



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

**ConnectGen Montgomery County LLC**

Mill Point Solar I Project

Matter No. 23-00034

**§ 900-2.18 Exhibit 17**

**Consistency with Energy Planning Objectives**

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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.

**Limits of Disturbance (LOD):**

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.

**Project or Mill Point Solar I**

Collectively refers to permitting, construction, and operation of the Facility, as well as proposed environmental protection measures and other efforts proposed by the Applicant.

**Study Area:**

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
AVERT	AVoided Emissions and geneRation Tool
Btu	British thermal units
CES	Clean Energy Standard
CLCPA	Climate Leadership and Community Protection Act
CO <sub>2</sub>	Carbon dioxide
DC	Direct current
EPA	United States Environmental Protection Agency
GHG	Greenhouse gas
GW	Gigawatt
kV	Kilovolt
KW	Kilowatt
LOD	Limit of Disturbance
LSEs	Load-serving entities
MW	Megawatt
NO <sub>x</sub>	Nitrogen oxides
NYPSC	New York Public Service Commission
NYS	New York State
NYSEPB	New York State Energy Planning Board
NYSERDA	New York State Energy Research and Development Authority
NYISO	New York Independent System Operator
O&M	Operations & Maintenance
ORES	Office of Renewable Energy Siting
POI	Point of Interconnection
PV	Photovoltaic
RECs	Renewable energy credits
REV	Reforming the Energy Vision
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewable portfolio standard
SEP	State Energy Plan
SO <sub>x</sub>	Sulfur oxides
SRIS	System Reliability Impact Study

## **Exhibit 17           CONSISTENCY WITH ENERGY PLANNING OBJECTIVES**

### **17(a) Consistency with State Energy Planning**

New York has a long history of embracing clean renewable energy. Starting over 20 years ago, in 2002, the New York State Energy Plan (SEP) set targets for increasing renewable energy and reducing greenhouse gas (GHG) emissions. In 2004, the New York State Public Service Commission (NYPSC) instituted the statewide renewable portfolio standard (RPS) to further encourage renewable energy penetration in the electricity market. The RPS set a target of 25% of retail energy consumption from renewable sources by 2014. In 2008, New York became a charter member of a multi-state cooperative effort known as the Regional Greenhouse Gas Initiative (RGGI), which addresses carbon dioxide emissions in the electricity sector. RGGI was the first market-based regulatory program to limit GHG emissions in the United States and has been considered a market success. Then in 2015, the new SEP adopted the nation's highest targets at the time for renewable generation, calling for 50% of New York's electricity to be generated from renewable sources by 2030 and for a 40% reduction in statewide GHG emissions by 2030. The 2015 SEP placed New York at the forefront of renewable energy policy.

To turn the SEP into action, the governor and the NYPSC created a comprehensive energy strategy for New York called Reforming the Energy Vision (REV). In August 2016, the NYPSC adopted the Clean Energy Standard (CES) to ensure that the SEP and REV goal of 50% renewable energy consumption in New York by 2030 is achieved. The CES is designed to encourage development of large-scale economically viable renewable projects that can compete with all other generation sources in the electric market. In 2019 New York enacted the Climate Leadership and Community Protection Act (CLCPA) which sets statewide greenhouse gas emission limits to 60% of 1990 emissions by 2030 and 15% of 1990 emissions by 2050. The CLCPA also increased the State's electric sector targets, including a requirement that 70% of the State's electricity come from renewable energy by 2030, while 100% of the State's electricity supply must be emissions free by 2040.

In 2020, The Accelerated Renewable Energy Growth and Community Benefit Act ("Act") was adopted. The Act added Section 94-c to the Executive Law, titled Major Renewable Energy Development. Section 94-c and its implementing regulations created an expedited process for reviewing renewable energy projects of 25 megawatts (MW) or greater. Section 94-c is implemented by the Office of Renewable Energy Siting (ORES).

As outlined further below, the construction and operation of the Mill Point Solar I Project (the Project or Facility) is consistent with New York State (NYS) energy policies, including CLCPA targets, the long-range energy planning objectives and strategies contained in the 2015 SEP, as amended, and related policies and plans.

### ***State Energy Plan (SEP)***

The most recent SEP adopted by the New York State Energy Planning Board (NYSEPB), pursuant to New York State Energy Law § 6-104 in June 2015, provides a wide range of goals for New York's energy system. The SEP is based on five Guiding Principles: market transformation, community engagement, private sector investment, innovation and technology, and customer value and choice. The SEP, among other things, "sets out specific initiatives to increase renewables and decrease [greenhouse gas (GHG)] emissions" (NYSEPB 2015). SEP goals include attracting private investment in New York's energy sector and combating climate change. The SEP calls for reducing statewide GHG emissions 40% from 1990 levels, generating 50% of the State's electricity from renewable resources by 2030, and increasing statewide energy efficiency by 600 trillion British thermal units (Btu) from 2012 levels. (NYSEPB 2015). According to the SEP, large-scale renewables have several immediate benefits for the State including: "economic development and jobs for communities across the State, greater stability in customer bills, [and] cleaner air..." (NYSEPB 2015). The SEP was amended in 2020 to include the renewable energy targets of the CLCPA, which are discussed below (NYSEPB 2020).

