



**Exhibit 17: Consistency with
Energy Planning Objectives**

Cider Solar Farm
Towns of Oakfield and Elba
Genesee County, New York

Matter No. 21-1108

EXHIBIT 17: CONSISTENCY WITH ENERGY PLANNING OBJECTIVES

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Abbreviations

CES	Clean Energy Standard
CLCPA	Climate Leadership and Community Protection Act
GHG	greenhouse gas
MW	megawatt
NYS	New York State
SEP	State Energy Plan
SRIS	System Reliability Impact Study

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Glossary of Terms

Applicant	Hecate Energy Cider Solar LLC
Project	Refers to the proposed Cider Solar Farm, an up to 500-megawatt utility scale solar project that will be comprised of photovoltaic panels, inverters, access driveways, electrical collection lines, point of interconnection/substation, construction staging areas, fencing and plantings, located on private land in the towns of Elba and Oakfield, Genesee County, New York.
Project Area	Refers to the Project Site and surrounding/adjacent land totaling approximately 7,518 acres.
Project Footprint	Refers to the limit of temporary and permanent disturbance within the Project Site caused by the construction and operation of all components of the Project totaling approximately 2,452 acres.
Project Site	Refers to those privately owned parcels under option to lease, purchase, easement or other real property interests with the Applicant in which all Project components will be sited totaling approximately 4,650 acres.

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The content of Exhibit 17 is provided in conformance with Chapter XVIII, Title 19 of the New York Codes, Rules, and Regulations § 900-2.18, as follows.

a) Consistency with State Energy Plan

The construction and operation of the Project is consistent with the energy policies and long-range energy planning objectives contained in Climate Leadership and Community Protection Act (CLCPA); the New York State (NYS) Energy Planning Board's 2015 State Energy Plan (SEP), as amended in 2020; the August 1, 2016 New York Public Service Commission (Commission) Order Adopting A Clean Energy Standard (CES) and October 15, 2020, Order Adopting Modifications To The Clean Energy Standard; and related law, orders, policies, and plans.

The SEP is a “call to action, an opportunity for public and private investment in clean energy technologies and resources to boost [New York’s] economy, create jobs and protect the environment.” The Project represents this investment and further embodies the Guiding Principles of the SEP. In particular, the Project aligns with the following Guiding Principles:

- Market Transformation – The Project will contribute to a self-sustaining private sector-driven clean energy market through the regulatory forms, initiatives, and programs established to further the goals of the SEP and the CES.
- Private Sector Investment – The Project will participate in a competitive market by leveraging private sector capital investment.
- Community Engagement – The Project will be developed with stakeholder input, as described in Exhibit 2: *Overview and Public Involvement* of this Application. The Applicant engaged with residents of the towns where the Project is proposed to be sited, which inclusive of low to moderate Income household engagement.
- Innovation and Technology – The Project seeks to align energy innovation with market demand and support for the growth of NYS’s clean energy economy.

The CLCPA, signed on July 18, 2019, directed the Commission to establish a program requiring that: (a) a minimum of 70% of the statewide electric generation secured by jurisdictional load serving entities to meet the electrical energy requirements of all end-use customers in NYS in 2030 be generated by renewable energy systems; and (b) by 2040, the statewide electrical generation system will produce zero emissions.

The CLCPA also set a statewide goal “to reduce greenhouse gas emissions from all anthropogenic sources 100% over 1990 levels by the year 2050, with an incremental target of at least a 40 percent reduction in climate pollution by the year 2030.”

Following the CLCPA’s enactment, the NYS Energy Planning Board amended the SEP on April 8, 2020, to reflect these clean energy and climate targets:

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- 70% electricity generation from renewable energy resources by 2030: Renewable energy resources, including solar, wind, and hydropower, will play a vital role in reducing electricity price volatility and curbing greenhouse gas emissions.
- 100% carbon free electricity by 2040: Decarbonizing the electric grid will support greenhouse gas (GHG) reductions in the power generation sector directly, as well as facilitate decarbonization of other sources of emissions, like the transportation sector and buildings that will increase reliance on electricity as a primary low- or zero-carbon energy input.
- 40% reduction in GHG emissions by 2030: Reducing GHG emissions by no less than this amount on an economy-wide basis is critical for placing the State on a path toward the 85% emissions reduction goal and signaling to clean energy industries that New York intends to place itself at the forefront of clean energy market growth.
- 85% reduction in GHG emissions by 2050: Reducing GHG emissions by no less than this amount on an economy-wide basis—power generation, industry, buildings, transportation, forestry, and waste—is critical to ensuring society’s sustainability and well-being.

