

# ConnectGen Chautauqua County LLC

South Ripley Solar Project Matter No. 21-00750

900-2.7 Exhibit 6

**Supplement** 

**Public Health, Safety and Security** 

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# EXHIBIT 6 PUBLIC HEALTH, SAFETY, AND SECURITY

# (a) Statement and Evaluation of Adverse Impacts

Solar PV 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 Technology Center, 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 PV 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 PV facilities typically do not pose a risk of significant impacts to public health and safety; rather, solar PV facilities provide benefits to public health by reducing greenhouse gas (GHG) and wastewater emissions associated with conventional energy production. The Applicant is committed to develop and operate the Facility in a safe and environmentally responsible manner. The Facility will be constructed in accordance with applicable health and safety standards.

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 mitigated by the Applicant's adherence to various construction BMPs, including, but not limited to, those outlined in the Section 94-c Uniform Standards and Conditions and those described in the Applicant's Safety Response Plan (see Appendix 6-B). In addition, the Applicant's measures to mitigate construction-related risk to public health and safety will be further detailed in preconstruction compliance filings in accordance with Section 94-c.

Once constructed, the presence of electrical equipment and the battery energy storage system (BESS) carry some associated risks, including electrical shock and equipment combustion. However, generally, these systems have been tested and proven to operate safely, and with respect to BESS, particularly when designed to meet or exceed applicable New York State Fire Code requirements. Areas hosting electrical equipment and the BESS will have perimeter controls (i.e., security fencing, signage, and self-locking gates) as required by local law and National Electrical Safety Code (NESC) to prevent potential injury as identified in the Applicant's Site Security Plan (see Appendix 6-A). In addition, the Applicant's Safety Response Plan includes information addressing potential risks, such as combustion at the Facility, and how these risks will be mitigated (see Appendix 6-B). Appropriate siting and design of the Facility, diligent implementation of the Site Security and Safety Response Plans, 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.

As a safe, renewable source of energy production, solar PV facilities and energy storage 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 Climate Leadership and Community Protection Act (CLCPA), reducing greenhouse gas 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.

Specifically, annual operation of the proposed 270-megawatt (MW) Facility would generate emissions free energy, offsetting equivalent to approximately 286,308 metric tons of carbon dioxide associated greenhouse gas emissions generated by traditional energy sources (EPA, 2021). The Project would not generate other common pollutants associated with traditional energy generation sources, such as SOx, NOx, or mercury, nor would it utilize significant volumes of water for generation or discharge effluent. The Project naturally supports near term public health and safety through the displacement of air and water emissions, 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.

Additionally, under the CLCPA, the State is required to consume 70% of its electricity from renewable resources by 2030 and 100% of its electricity from clean resources by 2040. South Ripley Solar will contribute 270 MWs of generation and energy storage capabilities, supporting CLCPA objectives. Therefore, the Project is not only consistent with New York State energy policy, but importantly, its clean energy contribution results in net positive public health outcomes for the state and region. See Exhibit 17 for a full discussion of the compatibility of the Facility with New York State energy planning objectives.

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

The construction of the Project is not expected to produce significant amounts of gaseous, liquid, or solid waste, with waste produced during construction typically limited to standard waste produced by common construction equipment and large-scale construction activities.

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. Additionally, concrete truck washout will generate small amounts of liquid waste

located near the foundation areas of the Point of Interconnection (POI) facilities and BESS during construction. The contractor will be responsible for the removal and disposal of concrete washout at a licensed facility.

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 BMPs and all applicable laws and regulations. Facility construction will generate solid waste, consisting primarily of approximately 25,000 wooden pallets and cardboard boxes. Additionally, other plastic, wood, cardboard and metal packing/packaging materials, construction scrap and general refuse may be generated during construction. All construction waste that cannot be recycled (such as cardboard, plastic, or wood) will be disposed of at a licensed solid waste disposal facility. During construction of the Facility, sanitary facilities used by workers will consist of portable toilets, which will be emptied on an as needed basis by a certified portable sanitation business at a designated disposal facility.

Construction of the Project will require vegetation and tree clearing (approximately 521 acres of forestland and 66 acres of successional shrubland) that may result in some solid waste for disposal. It is anticipated that cleared trees 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. For instance, large tree stumps not chipped will be either left in place as to not disrupt environmentally sensitive areas such as wetlands, removed and stockpiled or buried on site (in non-wetland and nonagricultural 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, 2020). 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.