### ***Clean Energy Standard (CES)***

In August 2016, the NYPSC adopted the CES to ensure that New York will achieve the SEP's goal of 50% of New York's electricity to be generated from renewable energy by 2030. "The chief focus of the CES initiative is on building new renewable resource power generation facilities" (NYPSC 2016). The CES also sought to reduce the "total emissions of air pollutants resulting from fossil fuel combustion" (NYPSC 2016).

The CES employs two related mechanisms to reach the SEP's renewables goal. First, it requires load-serving entities (LSEs) to obtain an increasing percentage of their electricity needs from renewables. LSEs demonstrate compliance by purchasing renewable energy credits (RECs) from renewable resources (NYPSC 2016). Second, to ensure that an increasing number of RECs are available to LSEs, the CES authorizes the New York State Energy Research and Development

Authority (NYSERDA) to procure RECs from renewables (NYPSC 2016). Renewables sited within New York are eligible to sell RECs regardless of their location within the State (NYPSC 2016).

The NYSPSC's highest projection for the amount of utility-scale solar that would need to be installed to help reach the 50% renewables mandate was approximately 6,900 MW (NYPSC 2016, Appendix G). The NYSPSC noted that even if 100% of those projects were sited on New York agricultural lands, only about 0.16% of such lands would be converted to utility-scale solar (NYPSC 2016, Appendix G). The NYSPSC's 2016 analysis was recently updated to reflect the CLCPA's increased renewables targets (NYPSC 2020). While the 2016 analysis assumed that solar facilities require 2 acres per MW, the 2020 analysis increased this assumption to 5 acres per MW (NYPSC 2020). Nevertheless, the 2020 analysis found that increasing the State's renewables mandate from 50% to 70% by 2030 would only see approximately 0.2%–0.5% more of New York's agricultural lands occupied by utility-scale solar facilities (NYPSC 2020). In other words, at most, 0.66% of New York's agricultural lands would host utility-scale solar facilities to achieve the 70% by 2030 mandate. Further, the 2020 analysis concluded that, "[g]iven the minor conversion of land compared to available crop and pastureland, project-specific agency guidelines, and restoration following decommissioning, significant adverse impacts on land use and land cover would not be expected from incremental utility-scale solar development" (NYPSC 2020).

### ***New York State Climate Leadership and Community Protection Act (CLCPA)***

The CLCPA accelerates the State's renewable energy penetration target to 70% by 2030 with 6 gigawatts (GW) of solar generation by 2025. The CLCPA ultimately requires 100% carbon-free electricity by 2040. In order to achieve these targets, the CLCPA calls for the following:

- Increasing New York's offshore wind target to 9,000 MW by 2035, up from 2,400 MW by 2030;
- Doubling distributed solar deployment to 6,000 MW by 2025, up from 3,000 MW by 2023;
- Maximizing the contributions and potential of New York's existing renewable resources; and
- Deploying 3,000 MW of energy storage by 2030 (in accordance with the NYPSC's goal).



### ***Regional Greenhouse Gas Initiative (RGGI)***

New York State is a member of the RGGI, which is a regional marketplace that limits carbon dioxide (CO<sub>2</sub>) emissions through a cap-and-trade program. The direct benefits of CO<sub>2</sub> emissions reductions are realized through the broader regional marketplace that New York participates in through RGGI. Participating states “implemented a new cap reduction trajectory of 30% over the period 2020 to 2030” (RGGI 2021). The sale of the CO<sub>2</sub> allowances allows NYS to invest in programs that encourage innovations in clean energy technology and the creation of green jobs.

### ***10-Point Renewable Energy Action Plan***

On October 12, 2023, Governor Hochul announced a 10-Point Action Plan to expand a thriving large-scale renewable industry in New York. The 10-Point Action Plan affirms New York’s commitment to expanding clean energy and achieving the goals of the CLCPA.

