of landowners to discuss project specifics	None	
4/11/2019	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Caton Fenz (CDO) • Colleen Nash (Director) • Isaac Phillips (Analyst)	Introduce the project publicly at the monthly Ripley Town Board meeting,	None	
5/9/2019	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Colleen Nash (Director)	Request official letter from town for NYSERDA RFP and provide project updates	None	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
7/11/2019	Town of Ripley Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Supervisor:** • Doug Bowen	Provide brief update on project development activities on the Project.	None	
8/6/2019	Chautauqua County Industrial Development Agency (CCIDA) Meeting Location: Fredonia Technology Incubator	**ConnectGen:** • Caton Fenz (CDO) • Henry Woltag (Manager) • Isaac Phillips (Associate) • Jimmy Moreland (Associate) **CCIDA:** • Richard Dixon (CFO) • Linda Burns (Manager)	ConnectGen team to formally introduce the Project and provide updates regarding development activities in South Ripley. CCIDA to describe services offered to large scale energy projects.	Linda Burns to provide ConnectGen with CCIDA PILOT Application and contact to District 19 Legislator's contact information.	
8/6/2019	Landowner Dinner, Presentation, and Q/A Forum Location: Meeder's Restaurant	**ConnectGen:** • Caton Fenz (CDO) • John Kuba (Director) • Henry Woltag (Manager) • Isaac Phillips (Associate) • Jimmy Moreland (Associate)	ConnectGen to provide host landowners with project updates and to host an open Q/A forum	None	
8/15/2019	Town of Ripley Meeting Location: Chautauqua County Planning Board Office	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Supervisor:** • Doug Bowen **Ripley Town Deputy Supervisor:** • Mike Rowe **Chautauqua Planning Director:** • Donald McCord	ConnectGen to provide Town and County officials with project updates and short-term schedule of relevant development milestones	ConnectGen to notify town officials when Draft PIP is filed	
8/23/2019	Department of Public Service Meeting Location: Department of Public Service Office	**ConnectGen:** • John Kuba (Director) • Henry Woltag (Manager) • Isaac Phillips (Associate) • Jimmy Moreland (Associate **Young/Sommer:** • Jim Muscato **EDR:**	ConnectGen team to formally introduce the Project, provide updates regarding development activities in South Ripley, and discuss Article 10 process and expectations	None	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
		• Ben Brazell **DPS Staff:** • Erin Odell Keller • Elizabeth Grisaru • Heather Behnke • Andy Davis			
8/23/2019	Department of Environmental Conservation Meeting Location: New York State Department of Environmental Conservation Office	**ConnectGen:** • John Kuba (Director) • Henry Woltag (Manager) • Isaac Phillips (Associate) • Jimmy Moreland (Associate) **Young/Sommer:** • Jim Muscato **EDR:** • Ben Brazell **DEC Staff:** • Chris Hogan • Roy Jacobson • Colleen Kimble • Lisa Covert • Christopher Grady • Ted Loukides • Mike Higgens	ConnectGen team to formally introduce the Project, provide updates regarding development activities in South Ripley, and discuss Article 10 process and expectations	Follow up with NYSDEC central office and regional staff regarding resource identification	
8/23/2019	Department of Agriculture and Markets Meeting Location: Department of Agriculture & Markets Office	**ConnectGen:** • John Kuba (Director) • Henry Woltag (Manager) • Isaac Phillips (Associate) • Jimmy Moreland (Associate) **Young/Sommer:** • Jim Muscato **EDR:** • Ben Brazell **DAM Staff:** • Jason Mulford	ConnectGen team to formally introduce the Project, provide updates regarding development activities in South Ripley, and discuss Article 10 process and expectations	None	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
		• Mike Saviola • Tara Wells • Danielle Cordier			
8/28/2019	Department of Environmental Conservation Email Correspondence	**Young/Sommer** • Jim Muscato	Email to Brianna Denoncour (DEC Central Office) to make general introduction to project and connect Brianna with the ConnectGen team	As needed	
8/29/2019	Department of Environmental Conservation Email Correspondence	**EDR:** • Ben Brazell	Email to Mike Higgins (DEC Central Office) to obtain contact information for regional staff to facilitate consultation regarding resource identification	As needed	
9/17/2019	Department of Environmental Conservation, Region 9 Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Email to Ken Baginski and Mike Clancy requesting a conference call to discuss any documented rare, threatened or endangered species, or significant natural communities in the Facility Area.	Response from Region 9 requested.	
9/18/2019	Department of Environmental Conservation Conference call	**EDR:** • Ben Brazell • Bill Whipps • Sam Beguin **ConnectGen:** • John Kuba (Director) **DEC Staff:** • Brianna Denoncour	Conference call between EDR, John Kuba (ConnectGen) and Brianna Denoncour (DEC Central Office) to discuss available ecological data and potential sensitive ecological resources at the Facility Area.	Brianna and John to coordinate DEC providing ConnectGen with Natural Heritage and other sensitive resource data.	
9/18/2019	Department of Environmental Conservation Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Follow up to conference call with Brianna Denoncour (DEC Central Office), forwarding original 9/17 email to Region, as well as Facility maps and NYNHP response letter.	As needed	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
9/20/2019	Town of Ripley Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Supervisor:** • Doug Bowen **Chautauqua Planning Director:** • Donald McCord	ConnectGen to provide copies of filed Draft PIP Plan for review and access by town officials	None	
9/27/2019	Department of Environmental Conservation, Region 9 Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Email to Ken Baginski and Mike Clancy following up on 9/17 request for a conference call.	Response from Region 9 requested.	
9/30/2019	Department of Environmental Conservation, Region 9 Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	In response to Ken Baginski replying to the email of 9/27 that Mike Clancy was on vaction until 10/15, follow up email to Region requesting any information on documented rare, threatened or endangered species, or significant natural communities that the Region might have.	Response from Region 9 requested.	
10/1/2019	Department of Environmental Conservation Email Correspondence	**ConnectGen:** • John Kuba (Director)	Email to Brianna Denoncour sending signed non-disclosure agreement required for sharing Natural Heritage data.	DEC to countersign NDA	
10/7/2019	Department of Environmental Conservation Email Correspondence	**ConnectGen:** • John Kuba (Director)	Email from Brianna Denoncour providing fully executed non-disclosure agreement required for sharing Natural Heritage data. Email requesting additional Project Area GIS files	DEC to provide Natural Heritage GIS data; ConnectGen to provide Project Area GIS files.	

South Ripley Solar
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Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
10/10/2019	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate)	ConnectGen to provide update on project development milestones including Draft PIP Plan submittal	None	
10/17/2019	Department of Environmental Conservation, Region 9 Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Follow up email with the Region again requesting a conference call to discuss any documented rare, threatened or endangered species, or significant natural communities in the Facility Area.	Response from Region 9 requested.	
10/21/2019	Department of Environmental Conservation, Region 9 Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Response from DEC Region 9 that DEC is unaware of any additional records that are not included in the NHP database.	None	
11/4/2019	Department of Environmental Conservation Email Correspondence	**ConnectGen:** John Kuba (Director)	Follow up email to Brianna Denoncour requesting status of Natural Heritage GIS data.	DEC to provide Natural Heritage GIS Data.	
11/4/2019	Local Document Repository Check-in Location: Ripley Town Clerk's Office	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Clerk:** • Rebecca Rowe Carvallo	Introduce project and confirm that local document repository documents were received and would be stored for public access.		Documents were received and Town Clerk confirmed use of location for a local document repository
11/4/2019	Local Document Repository Check-in Location: Ripley Public Library	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Public Library Director:** Rhonda Thompson	Introduce project and confirm that local document repository documents were received and would be stored for public access.		Documents were received and Director confirmed use of library for a local document repository
11/4/2019	Town of Mina Meeting Location: Mina – Findley Lake Community Center	**ConnectGen:** • Isaac Phillips (Associate) **Mina Town Supervisor:** • Rebecca Brumagin	Introduce company and project, notify Town Supervisor of ongoing Article 10 process with adjacent landowners within town boundaries, notify	ConnectGen to send note outlining Dec 4th public meeting details for Town Supervisor to circulate at her convenience	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
			of PIP filing, and answer questions		
11/4/2019	Town of Ripley Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Supervisor:** Douglas Bowen	Notify Town Supervisor of updated PIP filing, discuss anticipated public meeting in December, answer questions		
11/5/2019	Town of Sherman Meeting Location: Sherman Town Hall	**ConnectGen:** • Isaac Phillips (Associate) **Sherman Town Supervisor:** • Mark Persons	Introduce company and project, notify Town Supervisor of ongoing Article 10 process with adjacent landowners within town boundaries, notify of PIP filing, and answer questions		
11/6/2019	Department of Environmental Conservation Email Correspondence	**ConnectGen:** • John Kuba (Director)	Email from Brianna Denoncour providing maps and descriptions of the species and communities tracked by the NY Natural Heritage Program located near the Project.	None	
11/8/2019	Local Document Repository Check-in Location: Minerva Free Library	**ConnectGen:** • Isaac Phillips (Associate)	Introduce project to Library Board and confirm that local document repository documents were received and would be stored for public access	ConnectGen to provide box to store documents	Documents were received and Library Board approved the use of the library for a local document repository
11/14/2019	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate)	Invite Town Board and attendees to Public meeting on December 4th.	None	
11/14/2019	Article 10 Public Meeting Notification	ConnectGen mailed notification letters to host and adjacent landowners and all stakeholders on the notification list.	Notify host landowners, adjacent landowners, and stakeholders of upcoming Article 10 Public Meeting.		

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
11/19/2019-11/29/2019	Article 10 Public Meeting Notification	ConnectGen ran newspaper notices in the Westfield Republican, Jamestown Post-Journal, and North East News Journal.	Notify public of upcoming Article 10 Public Meeting.		Notices run on following dates: • Westfield Republican: 11/21 & 11/28 • Jamestown Post-Journal: 11/19 & 11/26 • North East News Journal: 11/22 & 11/29
11/26/2019	Department of Environmental Conservation Email Correspondence	**EDR:** • Bill Whipps (Project Manager)	Emailed Winter Raptor Survey Workplan to Brianna Denoncour, requesting review and feedback.		
12/4/2019	Article 10 Public Meeting Location: Meeder's Restaurant	**ConnectGen:** • Caton Fenz (CEO) • Colleen Nash (Director) • John Kuba (Director) • Isaac Phillips (Associate) • Jimmy Moreland (Associate) **EDR:** • Bill Whipps (Project Manager) • Caitlin Lashbrook (Analyst) **Innovant Public Relations:** • Sarah Bray (President) **Public Attendees:** • Over 50 members of the public attended either the morning or evening session	Inform public of project details, educate public on Article 10 process, answer questions, and take feedback from the community.	• Update notification list as appropriate • Post meeting documents on project website	ConnectGen circulated notices for the meeting two weeks in advance: • Notices mailed to host and adjacent landowners • Notices mailed to stakeholders on the notification list • Notice posted in local publications • Notice posted outside of local document repositories • Notice posted on the DMM page ConnectGen held two meeting sessions on 12/4/2019:

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
					• 8:00 AM – 10:00 AM • 4:30 PM – 7:30 PM
12/6/2019	Ripley Town Supervisor Phone Call	**ConnectGen:** • Isaac Phillips (Associate) **Ripley Town Supervisor:** • Douglas Bowen	Update Ripley Town Supervisor on Article 10 Public Meeting attendance and provide direction to location of meeting materials on project website		
12/5/2019	Department of Environmental Conservation Email Correspondence	**EDR:** • Sam Beguin (Senior Environmental Analyst)	Followed up with Brianna Denoncour to see if she had questions or comments on Winter Raptor Survey Workplan; let her know that surveys were under way.		
12/12/2019	Department of Environmental Conservation Email Correspondence	**EDR:** • Sam Beguin (Senior Environmental Analyst)	Followed up with Brianna Denoncour a second time to see if she had questions or comments on Winter Raptor Survey Workplan.		
01/02/2020	Department of Environmental Conservation Email Correspondence	**EDR:** • Sam Beguin (Senior Environmental Analyst)	Email from Brianna Denoncour providing comments on Winter Raptor Survey Workplan.		
01/08/2020	Department of Environmental Conservation Email Correspondence	**EDR:** • Sam Beguin (Senior Environmental Analyst)	Email response to Brianna Denoncour following up on NYSDEC comments on Winter Raptor Survey Workplan.		
01/29/2020	Department of Environmental Conservation Email Correspondence	**EDR:** • Sam Beguin (Senior Environmental Analyst)	Email to Brianna Denoncour providing updated winter raptor survey locations shapefile and map		

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
2/11/20	Meeting with Town Officials Location: Ripley Town Hall	**Ripley:** • Deputy Town Supervisor – Michael Rowe • Code Enforcement Officer – Melanie Eddy • Planning Board Chair – Shelly Spacht **ConnectGen:** • Isaac Phillips (Associate)	Discuss Ripley Solar Zoning Law and confirm specific provisions	None	
2/11/20	Town of Ripley Planning Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate)	Provide project update and discuss any Project related questions.	None	
2/13/20	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate)	Provide project update.	None	
03/20/20	Department of Environmental Conservation Telephone and Email Correspondence	**EDR:** • Ben Brazell (Principal)	Telephone and email correspondence with Mike Higgins at DEC throughout March to coordinate pre-PSS meeting between the agency and ConnectGen.		
3/12/20	Town of Ripley Board Meeting Location: Ripley Town Hall	**ConnectGen:** • Isaac Phillips (Associate)	Provide project update.	None	
3/31/20-4/3/30	Public News Bulletin	ConnectGen sent out a news bulletin to all landowners in the Study Area with information about Project progress, contact information for questions, and anticipated next steps for the Project.	Continue to engage and inform the public within the Study area.	None	

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
04/03/2020	Department of Environmental Conservation Conference Call/Meeting	**EDR:** • Ben Brazell • Bill Whipps • Sam Beguin • Laurie Stubenrauch **ConnectGen:** • John Kuba • Isaac Phillips • Colleen Nash • Derek Rieman • Rande Patterson **DEC Staff:** • Mike Higgins • Brianna Denoncour • Colleen Kimble • Charles Rosenberg • Jackie Walters	Conference call between EDR, ConnectGen and DEC Central Office and regional staff to discuss South Ripley Solar project status and issues in advance of PSS submission.		
04/06/2020	Department of Public Service Conference Call/Meeting	**EDR:** • Ben Brazell • Bill Whipps **Young/Sommer:** • James Muscato **ConnectGen:** • John Kuba • Isaac Phillips • Colleen Nash • Derek Rieman • Rande Patterson **DPS Staff:** • Houtan Maoveni • Brian Ossias • Andrew Davis	Conference call between EDR, ConnectGen, Young/Sommer and DPS staff to discuss South Ripley Solar project status and issues in advance of PSS submission.		

South Ripley Solar
PIP Tracking Log – Record of Activities Updated Through May 22, 2020

Date of Activity	Activity Type	Activity Attendees	Purpose of Activity	Follow-up Action Items	Comments
5/07/2020	Energy Storage Safety Webinar	**ConnectGen:** • Isaac Phillips • Colleen Nash • Derek Rieman • Deral Danis **DNV GL:** • Victoria Carey • Mohamed Kassamali • Sudipta Lahiri **Local Representatives:** • Chautauqua County Director of Emergency Services – John Griffith • Ripley Fire Chief - Mark Smith • Ripley Planning Board Chair – Shelly Spacht • 3-4 additional local constituents	Webinar to introduce the Project to relevant Fire and EMS officials and to introduce the basic safety considerations for battery energy storage	ConnectGen to circulate meeting materials and provide hard copies of relevant code to the Ripley Fire Department	
5/13/2020	Article 10 PSS Filing Notification	ConnectGen mailed notification letters to host and adjacent landowners and all stakeholders on the notification list.	Notify host landowners, adjacent landowners, and stakeholders of upcoming Article 10 Public Scoping Statement filing.		
5/14/2020 – 5/16/2020	Article 10 PSS Filing Notification	ConnectGen ran newspaper notices in the Westfield Republican, Jamestown Post-Journal, and North East News Journal.	Notify public of upcoming Article 10 Public Scoping Statement filing.		Notices run on following dates: • Westfield Republican: 5/14 • North East News Journal: 5/15 • Jamestown Post-Journal: 5/14 – 5/16

Appendix C

Certificate of Formation

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "CONNECTGEN CHAUTAUQUA COUNTY LLC", FILED IN THIS OFFICE ON THE FOURTH DAY OF OCTOBER, A.D. 2018, AT 11:13 O`CLOCK A.M.

Jeffrey W. Bullock, Secretary of State

7087269 8100
SR# 20186982477

Authentication: 203550386
Date: 10-04-18

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 11:13 AM 10/04/2018
FILED 11:13 AM 10/04/2018
SR 20186982477 - File Number 7087269

CERTIFICATE OF FORMATION
OF
CONNECTGEN CHAUTAUQUA COUNTY LLC

This Certificate of Formation, dated October 4, 2018, has been duly executed and is filed pursuant to Sections 18-201 and 18-204 of the Delaware Limited Liability Company Act (the "***Act***") to form a limited liability company (the "***Company***") under the Act.

1. ***Name.*** The name of the Company is:

ConnectGen Chautauqua County LLC

2. ***Registered Office; Registered Agent.*** The address of the registered office required to be maintained by Section 18-104 of the Act is:

Corporation Trust Center
1209 Orange Street
Wilmington, Delaware 19801

The name and the address of the registered agent for service of process required to be maintained by Section 18-104 of the Act are:

The Corporation Trust Company
Corporation Trust Center
1209 Orange Street
Wilmington, Delaware 19801

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Formation as of the date first written above.

By: _____
Name: John Rosenkild
Title: Authorized Person

Appendix D

Master List of Stakeholders

Affected State and Federal Agencies

Organization	Name	Address	Email
Empire State Development Corporation	Howard Zemsky, President and CEO	633 Third Avenue, Floor 37 New York, NY 10017	nys-nyc@esd.ny.gov
Empire State Development Corporation	Amanda Mays, Western NY Regional Director	95 Perry Street, Suite 500 Buffalo, NY 14203	nys-wny-redc@esd.ny.gov
National Telecommunications and Information Administration	David J. Redl, Assistant Secretary	HCHB U.S. Department of Commerce 1401 Constitution Avenue N.W. Washington DC 20230	*Email not available*
New York Independent System Operator	Richard J. Dewey, President and CEO	10 Krey Boulevard Rensselaer NY 12144	stakeholder_services@nyiso.com
New York State Energy Research and Development Authority	Alicia Barton, President and CEO	17 Columbia Circle Albany NY 12203	info@nyserda.ny.gov
New York State Energy Research and Development Authority	Richard Kaufmann, Chair	17 Columbia Circle Albany NY 12203	info@nyserda.ny.gov
New York Power Authority		123 Main Street, Corporate Communications Mail Stop 10 B White Plains NY 10601	info@nypa.gov
NYS Attorney General	Letitia James, NYS Attorney General	NYS Capitol Building Albany NY 12224	*Email not available*
NYS Department of Agriculture and Markets	Richard A. Ball, Commissioner	10B Airline Drive Albany NY 12235	info@agriculture.ny.gov
NYS Department of Agriculture and Markets Division of Land & Water Resources	Michael J. Saviola, MPS	1530 Jefferson Road Rochester NY 14623	michael.saviola@agriculture.ny.gov
NYS Department of Agriculture and Markets	Tara Wells, Senior Attorney	10B Airline Drive Albany NY 12235	tara.wells@agriculture.ny.gov
NYS DEC, Central Office	Basil Seggos, Commissioner	625 Broadway Albany NY 12207	basil.seggos@dec.ny.gov
NYS DEC, Central Office	Daniel Whitehead, Dir. Div. of Env. Permits, Major Projects Mang	625 Broadway Albany NY 12207	deppermitting@dec.ny.gov
NYS DEC, Region 9	Abby Snyder, Regional Director	270 Michigan Avenue Buffalo NY 14203	region9@dec.ny.gov
NYS Department of Health	Howard A. Zucker, Commissioner	Corning Tower Empire State Plaza Albany NY 12237	dohweb@health.ny.gov
NYS Department of Public Service	John B. Rhodes, Chair and CEO	Empire State Plaza Agency Building 3 Albany NY 12223	secretary@dps.ny.gov
NYS Department of Public Service	James Denn, Director of Public Affairs	Empire State Plaza Agency Building 3 Albany NY 12223	james.denn@dps.ny.gov
NYS Department of Public Service	Lorna Gillings, Outreach Contact	Empire State Plaza Agency Building 3 Albany NY 12223	lorna.gillings@dps.ny.gov
NYS Department of Public Service	Andrea Cerbin, Assistant Counsel	Empire State Plaza Agency Building 3 Albany NY 12223	Andrea.Cerbin@dps.ny.gov

