
NORTH SENECA
SOLAR PROJECT

North Seneca Solar Project

ORES Permit Application No. 23-00036

1100-2.7 Exhibit 6

Public Health, Safety and Security

REVISION 1

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EXHIBIT 6 PUBLIC HEALTH, SAFETY, AND SECURITY

(a) Statement and Evaluation of Adverse Impacts

North Seneca Solar Project, LLC (the Applicant) proposes to develop an up to 90 megawatt (MW) solar energy facility and associated infrastructure (the Facility) located in the Town of Junius and Waterloo (referred to jointly as the Towns), Seneca County, New York. The Applicant assessed potential public health, safety, and security impacts associated with the construction and operation of the Facility to ensure those impacts are avoided and minimized to the maximum extent practicable through Facility design and planning. In general, solar photovoltaic (PV) facilities are not known to pose any significant health dangers to the public at large, or to properties in the vicinity of facilities. Solar facilities are safer than most other forms of electricity generation and are not known to pose significant public health or safety risks (NC Clean Energy, 2017). Unlike conventional fossil fuel power plants, solar facilities generate electricity without emitting pollutants that damage air quality or harm public health and safety (NYSEPB, 2015). In addition, solar facilities do not require water for operation or discharge wastewater, producing energy without affecting the availability or quality of surface water or groundwater or discharging pollutants to ground or surface waters. With proper siting, design, construction, and operation, solar facilities typically do not pose a risk of significant impacts to public health and safety; rather, solar facilities provide benefits to public health by reducing greenhouse gas (GHG) and wastewater emissions associated with conventional energy production. The Facility will be constructed in accordance with applicable health and safety standards and the Applicant is committed to developing and operating the Facility in a safe and environmentally responsible manner.

Public health and safety concerns associated with construction of the Facility are primarily limited to common risks associated with commercial construction projects, such as increased noise levels during construction, increased traffic, and the potential release of construction-related contaminants into the environment. These common risks are generally not associated with significant impacts to public health and safety and will be avoided, minimized, and mitigated by the Applicant's adherence to the Article VIII Uniform Standards and Conditions (USCs) and implementation of the Site Security Plan (Appendix 6-A) and the Safety Response Plan (Appendix 6-B). In addition, the Applicant's measures to avoid, minimize, and mitigate construction-related risk to public health and safety will be further detailed in pre-construction compliance filings in accordance with Article VIII.

Once constructed, the presence of electrical equipment both within the arrays and at the collection substation carries some risk of an electrical hazard. However, generally, these systems have been tested and proven to operate safely, and these areas will have perimeter controls (i.e., security fencing, signage) as is required by local law and the National Electrical Safety Code to prevent potential injury. Certain equipment, such as inverters, may also present a combustion risk. The Applicant's Safety Response Plan includes information regarding combustion risks, and how these risks will be avoided, minimized, and mitigated or addressed (see Appendix 6-B).

Additionally, solar energy generating facilities have the potential to produce glare and therefore PV modules are produced with anti-reflective coatings to reduce and mitigate glare impacts on residences, airports, and public roadways. The Applicant will utilize single-axis tracking PV arrays, which maintain low incidence angles by following the sun's position throughout the day. This increases the amount of incoming solar radiation absorbed by the panels and limits the amount reflected. The Applicant's assessment of glare showed that none of the potentially sensitive receptors located within or adjacent to the Facility will receive glare from the Facility (see Exhibit 8 and Appendix 8-B).

Appropriate siting and design of the Facility, diligent implementation of the Site Security Plan and the Safety Response Plan (see Appendices 6-A and 6-B), and adherence to state and federal health and safety standards greatly reduce the potential risks and emergency incidents associated with construction and operation of the Facility.

The public health and environmental benefits of transitioning to renewable energy cannot be understated; those benefits have been a key driver of New York State energy policy for decades and were a central component of the Climate Leadership and Community Protection Act (CLCPA) (NYSCA, 2019). The state anticipates that the CLCPA's renewable energy generation targets will result in improved air quality and increased health benefits across the State. Additionally, under the CLCPA (2020), the state is required to consume 70% of its electricity from renewable resources by 2030 and 100% of its electricity from zero emission resources by 2040. The North Seneca Solar Project will contribute up to 90MWs of new renewable generation, supporting the CLCPA objectives. See Exhibit 17 for further discussion on the compatibility of the Facility with New York State energy planning objectives, and specific findings on how the Facility promotes public health and welfare and minimizes public health and environmental impacts related to climate change. Also see Exhibit 18 (Socioeconomic Effects) and Exhibit 19 (Environmental Justice) for additional information.

