

SAVING THE LAND THAT MATTERS MOST

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July 5, 2018

Hon. Kathleen H. Burgess, Secretary New York State Board on Electric Generation Siting and the Environment 3 Empire State Plaza Albany, New York 12223-1350

RE: Case No. 17-F-0619 – Application of Hecate Energy Greene 1, LLC, Hecate Energy Greene 2, LLC, and Hecate Energy Greene County 3, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 of the Public Service Law for Construction of a Solar Electric Generating Facility Located in the Village and Town of Coxsackie, Greene County.

Dear Secretary Burgess:

Pursuant to the Notice Extending Deadline for Submission of Comments issued June 6, 2018, Scenic Hudson, Inc. ("Scenic Hudson") respectfully submits the following comments on the Preliminary Scoping Statement ("PSS") submitted in the above-referenced proceeding.

Scenic Hudson's Interest

Scenic Hudson is a 501(c)(3) organization based in Poughkeepsie, NY. Scenic Hudson preserves land and farms and creates parks that connect people to the Hudson River, while fighting threats to the river and natural resources that are the foundation of the Hudson Valley's prosperity. We are following this proceeding as well as several other proceedings currently pending before the New York State Board on Electric Generation Siting and the Environment ("Siting Board") for new, large-scale solar energy facilities proposed in the Hudson Valley (specifically, Case Numbers 17-F-0617 and 18-F-0087).

Scenic Hudson is dedicated to preserving the scenic, ecological, recreational, historic and agricultural treasures of the Hudson River valley. We combine land acquisition, support for agriculture, citizen-based advocacy and sophisticated planning tools to create environmentally healthy communities, champion smart economic growth, open up riverfronts to the public and

preserve the valley's inspiring beauty and natural resources. A crusader for the valley since 1963, today we are the largest environmental group focused on the Hudson River and its valley. We have over 25,000 supporters, the majority of which reside in the Hudson Valley region, including Greene County.

The Scenic Hudson Land Trust, Inc. is an affiliate of Scenic Hudson, Inc. that owns lands throughout the Hudson Valley in fee and by conservation easement. The Scenic Hudson Land Trust exists to support the mission of Scenic Hudson and holds interests in real property (feeowned lands and conservation easements) that exhibit the open space and agricultural values that Scenic Hudson is dedicated to preserving. Scenic Hudson has protected over 40,000 acres in nine counties and created or enhanced many parks and preserves for public enjoyment, including in Greene County.

New York State policy mandating an increase in the amount of renewable energy supply from 25% to 50% of the state's total by the year 2030 is driving proposals for new, large-scale solar facilities in the Hudson Valley. New York has adopted important policies to transition the state to a 50% renewable energy supply, reduce fossil fuel emissions and mitigate climate change. Scenic Hudson strongly supports these initiatives. We seek to ensure that the development of solar energy projects in the Hudson Valley is maximized, while protecting the region's priceless natural resources, scenic views and historic sites. It is Scenic Hudson's view that we can fight climate change by helping make the Hudson Valley a leader in clean energy. This can create new jobs, provide reliable and affordable energy, and shape healthier, stronger communities.

Scenic Hudson is focused on promoting the development of solar projects in the Hudson Valley, while simultaneously preserving important natural and economic resources. We have published a guide to siting renewable projects in the Hudson Valley, *Clean Energy, Green Communities*, which was developed to help overcome challenges presented by large-scale solar projects such as this. The Guide is available on-line at: www.scenichudson.org/renewables.

Clean Energy, Green Communities contains several siting and design principles for renewable energy development to help stakeholders find common ground in a regional model for increased renewable energy development that also protects natural and economic resources:

- prioritize development on previously disturbed areas
- protect agricultural lands and promote co-location

- protect natural beauty
- protect ecological resources
- protect historic and cultural resources
- maintain the purpose of conserved lands
- avoid and minimize new transmission and distribution lines
- use construction and operation best practices; and
- promote sustainable renewable energy development through planning and zoning.