NYS Department of Public Service	David Solimeno, Excelsior Fellow	Empire State Plaza Agency Building 3 Albany NY 12223	David.Solimeno@dps.ny.gov
NYS Department of State	Rossana Rosado, Secretary of State	One Commerce Plaza 99 Washington Avenue Albany NY 12231	*Email not available*
NYS DPS, Office of Electric, Gas, and Water	Andrew Davis, Utility Supervisor	Empire State Plaza Agency Building 3 Albany NY 12223	Andrew.Davis@dps.ny.gov
NYS DPS, Office of Electric, Gas, and Water	Tammy Mitchell, Director	Empire State Plaza Agency Building 3 Albany NY 12223	*Email not available*
NYS Department of Transportation	Marie Therese Dominguez, Commissioner	50 Wolf Road Albany NY 12232	*Email not available*
NYSDOT, Region 5	Frank Cirillo, Acting Regional Director	100 Seneca Street Buffalo NY 14203	*Email not available*
NYS Div. of Homeland Security & Emergency Services	Kevin Wisely, Deputy Commissioner	State Office Campus, Building 7A Suite 710 1220 Washington Avenue Albany NY 12242	*Email not available*
NYS Governor's Office	Andrew Cuomo, Governor of NY	NY State Capitol Building State Street and Washington Avenue Albany NY 12224	*Email not available*
NYSOPRHP	Daniel Mackay, Deputy Commissioner	Peebles Island State Park P.O. Box 189 Waterford NY 12188	Daniel.mackay@parks.ny.gov
NYSOPRHP	Diana Carter, Director of Planning	Resources and Facility Planning Bureau 625 Broadway Albany NY 12207	Diana.Carter@parks.ny.gov
NYSOPRHP, Region 2 – Allegany	Dalton J. Burgett, Chair	2373 ASP Route 1, Suite 3 Salamanca NY 14779	Jay.Bailey@parks.ny.gov
NYS Assembly	Andy Goodell, Assembly Member, District 150	Fenton Building, Suite 320 2 E. 2nd Street, Jamestown NY 14701	goodella@nyassembly.gov
NYS Senate	NYS Senator, District 57	188 State Street, Room 706 Albany, NY 12247	*Email not available*
U.S. Army Corps of Engineers, Buffalo NY District	Lt. Col. Jason A. Toth, District Commander	1776 Niagara Street Buffalo NY 14207	*Email not available*
U.S. Federal Aviation Administration	Jennifer Solomon, Eastern Regional Administrator	1 Aviation Plaza Jamaica NY 11434	*Email not available*
U.S. Fish and Wildlife Service, New York Field Office	David Stilwell, Field Supervisor	3817 Luker Road Cortland NY 13045	david_stilwell@fws.gov
U.S. House of Representatives	Thomas W. Reed, Representative, District 23	2437 Rayburn HOB Washington DC 20515	*Email not available*
Leo W. O'Brien Federal Building	Charles E. Schumer, US Senator	1 Clinton Square Room 420 Albany NY 12207	*Email not available*

Leo W. O'Brien Federal Building	Kirsten E. Gillibrand, US Senator	11A Clinton Avenue Room 821 Albany NY 12207	*Email not available*
NYS Senate	George Borrello, New York State Senator	188 State Street Room 706 Albany NY 12247	*Email not available*

Local Agencies

Organization	Name	Address	Email
Gerace Office Building	Paul M. Wendel, Jr., County Executive	3 North Erie Street Mayville NY 14757	wendelp@co.chautauqua.ny.us
Chautauqua Cty Dept of Health and Human Services	Christine Schuyler, Commisioner	7 N. Erie St., Hall R., Clothier Bldg Mayville NY 14757	cchealth@co.chautauqua.ny.us
Chautauqua Cty Dept of Planning and Economic Dev	Don McCord, Planning Director	2 South Portage Street Westfield NY 14787	mccordd@co.chautauqua.ny.us
Chautauqua Cty Dep of Public Facilities	Brad Bentley, Director	454 N. Work St. Falconer NY 14733	bentleyb@co.chautauqua.ny.us
Chautauqua Cty Office of Emergency Services	John Griffith, Director	2 Academy Street Suite A, Room 106 Mayville NY 14757	*Email not available*
Chautauqua Cty Industrial Development Agency	Mark Geise, Chief Executive Officer	201 W 3rd St #115 Jamestown NY 14701	geisem@co.chautauqua.ny.us
Chautauqua Cty Agriculture and Farmland Protection Board	Melissa A. Keller, Planner	2 South Portage Street Westfield NY 14787	kellerm@co.chautauqua.ny.us
Chautauqua Cty Soil and Water Conservation Dist	Fred Croscut, Chairman	220 Fluvanna Ave. Suite 600 Jamestown NY 14701	chaut-co@soilwater.org
Chautauqua Cty Soil and Water Conservation Dist	Robert Halbohm	220 Fluvanna Ave. Suite 600 Jamestown NY 14701	ehalbohm@soilwater.org
Chautauqua Cty Jamestown Airport	Brad Bentley	3163 Airport Drive Jamestown NY 14701	bentleyb@co.chautauqua.ny.us
Chautauqua Cty Dunkirk Airport	Brad Bentley	3389 Middle Road Dunkirk NY 14048	bentleyb@co.chautauqua.ny.us
Town of Ripley Building/Zoning Office	Melanie Eddy, Code Enforcement	P.O. Box 2 Ripley NY 14775	ripleybz@fairpoint.net
Town of Ripley Highway Department	Jim Spacht, Highway Superintendent	P.O. Box 506 Ripley NY 14775	ripleyhs@fairpoint.net
Town of Ripley Emergency Services	Mark Smith, Fire Chief	P.O. Box 342 Ripley NY 14775	*Email not available*
South Ripley Volunteer Fire Department		10268 NE Sherman Rd Ripley NY 14775	*Email not available*
Town of Mina Zoning Code Enforcement Officer	Melanie Eddy	P.O. Box 38 Findley Lake NY 14736	*Email not available*
Town of Mina Highway Department	Bill Himelein	P.O. Box 38 Findley Lake NY 14736	*Email not available*
Southern Tier West Reg Planning & Dev Board	Richard Zink, Executive Director	4039 Route 219 Suite 200 Salamanca NY 14779	rzink@southerntierwest.org

Municipalities and School Districts in Facility Area

Organization	Name	Address	Email
Town of Ripley	Douglas Bowen, Town Supervisor	P.O. Box 352 Ripley NY 14775	ripleyts@fairpoint.net
Town of Ripley	Mike Rowe, Deputy Town Supervisor	P.O. Box 352 Ripley NY 14775	ripleyts@fairpoint.net
Town of Ripley Clerk's Office	Rebecca Rowe Carvallo, Clerk	14 North State St. Ripley NY 14775	townclerk@ripley-ny.com
Sherman Central School District	Michael Ginestre, Superintendent	127 Park St. Sherman NY 14781	mginestre@shermancsd.org

Municipalities and School Districts in Study Area

Organization	Name	Address	Email
Town of Mina	Rebecca N. Brumagin, Town Supervisor	P.O. Box 38 Findley Lake NY 14736	supervisor@townofmina.info
Mina Clerk's Office	Sherrie R. Tanner	2883 County Touring Rte 3 PO Box 38 Findley Lake NY 14736	mina1@townofmina.info
Town of Westfield Clerk's Office	Andrea L. Babcock, Town Clerk	Eason Hall 23 Elm Street Westfield NY 14787	*Email not available*
Ripley Central School District	William Caldwell, Superintendent	12 North State Street Ripley NY 14775	wcaldwell@ripleycsd.org
Clymer Central School District	Edward Bailey, Superintendent	8672 East Main Street Clymer NY 14724	ebailey@clymercsd.org
Town of Sherman	Mark Persons, Town Supervisor	111A Mill Street Sherman NY 14781	markpersons17@gmail.com
Town of Sherman Clerk's Office	Tamera Wise	111A Mill Street Sherman NY 14781	townsherman@gmail.com

Additional Stakeholders

Organization	Name	Address	Email
Adirondack Mountain Club, Niagra Frontier Chapter	Cheryl Peluso	77 Washington Highway Snyder, NY	Cherylp17@verizon.net
Cornell Cooperative Extension of Chautauqua County	Sarah Nickerson, President	Frank W. Bratt Agricultural Center 3542 Turner Road Jamestown NY 14701	chautauqua@cornell.edu
Buffalo Audubon Society	Melissa Fratello	1610 Welch Rd North Java NY 14113	mfratello.buffaloaudubon@gmail.com
Chautauqua County Federation of Sportsmen's Clubs	Zen Olow, President	PO Box 681 Fredonia NY 14063	*Email not available*
Chautauqua County Farm Bureau	Richard Kimball, President	P.O. Box 5330 Albany NY 12205	rwkcow@aol.com
Chautauqua County Visitor's Bureau	Andrew Nixon	P.O. Box 1441 Chautauqua NY 14722	nixon@tourchautauqua.com
Chautauqua Energy Drilling, Inc.	Scott E Sampson, President	8850 Route 20 Westfield NY 14787	*Email not available*
Chautauqua Watershed Conservancy	Jonathan Townsend	413 North Main St. Jamestown NY 14701	info@chautauquawatershed.org
Chautauqua County Chamber of Commerce	Joanna Dahlbeck, Jamestown Community Chamber Coordinator	512 Falconer Street Jamestown NY 14701	info@chautauquachamber.org

Empire Energy E&P, LLC		100 East Chautauqua Street Box 18 Mayville NY 14757	*Email not available*
Erie County, Pennsylvania	Kathy Dahlkemper, County Executive	Erie County Courthouse 140 West Sixth Street Erie PA 16501	countyexecutive@eriecountypa.gov
International Brotherhood of Electrical Workers (IBEW), Local 106	Robert Whitney, President	322 James Avenue Jamestown NY 14701	general.info@ibew106.org
Lake Erie Watershed Protection Alliance (LEWPA)	Dave Spann	Environment and Planning, Edward A Rath County Office Building 95 Franklin Street, 10th Floor Buffalo NY 1402	*Email not available*
Lake Erie Bird Club	Jeffrey Gordon, ABA President	6 Pine Drive Fredonia NY 14063	info@aba.org
National Fuel Gas Distribution Corporation		6363 Main Street Williamsville NY 14221	*Email not available*
National Grid	John Bruckner, President	300 Erie Boulevard West Syracuse NY 13202	*Email not available*
New York Forest Owners Association	Art Wagner, President	P.O. Box 541 Lima NY 14485	president@nyfoa.org
New York State Electric and Gas Corporation (NYSEG)	Carl Taylor	P.O. Box 3607 Binghamton NY 13902	*Email not available*
New York State Laborers' Organizing Fund	Sean Morgan	668 Wemple Road Glenmont NY 12077	nyskifenergy@gmail.com
Norse Pipeline, LLC		5644 Bentley Rd Mayville NY 14757	*Email not available*
North East Township	August Neff, Supervisor	10300 W. Main Road North East PA 16428	aneff@northeasttwp.org
North East Township	Fredrick W. Shunk, Supervisor	10300 W. Main Road North East PA 16428	fwshunk@northeasttwp.org
North East Township	Robert Mazza, Supervisor	10300 W. Main Road North East PA 16428	admin@northeasttwp.org
Seneca Nation of Indians	Joshua J. Becker, Director	90 Ohiyo Way Salamanca NY 14779	josh.becker@sni.org
Schreiner Oil and Gas, Inc.		8390 East Via De Ventura Scottsdale AZ 85258	*Email not available*
Sierra Club, Niagara Group	Sara Schultz, Chairperson	744 Broadway Albany NY 12207	niagarasierra@gmail.com
Ripley Hawk Watch	Gil Randell, Coordinator	6901 Moore Road Mayville NY 14757	janngil@fairpoint.net
The Nature Conservancy, Central & Western New York	Jim Howe, Executive Director	274 North Goodman Street Suite B261 Rochester NY 14607	*Email not available*
Trout Unlimited, 627 – Red House Brook Chapter	Luke Radloff	P.O. Box 266 Little Valley NY 14755	*Email not available*
Western New York Land Conservancy	Nancy Smith, Executive Director	P.O. Box 471 East Aurora NY 14052	info@wnylc.org
	Ripley Library	64 Main Street Ripley NY 14775	*Email not available*
	Minerva Free Library	116 Miller Street Sherman NY 14781	*Email not available*