Air, water, and soil pollution represent "the world's largest environmental risk factor for disease and premature death" (The Lancet, 2022). According to Dr. Tedros Adhanom Ghebreyesus, the Director General of the World Health Organization, 90% of the world's population regularly breathes highly polluted, toxic air which far exceeds the levels that the World Health Organization considers safe, which contributes to an estimated 25 to 30 percent of deaths from heart attack, stroke, lung cancer and chronic respiratory disease, and causes the premature, preventable deaths of more than 7 million people every year (Burnett et al., 2018). Sensitive groups such as children, elderly, minorities, and impoverished communities are typically at higher risk of health impacts due to environmental pollution. In New York State, those living in poverty in urban centers, often people of color, are typically the most significantly impacted by the pollution created by fossil fuel-generating facilities located in their neighborhoods (New York State Energy Research and Development Authority, 2021).

Conventional fossil fuel power generation is a major source of criteria air pollutants, which include carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide, that affect air quality, visibility, and public health. In addition, those facilities can also release other acidic compounds, as well as mercury. Exposure to these pollutants can cause or aggravate "lung diseases including asthma, emphysema, and chronic bronchitis, as well as increase the risk of premature mortality from heart or lung

disease" (NYS DPS, 2015). According to the New York State Department of Public Service's (NYS DPS's) Final Generic Environmental Impact Statement for the Reforming the Energy Vision (REV) proceeding:

One study estimated health impacts from fossil fuel energy sources at \$362 to 886 billion in economic value annually, based on premature mortality, workdays missed, and direct costs to the U.S. healthcare system resulting from PM_{2.5}, NO_x, and SO₂. The same study estimated that the economic value of negative health impacts was equal to approximately \$0.14 to \$0.31 per kWh. These costs may be even higher if greenhouse gas emissions are included.

The public health impact of fossil fuel power generation is significant. According to a report by New York City's Department of Health and Mental Hygiene, particulate air pollution in New York City "causes more than 3,000 deaths, 2,000 hospital admissions for lung and heart conditions, and approximately 6,000 emergency department visits for asthma in children and adults" each year (NYC DOHMH, 2011). A 10% reduction in particulate air pollution is expected to prevent more than "300 premature deaths, 200 hospital admissions and 600 emergency department visits annually" in New York City alone (NYC DOHMH, 2011). It is likely that, across the State, thousands of New Yorkers are sickened or die prematurely due to poor air quality.

While the CLCPA and other state energy policies emphasize the urgent need to address climate change, the legislation and similar State initiatives have also focused on addressing broader air pollution problems, as a matter of equity and environmental justice, particularly in disadvantaged communities "burdened by cumulative environmental pollution and other hazards that can lead to negative public health effects."¹ Some of New York's dirtiest power plants are so-called "peaking" power plants which operate on the hottest days of the year and in times of daily peak demand, and produce the most air pollution, often in low-income neighborhoods and communities of color in the New York City area.

Harmful effects of air pollution are not limited to humans—the natural environment suffers negative air pollution impacts ranging from acid rain and contamination of water sources, to crop and forest damage, in addition to the wide range of threats posed by climate change. Moreover, climate change poses a much broader range of threats to human health than simply air quality issues—according to the NYSDEC, the projected effects of climate change "threaten the livability and economic vitality of many of New York's communities, as well as the health and safety of the residents of those communities" through projected sea level rise, increased storms and storm-related damages, increased salinity in drinking water in communities along the Hudson River, expansion of invasive species and pests, droughts, heat waves, and cold events, among other things. The effects from climate change will be felt on a global level, but certain vulnerable communities are anticipated to face disproportionate negative impacts resulting from the effects of climate change including those with low incomes, people of color, and the elderly (U.S. Environmental Protection Agency [EPA] 2021).

¹ See, e.g., Article 75 of the New York Environmental Conservation Law, which focuses on efforts to aid Disadvantaged Communities burdened by negative public health effects, environmental pollution, and climate change impacts, such as by establishing a Climate Justice Working Group, among other things.

Furthermore, as demonstrated in the Climate Change 2023 Synthesis Report from the Intergovernmental Panel on Climate Change (IPCC), human induced climate change is affecting weather and climate extremes in every region of the world, and such changes will continue to increase in frequency and intensity in direct correlation with an increase in global warming (IPCC, 2023). As indicated in the 2023 IPCC Report, cumulative carbon dioxide (CO₂) emissions must be limited to slow human induced global warming. Thus, moving towards renewable energy alternatives that reduce CO₂ emissions on a widescale, regional level, will play an important role in global efforts to reduce global warming and address impacts of climate change.

As a safe, renewable source of energy production, solar facilities will play a critical role in meeting the public health and safety goals of the New York State energy policy. The public health benefits of solar energy are a critical driver of new State policy guiding in-state energy development. As outlined in New York State's 2015 State Energy Plan and the 2019 CLCPA, reducing GHG emissions from the energy sector is a critical element of protecting the health and welfare of New York state residents. Pursuant to the State Energy Plan, increasing the fraction of the State's electricity needs to be met by solar, and other renewable sources, will, in general, decrease health risks associated with electricity production by reducing GHG and other pollutant production.