Operation of the Facility is anticipated to generate minimal solid waste and no gaseous or liquid waste. Operational solid material waste may include cardboard, or other packaging, and vegetation from maintenance activities.

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

It is not anticipated that the construction or operation of the Project will generate substantial amounts of waste, with the exception of general construction waste described above, which is not anticipated to be released into the environment. Generally, densely wooded areas may result in a volume of approximately 300 cubic yards of wood chips per dense tree stand acre, with an additional approximately 100 cubic yards resulting from chipping of associated stumps. However, the majority of cleared vegetation is anticipated to be repurposed and utilized on-site or converted to merchantable lumber. Thus, vegetation clearing waste that would be unusable and disposed of at a licensed off-site landfill is anticipated to be negligible.

During Project operation, the use of herbicides may be required for selective targeting of invasive species but would not be used on a broad scale across the Facility Site. Herbicide treatments would be applied by a licensed NYS 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 which will be detailed in the Applicant's Vegetation Management Plan and Invasive Species Control and Management Plan in compliance with 6 NYCRR Part 575 and in accordance with Section 94-c pre-construction compliance filings.

A de minimis amount of water may be used for vehicle washing associated with the invasive species control (removal from trucks). With the exception of general construction waste described above (which is not anticipated to be released into the environment), no other significant waste will be generated nor released to the environment during Project operation.

#### (3) Treatment Processes to Eliminate or Minimize Wastes Released to the Environment

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

To address local concern raised during consultations with the Ripley Volunteer Fire Department, the Applicant has included a runoff management area adjacent to the BESS site. Please see Appendix 5-A for more information. In the unlikely event of a contingency that requires emergency response to douse or otherwise apply water onto a compromised BESS container, the runoff management area will serve as a drainage point for the BESS site, allowing for emergency response runoff management, including testing, capture, and remediation. However, it is important to note that BESS container burn testing does not support the need for emergency response runoff management area, this feature was included to satisfy the request of local first responders.

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

Refer to Sections (a)(1) and (a)(2) for additional detail regarding the types and amounts of waste that is anticipated to be generated by the construction and operation of the Facility. Additionally, the procedures for the collection, handling, storage, transport, and disposal for specific, limited amounts of waste is described below.

As described above, trees cleared from the work area 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 stumps not chipped will be either left in place as to not disrupt environmentally sensitive areas such as wetlands, removed and stockpiled on site (in non-wetland and nonagricultural 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, 2020). 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.

All major construction waste, as described in previous sections above, will be collected and disposed of in on-site 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 dumpsters on an as-needed basis and dispose of the refuse at a licensed solid waste disposal facility. The closest licensed landfill is the Chautauqua County Landfill, located in the City of Jamestown approximately 32 miles from the Facility Site. This landfill accepts construction and demolition debris within Chautauqua County for approximately \$36 per ton (Chautauqua County, 2020).

During operation, wastes produced by the Facility will be reused or recycled to the maximum extent practicable or sent to the local scrapyard if applicable. Facility components that are no longer operational and require replacement, such as inverters, transformers, depleted energy storage batteries, 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 Decommissioning Plan (See Exhibit 23), which describes methods for removing and recycling or disposing of equipment and materials at the end of usable life of the Project.

#### (5) Maps of Study Area and Analysis

See Figure 6-1 for Public Health and Safety map, which depicts publicly available health and safety-related features and facilities within a 5-mile radius of the Facility, including:

- Known public water supplies;
- Fire/police/EMS stations;
- Emergency services communications facilities;
- Hospitals and emergency medical facilities;
- 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);
- Dams, bridges, and related infrastructure;
- Explosive or flammable materials transportation or storage facilities;
- Contaminated sites; and
- Local risk factors.

Table 6-1 below identifies the following assets that were located within the Facility Site and 5-mile Study Area.

