BROOKSIDE SOLAR, LLC

Matter No. 21-00917

900-2.18 Exhibit 17

Consistency with Energy Planning Objectives

Contents

Acronym List

AC	Alternating Current
AES	The AES Corporation, Inc.
CES	Clean Energy Standard
CLCPA	Climate Leadership and Community Protection Act
EPA	United States Environmental Protection Agency
GHG	greenhouse gas
kV	kilovolt
MW	megawatt
NYCRR	New York Codes, Rules and Regulations
NYISO	New York Independent System Operator
NYPSC	New York Public Service Commission
NYSEG	New York State Electric and Gas
NYSEPB	New York State Energy Planning Board
NYSERDA	New York State Energy Research and Development Authority
ORES	Office of Renewable Energy Siting
POI	point of interconnection
RECs	Renewable Energy Credits
SEP	State Energy Plan
SRIS	System Reliability Impact Study
USCs	Uniform Standards and Conditions
ZECs	Zero Emission Credits

Glossary Terms

Applicant	Brookside Solar, LLC, a subsidiary of The AES Corporation, Inc. (AES), 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 Executive Law.
Facility	The proposed components to be constructed for the collection and distribution of energy for the Brookside Solar Project, which includes solar arrays, inverters, electric collection lines, and the collection substation.
Facility Site	The parcels encompassing Facility components which totals 1,471 acres in the Towns of Burke and Chateaugay, Franklin County, New York (Figure 2-1).

Exhibit 17: Consistency with Energy Planning Objectives

This Exhibit discusses the Facility and its consistency with New York State energy policies, including Climate Leadership and Community Protection Act (CLCPA) targets, long-range energy planning objectives, and strategies contained in the most recent State Energy Plan (SEP) as required under §900-2.18 of the Section 94-c Regulations.

New York State's energy policies have for decades focused on the need to increase renewable energy electricity generation supplies, lower the cost of energy to consumers, increase efficiencies, drive investments in the electric system, and send market signals to support State efforts to boost renewable energy production (NYS SEP, 2002; NYS SEP 2005). The culmination of these various policy efforts is the enactment of the CLCPA, a historic climate law that sets statewide greenhouse gas (GHG) emission limits of 60% of 1990 emissions by 2030 and 15% of 1990 emissions by 2050. To reach these goals, the CLCPA creates a Climate Action Council, which must propose a suite of strategies for attaining deep decarbonization across the economy. The CLCPA also codifies several ambitious energy sector targets, many of which were originally proposed by Governor Cuomo as enhancements to New York State's existing Clean Energy Standard (CES). The targets include 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. By codifying these goals into law, the CLCPA has turned aggressive state energy planning and policy into mandates requiring specific action to achieve the combined environmental benefits from increasing electrification of the economy and developing renewable energy generation to meet the demand. Along with the companion planning policies in the CES and SEP, which are interrelated and interdependent, New York has created an environment to spur progress away from the fossil fuel-based utility market toward cleaner, greener, cheaper, and more reliable market-based renewable energy. The Facility will play a key role in advancing this continuing market transformation and signify the responsiveness of the private sector to the State's articulated goals and promised reforms.

The Facility's size, location, and interconnection make it an economical resource, allowing Brookside Solar to provide New York State with renewable energy.

SEP

New York State Energy Law 6-104 requires that the New York State Energy Planning Board (NYSEPB) adopt a SEP, at a minimum, every 10 years. The SEP forecasts New York State energy supply/demand, the State's ability to satisfy that demand, Facility GHG emissions, identifies and assesses the current energy policies/programs, and assesses the impacts of plan implementation on New York State as a whole. In 2015 NYSEPB issued new SEP and Draft Amendment, which was adopted on April 8, 2020. As discussed in greater detail below, the 2015 SEP and 2020 Amendment set forth a broad range of goals for New York's energy system, including the goal to decarbonize New York State's economy with the goal of reducing statewide GHG emissions 40% by 2030 and 85% by 2050. The Facility is consistent with the SEP because it proposes to generate electricity through a renewable energy technology, solar energy, which generates electricity without emitting carbon dioxide or other GHG emissions.