Based on an analysis using the EPA's Avoided Emissions and Generation Tool (AVERT),² the Facility's load profile will displace 147,420,000 kilowatt hours (kWh) of fossil fuel generation in the New York Region over the course of a year (EPA, 2023). For reference, this equals the annual electricity consumed by 12,140 average homes in the United States.³ This electricity generation will displace electricity generated from conventional power plants, thereby reducing emissions of conventional air pollutants such as sulfur and nitrogen oxides, and GHGs (e.g., carbon dioxide). Annual particulate emissions changes estimated by AVERT for the New York region power sector resulting from the operation of the Facility are summarized in Table 6-1.

Table 6-1. Annual Emission Changes Estimated by AVERT for the New York Region Power Sector Resultant from the Operation of the Facility

Particulate	Emission Changes Estimated by AVERT
CO ₂	-78,550 tons
SO ₂	-29,290 lbs.
NO _x	-72,470 lbs.
PM _{2.5}	-22,040 lbs.
VOCs	-9,990 lbs.
NH ₃	-10,420 lbs.

² AVERT Web Edition is a publicly accessible model that is capable of evaluating how the operation of a new renewable energy project can offset traditional fossil fuel energy generation and change the emissions of common air pollutants at a county, state, or regional level. Available at: <https://www.epa.gov/avert/avert-web-edition>.

³ State-specific information for this metric is not provided by AVERT.

During operations, the Facility will not generate other common pollutants associated with the various phases of traditional fossil fuel power generation—from extraction and refining to transportation and storage, to the burning of fuel and the generation of waste products—nor will it utilize or discharge cooling water and wastewater effluent. The Project supports immediate public health and safety objectives through the displacement of emissions to air and water, but also meets long-term objectives of curbing climate change which has broader public health and safety effects at the local, state, and global levels.

The transition from fossil fuels to renewable energy here in New York will not only play a critical role in the State's efforts to combat climate change, but it will also aid efforts to reduce harmful air pollution, and advance principles of environmental justice by eliminating significant sources of pollution from the state's most vulnerable neighborhoods. Based on this assessment and the mitigation and protection measures proposed by the Facility, significant adverse impacts on public health, safety, and security will not occur.

(1) Gaseous, Liquid, and Solid Wastes to be Produced During Construction and Operation

The construction of the Facility is not expected to produce significant amounts of gaseous, liquid, or solid waste. The procedures for collecting, handling, storage, transport, and disposal for wastes generated during construction and operation of a solar energy facility are discussed in Exhibit 6(a)(4).

Waste produced during construction will typically be limited to standard waste produced by common construction equipment and large-scale construction activities and will be handled by the engineering, procurement, and construction (EPC) contractor in accordance with all applicable laws and regulations pertaining to such wastes.

The operation of construction equipment by the designated contractor will generate the majority of gaseous and liquid waste during construction. Construction equipment and vehicles, including but not limited to bulldozers, pile drivers, delivery trucks, and passenger vehicles, will be fueled by unleaded gasoline and ultra-low sulfur diesel and will have maintained mufflers. Minor volumes of concrete washout wastes would be generated for inverter and substation foundations.

Other liquid and/or solid waste materials will be primarily limited to standard construction-related wastes and will be handled by the contractor in accordance with construction Best Management Practices (BMPs) and all applicable laws and regulations. Horizontal directional drilling (HDD) will be utilized in some areas identified for trenchless crossings (see Exhibit 5 [Design Drawings]). The Applicant will develop an Inadvertent Return Flow Plan in accordance with 16 New York Codes, Rules, and Regulations (NYCRR) Section 1100-10.3(f)(5) to ensure drilling fluid does not enter wetlands, waterbodies, or streams. Drilling fluid may be generated from the HDD process.

Additionally, during construction of the Facility, sanitary facilities used by workers will consist of portable toilets, which will be emptied by an NYSDEC-permitted waste hauler, as needed, and taken to a designated disposal facility.

Solid waste will consist primarily of plastic, wood, cardboard and metal packing/package materials, construction scrap and general refuse, as well as brush and timber from site preparation. Facility

construction will generate solid waste, consisting primarily of approximately 3,650 wooden pallets and cardboard boxes, or approximately 900 cubic yards of waste.