Under these principles, areas with high conservation, agricultural, ecological and cultural value should be avoided for development. Instead, low-conflict sites and areas should be identified and prioritized for use. Projects can be sited and designed to minimize impacts to areas of natural beauty by avoiding designated scenic areas, keeping below tree lines and including robust vegetative screening. Opportunities should be pursued to achieve dual-use, or co-location, of solar energy projects and other uses, such as pollinator-friendly plantings, livestock grazing or crops. In this way, the benefits of renewable energy can be achieved without compromising conservation values.

The project proposed in this proceeding has the potential to impact agricultural, scenic, and ecological resources of the Hudson Valley in general, and Greene County and the Village and Town of Coxsackie in particular. In Greene County, Scenic Hudson has played a vital role in securing New York Department of Environmental Conservation Wildlife Management Areas (Vosburgh Swamp MUA in Coxsackie and Athens and The Great Vly MUA in Catskill) along with the Brandow Point Multiple Use Area. Scenic Hudson has also established multiple parks and preserves in Greene County, which provide public access to the significant and important natural resources these areas provide. These places include the Ramshorn-Livingston Sanctuary in Catskill, Long View Park in New Baltimore, and Four Mile Point Preserve, which is located in Coxsackie. Most recently, together with the Greene Land Trust, Scenic Hudson opened Mawignack Preserve in the Town of Catskill, a 144-acre property at the confluence of the Catskill and Kaaterskill Creeks, which will provide recreational opportunities and help with flood control. All told, Scenic Hudson holds, in fee or conservation easement, just over 290 acres of land in Coxsackie, and almost 1,700 acres in Greene County. Therefore, Scenic Hudson itself will potentially be affected by the proposed 50 megawatt (MW) solar electric generation facility, as will its conservation mission in the Hudson Valley.

The Proposed Greene County Solar Facility

The proposed Greene County Solar Facility ("Facility") is one of several proposed largescale solar PV projects in the Hudson Valley currently undergoing the Public Service Law Article 10 review process before the Siting Board. A revised Preliminary Layout with changes to the relevant tables and figures in the PSS was submitted by the Applicant¹ on June 22, 2018. According to the revised PSS, the proposed Facility is a 50-megawatt (MW) solar photovoltaic (PV) energy generation facility on a +/-814-acre Facility Area located on the east and west sides of Farm to Market Road (County Route 57) in the Village and Town of Coxsackie, Greene County. A total of approximately 315 acres of the Facility Area will be used for the construction of the Facility. The River Subdivision Railroad Lined by CSX runs adjacent to the Facility Area to the west. New York State Route 385 lies to the east, and beyond that is the Hudson River. Residential neighborhoods lie to the north and south.

Comments on the Preliminary Scoping Statement for the Greene County Solar Facility

General Comments on the PSS

The PSS is vitally important to the Article 10 process because it is the public's first significant opportunity to learn about the potential environmental and health impacts of a proposed project; the proposed studies that will be conducted in order to evaluate those potential impacts; measures proposed to minimize environmental impacts or mitigate unavoidable impacts; and reasonable alternatives to the project.² The PSS also provides an opportunity to learn about the potential benefits of a project.

The PSS must address, among other things, "the extent and quality of information needed for the application to adequately address and evaluate each potentially significant adverse environmental and health impact...."³ It serves as the scope for the application itself as well as the basis for any stipulations, or agreements, between the applicant and stakeholders on the scope and methodology of the studies to be conducted for the formal application.

Based upon the information in these studies, the Siting Board, through the Public Service Law Article 10 process, is empowered to grant permission for an applicant to construct and operate a major electric generation facility only if it finds, among other things, that:

¹ The applicants are Hecate Energy Greene 1, LLC, Hecate Energy Greene 2, LLC and Hecate Energy Greene County 3, LLC, referred to herein collectively as the "Applicant."

² NY Public Service Law ("PSL") § 163(1).

³ 16 NYCRR § 1000.5(l).