### ***Consistency with State Policies***

New York’s energy policies are geared toward increasing the amount of renewable generation and decarbonizing the energy sector. The State Legislature made this clear with the CLCPA. The Mill Point Solar I Facility will generate electricity without emissions and therefore is consistent with these policies. The Facility employs solar generation, which is consistent with the CLCPA’s 6 GW solar target. Further, the Facility is consistent with the CES’s goal of reducing total emissions of air pollutants that result from fossil fuel generation, and RGGI’s goal of reducing CO<sub>2</sub> emissions. Moreover, the Applicant is a private entity and is making a significant private investment to develop the Facility. The Facility will employ efficient, state-of-the-art solar technology. The Facility is also consistent with the SEP’s Guiding Principles. It will help transform New York’s energy market by moving it further from fossil fuels to a more diverse, renewables-based market.

### ***Accelerated Renewable Energy Growth and Community Benefit Act***

In addition to the NYS energy policies and plans identified above, the adoption of Section 94-c under the Accelerated Renewable Energy Growth and Community Benefit Act (enacted April 3, 2020) replaced the previous permitting regime (Article 10 of the Public Service Law) for renewable energy generation facilities. This new legislation replaces the Article 10 process for wind and solar generation projects and allows a more streamlined process with the bulk of studies and comprehensive analyses occurring prior to submittal of the Application. Section 94-c framework was designed to streamline the siting and construction of renewable energy facilities while

ensuring environmentally friendly and cost-effective measures are utilized. The contents of this Section 94-c Application conform to the requirements under Section 94-c and, in effect, operate to further the goals and objectives of renewable energy generation in NYS.

#### **17(b) Impact on Reliability**

A System Reliability Impact Study (SRIS) has been prepared and the results indicate that the Facility will not adversely impact reliability of the New York State Transmission System. Numerous analyses, discussed in Exhibit 21 (Electric System Effects and Interconnection) of this Application, were performed for the SRIS. The SRIS is included in the Application as Appendix 21-1; however, the SRIS is being submitted under trade secret and confidential commercial information protection as it contains critical infrastructure information.

#### **17(c) Impact on Fuel Diversity**

Fuel diversity is an important aspect to consider when combating global climate change and aiming to reduce GHG emissions. The Facility will increase fuel diversity within NYS by increasing the amount of electricity produced by solar generation facilities. This, in turn, will help to diversify New York's energy economy and ease New York's overdependence on natural gas and other polluting fossil fuels. The New York electric utility system relies on supply from numerous fuel sources, including natural gas, hydroelectric, nuclear, wind, oil, and solar, as well as interconnections with its neighbors and demand-response resources. Fuel diversity leads to increased resilience and overall grid reliability (NYISO 2021).

#### **17(d) Impact on Regional Capacity Requirements**

An SRIS was conducted for the maximum capacity of 250 MW of renewable generation energy that will be added to the region once the Facility is operational. The results from the SRIS indicate that the Facility has no significant adverse impact on the reliability of the New York State Transmission System, and therefore, the Facility will not adversely affect the regional capacity requirements. The SRIS is included as Appendix 21-1 of this Application, however, it will be filed separately under confidential cover as New York Independent System Operator (NYISO) requires SRIS to remain confidential due to Critical Energy Infrastructure Information Regulations. The results of the SRIS and how the Facility will impact the regional energy and capacity demands are further explained in Exhibit 21 of this Application.

### **17(e) Impact on Electric Transmission Constraints**

The Facility will not result in new electric transmission constraints. In the SRIS, the NYISO did not identify any additional or new electric transmission system constraints that would be created by the Facility. Exhibit 21 discusses the Facility's effect on transfer capacity across affected interfaces.

### **17(f) Analysis of Reasonable and Available Alternative Locations**

There are no reasonable and available alternative locations for the Facility. The Applicant is a private applicant that lacks the power of eminent domain. Therefore, the locations available and that may be reasonably considered for the Facility are limited to those which the Applicant or its affiliates have control. The Applicant is in the process of developing a second project, which is referred to as Mill Point Solar II and is engaged in landowner discussions to identify interested participants. While this land is or will be potentially controlled by the Applicant for the development of a second solar project, this land is not available to be utilized as part of Mill Point Solar I. In order to have two viable projects that help reach the goals of the CLCPA, meet the project sponsor's goals, off take arrangements and interconnection requirements, the land under control for Mill Point Solar II is not a reasonable and available alternative for Mill Point Solar I.

The selection of utility-scale solar locations is driven by technical, economic, and operational factors. The Applicant selected the Facility Site based on the following factors:

- Availability of the solar resource – the Facility Site was identified as having a strong solar resource.
- Available land from willing landowners – the Applicant was able to secure the rights to the Facility Site from willing landowners and the Facility Site has sufficient acreage of suitable land for development of a 250 MW solar facility.
- Relative ease of interconnecting to the existing transmission grid – the Facility's Point of Interconnection (POI) to NYS's electric grid will consist of one substation and one POI switchyard located in the northeastern portion of the Facility Site, adjacent to National Grid's existing Marcy to New Scotland 345 kilovolt (kV) transmission line which traverses the Facility Site.
- Relative ease of access to the Facility Site – the Facility Site is easily accessible from Logtown Road, NY-30A, Fisher Road, Auriesville Road, Scott Road, and Van Epps Road. In addition, the parcels that make up the Facility Site are in relative proximity to one

another, allowing the sharing of project infrastructure, and consolidating the Facility footprint.