Generally, densely wooded areas may result in a volume of approximately 300 cubic yards of woodchips per dense tree stand acre, with an additional approximately 100 cubic yards resulting from chipping of associated stumps. Construction of the proposed Facility would result in the clearing of approximately 66 acres of forestland (including approximately 6 acres where stumps will be left uncut and 60 acres where stumps to will be removed within the limits of grading), 6 acres of brushy cleared land, and 1.6 acres of successional shrubland. Tree clearing and disposal of vegetation will be conducted in accordance with 16 NYCRR Section 1100-6.4(m)(8) requirements including coordinating with landowners to salvage materials. Landowners will have the right to any materials, including trees, taken from their property during site preparation. Any trees not claimed by the landowner would first be salvaged for merchantable timber for commercial wood use or utilized as firewood, particularly for cleared trees within mature hardwood and mixed forest areas. The remaining cleared vegetation, including immature hardwood and mixed brush or shrubs is expected to be chipped and spread on site in upland areas of the Facility Site (safely away from water resources or active agricultural fields) so as not to interfere with existing land use practices. Thus, the amount of waste associated with vegetation clearing is anticipated to be negligible and primarily limited to unusable vegetation.

Operation of the Facility is anticipated to generate minimal waste. Operational materials may include cardboard packaging and vegetation from maintenance activities. Additionally, limited waste from defective or damaged PV panels and other equipment may be expected during operations.

Anticipated volumes of waste to be produced during construction and operation phases of the Project are provided in Table 6-2.

Table 6-2. Source and Anticipated Volumes of Waste during Construction and Operation

Waste Type	Volume	Management Method
Construction		
Timber and Stumps	25,800 cubic yards	Provided to landowners upon request, sold to a timber buyer, or disposed of at the Seneca Meadows Landfill
PV Panel Packing Materials	Approximately 900 cubic yards	Cardboard, plastic, and metal – disposed or recycled at the Seneca Meadows Landfill Pallets-crushed and disposed of or returned to vendor for reuse, if available
Defective or Damaged PV Panels	N/A	Returned to manufacturer or disposed of in accordance with federal and state laws
Operation		
PV Panel Packing Materials	N/A	Same as construction
Defective or damaged PV Panels	N/A	Same as construction

Waste Type	Volume	Management Method
Inverters	24 kVA inverters (120 inches by 84 inches by 300 inches)	Repurposed or scrapped

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

It is not anticipated that the construction or operation of the Facility will generate a substantial amount of waste, with the exception of general construction waste described above, which will be handled in accordance with all applicable laws and regulations pertaining to such wastes and is not anticipated to be released into the environment. Brush and timber cleared during construction of the Facility is anticipated to be repurposed and utilized on-site or converted to firewood or merchantable lumber. As a result, unusable vegetation clearing waste that will need to be disposed of at a licensed off-site landfill is anticipated to be negligible.

The use of herbicides may be required during operation of the Facility for selective targeting of invasive species, or to control vegetation at the substation, but herbicides would not be used on a broad scale across the Facility Site. Herbicide treatments would be applied by a licensed New York State pesticide applicator that meets the requirements set forth in 6 NYCRR Part 325, Application of Pesticides in accordance with NYSDEC-approved herbicide and treatment measures. The type of herbicide(s) to be used, method of application, and schedule for application will be determined based on the locations of the targeted areas, an evaluation of herbicide safety and efficacy, and the particular invasive species to be controlled. This will be detailed in the Applicant’s Vegetation Management Plan, and the Invasive Species Control and Management Plan, in compliance with 6 NYCRR Part 575 and in accordance with Article VIII pre-construction compliance filings.

A de minimis amount of water may be used for vehicle washing associated with invasive species control (removal from trucks) or limited occurrences for washing panels if necessary.

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

It is not anticipated that the proposed Facility will require any waste treatment processes during construction or operation.

(4) Procedures for Collection, Handling, Storage, Transport, and Disposal for Wastes

Waste produced during construction will typically be handled by the EPC contractor in accordance with all applicable laws and regulations pertaining to such wastes. All debris, excess construction materials, and other liquid and/or solid waste materials will be removed and appropriately disposed of consistent with construction BMPs and all applicable laws and regulations as well as the Article VIII USCs established in Title 16 New York Codes, Rules, and Regulations (16 NYCRR) Section 1100-6.4(m)(6).

The EPC contractor will be responsible for the removal and disposal of concrete washout associated with the inverter and substation foundations at a licensed facility consistent with 16 NYCRR Section

1100-6.4(p)(7) requirements for concrete washouts. The EPC contractor will collect and dispose of HDD drilling fluids in accordance with 16 NYCRR Section 1100-10.3(f)(5) which may include drying of fluid at on-site staging areas before disposing of the fluids off-site.

As described in Section 6(a)(1), the Applicant will coordinate with landowners regarding the salvage of trees and vegetation cleared from their properties. Unclaimed tree and vegetation waste will be converted to merchantable lumber, cut into logs and stockpiled on the edge of the work area or removed from the defined work area, while limbs and brush will be chipped and spread in upland areas of the Facility Site. Large tree stumps not chipped will be either left in place in order to not disrupt environmentally sensitive areas such as wetlands, removed and stockpiled on site (in upland, non-agricultural areas), or disposed of at a licensed off-site landfill designated for receipt of such waste. All timber products will be managed in accordance with best management practices designed to prevent the spread of invasive species, such as those for firewood (NYSDEC, 2020b). Activities will comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL Section 9-1303 and any quarantine orders issued thereunder, consistent with 16 NYCRR Part 1100-6.4(m)(8)(i), and the approved Invasive Species Control and Management Plan which will be prepared by the Applicant in accordance with the pre-construction compliance filing requirements outlined in 16 NYCRR Section 1100-10.2(f)(4).

