

Attachment AC

**Revised Exhibit 17.
Consistency with Energy Planning
Objectives**



RIVERSIDE SOLAR, LLC

Matter No. 21-00752

900-2.18 Exhibit 17

Consistency with Energy Planning Objectives

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Acronym List

AES	The AES Corporation, Inc.
CES	Clean Energy Standard
CLCPA	Climate Leadership and Community Protection Act
USEPA	United States Environmental Protection Agency
GHG	greenhouse gas
NYCRR	New York Codes, Rules and Regulations
NYISO	New York Independent System Operator
NYPSC	New York Public Service Commission
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	Riverside 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 Riverside Solar Project, which includes solar arrays, inverters, electric collection lines, and the collection substation.
Facility Site	The parcels encompassing Facility components which totals 1,168 acres in the Towns of Lyme and Brownville, Jefferson 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 and 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. 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 electric 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 enshrining 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 and 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 Riverside Solar to provide New York State with renewable energy.

State Energy Plan (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 ten years. The SEP forecasts New York State

energy supply and demand, the State's ability to satisfy that demand, Facility GHG emissions, identifies and assesses the current energy policies and programs, and assesses the impacts of plan implementation on New York State as a whole. The NYSEPB issued the SEP in 2015 and issued a Draft Amendment to the 2015 plan in 2019, which was adopted on April 8, 2020. As discussed in greater detail below, the 2015 SEP and 2020 Amendment sets forth a broad range of goals for New York's energy system, including the goal to decarbonize New York State's economy with the state goal of reducing statewide GHG emissions 40% by 2030 (and 85% reduction by 2050). The Facility is consistent with the SEP because it proposes to generate electricity through a renewable fuel technology, solar energy, which generates electricity without emitting carbon dioxide or other GHG emissions.

Climate Leadership and Community Protection Act (CLCPA)

As mentioned above, the CLCPA was signed into law on July 18, 2019. This law creates 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 towards carbon neutrality. The State's energy policies are geared towards increasing the amount of renewable energy generation and decarbonizing the energy sector.

The CLCPA accelerates NYS's clean energy goals and includes aggressive targets including 70% renewable electricity by 2030 and 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 megawatts by 2035, up from 2,400 megawatts by 2030;
- Doubling distributed solar deployment to 6,000 megawatts by 2025, up from 3,000 megawatts by 2023;
- Maximizing the contributions and potential of New York's existing renewable resources; and
- Deploying 3,000 megawatts of energy storage by 2030 (in accordance with the New York Public Service Commission's [NYPSC's] goal).

The Project 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 New York Independent System Operator (NYISO) 2021 Power Trends report the Facility would increase installed summer capacity of other renewables by a third¹ (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 generation facilities” (NYPSC, 2016, p.78). The Project 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

¹ It is projected that 351 MW of “other renewables” including solar will be available for the 2021 Summer Capability Period.

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 private investment in Jefferson 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, 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 Constraints

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 of the Facility Site as defined herein and land under control by the Applicant.

Riverside 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 National Grid Lyme Tap Line off the Thousand Islands – Coffeen St. 115 kV transmission line #4 runs immediately adjacent to 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 off-site features, and consolidating Facility impacts to a more defined area. Additionally, the SRIS (see Appendix 21-1 of Exhibit 21) indicated that the existing Thousand Islands – Coffeen St. #4 – Lyme Tap 115 kV 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 1,168 acres. Approximately 628 acres of which will be disturbed by Facility construction. These refinements were considered advantageous as the reduction allowed the opportunity to:

- Meet state and local regulatory requirements described in Exhibit 24.
- Consider Stakeholder input more fully.
- Construct facilities north of 12E to further consolidate Facility components.
- Place the point of interconnection (POI) facilities in very close proximity to the Lyme to Lyme 115 kV Line, therefore 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 breeding bird habitat, as discussed in Exhibit 12.
- Minimize or largely eliminate disturbances within environmentally sensitive areas including wetlands, as discussed in Exhibit 14 and shown on Figure 14-1.
- Minimize points of access, which reduces traffic impacts in the surrounding area.
- Allows 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 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 133,000 metric tons each year – the equivalent of taking approximately 28,000 cars off the road. 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 Facility plays a crucial role in meeting New York State's energy goals outlined in the CES and SEP: injecting renewable or carbon-free power to the New York grid. Specifically, achieving 70% of electricity generated by renewable energy in New York by 2030. The Facility helps to build sustainable and resilient communities, encourage infrastructure, and spur innovation. The Facility is also consistent with the SEP's guiding principles of encouraging private sector investments and enabling market transformation. 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, 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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