Young/Summer LLC	Kayleigh Robinson, Legal Assistant	5 Palisades Drive, Suite 300 Albany NY 12205	krobinson@youngsommer.com
Young/Summer LLC	James Muscato, Partner	5 Palisades Drive, Suite 300 Albany NY 12205	jmuscato@youngsommer.com
South Ripley Cemetery Association	Ryan, Peter J	4855 S Ripley Rd Ripley NY 14775	pjryan@fairpoint.net
North Atlantic States Regional Council of Carpenters	Christopher Austin, Team Lead	1159 Maryvale Drive Cheektowaga, NY 14225	nyresearch@nasrcc.org

Voluntary Stakeholders

Name	Address	Email
Shelley Spacht	10214 NE Sherman Road Ripley, NY 14775	*Email not available*
Chris Stone	1159 Maryvale Dr. Cheektowaga NY 14775	cstone@nercc.org
David Russell	6563 Sherwood Ln Boston NY 14025	*Email not available*
Fred Johnson	P.O. Box 423 Westfield NY 14787	Fred@Johnsonwinny.com
Lee and Rebecca Leonard	10285 Penniman Dr Chardon OH 44024	*Email not available*
Marcia Meeder	4105 CR 13 Ripley NY 14775	troycooks@gmail.com
Robert McIntosh	9615 E Lake Rd Ripley NY 14775	bobmc14775@gmail.com
Tim Hull	4068 Chautauqua-Stedman Rd Mayville NY 14757	*Email not available*
Thomas Gasiewicz	1159 Maryvale Dr. Cheektowaga NY 14775	billsfanone@yahoo.com
Name not available	*Address not available*	hazelk@aol.com
Name not available	*Address not available*	dkr1022@gmail.com
Name not available	*Address not available*	belljbcc@verizon.net
Name not available	*Address not available*	jhaines721@aol.com
Name not available	*Address not available*	fwshunk@northeasttwp.org
Debra Sack	*Address not available*	debsack101@gmail.com
Kristofor Sellstrom	*Address not available*	ksellstrom@jamestownbpu.com
Lisa Mertz	*Address not available*	lmertz@icloud.com
Alex Andrasik	*Address not available*	andalex34@gmail.com
Debra Sack	*Address not available*	griffith@chautcofire.org

Appendix E

Open House Notices

South Ripley
SOLAR PROJECT

November 13th, 2019

RE: Notice of Open House for the South Ripley Solar Project, Case No. 19-F-0560
Town of Ripley, Chautauqua County, New York

Dear Reader:

As you may be aware, ConnectGen Chautauqua County LLC (ConnectGen) has proposed to construct an approximately 270-megawatt solar energy generation system in the Town of Ripley, Chautauqua County, New York. To construct the facility, ConnectGen is seeking a Certificate of Environmental Compatibility and Public Need ("Certificate") from the New York State Board on Electric Generating Siting and the Environment ("Siting Board") pursuant to Article 10 of the Public Service Law and the Siting Board's rules (16 NYCRR Part 1000).

Please note that **ConnectGen will hold its first public open house meeting for its proposed South Ripley Solar Project from 8:00-10:00 AM and 4:30-7:30 PM on Wednesday, December 4, 2019 at Meeder's Restaurant, 19 E Main St., Ripley, NY 14775.** At this open house, project representatives will be available to provide information on the proposed project and answer questions from members of the community.

You have been identified as a landowner owning property located within 2,500 feet of proposed project facilities and have been added to the Project Notification List. As such, we would like to take this opportunity to inform you that a Public Involvement Program Plan (PIP) has been prepared for this project. This document is available for review online at **www.southripleysolar.com** and paper copies have been filed at the following local document repositories:

- **Ripley Town Clerk's Office**, 14 North State Street, Ripley, NY 14775. Monday, Tuesday, Thursday, and Friday 9:00 AM-12:00 PM, and 1:15 PM-4:00 PM, Saturday 9:00 AM-12:00 PM
- **Ripley Library**, 64 Main Street, Ripley, NY 14775. Monday, Wednesday, and Friday 10:00 AM-5:00 PM, Tuesday and Thursday 10:00 AM-7:30 PM, and Saturday 9:00 AM-2:00 PM
- **Minerva Free Library**, 116 Miller Street, Sherman, NY 14781. Tuesday, 4:00 PM-8:00 PM, Thursday, 9:00 AM-4:00 PM and 6:00 PM-8:00 PM, Friday, 9:00 AM-3:00 PM, Saturday, 9:00 AM-12:00 PM.

Those persons who wish to become a party to this Article 10 proceeding, or those who wish to receive electronic notices, should visit the Siting Board's website (listed below) to sign up for the Party or Service List, respectively.

(**http://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/6227C34A22CBE96685257B430050A426?OpenDocument**)

If you have any questions or concerns, please feel free to contact Isaac Phillips, Development Associate for ConnectGen LLC, by phone at (800) 338-8905, by email at info@southripleysolar.com, or stop by our open house where additional project information will be available.

Sincerely,

Isaac Phillips

South Ripley
SOLAR PROJECT

November 15th, 2019

RE: Notice of Open House for the South Ripley Solar Project, Case No. 19-F-0560
Town of Ripley, Chautauqua County, New York

Dear Reader:

As you may be aware, ConnectGen Chautauqua County LLC (ConnectGen) has proposed to construct an approximately 270-megawatt solar energy generation system in the Town of Ripley, Chautauqua County, New York. To construct the facility, ConnectGen is seeking a Certificate of Environmental Compatibility and Public Need ("Certificate") from the New York State Board on Electric Generating Siting and the Environment ("Siting Board") pursuant to Article 10 of the Public Service Law and the Siting Board's rules (16 NYCRR Part 1000).

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You have been identified as a landowner owning property located within 2,500 feet of proposed project facilities and have been added to the Project Notification List. As such, we would like to take this opportunity to inform you that a Public Involvement Program Plan (PIP) has been prepared for this project. This document is available for review online at **www.southripleysolar.com** and paper copies have been filed at the following local document repositories:

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Those persons who wish to receive electronic notices, should visit the Siting Board's website (listed below) to sign up for the Service List.

(**http://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/6227C34A22CBE96685257B430050A426?OpenDocument**)

If you have any questions or concerns, please feel free to contact Isaac Phillips, Development Associate for ConnectGen LLC, by phone at (800) 338-8905, by email at info@southripleysolar.com, or stop by our open house where additional project information will be available.

Sincerely,

Isaac Phillips

South Ripley
SOLAR PROJECT

November 13th, 2019

RE: Notice of Open House for the South Ripley Solar Project, Case No. 19-F-0560
Town of Ripley, Chautauqua County, New York

Dear Reader:

As you may be aware, ConnectGen Chautauqua County LLC (ConnectGen) has proposed to construct an approximately 270-megawatt solar energy generation system in the Town of Ripley, Chautauqua County, New York. To construct the facility, ConnectGen is seeking a Certificate of Environmental Compatibility and Public Need ("Certificate") from the New York State Board on Electric Generating Siting and the Environment ("Siting Board") pursuant to Article 10 of the Public Service Law and the Siting Board's rules (16 NYCRR Part 1000).

Please note that **ConnectGen will hold its first public open house meeting for its proposed South Ripley Solar Project from 8:00-10:00 AM and 4:30-7:30 PM on Wednesday, December 4, 2019 at Meeder's Restaurant, 19 E Main St., Ripley, NY 14775.** At this open house, project representatives will be available to provide information on the proposed project and answer questions from members of the community.

Your agency/group has been identified as having a special interest in this proposed project, and you have been added to the Project Notification List. As such, we would like to take this opportunity to inform you that a Public Involvement Program Plan (PIP) has been prepared for this project. This document is available for review online at **www.southripleysolar.com** and paper copies have been filed at the following local document repositories:

- **Ripley Town Clerk's Office**, 14 North State Street, Ripley, NY 14775. Monday, Tuesday, Thursday, and Friday 9:00 AM-12:00 PM, and 1:15 PM-4:00 PM, Saturday 9:00 AM-12:00 PM
- **Ripley Library**, 64 Main Street, Ripley, NY 14775. Monday, Wednesday, and Friday 10:00 AM-5:00 PM, Tuesday and Thursday 10:00 AM-7:30 PM, and Saturday 9:00 AM-2:00 PM
- **Minerva Free Library**, 116 Miller Street, Sherman, NY 14781. Tuesday, 4:00 PM-8:00 PM, Thursday, 9:00 AM-4:00 PM and 6:00 PM-8:00 PM, Friday, 9:00 AM-3:00 PM, Saturday, 9:00 AM-12:00 PM.

Those persons who wish to become a party to this Article 10 proceeding, or those who wish to receive electronic notices, should visit the Siting Board's website (listed below) to sign up for the Party or Service List, respectively.

(**http://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/6227C34A22CBE96685257B430050A426?OpenDocument**)

If you have any questions or concerns, please feel free to contact Isaac Phillips, Development Associate for ConnectGen LLC, by phone at (800) 338-8905, by email at info@southripleysolar.com, or stop by our open house where additional project information will be available.

Sincerely,

Isaac Phillips

Appendix F

NYNHP and IPaC Correspondence

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

September 15, 2019

Bill Whipps
EDR
217 Montgomery Street, Suite 1000
Syracuse, NY 13202

Re: South Ripley Solar Project (EDR Project No. 19020)
County: Chautauqua Town/City: Ripley

Dear Mr. Whipps:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 9 Office, Division of Environmental Permits at dep.r9@dec.ny.gov, (716) 851-7165.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

1041

The following rare plants and significant natural communities have been documented at the project site, or in its vicinity.

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. Each community is either an example of a community type that is rare in the state, or a high-quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Wetland/Aquatic Communities			
Confined River			High Quality Occurrence of Uncommon Community Type

Documented in the eastern third of the project site at Twentymile Creek. This is a moderately large occurrence in very good condition and with very good species diversity. The stream is in a moderate-sized landscape of working forests. 10196

Upland/Terrestrial Communities			
Hemlock-Northern Hardwood Forest			High Quality Occurrence

Documented in multiple patches within the project site. This is a moderate-sized occurrence in a mature state with small patches of putative old growth and excellent plant species diversity. The community is in an excellent moderate-sized and intact forested landscape. 6512

The following plant is listed as Endangered by New York State, and so is a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Tall Ironweed	*Vernonia gigantea*	Endangered	Critically Imperiled in NYS

Documented within 0.35 mile south of the project site. 1991-08-05: Moist pastureland and successional old field. The area was probably a rich hemlock-hardwood forest before human and beaver activities. 1882

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: October 28, 2019
Consultation Code: 05E1NY00-2020-SLI-0302
Event Code: 05E1NY00-2020-E-00842
Project Name: South Ripley Solar

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/

eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Consultation Code: 05E1NY00-2020-SLI-0302

Event Code: 05E1NY00-2020-E-00842

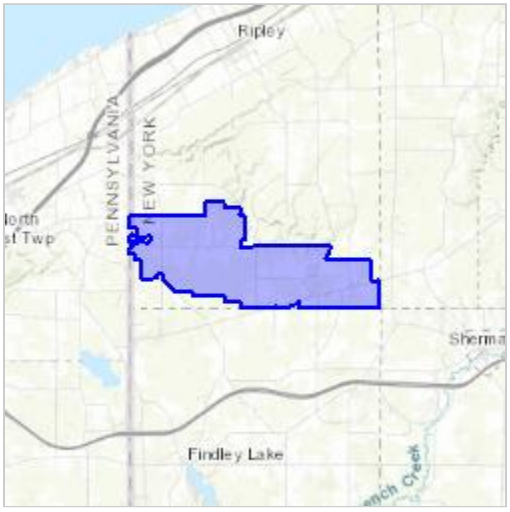
Project Name: South Ripley Solar

Project Type: POWER GENERATION

Project Description: South Ripley Solar Project is proposing to construct an up to 270 MW solar powered electric generating facility within the Town of Ripley, Chautauqua County, New York.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.19202586523372N79.71394837277441W



Counties: Chautauqua, NY

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix G

Visual Outreach Letter

Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.