All major construction waste that cannot be recycled will be collected from work areas and stored in 10- to 40-yard roll-off dumpsters located within the Facility security fences at locations such as laydown yards and major construction areas. A private contractor will empty the construction materials on an as-needed basis, which is expected to be no less frequent than weekly and dispose of the refuse at a licensed solid waste disposal facility. The closest landfill to the Facility is Seneca Meadows Landfill,⁴ located approximately 2.2 miles east of the Facility. According to the NYSDEC's current 2020 version of the Municipal Solid Waste Landfill Capacity Chart, the existing annual permit limit for this landfill is 2,190,000 tons per year. Existing and planned capacity for this landfill under the existing permit is 8,520,432 tons (NYSDEC, 2020a). The landfill accepts non-hazardous, solid waste from residences, businesses, and industry, as well as tire recycling, residential and commercial recyclables, e-waste recycling, and rechargeable battery recycling (Seneca Meadows Inc., 2020).

Additionally, during construction of the Facility, sanitary facilities used by workers will consist of portable toilets, which will be emptied by an NYSDEC-permitted waste hauler, as needed, and taken to a designated disposal facility.

Waste produced during operation of the Facility will be reused or recycled to the maximum extent practicable or sent to the local scrapyards if applicable. Facility components that are no longer operational and require replacement, such as inverters, transformers, and broken solar panels, will be repurposed if possible or disposed of in accordance with all applicable federal and state laws. Defective panels will be sent back to the manufacturer. The Applicant has also prepared a Site Restoration and

⁴ <https://data.ny.gov/Energy-Environment/Landfill-Solid-Waste-Management-Facilities-Map/afg5-7i6u>

Decommissioning Plan (See Exhibit 23), which describes methods for removing and recycling or disposing of equipment and materials at the end of the usable life of the Facility.

(5) Maps of Study Area and Analysis

The Study Area for Public Health, Safety, and Security consists of a 5-mile radius from the Facility Site. See Figure 6-1 for Public Health and Safety maps which depict publicly available data within the 5-mile Study Area, including the following resources:

- Known public water supplies
- Fire/police/emergency medical services (EMS) stations
- Hospitals and emergency medical facilities
- Emergency services communications facilities
- USEPA-regulated facilities
- Dams, bridges, and related infrastructure
- Existing known hazard risks (flood hazard zones, storm surge zones, areas of coastal erosion hazard, landslide hazard areas, and areas of geologic, geomorphic or hydrologic hazard)
- Explosive or flammable materials transportation or storage facilities
- Contaminated sites
- Local risk factors.

Flood Insurance Rate Map (FIRM) panels available from the Federal Emergency Management Agency indicate that there are no special flood hazard areas (100-year flood zones) documented within the Facility Site (see Appendix 24-D). The following known hazard and risk areas were not identified within the Facility Site or 5-mile Study Area: storm surge zones, state coastal boundary or coastal erosion hazards, landslide hazard areas, or other geologic/geomorphic/hydrologic hazards.

While several water wells were mapped by the NYSDEC in the Facility Site, no public water supplies occur in the Facility Site. Exhibit 13 for additional information regarding private water wells and public water supply systems. In addition, several oil and gas wells and a natural gas transmission line occurs within the Facility Site as detailed in Exhibit 3 and depicted on Figures 3-4 and 3-12. Local hospitals and emergency responders are identified in the Safety Response Plan (Appendix 6-B).

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

As indicated in the previous sections, the Facility is not expected to result in any significant public health or safety concerns associated with the release of gaseous, liquid, or solid wastes. The potential public health and environmental benefits of the Facility, particularly as they relate to climate change, are discussed further in Exhibit 17.

Exhibit 7 evaluates the potential for noise from Facility construction and operations to impact sensitive noise receptors. Construction of the Facility is not anticipated to require blasting, which generates high levels of noise. As discussed in Exhibit 7, sound propagation modeling shows that construction of the Facility will not result in public health impacts from noise as impacts during operation are below all applicable limits for participating and non-participating residents.

Exhibit 8 describes the analysis of glint and glare from solar installations that could result in operator safety impacts, such as the potential to disorient motorists when driving or pilots when landing near the Facility Site. As discussed in Exhibit 8, the Solar Glare Hazard Analysis and the viewshed analysis shows that no glare would be received at any of the identified residences, rights-of-way, State and National Register of Historic Places eligible resources, or travel routes.

