NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 17-F-0617 - Application of Hecate Energy Albany 1 LLC and Hecate Energy Albany 2 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 Town of Coeymans, Albany County.

ORDER GRANTING CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED, WITH CONDITIONS

Issued and Effective: January 7, 2021

NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

At a session of the New York State Board on Electric Generation Siting and the Environment held in the City of Albany on January 7, 2021

BOARD MEMBERS PRESENT:

John B. Rhodes, Chair
New York State Public Service Commission

Vincent Ravaschiere, Alternate for
Eric Gertler, Acting Commissioner, New York State Department of Economic Development and President and Chief Executive Officer Designate, Empire State Development

Louis Alexander, Alternate for
Basil Seggos, Commissioner
New York State Department of Environmental Conservation

John Williams, Alternate for
Richard L. Kauffman, Chair
New York State Energy Research and Development Authority

Elizabeth Lewis-Michl, Alternate for
Howard A. Zucker, M.D., J.D., Commissioner

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BY THE BOARD:

I. INTRODUCTION

By this Order, the Board on Electric Generation Siting and the Environment (Siting Board) grants to Hecate Energy Albany 1 LLC and Hecate Energy Albany 2 LLC (collectively, Hecate Albany or the Applicant), wholly owned subsidiaries of Hecate Energy LLC, a Certificate of Environmental Compatibility and Public Need pursuant to Article 10 of the Public Service Law (PSL) to construct and operate a 40 megawatt commercial-scale solar electric generating facility in the Town of Coeymans, Albany County, New York (the Project or Facility).

With the Certificate Conditions attached to and made a part of this Order, which were agreed to by the parties except for the Department of Agriculture and Markets, we determine that the Project will meet the statutory requirements for certification under PSL Article 10. Our decision is supported by and based on the extensive evidentiary record compiled in this proceeding,[1] and on post-hearing briefs, public comments, and applicable laws, regulations and policies.

II. BACKGROUND

A. Facility Description

The Hecate Albany Facility is proposed to be located

[1] The evidentiary record includes, but is not limited to, Hecate Albany's application; supplements to the application; discovery responses; July 15, 2020 applications for Clean Water Act Section 401 certification and 404 permit; and the proposed Certificate Conditions and Guidance for the Development of Site Engineering and Environmental Plans for the Construction of the Project (SEEP Guide) stipulated to by Hecate Albany, DPS Staff and DEC Staff, which was initially filed on May 11, 2020, and was updated and re-filed on May 14, 2020.

on a 436-acre rural site between Route 9W and County Route 101, in the Town of Coeymans on privately-owned agricultural land leased by the Project developer. The proposed Facility will consist of an array of ground-mounted photovoltaic solar panels producing direct current electricity mounted on single-axis tracking structures. The Facility will have a total electric generating capacity of 40 megawatts and is expected to generate approximately 73,000 megawatt-hours (MWh) of energy annually. The Facility footprint will occupy approximately 220 acres of the total 436-acre Facility site.[2] The Facility solar panels would be connected to the bulk electric transmission system through underground collection lines and will interconnect with the existing National Grid 115 kV Long Lane-Lafarge transmission line at two locations, both of which are located in the southern portion of the Project site.[3]

The Project also will require the construction of internal infrastructure, including inverters with integrated transformers within weather-rated enclosures; voltage cable collection systems that will extend underground to aggregate the alternating current output from the inverters; two on-site substations to which the collection systems will extend and where the Facility's electrical output will be combined and increased to the transmission line voltage of 115 kilovolts (kV) and connected to the existing on-site utility transmission lines via a line tap; permanent gravel access roads; a temporary laydown area areas for equipment staging during construction; and security fencing (of up to 8 feet in height).[4]

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[2] See Hearing Exhibit 175, Application Exhibit 2. See also Hearing Exhibit 90, Updated Application Figure 2-2.