- it will be a beneficial addition for the electric generation capacity of the state;
- it will serve the public interest;
- "the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable;"
- if there are "significant and adverse disproportionate environmental impacts" from a proposal, that "the applicant will avoid, offset, or minimize the impacts caused by the facility upon the local community for the duration that the certificate is issued to the maximum extent practicable using verifiable measures"; and
- the Facility is designed to operate in compliance with applicable local laws concerning the environment and public health and safety that are not unduly burdensome.⁴

In making these findings, the Siting Board "shall consider" the state of available technology; alternatives; environmental impacts; impacts of related facilities; consistency with the state energy plan; impacts on community character; and "such additional social, economic, visual, or other aesthetic, environmental and other considerations deemed pertinent".⁵

The specific items required to be provided in a PSS are set forth in Public Service Law § 163(1) and 16 N.Y.C.R.R. § 1000.5(1). The PSS for this project is formatted to follow the requirements set out in the Siting Board's regulations at 6 NYCRR Part 1001, which dictates the content of an application for a certificate of under Article 10 of the Public Service Law. While this approach makes sense, the unique nature of solar projects, which are a clean source of electricity generation but require significant amounts of land for construction and operation, requires some special considerations when scoping out the studies to be conducted for the application in the PSS. In this case, specifically, accommodation should be made to ensure a full analysis of potential impacts to existing agricultural land use, both on a site-specific and regional basis, as well as the agricultural soils on the site. In addition the application must include studies of the potential impacts to and mitigation measures for visual resources and grassland habitat, which are of particular concern in this area. The Application should include detailed analyses of both alternative locations and Facility layout and design, taking into account measures to avoid,

⁴ NY Public Service Law ("PSL") § 163(3).

⁵ PSL § 168(4).

minimize and mitigate impacts to these important resources. Finally, the application must provide the information necessary to ensure that the clean energy, economic, and other benefits of the project are adequately demonstrated.

Specific Comments on the PSS

The following are our comments on specific sections of the PSS and the proposed studies laid out therein.

Section 4.4 Land Use

Potential Agricultural Impacts

According to the PSS, the Facility Area is dominated by agricultural fields with intermittent wooded hedgerows. The PSS acknowledges that construction and operation of the Facility will result in disturbance of agricultural land. The majority of the Facility Site is located within a Greene County Agricultural District. A significant portion of the site soils (70%) is Farmland of Statewide Importance; 10% is Prime Farmland; 15% is Prime Farmland if Drained; and the remainder (5%) is Not Prime Farmland. The parcels that make up the site are designated as highest and high priority under Scenic Hudson's regional Foodshed Conservation Plan, although they are not located within an identified Farmland Conservation Cluster.⁶ The PSS states that area around the Facility is predominantly in agricultural production, and that some portions of the Facility Area are in active agricultural production. Farmland within the Facility Area consists of a combination of row crops (corn and soybeans), hay, and pasture fields.

The "qualitative assessment of the compatibility of the Facility" with existing, proposed and allowed land uses as required by regulation in this section should contain a separate discussion that specifically addresses the potential impacts to both active and potential agricultural land use (i.e., farming) from construction and operation of the Facility as well as measures to avoid, minimize and mitigate such impacts. This assessment should include a detailed description of the existing agricultural uses on the Facility Area.

The PSS also states that payments to the current landowners will "allow them to invest in a more successful farming operation outside of the Facility Area.⁷ If this is considered to be a mitigation measure for the Facility's potential impacts on agricultural land use, it should be further described and explained.

⁶ Securing Fresh, Local Food for New York City and the Hudson Valley: A Foodshed Conservation Plan for the Region, available at: https://www.scenichudson.org/foodshedplan.

⁷ PSS p. 30.

Compliance with Local Laws

The PSS indicates that there is a moratorium on the installation of new solar systems in the Town of Coxsackie as it considers zoning amendments. Pursuant to Article 10, the application must demonstrate that the Facility complies with local laws concerning the environment and public health and safety that are not unduly burdensome.

Section 4.5 Electric System Effects and Section 4.8 Electric System Production Modeling

In addition to the technical requirements that must be included in these sections of the Application, the PSS should provide that the Application will include an easily understandable description of how the Facility will produce clean solar energy and who the likely benefited consumers will be, as well as a discussion of benefits to the community, town, village and county in terms of energy pricing, emissions, and other appropriate metrics.