Exhibit 13 evaluates potential impacts to public water supplies based on a survey of existing water wells and water supplies in the Study Area. Based on the data reviewed, the proposed Facility is not anticipated to result in significant impacts to groundwater quality or quantity, or to the private drinking water supply wells, aquifer protection zones, or groundwater aquifers within the Facility Site, or within a 1-mile radius of the Facility Site.

Exhibit 16 discusses potential traffic impacts to roads in the Study Area. During construction, the number of heavy equipment vehicles operating adjacent to or within public road rights-of-way will increase during regular work hours. However, due to the existing low traffic volumes on adjacent roadways and the rural character of the Facility Site, traffic impacts on the adjacent roadway network due to proposed construction activities are expected to be negligible. Traffic associated with Facility operation will be negligible and limited to occasional trips associated with routine maintenance activities, requiring only pick-up trucks and occasional heavy equipment for maintenance (e.g., replacement panel delivery and installation).

As described in Exhibit 17, the Facility will generate Renewable Energy Credits as part of the effort to mitigate climate change through a reduction of GHGs which contribute to climate change. By reducing GHG emissions, as required by the CLCPA, New York State will reduce climate change impacts, including impacts on public health and the environment related to warmer temperatures, more frequent heat waves, and changing weather patterns. By increasing renewable energy generation in New York, the Facility contributes toward the reduction in the use of fossil fuel and supports state goals for improved health and welfare for environmental justice communities.

(7) Impact Minimization Measures

The Applicant will comply with the conditions of various applicable local, state, and/or federal regulations that will ultimately govern Facility development to minimize impacts from construction and operation of the Facility. Additionally, the Applicant has made commitments to address potential impacts to a wide range of resources, as described in Section a(6), throughout this Application and will adhere to any permit issued by the Office of Renewable Energy Siting and Electric Transmission (ORES), and the requirements of 16 NYCRR Part 1100 and Subpart 1100-6 of the USCs, which will minimize

impacts from construction and operation of the Project. The development, construction, and operation of the Project is not anticipated to result in significant adverse impacts on the environment, public health, or community safety.

Facility development and operation will also include measures to minimize potential impacts by following and implementing the USCs including by protecting underground facilities and pipelines consistent with 16 NYCRR Section 1100-6.4(f) and (g) requirements, protecting mechanical equipment by fencing consistent with 16 NYCRR Section 1100-6.4(i), operating the Facility according to all applicable safety rules and regulations as outlined in 16 NYCRR Section 1100-6.5(c), and hiring an independent, third-party monitor to oversee compliance with environmental commitments and siting permit requirements and applicable sections of the Public Service Law, Environmental Conservation Law, and Clean Water Act Section 401 Water Quality Certification consistent with 16 NYCRR Section 1100-6.4(b) requirements.

For a detailed analysis of impact minimization measures for a given resource, see the appropriate exhibit in this Application (e.g., for impact minimization measures associated with noise see Exhibit 7, for visual minimization measures associated with glare see Exhibit 8, and for impact minimization measures associated with wetlands see Exhibit 14).

(8) Impact Mitigation Measures

The development and operation of the Facility will include measures to mitigate potential impacts to public health and safety by following and implementing the USCs, which generally include the following:

- Develop and implement various plans to minimize potential adverse impacts to air, soil, and water resources (which can directly impact public health), including a dust control plan, a Stormwater Pollution Prevention Plan (Appendix 13-C), and spill prevention, control, and countermeasures procedures (Exhibit 13).
- Document existing road conditions and undertake public road improvement/repair as required to mitigate impacts to local roadways (Exhibit 16).
- Develop and implement the Site Security Plan (Appendix 6-A).
- Develop and implement a Safety Response Plan (Appendix 6-B).
- Develop and implement a Complaint Management Plan to address public concerns throughout Facility construction and operation (16 NYCRR Section 1100-10.2 (e)(7)).
- Follow notification and reporting requirements in the event of an emergency (16 NYCRR Section 1100-6.5(g) and 16 NYCRR Section 1100-6.5(h)(1)).
- Adhere to applicable USCs (16 NYCRR Section 1100-6).

For a detailed analysis of USCs to be followed for a given resource, see the appropriate exhibit in this Application (e.g., for USCs associated with noise see Exhibit 7).

(9) Proposed Monitoring

The Applicant is committed to develop and operate the Facility in a safe and environmentally responsible manner. In addition to implementing the USCs, an Environmental Monitoring Plan will be developed and implemented in accordance with the pre-construction compliance filing requirements outlined in 16 NYCRR Section 1100-10.2(e)(6), and the Applicant will hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and permit requirements during construction including siting permit requirements and applicable sections of the Public Service Law, Environmental Conservation Law, and Clean Water Act Section 401 Water Quality Certification, consistent with 16 NYCRR Section 1100-6.4(b) requirements.