[3] Hearing Exhibit 147, Application Exhibit 5, p. 1; Hearing Application 175, Application Exhibit 2, p. 1.

[4] Hearing Exhibit 175, Application Exhibit 2, p. 1.

Public roads will be used during Facility construction and for general site access during Facility operations. Hecate Albany does not anticipate any improvements to public road intersections or the addition of turnarounds.[5]

B. Procedural History

On October 13, 2017, Hecate Albany submitted its proposed Public Involvement Program Plan (PIP Plan) for the Project.[6] On November 13, 2017, DPS Staff filed comments on the PIP, which Hecate Albany addressed in a revised PIP Plan filed on December 12, 2017.[7]

On April 17, 2018, Hecate Albany filed a Preliminary Scoping Statement (PSS) outlining its proposed Project and providing public notice of the PSS and its intention to file an application for a certificate of compatibility and public need pursuant to PSL Article 10.[8] The Secretary to the Siting Board issued a Notice of Filing of Preliminary Scoping Statement and Deadline for Submitting Public Comments on May 16, 2018. The Department of Public Service Staff (DPS Staff), Department of Environmental Conservation Staff (DEC Staff), and the Department of Agriculture and Markets Staff (DAM Staff) submitted comments on the PSS. Scenic Hudson, Inc., a not-for-profit organization whose mission is to preserve land and farms and create parks

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5 Hearing Exhibit 175, Application Exhibit 2, p. 2.

6 Hearing Exhibit 233. At the time the PIP was filed, Hecate Albany indicated that the proposed Facility Area was approximately 360 acres (PIP, p. 1), but later expanded it to 428 acres (Preliminary Scoping Statement, pp. 5-6).

7 Hearing Exhibits 231, 232.

8 Hearing Exhibit 230. On May 14, 2018, Hecate Albany filed with the Secretary an affidavit and proof of publication of the PSS in the *Albany Times Union* and the *Ravena Herald News* (DMM Item No. 26), as required by 16 NYCRR § 1000.7(a).

connecting people to the Hudson River, also submitted comments on the PSS. Hecate Albany responded to the PSS comments on July 6, 2018.[9]

Pursuant to PSL § 163(4), Hecate Energy submitted pre-application intervenor funding totaling $14,000 for public participation in the PSS process and the Secretary issued a Notice of Availability of Pre-Application Intervenor Funding on May 16, 2018.[10] On June 5, 2018, the Secretary issued a Notice of Procedural Conference to consider intervenor funding requests and initiate the stipulations process for the Project. On July 3, 2020, the Examiners issued a Ruling Authorizing Commencement of the Stipulations Process, enabling Hecate Albany to discuss with interested parties the scope of studies and other aspects of the application. On July 13, 2018, Hecate Albany initiated the stipulations process pursuant to 16 NYCRR § 1000.5(j) and negotiated the scope of certain studies that would be a part of the application with interested parties, including DPS Staff, DEC Staff, and DAM Staff.[11]

On September 5, 2018, the Flach Family Farms, a local farming operation near the Project and the owner of the Project site, submitted a request for pre-application funding for purposes of participating in the PSS and performing a preliminary investigation into the suitability of integrating farm operations with the proposed Project to minimize the

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[9] Hearing Exhibit 231.

[10] No requests for intervenor funding were submitted by the June 15, 2020 deadline in response to the Secretary's Notice of Availability and, on July 11, 2018, the Secretary issued a Second Notice of Availability of Pre-Application Intervenor Funds, which resulted in submission of one application for funds by Flach Family Farms.