217 Montgomery Street, Suite 1000, Syracuse, New York 13202
P. 315.471.0688 • F. 315.471.1061 • www.edrdpc.com

May 20, 2020

Municipal Planning, State Agency and Party List Representatives
Per Attached Distribution List

RE: South Ripley Solar Project
Identification of Visually Sensitive Resources
Official Request for Information

Dear Municipal Planning, State Agency and Party List Representative:

As you may be aware, ConnectGen Chautauqua County LLC (ConnectGen or the Applicant), a direct subsidiary of ConnectGen LLC, is proposing to construct the South Ripley Solar Project (Project), a 270 megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy generation facility (Project), that may include up to 20 MW (80 megawatt hours [MWh]) of battery energy storage capacity located in the Town of Ripley, Chautauqua County, New York (Figure 1). The proposed Project is subject to the rules for siting a major electric generating facility under Article 10 of the New York State Public Service Law (PSL). In accordance with the Article 10 regulations, a Public Involvement Program (PIP) plan for this Project was filed in October 2019 and a Preliminary Scoping Statement (PSS) is anticipated to be filed during the month of May. Both documents will be available on the Project's website, www.southripleysolar.com and the State Document Matter Master (DMM) website. Please refer to the PIP and the PSS, when available, for additional details regarding the proposed Project. This information will also be available on the Department of Public Service (DPS) Document Matter Management (DMM) website at: http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=19-F-0560&submit=Search

In accordance with the Article 10 regulations, and as described in the PIP and forthcoming PSS, Environmental Design and Research, Landscape Architecture, Engineering and Environmental Services, DPC (EDR) is conducting a Visual Impact Assessment (VIA) for the proposed Project on behalf of the Applicant.

We are reaching out to you to request your assistance in identifying the visually sensitive resources (VSRs) to be included in this study. The information presented in this letter and its enclosures is intended to provide you with sufficient context and information to assist with the identification of these visually sensitive resources, and eventually the selection of important and/or representative viewpoints from which visual simulations of the Project would be prepared.

Visual Study Area

The VIA has identified a 5-mile radius visual study area (VSA) around the proposed Project site to identify the VSRs pertinent to this Project. The VSA boundary for the Project is depicted on Figure 2.

Visually Sensitive Resources

Aesthetic resources of statewide significance are formally defined by the Department of Environmental Conservation (DEC) in the Program Policy entitled Assessing and Mitigating Visual and Aesthetic Impact[1] (the "DEC Visual Policy"). The requirements of Article 10, Exhibit 24, part 1001.24 (b)(4)(ii) identify additional categories of sensitive resources. Together, these two sources identify the following sensitive resources within the VSA:

- **Properties of Historic Significance** (National/State Historic Landmarks, National/State Historic Sites, Properties Listed on the National or State Register of Historic Places, Properties Eligible for National /State Register of Historic Places)
- **Designated Scenic Resources** (Rivers Designated as National or State Wild, Scenic or Recreational, Adirondack Park Scenic Vistas, Sites, Areas, Lakes, Reservoirs or Highways Designated or Eligible for Designation as Scenic, Scenic Areas of Statewide Significance, Other Designated Scenic Resources (Easements, Roads, Districts, and Overlooks).
- **Public Lands and Recreational Resources** (National Parks, Recreation Areas, Seashores, and Forests, National Natural Landmarks, National Wildlife Refugees, Heritage Areas, State Parks, State Nature and Historic Preserve Areas, State Forest Preserve, Other State Lands; *Wildlife Management Areas and Game Refugees, State Forests, State Fishing/Waterway Access Sites*, Trails; *State and Federal Trails, Snowmobile/ATV Trails, Bike Trails/Routes* Palisades Park, Local Parks and Recreational Areas, Publicly Accessible Conservation Lands/Easements, Rivers and Streams with Public Fishing Rights Easements, Named Lakes, Ponds and Reservoirs)
- **High-Use Public Areas** (US, State and Interstate Highways, Schools, Cities, Villages, Hamlets)

EDR has conducted a preliminary desktop inventory of VSRs of potential national, statewide and local significance, including the types of resources identified on the above list. Figure 2 illustrates the location of each identified resource and Figure 3 lists the VSRs in table form, providing information such as VSR name, municipality, and distance to the proposed Project.

Feedback Request

EDR and ConnectGen are formally requesting feedback from municipal and regional planning representatives, state agencies, stakeholders, and local constituents in the identification of areas of aesthetic sensitivity within the VSA. Please review the inventory of VSRs included as Figure 3 and depicted on Figure 2. EDR believes the list of aesthetic resources included herein represents a substantially complete desktop inventory of the significant VSRs within the VSA. Please let us know whether there are any additional resources that you believe should be added to the inventory. If so, please provide the name and location of any VSRs not identified in Figures 2 and 3, and that you feel should be added to the inventory of aesthetic resources, by June 19, 2020 (30 days from date of letter).

[1] The DEC Program Policy *Assessing and Mitigating Visual and Aesthetic Impact* was issued on December 13, 2019 and can be reviewed here: https://www.dec.ny.gov/docs/permits_ej_operations_pdf/visualpolicydep002.pdf

All future correspondence regarding the South Ripley Solar Project will be by email, unless otherwise specified. If your email address is incorrect or missing on the enclosed distribution list, and you wish to receive future correspondence regarding this matter, provide your correct email address to the contact listed below. All future correspondence, including responses to this request, should also be directed to the contact below[i].

- Via email to: mrobinson@edrdpc.com
- Via written letter to:
  Attn: Matthew Robinson
  Environmental Design & Research
  217 Montgomery Street
  Suite 1100
  Syracuse, NY 13202

We appreciate your assistance.

Sincerely,

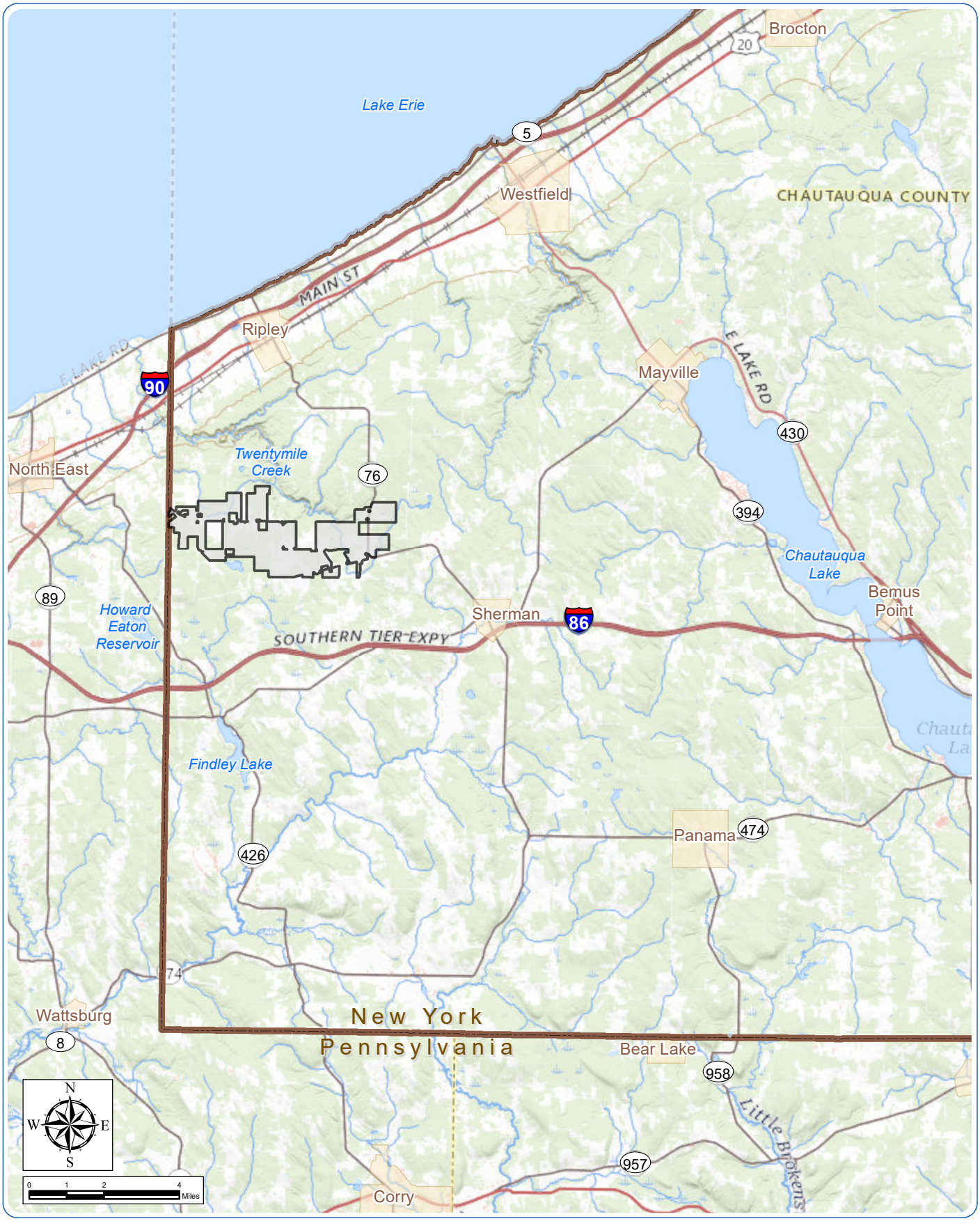
Matthew Robinson
Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C.
On behalf of ConnectGen Chautauqua County LLC

List of Enclosures:

- Figure 1. Facility Area
- Figure 2. Visually Sensitive Resources Map
- Figure 3. Visually Sensitive Resources Table

[i] Please note that digital submissions greater than 20 megabytes in size may be rejected by the server. If your document is too large to send, please contact the email below prior to sending the attachment.

