



**Mill Point**  
**SOLAR I PROJECT**

**ConnectGen Montgomery County LLC**

Mill Point Solar I Project

Matter No. 23-00034

**§ 900-2.21 Exhibit 20**

**Effect on Communications**

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## Glossary Terms

- Applicant:** ConnectGen Montgomery County LLC (ConnectGen), a direct subsidiary of ConnectGen LLC, is the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State (NYS) Executive Law.
- Facility:** The proposed components to be constructed for the generation, collection and distribution of energy for the Project will include: photovoltaic (PV) solar modules and their rack/support systems; direct current (DC) and communications cables connecting the panels to inverters; the inverters, with their support platforms, control electronics, and step-up transformers; buried alternate current (AC) medium voltage collector circuits; fencing and gates around each array of modules; access roads; temporary laydown/construction support areas; a medium voltage-to-transmission voltage substation with associated equipment and fenced areas; a new 3-breaker ring bus point of interconnection switchyard (POI switchyard); two adjacent approximately 305 foot-long 345 kV transmission line segments to interconnect the new POI switchyard to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; and an operations and maintenance (O&M) building with parking/storage areas as well as any other improvements subject to ORES jurisdiction.
- Facility Site:** The tax parcels proposed to host the Facility, which collectively totals 2,665.59 acres.
- Point of Interconnection (POI) or POI Switchyard:** A new 3-breaker ring bus point of interconnection switchyard will be constructed adjacent to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; the substation will tie into the new POI switchyard via an overhead span and deliver power produced from the Facility onto the electric grid through two overhead spans tapping the National Grid-owned Marcy – New Scotland 345-kV transmission line. The POI switchyard is located off Ingersoll Road in the northeastern portion of the Facility Site.

<b>Limits of Disturbance (LOD):</b>	The proposed limits of clearing and disturbance for construction of all Facility components and ancillary features are mapped as the LOD. The LOD encompasses the outer bounds of where construction may occur for the Facility, including all areas of clearing, grading, and temporary or permanent ground disturbance. This boundary includes the footprint of all major Facility components, defined work corridors, security fencing, and proposed planting modules, and incorporates areas utilized by construction vehicles and/or personnel to construct the Facility.
<b>Project or Mill Point Solar I</b>	Collectively refers to permitting, construction, and operation of the Facility, as well as proposed environmental protection measures and other efforts proposed by the Applicant.
<b>Study Area:</b>	In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 96,784.84 acres, inclusive of the 2,665.59-acre Facility Site.

## Acronym List

AC	Alternating current
DC	Direct current
DSNY	Dig Safely New York
EMF	Electric Magnetic Field
EPC	Engineering, procurement, and construction
HDD	Horizontal directional drilling
IP	Internet protocol
kV	Kilovolt
LOD	Limit of disturbance
NYCRR	New York Codes, Rules and Regulations
NYISO	New York Independent System Operator
NYS	New York State
O&M	Operations and Maintenance
ORES	Office of Renewable Energy Siting
POI	Point of Interconnection
PV	Photovoltaic

## **EXHIBIT 20      EFFECT ON COMMUNICATIONS**

### **20(a) Description of Telecommunications Interconnection**

It is anticipated that the Mill Point Solar I Facility's operational data will be transmitted to the New York Independent System Operator (NYISO) and the transmission-owning utility, National Grid, using existing telecommunications facilities, since the area is generally served by existing cellular and broadband communication services. This data will include generation data (megawatt output, megavar, and any curtailment) and meteorological data (wind speed, wind direction, barometric pressure, ambient temperature, dew point, and humidity). The Facility's meter is anticipated to be located at the Point of Interconnection (POI) switchyard. At the Facility substation, an internet protocol (IP)-based network connection will be enabled. Once the substation and operations and maintenance (O&M) building have internet service, a secure encrypted link will be established between the substation and the O&M building to allow for secure communications between the two.

### **20(b) Existing Broadcast Communications Sources near Wind Facilities**

The proposed Facility is a solar project. Therefore, this section is not applicable.

### **20(c) Existing Underground Cable and Fiber Optic Major Transmission Location Telecommunications Lines**

The Applicant reviewed publicly available information to determine if existing underground cable and fiber optic major transmission telecommunications lines are located within a one-mile radius of the Facility and interconnection. It was determined that there are two existing underground fiber optic facilities within National Grid's transmission line right-of-way, that bisects the Facility Site (Exhibit 5, Appendix 5-1, Sheets T-101-01 and T-102-01). Horizontal directional drilling (HDD) boring is proposed under the two existing underground fiber optic facilities within the National Grid transmission line right-of-way to allow for medium voltage collection lines to run from the inverters to the substation. This HDD boring is located approximately 0.25 miles east of Ingersoll Road and the specific design drawing for this Facility component is illustrated in Exhibit 5, Appendix 5-1, Sheet MPS-E-401-11. The HDD borings will avoid the existing underground fiber optic facilities; therefore, the Applicant does not anticipate impacts to the existing underground cables.

The Applicant and/or the Engineering, Procurement, and Construction (EPC) contractor will submit a request for location information to Dig Safely New York (DSNY) prior to the commencement of construction activities to verify the location of all buried utilities within one mile

of the Facility Site. The safety of onsite personnel and the prevention of damage to existing/operating utilities is a top priority of the Applicant. Using the information compiled on current fiber optic and/or underground cables through public review and completion of a site survey for the Facility Site, the Applicant will avoid interference.

#### **20(d) Electric Interconnection Effects**

The following subsections discuss the anticipated effects of the proposed Facility and electric interconnection on the communications systems identified and discussed throughout this Exhibit.