Prior to construction, a Quality Assurance and Control Plan will be developed and submitted as a pre-construction compliance filing (1100-10.2(e)), demonstrating how the Applicant will monitor and assure conformance of Facility design, engineering, and installation. Once the Facility has been constructed, periodic inspections will be conducted to identify damages and any necessary repairs consistent with 16 NYCRR Section 1100-6.5(d) requirements, as part of the Applicant's Facility Maintenance and Management Plan, which will be developed prior to construction. Among other things, the inspections will examine PV panels for wear and tear and any issues or red flags at the inverters that could cause a fire or other potential health and safety problems.

(b) Plans for Site Security during Facility Operation

The Applicant has developed a Site Security Plan (Appendix 6-A), which includes security measures to be implemented during operation. It is anticipated that the Applicant will own and operate the Facility, except for the point of interconnection (POI) substation, which will be owned and operated by National Grid. The Applicant will be responsible for site safety and security during operation of the Facility, excluding the POI substation.

(1) Access Controls

All access roads shall be gated to restrict access to the public. Gates will be required to be kept locked when maintenance activities are not occurring. Signage will be installed on gates warning the public not to trespass and of possible hazards. Gates are outfitted with a "Knox Box" type locking system (or similar) to allow site access by emergency personnel.

PV arrays and associated equipment will be surrounded by perimeter fencing. Gated access points to PV arrays and associated equipment and to the collection substation shall be closed and locked except when Facility personnel are working in and/or around these areas.

A storage trailer will be located within the Facility Site and will contain the necessary tools and equipment required to conduct routine maintenance. The storage trailer will be locked when unoccupied and access will be granted only to authorized personnel. A security camera or similar

detection device may be installed at the primary entrance of the storage trailer if unauthorized access, vandalism, or damage occur.

If vandalism and damage become a problem, security cameras shall be evaluated for installation at the Facility Site.

(2) Electronic Security and Surveillance Facilities

Electronic security is not currently proposed for the Facility. However, should electronic security measures, such as triggered alarms at gate entrances or touchpad entry to various components, be determined necessary following consistent issues with vandalism or trespass, or other security issues, these measures will be considered and/or approved by the Facility's Site Manager (i.e., the manager of the Facility during its operational period).

Additionally, surveillance of the Facility is not planned at the outset of operation. Rather, should vandalism and trespass become issues for the Facility, intrusion detection methods, most likely in the form of security cameras, will be installed at the Facility Site as determined necessary by the Site Manager.

(3) Security Lighting

Security lighting will be installed at the collection substation and POI substation. Security lighting that fails will be promptly repaired or replaced. The Applicant has included basic information regarding security lighting in the Site Security Plan. A Lighting Plan providing more detailed information is included in Appendix 8-B. The PV arrays are not anticipated to require permanent lighting.

(4) Aircraft Safety Lighting

There are no public or private airports within 5 miles of the Facility Site. The closest airport is the Finger Lakes Regional Airport, located approximately 6 miles southeast of the Facility Site. Given the low profile of the majority of the Facility's components and distance from public or private airports, aircraft safety lighting is not applicable or required.

(5) Cyber Security

The Applicant will comply with all North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards and maintain an audit-ready Internal Compliance Program. These mandatory Reliability Standards include CIP Standards 002 through 011, which address the security of cyber assets essential to the reliable operation of the electric grid (NERC, 2021). Physical access to critical cyber infrastructure areas will be restricted to those individuals who must have access. Where feasible, access into cyber secured restricted areas will be monitored by personnel and/or video surveillance. Cyber security program compliance reviews will be performed by an independent auditor every 6 years in compliance with 16 NYCRR Section 1100-2.7(b)(5).

The Applicant will partner with an industry leader in cyber security that will provide 24-hour, 365 day per year monitoring and alerting for all digital computer and communication systems and networks that support the Facility. This partner will demonstrate compliance with current NERC CIP standards, or equivalent standards established by the National Institute of Standards and Technology or the International Organization for Standardization. Multipoint tiered threat detection will be employed, and cyber monitoring will include all cyber assets at the site.

For additional information on the proposed cyber security program, please see the Site Security Plan (Appendix 6-A).

(c) Safety Response Plan

A Safety Response Plan which provides emergency response direction is included as Appendix 6-B. The Safety Response Plan specifies the contingencies related to Facility operation that would constitute a safety or security emergency, as well as the procedures to follow during such an event.

(1) Identification of Contingencies that Would Constitute an Emergency

The Facility poses little risk to the community, given the setback requirements established by local law and NERC safety standards which govern the location of electrical equipment relative to people and structures near the Facility which are in place to prevent potential harm in the event of an emergency. Accordingly, the Safety Response Plan focuses primarily on supporting the safety of persons at the Facility (i.e., employees and authorized visitors) in the event of a major emergency; potential community concerns are addressed in the Safety Response Plans as appropriate. The Safety Response Plan contains information regarding the following emergency situations:

- Medical emergency
- Fire emergency
- Earthquake
- Electrical emergency
- Hazardous material spills or releases
- Severe weather conditions (electrical storms, tornadoes, hurricanes, flooding, and snowstorms)
- Physical security threats or criminal activity

For each emergency category, the Safety Response Plan contains procedures and guidelines to be followed in the event an incident arises, together with a checklist that identifies key tasks and specifies who is required to complete the task.