CLCPA

The CLCPA was signed into law on July 18, 2019 creating a Climate Action Council charged with developing a scoping plan of recommendations to meet New York State's targets and place the State on a path toward carbon neutrality, and in December 2021 the Climate Action Council released its draft scoping plan for public comment, which includes a recommendation to accelerate deployment of renewable energy systems including solar.[1] The State's energy policies are geared toward increasing the amount of renewable energy generation and decarbonizing the energy sector.

The CLCPA accelerates New York State's clean energy goals and includes aggressive targets, including 70% renewable electricity by 2030 and 100% carbon-free electricity by 2040. To achieve these targets, the CLCPA calls for the following:

- Increasing New York's offshore wind target to 9,000 megawatts (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 (In September 2021, Governor Hochul announced a call for the expansion of the NY-

[1] https://climate.ny.gov/Our-Climate-Act/Draft-Scoping-Plan

Sun program to achieve an expanded goal of at least 10 gigawatts of distributed solar installed by 2030);

- 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 New York Public Service Commission's [NYPSC's] goal).

The Facility proposes to add 100 MW to the State's clean energy portfolio and is seeking a contract through the New York State Energy Research and Development Authority (NYSERDA) to ensure that Renewable Energy Credits (RECs) generated by the Facility maximize the contributions to the CLCPA mandates and goals. The Facility is among a relatively small number of solar projects with proposed "Commercial Operation Dates" before 2030, making the energy generation potential of the Facility critical to meeting the CLCPA 2030 mandate for renewable energy. It is less likely that the State meets the CLCPA 2030 mandate without the contributions of the Facility. Solar energy currently makes up less than 1% of total generating capacity in New York. According to the New York Independent System Operator (NYISO) 2021 Power Trends report, photovoltaic energy generating projects, like the proposed Facility, would increase installed summer capacity of other renewables by a third[2] (NYISO, 2021).

Clean Energy Standard (CES)

In furtherance of the goal of reaching 70% of electricity generated by renewable energy in New York by 2030, on August 1, 2016, the NYPSC adopted a comprehensive CES, which imposes mandatory procurement requirements on the State's electric utilities and establishes a system and market for awarding RECs and Zero Emission Credits (ZECs) to those injecting renewable or carbon-free power to the New York grid. The CES also adopts a number of measures designed to send market signals to encourage investment by renewable developers and others in the State's energy sector, with the goal of "transform[ing] the electric system" (NYPSC, 2016, p. 70). "[T]he chief focus of the CES initiative is on building new renewable resource power

[2] It is projected that 351 MW of "other renewables" including solar will be available for the 2021 Summer Capability Period.

generation facilities" (NYPSC, 2016, p.78). The Facility is consistent with the CES goals in a manner similar to how it is consistent with the CLCPA and Energy Plan mandates and goals.

17(a) Consistency with State Energy Planning

Construction and operation of the Facility is consistent with the energy policies and long-range energy planning objectives and strategies contained in the CES, CLCPA, the SEP, and related policies and plans.

The Facility, as a renewable energy project generating electricity from solar energy, is consistent with State policies that encourage the development of renewable energy projects, seek solutions to fight climate change, and emphasize the need to transition New York's energy markets away from a reliance on fossil fuels for electricity generation. The Facility falls squarely within the SEP's core renewable energy initiative and helps to further the related core initiatives to build sustainable and resilient communities, encourage infrastructure, and spur innovation. This is achieved through the economic benefits provided by the Facility, the upgrades to the utility infrastructure required to deliver the electricity for the Facility and the operation of the Facility, which contributes to the market for solar technologies, jobs, and skills. The Facility is also consistent with the SEP's guiding principles of encouraging private sector investments and enabling market transformation. AES is investing approximately $129 million in the development, construction, and operation of the Facility, which is a significant investment in Franklin County and New York State. Furthermore, the Facility aids in advancing specific CLCPA goals, including the State's intention to cut GHG emission 70% by 2030, protect New York's natural resources, and create new jobs and business opportunities. The Facility will have a nameplate capacity of 100 MW AC (alternating current), which is estimated to generate enough renewable green energy to power approximately 16,500 New York households, thus further reducing New York's dependence on fossil fuels and diversifying the energy market for consumers.