##### ***(1) Structures to Interfere with Broadcast Patterns***

There will be no adverse impacts to communications systems because of the Facility. Fiber optic cables neither emit, nor are affected by Electric Magnetic Fields (EMF). The Applicant is not aware of any research conducted to date that indicates interference to communications systems from utility-scale solar generation facilities. The Facility lacks tall structures and does not have exposed moving parts. The solar arrays generate weak EMF during the day that dissipate at short distances. The Applicant conducted an EMF Study for the Facility, and it is included in Exhibit 22, Appendix 22-1 of this Application.

There are no local broadcast structures within the Facility Site and as described in Section 20(d)(2) below, the Facility is not expected to impact lines-of-sight to other wireless broadcast facilities. Therefore, it was determined that Facility components will not create significant interference with broadcast patterns.

##### ***(2) Structures to Block Necessary Lines-of-Sight***

Given the low profile of the solar panels and lack of overhead collection structures, the Facility is not anticipated to disturb or block any lines-of-sight for microwave telecommunications systems or any other line of sight communications systems. As a result, tree heights are the controlling factor for line-of-sight concerns and the Facility interconnection will not result in wireless signal blockages or increase signal attenuation. The average height of the substation components will be under 50 feet, which is below tree heights in this region. There will be two overhead poles to connect the Facility substation to the POI switchyard, these poles are also not anticipated to block any necessary line-of-sights.

### ***(3) Physical Disturbance by Construction Activities***

Physical disturbance to communications infrastructure (e.g., towers, buried cables, etc.) during construction is not anticipated. The location of any such infrastructure within and adjacent to the proposed Facility will be indicated on construction drawings and reviewed by the contractor prior to construction. The Applicant will also coordinate with DSNY prior to commencing construction activities. All Facility construction and maintenance work that requires excavation will follow the One Call process with DSNY. This process helps prevent damage by alerting the excavator to the locations of underground utilities, including electric, gas, oil, steam, water, sewer, and communications lines. The excavator identifies the area to be excavated and then provides information to DSNY about the company performing the excavation, the duration of the job, the locations of digging, the depth of the excavation, and other information. DSNY members, who are utility operators, respond to the request either by noting that the area is clear, or by providing the locations of their facilities. These facilities are then marked above ground, and either avoided or protected during the excavation. If an underground utility cannot be avoided and needs to be exposed, the excavator will provide proper support and protection so that the utility is not damaged. Upon completion of work, the excavator backfills around any exposed utilities.

### ***(4) Adverse Impacts to Co-Located Lines due to Unintended Bonding***

The Applicant has no intention of co-locating buried lines related to the interconnection or transmission components. Therefore, no adverse impacts to co-located lines are anticipated.

### ***(5) Other Interference Potential***

There is not expected to be any adverse interference to communications systems because of the Facility. Solar panels have a low profile and any frequencies produced by the Facility will likely dissipate quickly over short distances.

## **20(e) Analysis of Capacity**

The Facility will utilize fiber optics to facilitate communications to and from the substation. Given the capability of Gigabit per second transmission speeds of fiber electronics and the availability of wave division multiplexing, there are no anticipated constraints regarding system communications capacity as well as telecommunications to the public and emergency responders, if necessary. There will be secure encrypted links at both the O&M building and the



minimum point of entry that will be tied back to the O&M Provider's office for monitoring and access to the Facility.

#### **20(f) Adverse Effects on Communications Systems**

The solar arrays and interconnection equipment will be connected by fiber optics and therefore will not adversely affect other communications systems. In the unlikely event that the interconnection does impact other communications systems, the Applicant will take appropriate steps to review and respond to any complaints. In accordance with 19 New York Codes, Rules and Regulations (NYCRR) Section 900-10.2(e)(7), the Applicant will prepare a Complaint Resolution Plan as part of the Pre-Construction Compliance Filings that outline the protocols (documentation, resolutions, tracking, and reporting) to address complaints from the public.

#### **20(g) Plans to Mitigate Impacts on Existing Communications Sources**

As previously described, it is not anticipated that the construction or operation of the Facility will cause any adverse impact on communications systems within one mile of Facility equipment and the electric interconnection between the substation and the POI switchyard. However, the Applicant takes seriously any complaints received from the public concerning impacts from the Facility. Residents that experience degraded off-air television service or interrupted telecommunication service during or after installation of the Facility can file a formal complaint with the Applicant. As previously stated, in accordance with Section 900-10.2(e)(7) of the 94-c regulations, the Applicant will develop and implement a Complaint Management Plan as a compliance filing, through which members of the public can lodge formal complaints, should any issues arise as a result of Facility construction or operation. The Applicant will implement a multi-step complaint response for all registered complaints, which may include: (1) gathering information; (2) responding to the complaint; (3) following up after the response has been issued; and (4) taking further action if the complainant believes that the issue has not been resolved. In the unlikely event that a public safety entity believes their coverage has been compromised by the Facility, the Applicant will work with the public safety entity to remedy any interference related to the Facility. Possible solutions include optimizing nearby base transmitters, adding a repeater site, and/or using utility towers within the Facility as base station or repeater sites. Additionally, the Applicant has prepared a Safety Response Plan as part of this Application to ensure the safety and security of the local community, provide guidance in the case of an emergency, and to supply contact information for Facility personnel and local public safety entities. The Safety Response Plan is available in Exhibit 6, Appendix 6-2 of this Application.

**20(h) Status of Telecommunications Interconnection**

The regulations require a description of the status of negotiations or a copy of agreements that have been executed with companies or individuals for providing the communications interconnection, including any restrictions or conditions of approval placed on the Facility imposed by the provider, if applicable. Such negotiations have not yet been initiated for the Facility because the need for these agreements is not anticipated.