[11] Hecate Albany and certain parties signed stipulations setting forth their agreement, which were filed in April 2019.

impacts to agricultural production at the Project site.[12] The Examiners found that the Flach Family Farms application met the criteria for an award pursuant to PSL § 163(4) and issued a ruling awarding $7,000 in funding.[13]

On June 7, 2019, Hecate Albany filed its application seeking Siting Board approval to construct and operate the Facility and submitted the required intervenor funds in the amount of $40,000 pursuant to PSL § 164(6).[14] Hecate Albany served all required municipalities, persons and entities with notice of the application and thereafter filed affidavits of service and publication, as required by PSL § 164(2).[15]

The Secretary issued a Notice of Availability of Intervenor Funds on July 25, 2019. On November 22, 2019, Flach Family Farms submitted a request for application-phase intervenor funding, indicating that it intended to compile information and best practices regarding solar-grazing operations and to develop a site specific feasibility plan to avoid or minimize displacement of active agricultural lands and maximize the potential environmental benefits of such an operation.[16] In a December 24, 2019 ruling, the Examiners awarded funding totaling $20,000 to Flach.[17]

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12 Flach Family Farm Request for Pre-Application Intervenor Funding, pp. 7-8, DMM Item No. 43.

13 Ruling on Intervenor Funding Request (issued September 26, 2018), pp. 3-4.

14 Hearing Exhibits 138–229.

15 Notice of the Application by Hecate Albany was also published and mailed to the entire Master Stakeholder List. Hearing Exhibit 102, First Supplement to the Application, pp. 8–9.

16 Flack Family Farm Request for Intervenor Funding, pp. 7-8, DMM Item No. 76.

17 Ruling on Intervenor Funding Request (issued December 24, 2019), pp. 3-4.

In an August 6, 2019 letter, the Chair of the Siting Board notified Hecate Albany of certain application deficiencies.[18] Hecate Albany supplemented its application with additional detailed information on September 23, 2019, and December 26, 2019.[19]

On January 22, 2020, the Chair of the New York State Board on Electric Generation Siting and the Environment (Siting Board) determined that Hecate Albany's application complied with PSL § 164 and the Siting Board's regulatory filing requirements set forth in 16 NYCRR § 1001 et seq.[20]

On January 30, 2020, the Secretary issued a Notice of Public Statement Hearing and on February 18, 2020, the Examiners presided over afternoon and evening information sessions and public statement hearings at the Coeymans Town Hall at which public comments were made by Mark Flach, operator of Flach Family Farm and landowner; John Reagan, representative of Port of Coeymans and Member of Board of Directors for the Bethlehem Chamber of Commerce; and Daniel Baker, Coeymans Town Board Member. All of the public commenters expressed support for the Project.

On February 28, 2020, Hecate Albany filed a Notice of Impending Settlement Negotiations pursuant to 16 NYCRR § 3.9(a), which the Examiners found to be in compliance with the applicable notice requirements and which provided interested persons with a reasonable opportunity to participate in the settlement discussions. The Examiners thereafter issued a Ruling Establishing Procedural Schedule establishing the dates

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[18] DMM Item No. 66.

[19] Hearing Exhibits 100-136 (First Supplement to Application); 79-99 (Second Supplement to Application).

[20] Hearing Exhibit 78.

for submission of testimony and commencement of an evidentiary hearing.[21]

On April 24, 2020, the Town of Coeymans Town Board (Town) passed Local Law No. 3 of 2020 (Local Law 3), which imposed a moratorium on the processing of all applications and approvals for solar facilities located in the Town.[22] On April 27, 2020, the Town filed the local law with the New York State Secretary of State.

On May 11, 2020, Hecate Albany submitted a request to the Siting Board pursuant to 16 NYCRR § 1001.31(e) for a waiver of Local Law 3, asserting that it may have implications for the Project and prevent it from obtaining a building permit from the Town. Hecate Albany submitted with its letter Local Law 2020-3 and pointed to the provision imposing a six-month moratorium and providing that during the moratorium "no permits, certificates of occupancy, approvals, denials, determinations or interpretations may be issued or granted for any land uses relating to solar energy, including but not limited to solar farms."[23] Hecate Albany asserted that the Town's Building Inspector/Code Enforcement Officer was required to issue approvals in order for the Project to comply with the New York State Uniform Fire Prevention and Building Code, the Energy Conservation Construction Code of New York State, and the substantive provisions of any applicable electrical, plumbing, or building code. Hecate Albany also indicated that it will comply with applicable Town Code provisions and other applicable laws. Hecate Albany indicated that the new law "could be

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[21] Ruling Establishing Procedural Schedule (issued March 18, 2020). The Examiners thereafter issued a Ruling Revising Procedural Schedule (issued April 13, 2020).