Section 4.9 Applicable Reasonable and Available Alternatives

The PSS is required to include "a description and evaluation of reasonable and available alternative locations for the proposed facility, including a description of the comparative advantages of the proposed and alternative locations, except that a private facility applicant may limit its description and evaluation of alternative location to parcels owned by or under option to such private applicant or its affiliates."⁸ However, the PSS states only that "the Application will include a preliminary description and evaluation of applicable reasonable and available alternative locations ... limited to parcels owned by, or under option to, Hecate Greene or its affiliates."9 To the extent such parcels exist, the PSS fails to comply with the regulatory requirement. In addition, in this case, the alternatives analysis should include alternative locations not only under control of Hecate Greene, but those that could potentially be under its control, in order to provide a full understanding of the Facility's potential impacts. The existence of potential project sites that would use previously disturbed lands and/or provide for reduced potential impacts on agricultural, visual, and other important resources should be explored in the application.

The PSS also notes that, pursuant to regulation, the application will include a study of reasonable alternatives to the proposed Facility at the proposed location, as well as the "no

 ⁸ 16 NYCRR § 1000.5(l)(2)(viii); (x).
⁹ PSS p. 37 (emphasis added).

action" alternative and energy supply source alternatives. The PSS should provide more information, even if only preliminary, on the range of project alternatives at this time in the interest of promoting public knowledge and feedback and to provide a basis for potential stipulations on the range and the studies of such alternatives.

According to the PSS, "potential avoidance and minimization measures to be assessed include, but are not limited to, conserving land to mitigate impacts to wildlife species, arranging the proposed solar array layout in order to preserve areas of farmland and/or adjusting the solar array layout to provide additional spacing as a means of visual impact mitigation."¹⁰ To the extent that alternative Facility layouts incorporating such mitigation measures have already been developed, they should be included in the PSS for the same reasons cited above. Impact avoidance, minimization and mitigation measures should include Facility design alternatives with fewer arrays and alternative scales of development and that include permanent land conservation on site or on nearby lands which provide equivalent ecological and/or agricultural resources. Such alternatives should take into account and comply with the recommendations contained in the Greene County Grassland Habitat Management Plan,¹¹ the Greene County Agricultural Development and Farmland Protection Plan¹², as well as other applicable planning documents. The conservation goals in these plans should have a direct bearing on the size and location of the Facility's footprint and alternatives.

The PSS should also provide that the Application will include a study of a Facility alternative that includes energy storage. Finally, the alternatives analysis should also include study of the feasibility of using pollinator-friendly plantings in and among the solar arrays, as well as the potential for co-location of solar energy production and agricultural use, such as grazing or appropriate crops.

Section 4.10 Consistency with Energy Planning Objectives

This section must include a discussion of the proposed Facility's consistency with the New York State Energy Plan. In particular, it should include a discussion of how the proposed Facility will help to achieve the goals of the Renewable Energy Standard and New York's 50x30 goal.

¹⁰ PSS p. 30.

¹¹ https://www.greenelandtrust.org/images/stories/PDF/GreeneCountyGrasslandPlanFINAL6-20-2014.pdf

¹² https://www.farmlandinfo.org/sites/default/files/GreeneCounty_NY_AgriculturalandFarmlandProtectionPlan.pdf

Section 4.12 Construction

This section should indicate that the Application will include a discussion of compliance with the construction requirements for solar energy projects on agricultural lands contained in guidance issued by the New York State Department of Agriculture and Markets (NYSDAM).¹³

Section 4.17 Air Emissions

As a renewable energy project, the proposed Facility will produce clean energy without generating air emissions. The Applicant states that the Facility will deliver about 93,000 MW-hours of electricity per year, enough for about 13,000 average NY state households. It will offset nearly 50,500 tons of CO2 per year, the equivalent of taking over 9,700 average cars off the road. The PSS should indicate that the application will include a discussion of the human health and other benefits from the net air emissions benefits of the Facility that will result from the pollutant displacement that will occur, to the extent possible.