Figures



South Ripley Solar Project

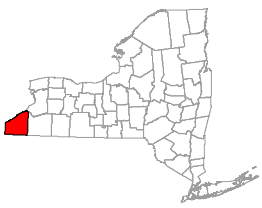
Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement - Case No. 19-F-0560

Figure 1: Regional Facility Location

Facility Area

State Boundary



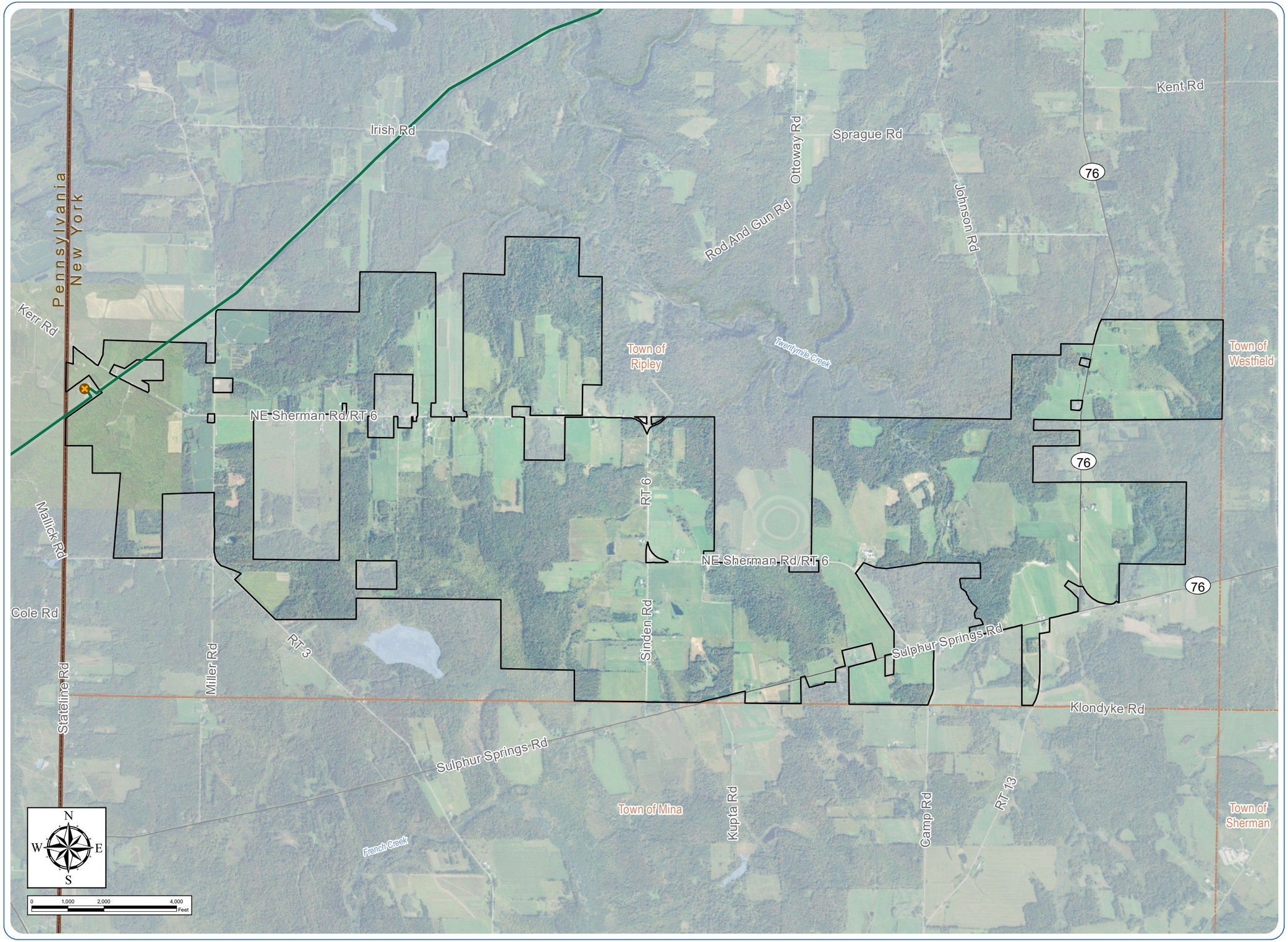
Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service. **2.** This map was generated in ArcMap on April 27, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
Case No. 19-F-0560

Figure 2: Facility Area



- Existing Substation
- Existing Transmission Line
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. Basemap: USDA NAIP "2019 New York 60cm" orthoimagery map service. **2.** This map was generated in ArcMap on May 15, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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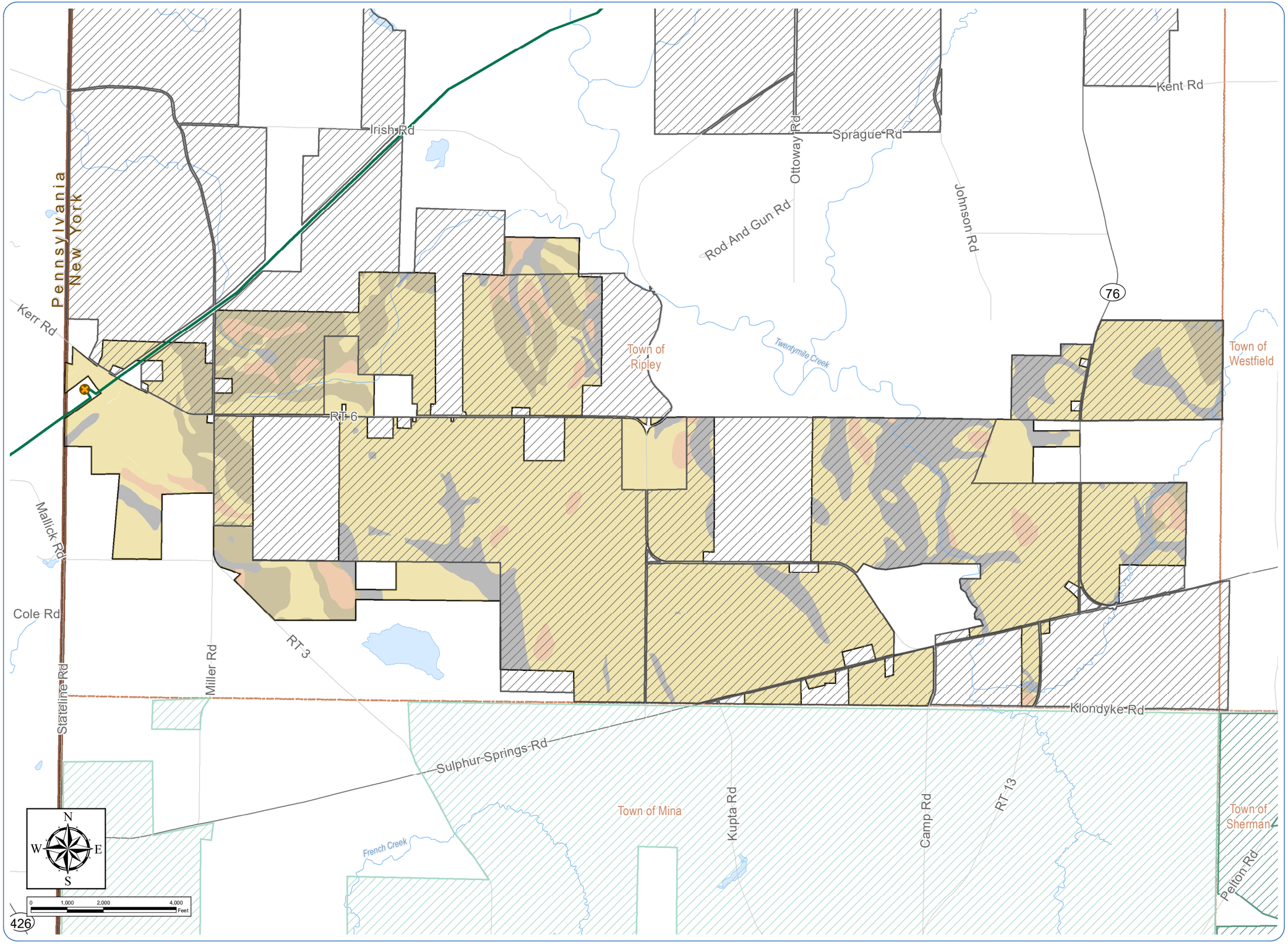
Figure 3: Agricultural Districts



USDA Farmland Soil Classification

- Farmland of Statewide Importance
- Prime Farmland
- Prime Farmland if Drained
- Not Prime Farmland
- Agriculture District 1
- Agriculture District 6
- Agriculture District 7
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. This map was generated in ArcMap on May 7, 2020. **2.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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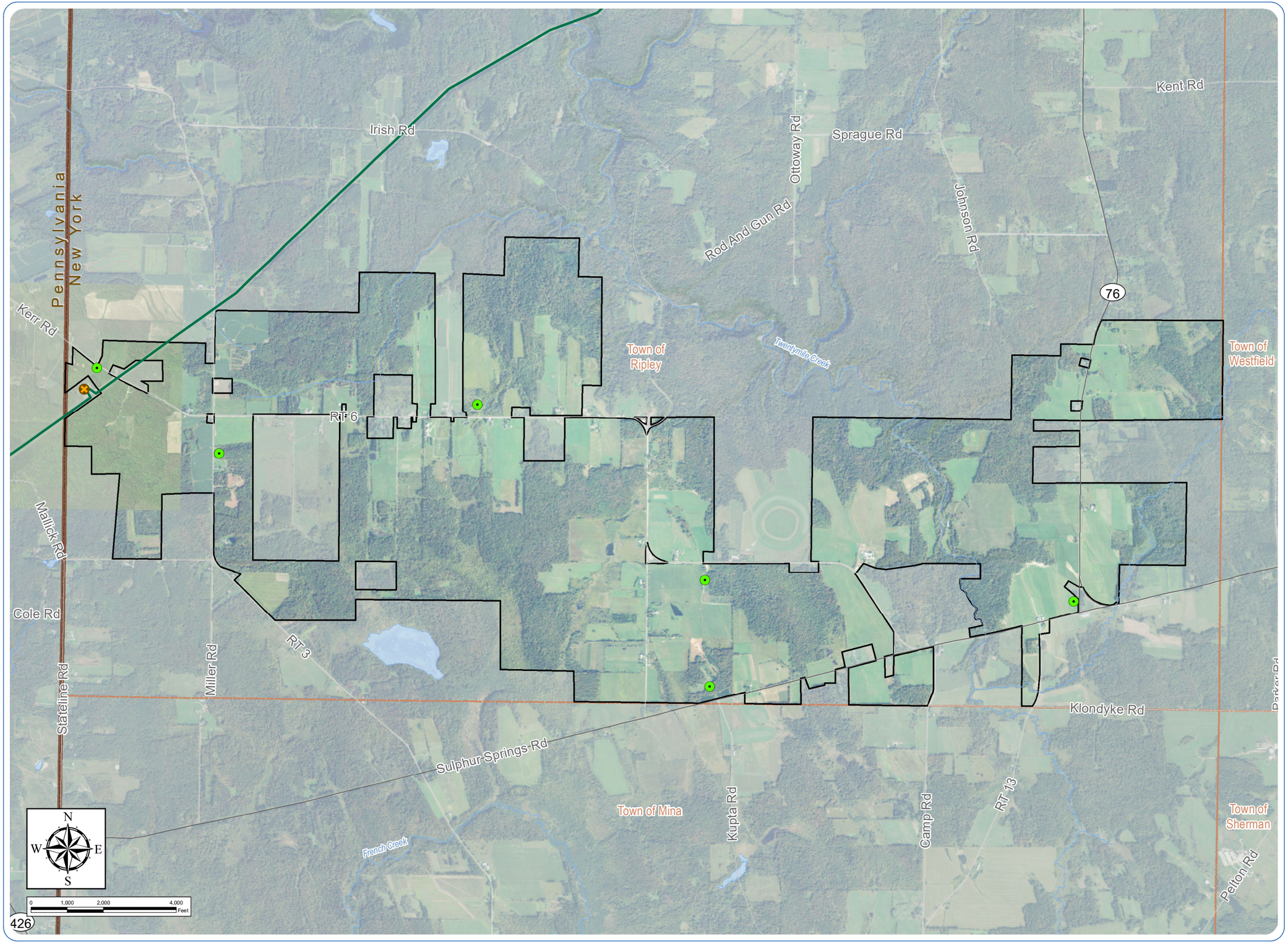
Figure 4: Noise Monitoring Location