The Facility will also provide economic development benefits to host and adjacent communities and neighbors through host community benefits, landowner payments, and other economic activity as detailed in other sections of this Application (see Exhibit 18).

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. The renewable energy generation associated with this Facility can be delivered to the New York State electric grid without upgrade costs being passed to ratepayers as the Applicant is responsible for upgrade and interconnection costs.

17(c) Impact on Fuel Diversity

The Facility will contribute to fuel diversity within New York State by providing 100 MW of electricity produced by renewable energy to enhance diversity and replace fossil fuels. Fuel diversity is an important aspect to consider when combating global climate change and aiming to reduce GHG emissions. Solar energy currently makes up less than 1% of total generating capacity in New York. Development of the Facility will provide additional generating capacity from solar projects in the State, helping to diversify New York's energy economy and ease New York's overdependence on natural gas and other polluting fossil fuels. Fuel diversity leads to increased resilience and overall grid reliability (NYISO, 2021).

17(d) Impact on Regional Capacity Requirements

The regional capacity requirements of New York's wholesale electricity markets and location-based pricing encourages investment in areas where the demand for electricity is highest. More generally, the need for additional renewable capacity in New York is based on the overarching statewide need for carbon-free energy generation to replace fossil fuel generation that offers capacity but does not advance other important State policy goals. The Facility's addition of renewable generation capacity within the region will not adversely affect regional requirements for capacity. Operation of the Facility will replace fossil fuel use with (renewable) solar energy, thereby promoting goals identified in the SEP.

17(e) Impact on Electric Transmission Restraints

Many of the existing renewable power projects are located in the western and northern regions of the State, while the southeastern region hosts power plants fueled primarily by natural gas. Taking full advantage of statewide fuel diversity will require upgrades and enhancements of the transmission system. These transmission enhancements will help move energy from upstate regions with a surplus of generating capacity to more populous areas with higher power demands (NYISO, 2016). According to the NYISO, the most congested transmission areas are the northern and central regions of New York State. However, these constraints on transmission will continue to exist regardless of whether the Facility is constructed, and the Facility will not result in new electric transmission system constraints. Additionally, as exhibited by the SRIS, the NYISO did not identify any additional or new electric transmission system constraints that would be created by the Facility. Exhibit 21 further discusses the Facility's effect on transfer capacity across affected interfaces.

17(f) Analysis of Reasonable and Available Alternative Locations

Availability of Alternative Sites

The Section 94-c regulations require that this Exhibit subsection shall contain "an analysis of the comparative advantages and disadvantages of reasonable and available locations or properties identified for construction of the facility." The Applicant does not have eminent domain authority and therefore, is only required to describe reasonable and available alternative sites that are owned by or under option to the Applicant (i.e., solar option, solar lease, or ownership). The Applicant does not have control of other sites in New York that could be considered reasonable and available for this Facility, as other sites are being developed for the development of other facilities. Therefore, comparative advantages and disadvantages of alternative locations for the Facility cannot be considered outside the Facility Site as defined herein and land under control by the Applicant.

Brookside Solar selected the initial Facility Site based on the availability of solar resources, willingness of landowners to partner with the Applicant, and the ease with which the Facility could be interconnected to the existing grid. Primarily, the fact that the existing New York State Electric and Gas (NYSEG) Line 911 Willis Road to Chateaugay 115-kilovolt (kV) transmission line runs through the Facility Site decreases offsite effects of the Facility and limits overall

impacts. The parcels that make up the initial Facility Site are in relative proximity to one another, allowing for sharing of haul roads, limiting the need for offsite features, and consolidating Facility impacts to a more defined area. Additionally, the SRIS (see Appendix 21-1 of Exhibit 21) indicated that the existing NYSEG Line 911 Willis Road to Chateaugay 115-kV transmission line has the required capacity available to support the Facility without requiring major upgrades or disrupting the existing system.