Table 6-1. Public Health and Safety Resources

| Public Health and Safety                  | Resources within the  | Resources within the 5-Mile Study Area   |
|---|---|--|
| Resources                                 | Facility Site   |  |
| Public Water Supplies 1,2                 | None  | Includes 12 water withdrawal locations   |
| Fire/EMS stations                         | One fire station (Ripley<br>Volunteer Fire Station #2<br>a.k.a. South Ripley<br>Volunteer Fire Station) | Includes 6 fire stations (Ripley Volunteer Fire Department (2 stations); Sherman Volunteer Fire Department; Findley Lake Volunteer Fire Department; Crescent Hose Company, Fuller Hose Company)                        |
| Police Stations                           | None  | Includes two police stations (Ripley Police Department, North East Police Department)  |
| Emergency communications facilities       | None  | None   |
| Hospitals                                 | None  | None. The nearest hospital is the Westfield<br>Memorial Hospital which is approximately 9.7<br>miles northeast of the Facility Site.   |
| Hazards and other local risk factors      | FEMA flood mapping is currently unavailable for the Town of Ripley (but studies are in progress).       | FEMA 100-year and 500-year floodplains, NYSDOS Coastal Zone, Pennsylvania Department of Environmental Protection (PADEP) Coastal Zone, NYSDEC CEHA Coastal Erosion Hazard Area natural protective feature <sup>3</sup> |
| Dams, bridges, and related infrastructure | One bridge (BIN 3325480 –<br>Mina Road (Country Road<br>13) over Twentymile Creek)                      | Includes 135 bridges, 19 dams  |

| Public Health and Safety  | Resources within the | Resources within the 5-Mile Study Area  |
|---|----------------------|---|
| Resources   | Facility Site        |   |
| Explosive or flammable materials transportation or  | None                 | Includes 40 PADEP inactive storage tanks; 18 NYSDEC petroleum bulk storage facilities; two  |
| storage facilities <sup>1</sup>   |                      | railroads   |
| Contaminated Sites (e.g.,<br>USEPA Regulated Facilities<br>and State-regulated<br>remediation sites) <sup>1</sup> | None                 | Includes 74 facilities (based on records from the Resource Conservation and Recovery Act, American Recovery and Reinvestment Act, Superfund Enterprise Management System, 2 Toxic Substances Control Act, Toxic Release Inventory System) |
| Other local risk factors  | None                 | None  |

<sup>&</sup>lt;sup>1</sup> Data sources: NYSDEC GIS Clearinghouse (NYSDEC, 2021), PADEP Open Data Portal (PADEP, 2021)

Although the publicly available data represented in Figure 6-1 shows 74 state or federally-regulated hazardous waste contamination and/or remediation sites within the 5-mile study area, none of these sites are within the Facility Site, and are not anticipated to have any impact on development or operation of the Facility.

The Chautauqua County Multi-Jurisdictional Hazard Mitigation Plan (Ecology and Environment, Inc., 2016) and Erie County Hazard Mitigation Plan (2018), identify other local risk factors, including severe weather (e.g., extreme snowfall, wind, etc.) and failure of critical infrastructure (e.g., dams, bridges, etc.). According to the Chautauqua County Multi-Jurisdictional Hazard Mitigation Plan, no evacuation routes have been identified within the 5-mile Study Area, however, snow and storm detour routes have been implemented on State and County roads. In addition, the plan identifies possible shelter locations within each town that may be used in the event of an emergency. Information on the likely transportation routes emergency responders would take in the event of an emergency at the Facility Site is provided in Exhibit 16 (see Figure 16-2).

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

The development, construction, and operation of the Project is not expected to result in significant adverse impacts on the environment, public health, or community safety. As noted earlier, the Facility is not expected to result in significant adverse impacts to public health or safety associated with gaseous, liquid, or solid wastes. No temporary, long-term or cumulative adverse public health impacts as a result of construction or operation of the Facility are anticipated.

<sup>&</sup>lt;sup>2</sup> More information on public water supplies is provided in Exhibit 13 and mapped in Figure 13-1.

<sup>&</sup>lt;sup>3</sup> NYSDEC Official CEHA Maps are available at: https://www.dec.ny.gov/docs/water\_pdf/cehabrochure.pdf

During the public engagement process, local stakeholders raised concerns regarding potential public health impacts of the Facility, which the Applicant has investigated in more detail. These topics included potential noise impacts (see Exhibit 7), potential glare impacts (see Exhibit 8), potential impacts to potable water sources (see Exhibit 13), potential traffic impacts (see Exhibit 16), and potential risks associated with combustion or explosions at the BESS (Exhibit 6 and Appendix 6-B). A summary of potential Facility-related impacts is also provided in Exhibit 2. As discussed in detail in these Exhibits and Appendices, the Facility is not expected to result in any significant short or long-term environmental or public health and safety impacts.