Section 4.20 Cultural Resources

According to the PSS, the Facility Area is considered archaeologically sensitive for both historic and pre-contact archaeological sites. Impacts to archaeological resources could result from excavation and earthmoving during construction and vehicle traffic. We agree with the stated New York State Office of Parks, Recreation and Historic Preservation (OPRHP) position that if archaeological resources are identified within the Facility Area, the Applicant must explore modifying the layout to avoid impacts to archeeological resources.¹⁴

There are also historic properties within close proximity to the Facility Area. We concur with OPRHP that potential visual effects to the overall traditional vernacular landscape should be evaluated, in addition to evaluation of effects on any individual historic properties.¹⁵

Section 4.21 Geology, Seismology and Soils

Section 4.21.1.13 Impacts to Regional Geology

This section indicates that surface soil could be compacted during construction of the solar arrays and support structures such as access roads and underground power lines. Given the existence of important agricultural soils in the Facility Area, the nature and extent of such compaction and its potential impact on agricultural soils must be addressed in the application. In

¹³ NYSDAM Guidelines for Agricultural Mitigation for Solar Projects (Revision 4/19/2019), available at:

https://www.agriculture.ny.gov/ap/agservices/Solar_Energy_Guidelines.pdf.

¹⁴ PSS. p. 64.

¹⁵ PSS p. 64.

addition, this section of the PSS should indicate that the application will include a discussion of compliance with the construction restoration, monitoring and remediation, and the decommissioning requirements for solar energy projects on agricultural lands contained in guidance issued by NYSDAM.¹⁶

Section 4.22 Terrestrial Ecology and Wetlands

There are numerous wetlands in the area, and several streams exist on the Facility Area. The agricultural portions of the Facility Area (which is predominantly where the Facility will be sited) also provide habitat for wildlife species associated with open fields and grasslands. A Raptor Winter Concentration Area exists within the Facility Area, and birds have been observed in several parts of the Facility Area, including the short-eared owl and the northern harrier. A portion of the Facility Area is also located in a Grassland Habitat Focus Area as identified in the Greene County Grassland Habitat Management Plan. The Facility Area is also located in the Atlantic Flyway migratory bird route, providing stop-over points and breeding habitat.

Section 4.22.1.1 General Wildlife Habitat

Table 4.22-1 should be complemented (or replaced) by a similar table using the mapped plant communities (and land uses) specific to the site.

Section 4.22.1.3 Avian Resources

It should be stated that the Greene County Grassland Habitat Management Plan confirms the presence of wintering raptors in the area. The PSS should indicate that the application will include studies of the direct impact of elimination of suitable habitat for hunting and the potential displacement of such state-listed species of concern.

Section 4.22.1.4 State and federal Endangered or Threatened Species

Northern harrier and short-eared owl are *known* to occur at the Facility Area. Therefore, all instances in the PSS that state that these species *may* occur on the site should be corrected.

Section 4.22.1.5 Wetlands

Table 4.22-3 should clarify which wetland acreages are within the Facility Area and which are in the buffer. Please also check for accuracy, since wetland HN-118 is listed four times, and others only once. Please also explain any discrepancies between wetlands delineated by the Applicant and NYSDEC regulated wetlands (including showing both on one map).

¹⁶ NYSDAM Guidelines for Agricultural Mitigation for Solar Projects (Revision 4/19/2019), available at: https://www.agriculture.ny.gov/ap/agservices/Solar_Energy_Guidelines.pdf.

Section 4.22.2 Proposed Studies

Based on surveyed plant communities and existing species records, the Applicant should develop and execute surveys for any potential site-specific rare plant and/or animal species that may occur (i.e., the plant community mapping should inform whether additional surveys are needed).

Section 4.22.2.1 General Wildlife Habitat

Plant community and wetland mapping should use the Ecological Communities of NYS classification, not only that of GAP NLCD.

Section 4.22.2.3 Avian Resources

This section should refer to the Greene County Grassland Habitat Management Plan.

Section 4.22.2.6 Agricultural Resources

This section should include soils maps, and a breakdown by agricultural soil types, as well as a detailed description of the existing agricultural uses on the site.

Section 4.22.3.5 Wetlands

The first sentence of the third paragraph does not make sense. Will shape files be created for wetlands? Please clarify.

Section 4.23 Water Resources and Aquatic Ecology

Section 4.23.1.2

Please note that Murderers Creek flows west to east (not east to west) through the Facility Area. The facility should include a flood standard for which any new culverts (particularly permanent ones) will be designed and should address sustainability and climate resilience of the project.