- Sufficient available capacity on the grid – the Facility’s SRIS indicates that the existing 345 kV transmission line has the available capacity required to support the Facility.

The Facility layout has been refined extensively based on input from stakeholders and the results of key resource studies and environmental impact assessments. The Facility Site available acreage totals 2,665.59 acres and through the design process the Applicant was able to efficiently site the Facility on 1,074.51 acres, essentially reducing the size by 40.3 percent. These refinements were considered advantageous as the design process minimized impacts and allowed the opportunity to:

- Meet state and local regulatory requirements described in Exhibit 24.
- Consider stakeholder input more fully.
- Place the POI facilities in close proximity to the National Grid Marcy – New Scotland 345kV Transmission Line, minimizing additional aboveground power line construction.
- Maximize proximity of Facility components to consolidate impacts to a more defined area and minimize the amount of direct disturbance from the Facility.
- Minimize disturbances within environmentally sensitive areas including wetlands and state-listed rare and threatened species habitats, as discussed in Exhibits 12 and 14.
- Minimize points of access, which reduces traffic impacts in the surrounding area.
- Allows maximum efficacy of planned landscape screening.
- Avoidance of Glen Village Cemetery and the Glen Historic District (Exhibit 9, Section 9(c)(2)).

#### **17(g) Public Health and Welfare, Climate Change**

The Facility will promote public health and welfare, including minimizing public health and environmental impacts related to climate change. As discussed above, the Facility will generate electricity without emissions. Solar photovoltaic (PV) technology produces no greenhouse gases nor local pollutants such as nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter. Using this sustainable technology will help reduce reliance on fossil fuel generation which produces emissions that can negatively affect the health of nearby residents and contribute to

climate change. Lowering emissions also improves air quality which is beneficial to public health. Additionally, lowering GHG emissions will decrease heat quantities trapped in the atmosphere which can cause warmer climates and alter large climate systems such as weather and wind patterns (EPA 2020).

To calculate the CO<sub>2</sub> emissions that will be offset by the proposed Facility per year, the Applicant utilized the United States Department of Environmental Protection (EPA) Greenhouse Gas Equivalencies Calculator, which uses national average emission factors. Through this tool, it is estimated that 376,377 tons of CO<sub>2</sub> emissions will be offset by the proposed Facility per year, which is enough power to meet the annual electricity needs of 65,000 homes within the United States (EPA 2023). In order to input the 'kilowatt (KW) hours avoided' data in the EPA Greenhouse Gas Equivalencies Calculator, the Applicant ran the following calculation: 250 MW (the Facility annual MW generation) x 365 days (one-year time-period) x 24 hours (one-day time-period) x 22% net capacity factor = 481,800 MW/yr nameplate. The Applicant then converted the 481,800 MW/yr to KW/yr through the following conversion factor (1 MW = 1000 KW) to determine that the Facility has a 481,800,000 KW/yr nameplate. The Applicant then inputted the 481,800,000 KW/yr data into the EPA Greenhouse Gas Equivalencies Calculator as "KW hours avoided" to get the total tons of CO<sub>2</sub> emissions that will be offset by the proposed Facility per year and the average annual number of houses that the Facility will power.

To be more specific to the Facility Site region, the Applicant took it a step further and utilized the EPA AVoided Emissions and geneRation Tool (AVERT), which uses the regional average emissions factors to calculate CO<sub>2</sub> emissions that will be offset by the proposed Facility per year. Through this tool, the Applicant inputted the following data: Selected the NYISO region and 250 MW (Facility annual MW generation). According to the AVERT tool, the Facility will reduce CO<sub>2</sub> emissions annually by 217,280 tons and generate enough energy to power 33,724 average homes annually in the United States.

As discussed further in Exhibit 6, the Facility will reduce carbon and other emissions associated with energy generation, thereby minimizing public health and environmental impacts related to climate change. In addition, the placement of Facility components has been researched, reviewed, and analyzed throughout the development and engineering process to avoid and/or minimize negative impacts to the maximum extent practicable and to incorporate extensive siting considerations including (but not limited to) landowner requests, solar resource, constructability,

and avoidance (or minimization) of impacts to wetlands, streams, state-listed species, and agricultural land.

## 17(h) References

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