Temporary noise impacts from construction are anticipated to be typical of large construction sites, but within acceptable regulatory guidelines for temporary noise generation, and will not impact the public health or safety. During operation, the Project will generate noise during energy production, however all noise generated by the project will be within acceptable regulatory guidelines for noise generation. Facility components, including the BESS and substation, have been sited to ensure that noise is minimized to the maximum extent possible, ensuring noise is within acceptable regulatory guidelines. Noise generation during operation will not impact the public health or safety. For more detail, please refer to Exhibit 7.

The Facility is not expected to result in glare that would cause a significant effect on surrounding areas. To evaluate any potential glare impacts, a Solar Glare Analysis was conducted using the Sandia National Laboratories Solar Glare Hazard Analysis Tool (SGHAT) methodology (see Appendix 8-B, Attachment 3). Potential solar glare exposure that could impede traffic movements or create safety hazards are not anticipated. However, some glare effects are predicted at a limited number of adjacent residences. In coordination with the Town of Ripley, the Applicant has designed significant vegetative screening to minimize and mitigate the potential visual and glare impact of the Project on all local sensitive receptors and roadways. In addition, although complaints are not expected, the Applicant has committed to implementing a complaint management plan that will address operational affects, such as glare, to the extent that they result in complaints. The Complaint Management Plan will be submitted prior to construction in accordance with §900-10.2(e)(7) of the 94-c regulations. It is not anticipated that the visual or glare impact from the Project will impact the public health or safety. A visual and glare analysis is included in Exhibit 8.

Certain construction activities including the installation of access roads, grading of high-slope areas, and the installation of buried electrical collection lines have potential to result in direct and/or indirect impacts to surface waters (see Exhibit 13). The potential impacts will be minimized and mitigated through implementation of the SWPPP (Appendix 13-E) and SPCC Plan (Appendix 13-F) during construction and operation of the Project. Solar facilities use little to no water during operation and have a relatively low impact design with limited impervious

surfaces. Regarding the potential for introduction of hazardous materials into the soil or groundwater, the proposed solar panels are comprised of a solid material, primarily sealed glass and metal, and do not contain liquids. Additionally, PV panels can be recycled at the end of their useful life. Accordingly, there is little to no potential for introduction of hazardous materials into the soil associated with the Project (NC Clean Energy Technology Center, 2017. As mentioned previously, to address local concern raised during consultations with the Ripley Volunteer Fire Department, the Applicant has included a runoff management area adjacent to the BESS site. However, it is important to note that BESS container burn testing does not support the need for emergency response runoff management area, this feature was included to satisfy the request of local first responders.

During Project construction the increased traffic from worker, construction, and delivery vehicles might present an additional traffic and collision risk on local roadways. Daily construction trips to support project construction are expected to total approximately 225 to 2,609 vehicle trips per day, depending on construction phase. It is not anticipated that the increase in road use during construction will cause an increase in traffic or collisions due to time of use, scope of project area, and limited existing traffic on haul and construction routes. To minimize the risk of increased traffic and collisions, the Applicant will require contractors to drive at safe speeds and follow all temporary and permanent traffic signals on designated haul routes. For more detail, please refer to Exhibit 16.

In addition, during public open houses and virtual meetings, stakeholders have asked the Applicant to address concerns regarding potential fire and explosion impacts associated with the solar equipment and battery energy storage system (see Exhibit 2). There is a very low likelihood that a fire would occur at the Project. PV solar components have no substantive fuel source to support a fire, as the panels are comprised of primarily metal and glass, and all electrical equipment is designed and maintained to strict electrical standards. The Applicant will actively manage vegetation surrounding and under solar arrays to prevent overgrowth and potential fuel for fires. In the rare event a piece of equipment catches fire, the lack of fuel in the solar array will prevent the fire from spreading and the Project will include access roads to all major electrical equipment for Emergency Service access (see Appendix 6-B).