(2) Emergency Response Measures by Contingency

The Safety Response Plan provides detailed instructions and guidelines to be followed by site personnel, the public, and emergency responders for each of the above-listed contingencies. See Appendix 6-B

for a description of the emergency response measures by contingency. Facility related incidents that affect facility operation, or that pose a public safety concern, and catastrophic incidents will be reported to ORES and the NYSDPS consistent with NYCRR Section 1100-6.5(g) and (h)(1) requirements.

(3) Evacuation Control Measures by Contingency

The proposed Facility will not create safety concerns of a magnitude that would necessitate a community evacuation. Accordingly, the Safety Response Plan focuses on evacuation of Facility personnel. In addition, the Safety Response Plan includes specific instructions relating to evacuations in relation to each of the contingencies identified above (e.g., hazardous materials, earthquake, severe weather, and physical security threats).

(4) Community Notification Procedures by Contingency

A utility-scale solar energy generating facility does not typically create safety concerns of a magnitude that would require community notification. As detailed in Section 6(c)(1), the primary contingencies would be internal to the Facility (e.g., medical emergencies, physical security threats, and fire). Local emergency services will be notified of all emergencies for which their assistance is or may be required. The criteria for determining whether to contact local emergency responders are included in the Safety Response Plan for each contingency. If an emergency requires reporting to host and/or adjacent landowners and community officials, notification will be made via telephone or as appropriate. Reports of spills or releases that require immediate outreach to federal, state and/or local authorities will be made by the Facility Manager in accordance with the spill procedures outlined in Exhibit 13.

(5) Onsite Equipment to Respond to Fire Emergencies or Hazardous Substance Incidences

The Safety Response Plan describes equipment available for responding to fire emergencies or hazardous substance incidents (i.e., Safety Data Sheets for all hazardous material on site, fire extinguishers, and personal protective equipment). Onsite equipment to respond to fire emergencies or hazardous substance incidents will be stored at the storage trailer. The Applicant has also compiled information regarding hazardous material spills in Exhibit 13.

Access to PV arrays will be coordinated with local emergency responders and may include double locks on perimeter gates. Similar lock mechanisms will be placed at the collection substation, though access to these areas will be subject to additional utility regulations. However, any time that the Facility operators and maintenance personnel are in the PV array or substation fenced areas, the access road gates remain unlocked and medical personnel will be able to access these areas as needed.

(6) Contingency Plans for Fire Emergencies or Hazardous Substance Incidences

The Safety Response Plan contains a protocol and guidelines to be followed in the event of a fire emergency or hazardous substance incident. Training activities with first responders will occur regularly to address these emergencies should they arise, as outlined in the Plan. In addition, the spill prevention, control, and countermeasure procedures outlined in Exhibit 13 will be implemented. The spill

prevention, control, countermeasures procedures outline potential hazardous substances that could be utilized during the construction, operation, or maintenance of the Facility. Typically, potential hazardous substances would consist of oils such as fuel oil, hydraulic oil, mineral oil, and lubricating oil (see Exhibit 13 for additional information).

(7) Emergency Responder Training Drills

As previously noted, the Applicant will conduct training drills with emergency responders on a regular basis (e.g., at least annually).

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

The Site Security Plan (Appendix 6-A) and Safety Response Plan (Appendix 6-B) were provided to the New York State Division of Homeland Security and Emergency Services on January 4, 2024. No comments have been received. See Exhibit 2 (Overview and Public Involvement) and Appendix 2-A for this correspondence.

(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 over one million and therefore a review by the local office of emergency management is not required by the Article VIII regulations. As noted elsewhere in this Exhibit, the Applicant has consulted with local emergency responders and relevant municipal agencies to ensure that its safety and security plans appropriately consider local conditions, risks, and resources. The Site Security Plan (Appendix 6-A) and Safety Response Plan (Appendix 6-B) were provided to local emergency responders on December 19, 2023. The Junius Fire Department replied on January 12, 2024, indicating that both plans appear consistent with the expected notification safety and security procedures and inquired about additional project details. The Applicant provided a response the same day. The Applicant also reached out to the Seneca County Emergency Management Department on December 19, 2023, to introduce the Project and gather feedback. In addition, the Applicant hosted a meeting with the host municipalities and local emergency responders on February 12, 2024, during which standard fire safety protocols for solar electric generating facilities were discussed. Please see Exhibit 2 (Overview and Public Involvement) for additional information regarding correspondence with local officials.

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