- Noise Monitoring Location
- Existing Substation
- Existing Transmission Line
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. Basemap:USDA NAIP "2019 New York 60cm" orthoimagery map service. **2.** This map was generated in ArcMap on May 7, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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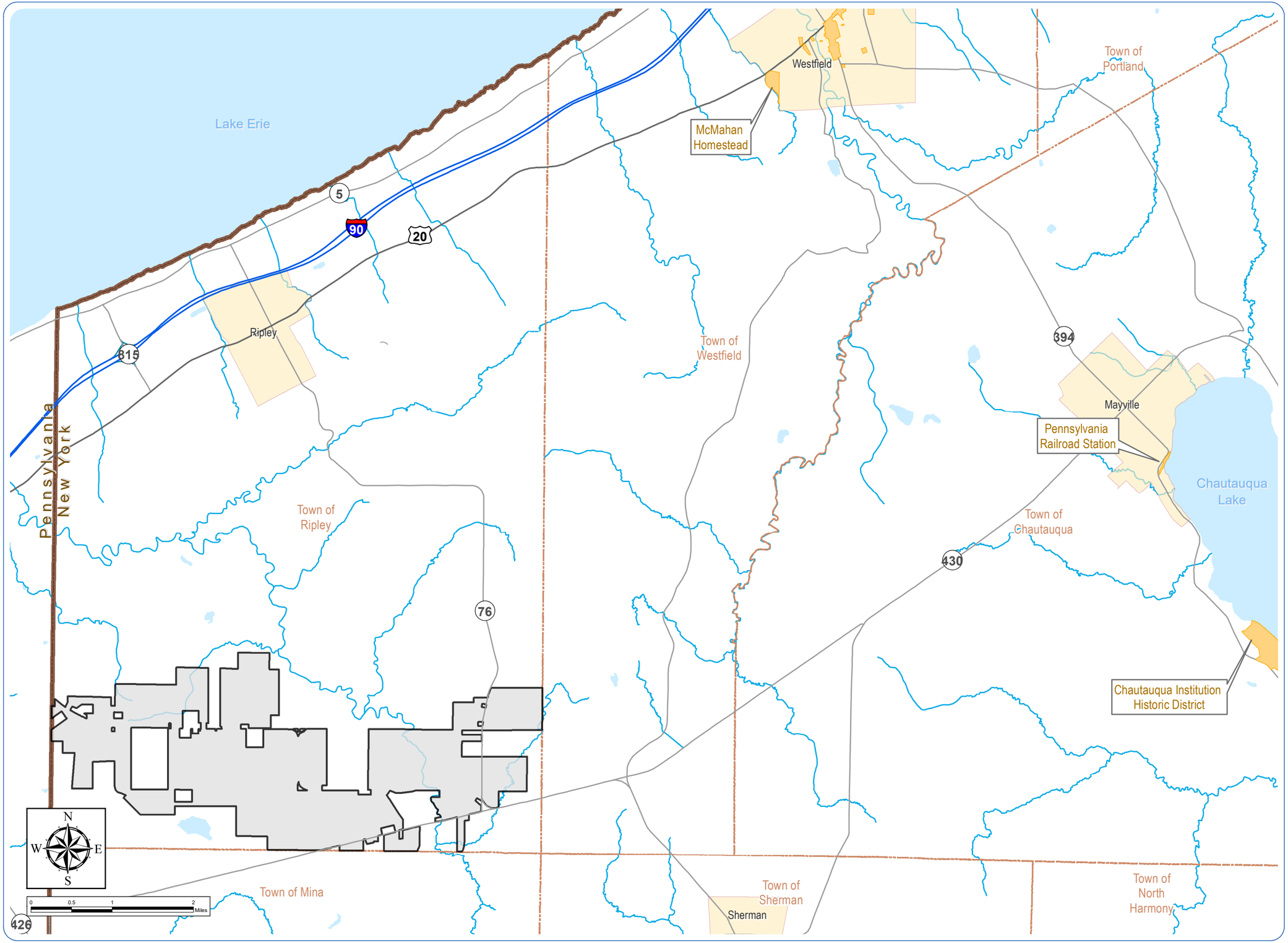
Figure 5: Historic Sites and Districts



NRHP-Listed Resource
Facility Area
Town Boundary
State Boundary

Notes: 1. Basemap: USDA NAIP "2019 New York 60cm" orthoimagery map service. **2.** This map was generated in ArcMap on May 7, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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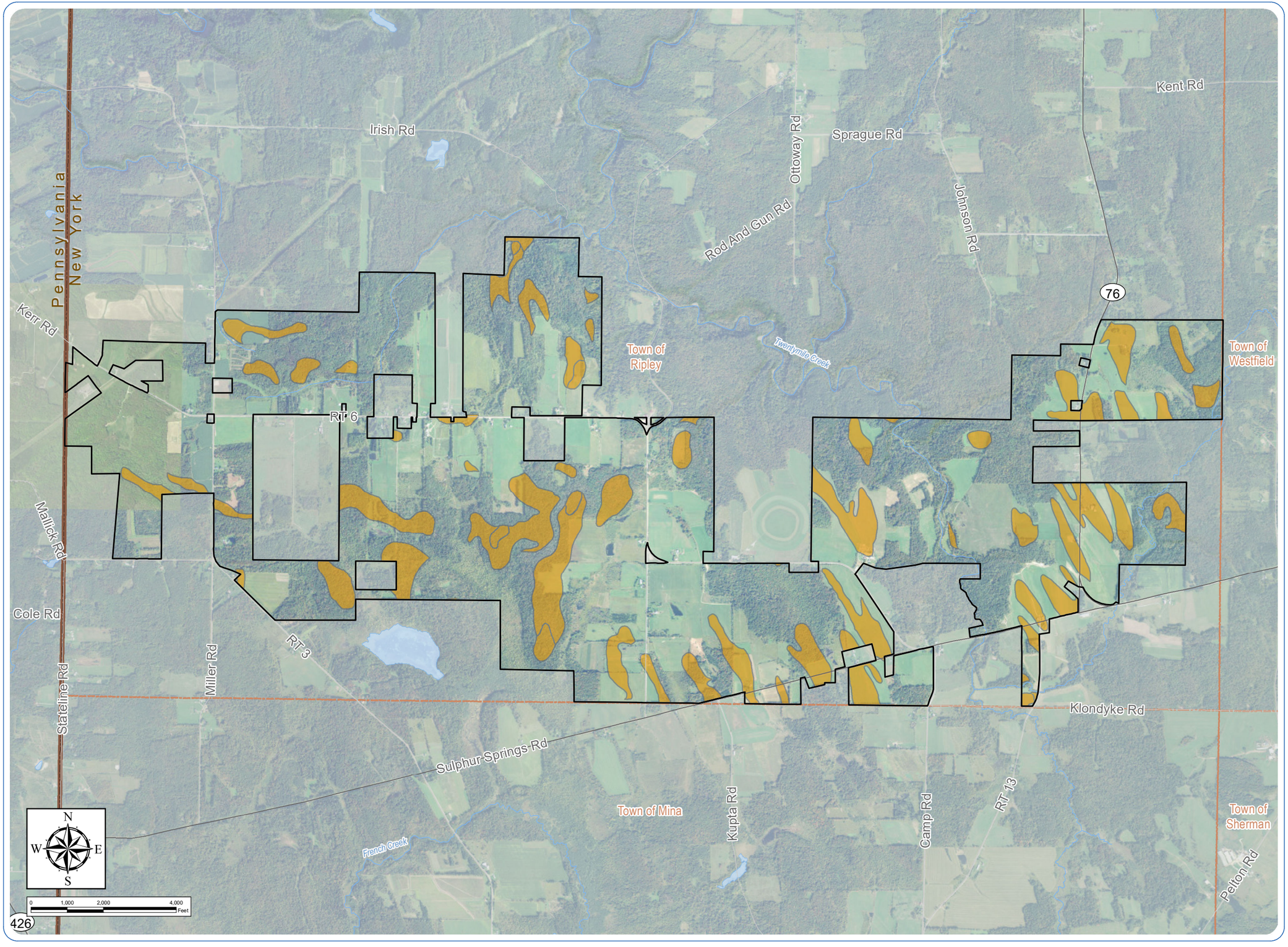
Figure 6: Mineral Soil Groups



Mineral Soil Groups 1 - 4
Facility Area
Town Boundary
State Boundary

Notes: 1. Basemap: USDA NAIP "2019 New York 60cm" orthoimagery map service. **2.** This map was generated in ArcMap on May 7, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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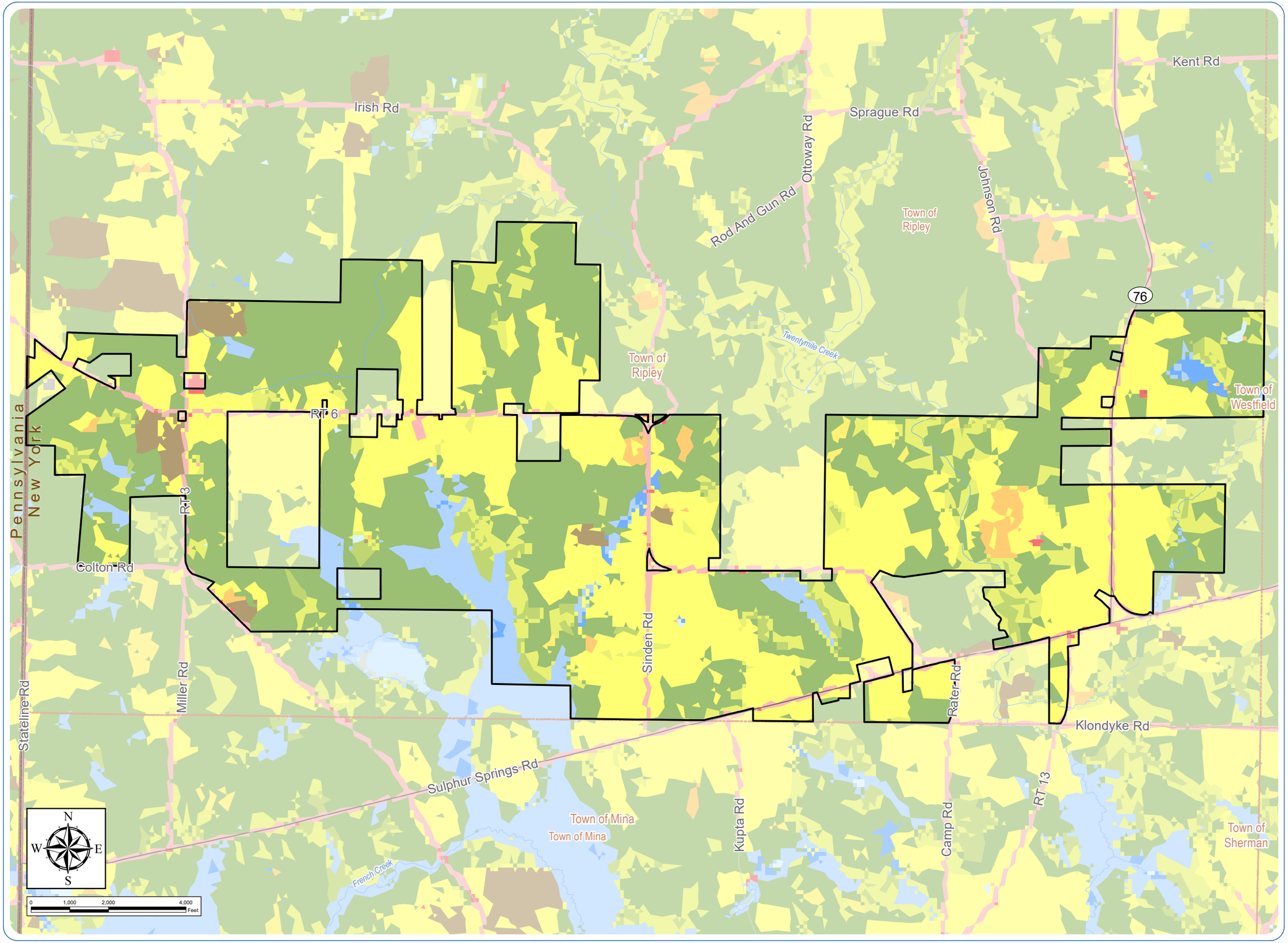
Figure 7: National Land Cover Data



- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
- 42 - Evergreen Forest
- 43 - Mixed Forest
- 52 - Shrub/Scrub
- 71 - Grassland Herbaceous
- 81 - Pasture/Hay
- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Wetlands
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. This map was generated in ArcMap on May 14, 2020. **2.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement
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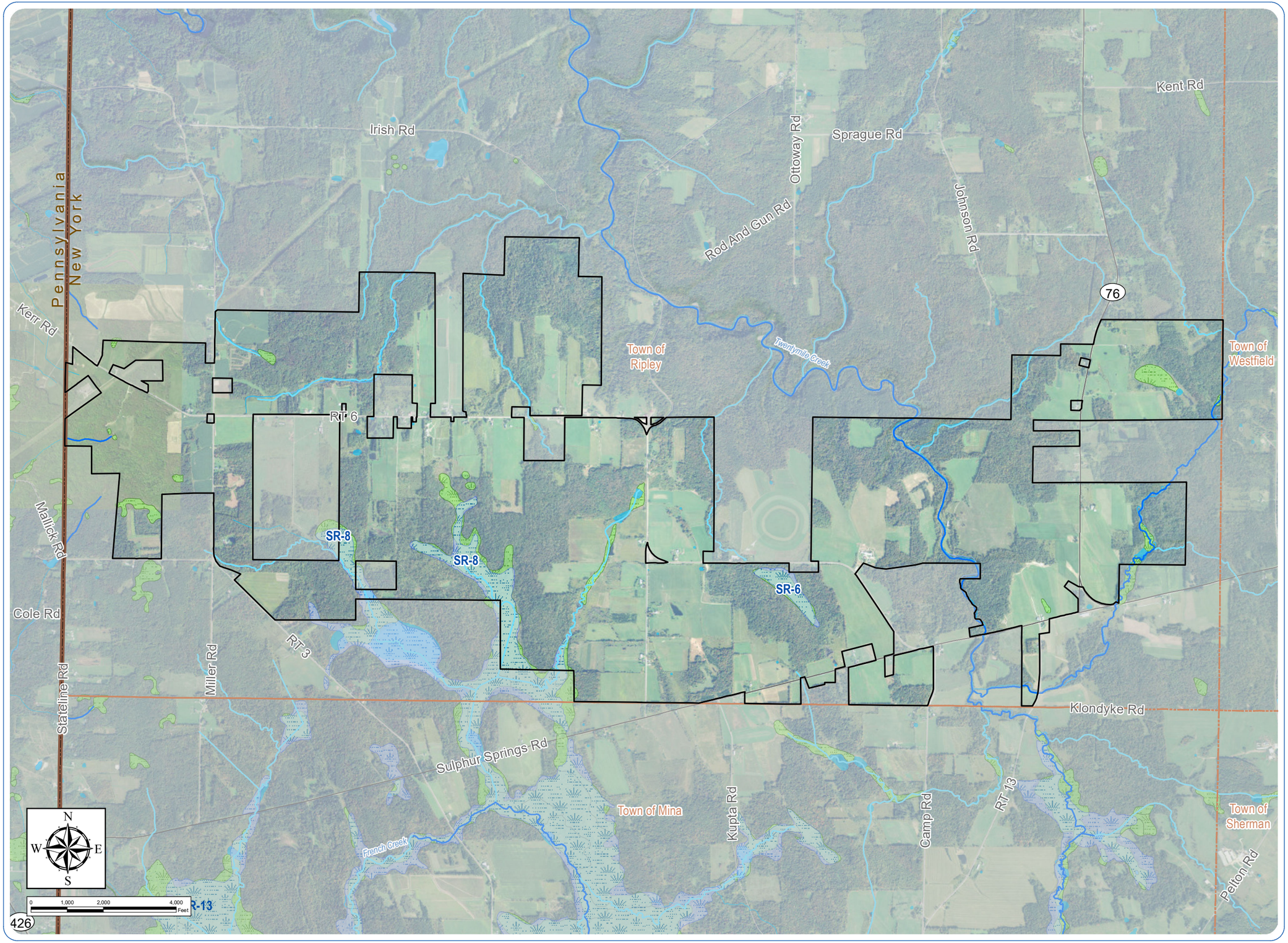
Figure 8: Mapped Wetlands and Streams



NYSDEC Stream Classification
- Class A, B, C(TS), or C(T) Stream
- Class C or D Stream
- NYSDEC Mapped Wetland
- NWI Mapped Wetland
- NWI Mapped Pond, Lake, or Riverine
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. Basemap: USDA NAIP "2019 New York 60cm" orthoimagery map service. **2.** This map was generated in ArcMap on May 7, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

South Ripley Solar Project

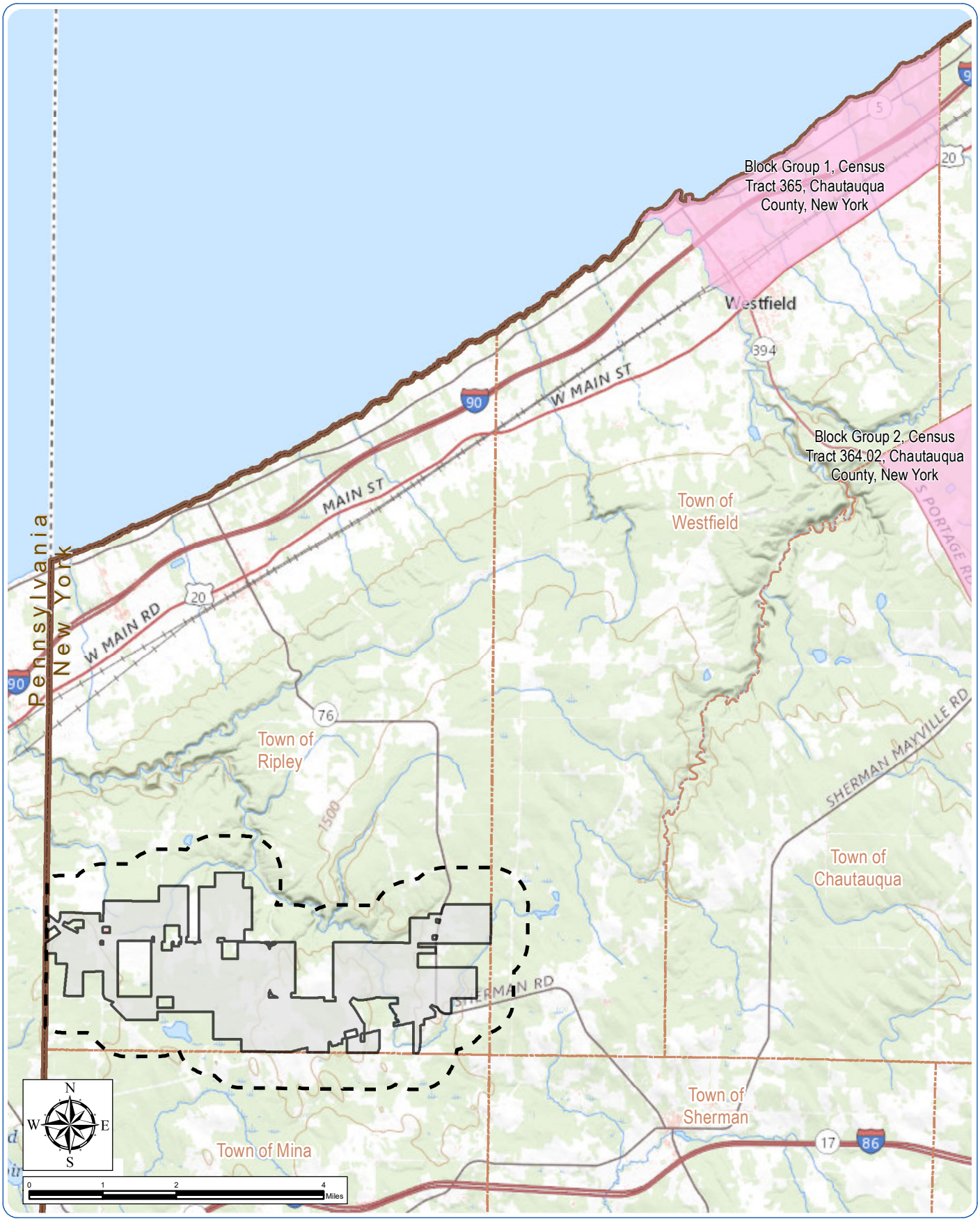
Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement Case No. 19-F-0560

Figure 9: Visually Sensitive Resources and Visual Study Area

Notes: 1. This map was generated in ArcMap on May 7, 2020. **2.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Hamlet
- School
- Church
- Cemetery
- Scenic Byway
- Bike Route
- Snowmobile Trail
- Trails on State Land
- NYSDEC Land
- The Nature Conservancy Land
- Conservation Easement
- Golf Course
- State Heritage Area
- Facility Area
- 2-Mile Study Area
- 5-Mile Study Area
- Town Boundary
- State Boundary



South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Preliminary Scoping Statement - Case No. 19-F-0560

Figure 10: Potential Environmental Justice Areas

Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service. **2.** This map was generated in ArcMap on May 6, 2020. **3.** This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Environmental Justice Impact Study Area
- Potential Environmental Justice Area
- Facility Area
- Town Boundary
- State Boundary