While rare, Lithium-ion based BESS, like the one proposed for the Facility, can catch fire if allowed to enter into a thermal runaway event. However, the BESS facility will be designed following the latest codes and standards, including New York State's Fire code requirements for energy storage (New York State Fire Code, 2020) which will greatly reduce the chance for a thermal runaway event, and which require mitigation measures including fire detection, fire suppression, and deflagration panels to limit the potential impact of an emergency event should thermal runaway occur. Additionally, the BESS facility will include multiple containers with greater-than-code-required spacing which will minimize the potential for a thermal runaway event to spread across multiple containers

within the facility, thus containing thermal runaway to a limited share of the BESS equipment. The New York State code requirements have historically set the standard for codes in the United States and have evolved over decades of research and experience with energy storage and other similar technologies. The Applicant has conducted an assessment of safety measures and concluded that the efforts made to date and proposed for the energy storage facility align with both industry best practices for energy storage safety and New York State's code requirements for energy storage.

### (7) Impact Minimization Measures

The Applicant will comply with the conditions of various 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) above, throughout this Application and will adhere to any permit issued by the Office of Renewable Energy Siting, and the requirements of 19 NYCRR Part 900 and Subpart 900-6 Uniform Standards and Conditions, which will minimize impacts from construction and operation of the Project generally. 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.

As described in Sections (a)(1) through (a)(4) above, the Applicant has proposed waste minimization, collection, and disposal measures to minimize direct and indirect impacts to public health, safety, and security as a result of the Project. The Applicant will comply with various local, State, and/or federal regulations that govern waste management and disposal. Waste generated from the construction and operation of the Project will have no significant adverse impact on the environment, public health, or safety.

Under 19 NYCRR Part 900, public input into the environmental review of proposed projects is required to identify potential adverse impacts prior to implementation and avoid, minimize, or mitigate those impacts to the maximum extent practicable. Through over two years of public outreach, multiple public meetings and open houses, and a comprehensive Public Scoping Statement with a 30-day public question and response period, the Applicant gathered input from local stakeholders on potential impacts from project development and a wide range of concerns relating to project development, construction, and operation, as described in Exhibit 2 and Appendix 2-C. The Project has been designed, in accordance with industry standards, to avoid, minimize, and mitigate potential adverse impacts identified by the public such as glare at local residences, changes in the visual landscape of the community, and noise production to the maximum extent practicable. Impact minimization measures such as vegetative visual screening paired with proposed Project setbacks from non-participating property lines and residences, as detailed in Exhibit 5, will provide minimization of risk to public health and safety associated with

temporary construction and long-term operation of the Project. Additionally, per industry best practices, Project components will be fenced and located on private land, limiting public access, and minimizing potential impacts to public health and safety, as noted in Exhibit 6 and Appendix 6-. Exhibit 2 includes a summary of measures to be implemented to minimize impacts to the relevant resources.

As described in Section (a)(6) above and in more detail in Exhibit 5, the Facility will be designed, constructed, and operated in compliance with strict state and federal electrical and fire codes and standards. Solar PV panel components are not composed of flammable materials. While extremely unlikely, the primary source of a potential fire could occur at the substation, BESS, or where the inverters and transformers collect power from PV arrays. Each of these areas is accessible by access road for emergency response use and emergency contingencies attributable to these project components are covered under the SRP and will be covered under emergency response training provided to the local fire departments. The thorough design of the Facility in compliance with industry, state, and federal guidelines, comprehensive emergency response plan, and commitment to emergency response training to the local fire departments will minimize the potential risk to the health and safety of the local community. Detailed measures to minimize fire risk as well as emergency response training requirements are described in the Applicant's Site Security Plan (Appendix 6-A) and Safety Response Plan (Appendix 6-B).

Compliance with state and federal regulations governing the development, design, construction, and operation of the Project will also serve to minimize potential adverse impacts related to water and water quality. Project components, including access roads, collection lines, solar PV panel and racking, and electrical collection equipment have been sited to avoid temporary or permanent impacts to wetlands, streams, and waterbodies to the maximum extent practicable. The Applicant has sited all PV panels and racking to avoid wetlands as delineated through onsite surveys and all access roads and collection lines have been sited to minimize, to the maximum extent practicable, impacts to wetlands, streams, and waterbodies by utilizing existing crossings, by crossing at narrow wetland and waterbody locations where feasible, and in the case of collection lines, using underground boring or overhead spans as alternatives to trenching in wetland and waterbodies. Federal permitting required by the United States Army Corps of Engineers (USACE) will serve to protect federally regulated wetlands and other navigable waters of the United States under USACE jurisdiction. The State Pollutant Discharge Elimination System (SPDES) permit, issued by the NYSDEC, is undertaken separately from the 94-c Application process and will serve to protect state regulated wetlands under NYSDEC jurisdiction. In addition, implementation of the Stormwater Pollution Prevention Plan (SWPPP, Appendix 13-E) and Spill Prevention, Control, and Countermeasure (SPCC, Appendix 13-F) Plan and will avoid or minimize impacts to wetlands the maximum extent practicable. See Exhibit 13(a) and (b) for more detail on measures that will minimize potential adverse public health and safety impacts related to water and water quality.