Identification and placement of Facility components has been defined by key resource studies and environmental impact assessments performed and presented throughout this Section 94-c Application in combination with environmental, engineering, and regulatory constraints. From this assessment, continued landowner outreach, and evaluation of property under lease agreement, the Facility Site was reduced to 1,471 acres, approximately 645 acres of which will be disturbed by Facility construction. These refinements were considered advantageous as the reduction allowed the opportunity to:

- Meet 94-c requirements and local regulatory requirements as further described in Exhibit 24.
- Consider Stakeholder input more fully. This allowed for landowner-imposed development restrictions on approximately 170.7 acres within 4 different parcels in the Facility Site, which will not contain any Facility components.
- Place the point of interconnection (POI) facilities in very close proximity to the NYSEG Line 911 Willis Road to Chateaugay 115-kV transmission line, therefore, minimizing additional aboveground power line construction.
- Maximize proximity of Facility Site 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 breeding bird habitat, as discussed in Exhibit 12.
- Minimize disturbances within environmentally sensitive areas including wetlands, as discussed in Exhibit 14 and shown on Figure 14-1.
- Minimize points of access, which reduce the traffic impacts in the surrounding areas.
- Allow maximum efficacy of planned landscape screening.

- Minimize the potential for noise impacts by maximizing the distance of noise-generating Facility components from nearby residents.

17(g) Public Health and Welfare, Climate Change

The Facility will promote public health and welfare by offering a sustainable alternative to generating electricity by non-renewable methods to meet New York State's energy requirements. The Facility would contribute to a reduction in the amount of fossil fuel consumed, and a corresponding reduction of global carbon emissions, which may result in a reduced rise in global ambient air temperature. The Facility is anticipated to positively impact both the environment and the local economy by reducing carbon dioxide emissions by an estimated 131,000 metric tons each year – the equivalent to powering approximately 16,500 homes' electricity use per year. This reduction in GHG emissions will contribute to improved environmental health overall.

The Facility plays a crucial role for the community and the entire state of New York, as it will help meet New York State's energy goal outlined in the 2015 SEP and 2020 Amendment to the 2015 plan: achieving 70% of electricity generated by renewable energy in New York by 2030. Lowering these emissions also improves air quality, which is beneficial to respiratory and public health. Additionally, lowering GHG emissions will decrease heat quantities trapped in the atmosphere (United States Environmental Protection Agency [EPA], 2020). Without reducing GHG emissions, the climate will continue to warm and alter larger climate systems, such as weather and wind patterns. The Facility will benefit the public health and welfare by offering an alternative to fossil fuels and successively improve public health by reducing climate change impacts throughout New York State.

Conclusions

The proposed Brookside Solar Project will play a crucial role in meeting New York State's energy goals outlined in the CES and SEP, primarily injecting renewable, carbon-free power to the New York grid, and helping New York achieve 70% of electricity generated by renewable energy by 2030. The Facility will help to build sustainable and resilient communities, encourage infrastructure, and spur innovation while being consistent with the SEP's guiding principles of encouraging private-sector investments and enabling market transformation. Furthermore, the Facility will aid in advancing specific CLCPA goals, including the State's intention to cut GHG

emission 70% by 2030, protect New York's natural resources, and create new jobs and business opportunities. The Facility will have a nameplate capacity of 100 MW AC, estimated to generate enough renewable green energy to power approximately 16,500 New York households, thus further reducing New York's dependence on fossil fuels and diversifying the energy market for consumers. The Facility has been designed to comply with 19 New York Codes, Rules and Regulations (NYCRR) §900-2.18 and the Uniform Standards and Conditions (USCs) and consistency with energy planning objectives has been achieved to the maximum extent practicable.

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