Section 4.23.1.4 Aquatic and Invasive Species

Please clarify whether species were surveyed for and not observed, none were casually observed, or were not surveyed for. This Section should also list (and Section 4.23.2.4 should also assess impacts to) other amphibian and reptiles, and mollusks, and any other taxa of conservation concern that may be using aquatic and associated terrestrial habitats, not only salamanders and fish (e.g. turtles, frogs, freshwater mussels).

Section 4.23.2.2 Surface Water

Please include a map and analysis of proposed stream crossings, including all streams mapped on site (including ephemeral and intermittent streams).

Section 4.23.3.2 Surface Water Avoidance, Minimization and Mitigation Measures

Please clarify the description and intent of the proposed "Restricted Activities Areas." Shouldn't they be established around the surface waters rather than around "essential construction"? If so, the Applicant should describe the criteria for delineating the areas. Vegetation clearing should be limited near the stream bank and also in stream floodplains.

Section 4.24 Visual Impacts

There are potential sensitive visual receptors in the area, including historic sites, the Columbia-Greene North Scenic Area of Statewide Significance (SASS), and designated scenic roadways, including State Route 385, which forms a portion of the western boundary of the Columbia-Greene North SASS as well as the Coastal Zone. According to revised Table 4.24-1, taking into account topography and forested land cover, views of the Facility are possible from several subunits of the Columbia-Greene North Scenic Area SASS (i.e. there are potential visual impacts on views from this SASS), including:

- CGN-8 Coxsackie Farmland Subunit
- CGN-9 Coxsackie Village Subunit
- CGN-10 Lampman Hill Subunit
- CGN-12 Athens-Coxsackie Farmland Subunit
- CGN-19 Sheffer Subunit
- CGN-22 Nutten Hook Farms Subunit; and
- CGN-28 Stottville Farms Subunit

More CGN Subunits may be visually impacted during leaf-off conditions.

The PSS indicates that the Applicant will develop a visual impact assessment ("VIA") to determine the extent and assess the significance of Facility visibility within a 5-mile visual study area. The Applicant proposes to use the concept of "contrast" based on the United States Bureau of Land Management's (BLM) Visual Resource management System (VRM), arguing that this system can be used on lands outside the jurisdiction of the BLM. However, given the size of the project, the large number of sensitive receptors and the unique nature of the area, the methodology used for the VIA should be appropriate to this region of the Hudson Valley and ensure that it assesses potential impacts to community character as well as the availability and feasibility of potential mitigation measures.

The revised Facility includes a Point of Interconnection located in the Coastal Zone. Therefore, we suggest the potential impact to visual resources should also be discussed as they relate to any applicable Local Waterfront Revitalization Plans ("LWRPs"). Finally, if any federal permits are required or federal funding is used, a Consistency Determination should be required, especially if the VIA finds any adverse impacts to views from the SASS subunits.

Section 4.29 Site Restoration and Decommissioning

This section should indicate that the Application will include a discussion of compliance with the restoration, monitoring and remediation, and decommissioning requirements for solar energy projects on agricultural lands contained in guidance issued by NYSDAM.¹⁷ This section should address the potential for and feasibility of returning the land to agricultural use after the life of the Facility.

Section 4.31 Local Laws and Ordinances

As noted above, the PSS indicates that there is a moratorium on the installation of new solar systems in the Town of Coxsackie as it considers zoning amendments. Pursuant to Article 10, the application must demonstrate that the Facility complies with local laws concerning the environment and public health and safety that are not unduly burdensome. In the event the Applicant will seek a waiver of application of any local ordinances, the Applicant must adequately demonstrate that the requirement is unduly burdensome in order to justify such waiver under the provisions of the Public Service Law.

Thank you for your attention to these comments on the Preliminary Scoping Statement for the proposed Greene County Solar Facility.

Respectfully submitted,

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Audrey Friedrichsen, Esq., LL.M. Scenic Hudson, Inc.

¹⁷ NYSDAM Guidelines for Agricultural Mitigation for Solar Projects (Revision 4/19/2019), available at: https://www.agriculture.ny.gov/ap/agservices/Solar_Energy_Guidelines.pdf.