# (8) Impact Mitigation Measures

The development and operation of the Facility will include the following measures to mitigate potential public health and safety impacts associated with gaseous, liquid, or solid wastes:

- Developing and implementing various plans to minimize adverse impacts to air, soil, and water resources (which can directly impact public health), including a dust control plan, a Stormwater Pollution Prevention Plan (SWPPP), and Spill Prevention, Control, and Countermeasures (SPCC) plan.
- Documenting existing road conditions and undertaking public road improvement/repair as required to mitigate impacts to local roadways.
- Developing and implementing a Safety Response Plan.
- Developing and implementing a Site Security Plan.
- Incorporating an emergency response water supply on-site and adjacent to the BESS. This water supply
  includes dry hydrants accessible from the BESS access road and the public road, NE Sherman Rd., for
  general emergency response in the Facility Site.
- Incorporating a runoff management area adjacent to the BESS site allowing for emergency response runoff management, including testing, capture, and remediation if necessary.

For detailed analyses of impact mitigation measures for a given resource relating to public health and safety, see the appropriate exhibit in this Application:

- Exhibit 7(n) and 7(o): Noise and Vibration
- Exhibit 8(d): Visual Impacts
- Exhibit 11(c): Terrestrial Ecology
- Exhibit 13: Water Resources and Aquatic Ecology
- Exhibit 14(g): Wetlands
- Exhibit 16(d): Transportation Resources

In addition, Exhibit 2 includes a summary of the mitigation measures proposed for each Exhibit listed above.

### (9) Proposed Monitoring

The Applicant is committed to developing and operating the Facility in a safe and environmentally responsible manner. In addition to the mitigation measures described/referenced above, an environmental compliance program will be implemented during construction, and the Applicant will provide funding for an independent, third-party environmental monitor to oversee compliance with environmental commitments and permit requirements. In addition, the 94-c regulations specifically require monitoring to assess the impacts on a particular type of resource. For monitoring associated with a specific resource, see the appropriate exhibit in this Application:

Exhibit 11(c): Terrestrial Ecology

Exhibit 13: Water Resources and Aquatic Ecology

Exhibit 14(g): Wetlands

• Exhibit 15(c): Agricultural Resources

Prior to construction, a quality assurance/quality control protocol will be implemented to monitor construction of the Facility and ensure that the materials and equipment meet all applicable standards. Once the Facility has been constructed, periodic inspections will be conducted as part of the Applicant's Facility Maintenance and Management Plan, prepared as a pre-construction compliance filing in accordance with Section 900-10.2 of the 94-c regulations, which will be developed prior to construction. In addition to required environmental inspections, the inspections will examine PV panels for wear and tear and will flag any issues at the inverters and BESS that could lead to a potential health and safety problem. Remote 24/7 monitoring will also provide operational security by identifying potential problems early and allowing Facility operators to preemptively address contingencies.

# (b) Plans for Site Security during Facility Operation

The Applicant will be responsible for site safety and security during operation of the Facility, excluding the point of interconnection (POI) which will be owned and operated by National Grid. The Applicant has developed a Site Security Plan (Appendix 6-A of this Application), which addresses the following measures:

Access controls.

Electronic security and surveillance facilities,

Security lighting, and

Cyber security program.

Lighting to ensure aircraft safety is not applicable to this solar facility and is not addressed within the Site Security Plan (SSP); however, a lighting plan is provided as part of the Visual Impacts Minimization and Mitigation Plan (Appendix 8-B, Attachment 2).