The Commission also issued the *Order Adopting Modifications to The Clean Energy Standard* on October 15, 2020, to, among other things, reflect the new renewable energy targets set forth in the CLCPA and establish implementing policies to ensure those targets were met. Recognizing the need to accelerate deployment of renewable energy resources in the near term, the Commission authorized the NYS Energy Research and Development Authority to solicit annually 4,500 gigawatt hours of Tier 1 renewable electricity over the next 5 years (2021–2025) to meet the CLCPA’s target of 70% renewables by 2030. The Project would represent a major step towards achieving all of the above-stated energy goals. As a solar photovoltaic generation plant with an expected maximum potential generating capacity of 500 megawatts (MW), the Project’s output would assist NYS in achieving the 70% renewables by 2030 and meeting the 100% carbon free electricity by 2040 targets required by the CLCPA. Because this clean, renewable energy will displace more carbon-intensive electricity sources in the power sector, it will also help NYS towards its economy-wide greenhouse gas reduction targets of 40% by 2030 and at least 85% by 2050. Because other sectors of the NYS economy such as transportation and buildings will rely on electrification to decarbonize, the Project’s contribution to a zero-emission grid will have positive environmental effects in those sectors as well.

b) Impact on Reliability

The results of the Project’s System Reliability Impact Study (SRIS) (Appendix 21-A: *Interconnection System Impact Study* of this Application) revealed that the Project will have no adverse impact on the reliability of the NYS Transmission System. The SRIS’s analyses are discussed in more detail in Exhibit 21: *Electric Systems Effects and Interconnection* of this Application. The SRIS is considered confidential as it contains critical infrastructure information.

Additionally, the CLCPA calls for large swaths of the NYS economy to undergo beneficial electrification, and the addition of the Project’s 500 MW solar energy will give the grid operator more options to meet that increased demand. By increasing the diversity of the NYS energy resource mix, the Project is likewise increasing the capability of NYS to confront risks that pertain to a single generator or a group of generators with a correlated risk factor. The SEP, for its part, stressed the need to install new technology

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to replace the NYS aging generation fleet to make the grid more reliable and resilient. By providing new generation, the Project will assist in that regard.

c) Impact on Fuel Diversity

The Project will increase fuel diversity in NYS. The NYS electric system relies on a variety of fuel sources, including oil, natural gas, hydroelectric, nuclear, wind, and solar. NYS had approximately 2,150 MW of solar capacity at utility-scale and small-scale, customer-sited installations by May 2020 (U.S. EIA 2020).

The Project will increase the amount of solar generation in NYS and is expected to displace energy production from fossil fuel energy generation sources; this displacement promotes the targets of the CLCPA, CES, SEP, and other related NYS policies that encourage the development of more renewable energy generation.

d) Impact on Regional Capacity Requirements

The Project's addition of renewable generation capacity to the region will positively affect the regional requirements for capacity. Due to its size, the Project likely will be able to provide meaningful capacity, reducing such costs for electricity customers in the region. The peak demand hour in New York Control Area's Summer Coincident Peak varies from year to year but typically occurs in the late afternoon when the Project is expected to be generating electricity (NYISO 2020). Exhibit 21 and the SRIS report (Appendix 21-A) details how the Project's capacity can be accommodated in the regional system.

e) Impact on Electric Transmission Constraints

Due to its location, the Project would not have an adverse impact on electric transmission constraints. The SRIS found that any thermal overloads that the Project may cause could be accommodated by applying the NYS Reliability Council Reliability Rules or other available measures, without requiring network upgrades on the transmission system. The Project's Point of Interconnection will be on the New York Power Authority Dysinger to New Rochester 345-kilovolt line and would not create significant constraints on local distribution systems. To the extent the Project is curtailed due to transmission constraints, the cost will be borne by the Project owners and not NYS captive electricity ratepayers.

f) Analysis of Reasonable and Available Alternative Locations

No alternative locations have been identified for the Project that meet the objectives of the Applicant. The Applicant does not have the power to exercise eminent domain as a private entity. The Applicant does not own or have under option other sites in NYS that could be considered reasonable and available for the Project. Therefore, only reasonable and available sites under the Applicant's control were considered.

As a part of site selection, preliminary assessments of specific criteria were undertaken to consider suitability of the site to meet the Applicant's development objectives. Criteria include: 1) strong solar energy potential; 2) adequate transmission for electrical interconnection; 3) compatible land use; 4) contiguous and adequate land area; 5) willing landowners; and 6) evaluation of preliminary site constraints. Additionally, the Applicant conferred with local community leadership and community members regarding compatibility with local laws and community support for the Project. This community

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consultation has been ongoing. There are no other reasonable and available locations for the Project, given the land permissions available and objectives of the Applicant. The Project location was secured for additional evaluation and development based upon the site criteria meeting the Applicant's objectives. Furthermore, the Project at this site was selected by, and has entered into a contract with the NYS Energy Research and Development Authority to sell Tier 1 renewable energy credits as a part of its 2020 large-scale renewable energy standard solicitation. The selection of solar energy projects is driven by both technical and economic factors, which are similar to the objectives of the Applicant's, including availability of the solar resource, willing landowners, and grid accessibility.

g) Promotion of Public Health and Welfare

The Project's solar photovoltaic technology produces no GHGs nor local pollutants such as NO_x, SO_x, and particulate matter. By replacing other generation sources whose operation does produces significant pollution that harms New Yorkers, the Project promotes public health and welfare. As discussed in Exhibit 6: *Public Health, Safety and Security* of this Application, the Project will reduce carbon and other emissions associated with energy generation, thereby minimizing the public health and environmental impacts related to climate change.

The CLCPA establishes an ambitious set of objectives that are necessary to reduce GHG emissions, combat climate change, and improve NYS public health and welfare. In furthering those objectives, as discussed in Section (a) of this Exhibit, the Project will, as a matter of state law, be contributing to public health and welfare.

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