#### (c) Safety Response Plan

A Safety Response Plan (SRP), which provides emergency response direction for construction and operation of the Facility to ensure the safety and security of the community, has been developed by the Applicant and is included as Appendix 6-B to this Application. The SRP specifies the procedures to follow in the event of an emergency as well as the contingencies related to construction and operation of the Facility that would constitute a safety or security emergency (e.g., medical emergency, fire, explosion, severe weather, physical security threat). The SRP includes the following basic components:

- Identification of Personnel and Responsibilities
- Identification of Contingencies that Would Constitute an Emergency,
- Emergency Response Measures by Contingency,
- Evacuation Control Measures by Contingency,
- Community Notification Procedures by Contingency,
- Onsite Equipment to Respond to Fire Emergencies or Hazardous Substance Incidences,
- Contingency Plans for Fire Emergencies or Hazardous Substance Incidences, and
- Emergency Responder Training Drills.

A Final SRP addressing safety incidents and emergency response during construction will be developed by the Contractor, in consultation with ConnectGen and local emergency responders. The Final SRP will cover the same basic subjects as Appendix 6-B with a focus on construction-related concerns. Local emergency responders will be expected to assist only with emergencies for which they are trained and equipped. Specialized emergency response services/equipment during construction will be provided by the Applicant and/or the Contractor. Additionally, the Applicant will update the SRP in the event there are any changes to facility design or equipment selection.

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

The Site Security Plan (Appendix 6-A) and the Safety Response Plan (Appendix 6-B) were provided to the New York State Division of Homeland Security and Emergency Services on June 22, 2021. Comments received on these documents will be addressed or incorporated into updated versions of these documents prior to initiation of Project construction.

# (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 Section 94-c regulations. However, 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. On May 25, 2021, the Applicant met with the Chautauqua County Office of Emergency Services and provided copies of the Site Security and Safety Response Plans. On June 1, 2021, the Applicant provided digital copies of the Site Security and Safety Response Plans to the Ripley Volunteer Fire Department and held a follow up consultation to discuss the documents on June 18, 2021. Final versions of the SSP and SRP will be provided to first responders prior to commencement of Project construction.

# REFERENCES

Chautauqua County. 2020. Chautauqua County Landfill Commercial Rates. Available at: <a href="https://chqgov.com/landfill/landfill-commercial-rates">https://chqgov.com/landfill/landfill-commercial-rates</a> (Accessed December 22, 2020).

Ecology and Environment, Inc. 2016. *Chautauqua County Multi-Jurisdictional Hazard Mitigation Plan*. Available at: <a href="http://www.chautcofire.org/2016MitigationPlan.html">http://www.chautcofire.org/2016MitigationPlan.html</a> (Accessed March 2021).

N.C. Clean Energy Technology Center. 2017. *Health and Safety Impacts of Solar Photovoltaics*. Available at: <a href="https://content.ces.ncsu.edu/static/publication/js/pdf\_js/web/viewer.html?slug=health-and-safety-impacts-of-solar-photovoltaics">https://content.ces.ncsu.edu/static/publication/js/pdf\_js/web/viewer.html?slug=health-and-safety-impacts-of-solar-photovoltaics</a>. (Accessed June 2021).

New York State Energy Planning Board (NYSEPB). 2015. 2015 New York State Energy Plan: Vol 2 Impacts and Considerations. Available at: https://energyplan.ny.gov/Plans/2015.

New York State Department of Environmental Conservation (NYSDEC). 2020. Firewood and Invasive Pests. Available at: <a href="https://www.dec.ny.gov/animals/28722.html">https://www.dec.ny.gov/animals/28722.html</a> (Accessed March 2021).

NYSDEC. 2021. GIS Clearinghouse. Available at: https://gis.ny.gov/gisdata/

New York State Energy Research and Development Authority (NYSERDA). 2020. New York State Battery Energy Storage System Guidebook. December 2020. Available at: <a href="https://www.nyserda.ny.gov/all-programs/programs/clean-energy-siting/battery-energy-storage-guidebook">https://www.nyserda.ny.gov/all-programs/programs/clean-energy-siting/battery-energy-storage-guidebook</a>

North American Electric Reliability Corporation (NERC). 2016. Critical Infrastructure Protection Compliance. Available at: <a href="http://www.nerc.com/pa/CI/Comp/Pages/default.aspx">http://www.nerc.com/pa/CI/Comp/Pages/default.aspx</a>.

Pennsylvania Department of Environmental Protection (PADEP). 2021. Open Data Portal. Available at: https://newdata-padep-1.opendata.arcgis.com/

U.S. Environmental Protection Agency (EPA). 2021. Greenhouse Gases Equivalencies Calculator. Available at: https://www.epa.gove/energy/greenhouse-gas-equivalencies-calculator