[22] Local Law No. 3 of 2020 (filed April 27, 2020).

[23] Id., § 3.

construed to prevent the Town from issuing the required building permit if the moratorium is still in effect when Hecate Albany applies for a building permit" and that the law is unreasonable in view of existing technology and would preclude construction of the Facility and impair the goals of the Climate Leadership and Community Protection Act, the Clean Energy Standard, and the State Energy Plan.[24]

Hecate Albany also indicated that in passing Local Law 3, the Town only intended to develop a solar law for future projects, expressed no intention to interfere with the construction of the Project, and indicated its support for the Siting Board's issuance of an Article 10 certificate.[25] Pursuant to PSL § 168(4) and 16 NYCRR § 1001.13(e)(1), Hecate Albany requested that the Siting Board elect not to apply Local Law 3 insofar as it applies to a building permit required for the Project.

On May 11, 2020, Hecate Albany filed a settlement proposal that included Proposed Certificate Conditions, Proposed Site Engineering and Environmental Plan (SEEP) Guide, and several other exhibits.[26] On May 14, 2020, Hecate Albany filed revisions to the settlement proposal and indicated that it represented certain changes to the Certificate Conditions, which had been agreed to by Hecate Albany and the parties to the settlement proposal.[27]

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[24] Hecate Albany May 11, 2020 Waiver Request, p. 2.

[25] Id. Local Law 2020-3(1) indicates that the moratorium was necessary in order for the Town to develop Town Code amendments to properly address an expected influx of applications to build solar facilities in the Town.

[26] Hearing Exhibits 70-71. Among the filed exhibits were several interrogatory responses (IRs) the parties had jointly agreed to make a part of the settlement.

[27] Hearing Exhibit 32.

On May 15, 2020, the DPS Staff and DEC Staff filed executed signature pages to the proposed stipulated Certificate Conditions and SEEP Guide.[28] The Department of Agriculture and Markets Staff (DAM Staff) did not agree to the Certificate Conditions and SEEP Guide in settlement of the proceeding.

On May 15, 2020, DPS Staff, DEC Staff, and DAM Staff filed direct testimony in accordance with the procedural schedule the Examiners established.[29] On June 5, 2020, Hecate Albany filed rebuttal testimony of its panel of five expert witnesses with four exhibits, which included as Exhibit 1, the revised proposed Certificate Conditions; Exhibit 2, Prime Farmland Soils Analysis; Exhibit 3, Corrected Wetlands Forms; and Exhibit 4, Revised Application Table 4-2. Hecate Albany's rebuttal testimony primarily supported the proposed Certificate Conditions and SEEP Guide, but also addressed DAM Staff's objections to certain aspects of the Project.[30] DPS Staff and DEC Staff submitted stipulations agreeing to the proposed Certificate Conditions and SEEP Guide.

On June 15, 2020, the parties submitted Issues Statements. DPS Staff's Issues Statement indicated that the issues it initially identified with the Project had been resolved, that it "proposes no issues to be addressed through litigation and that the record is sufficient to enable the Commission to make the required findings." DEC Staff's Issues

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[28] Hearing Exhibits 58–59. DEC Staff initially excepted to one proposed Certificate Condition, namely, Condition 89(c), but otherwise agreed to all other Conditions and the SEEP Guide. This exception was later resolved with Hecate Albany.

[29] DAM Staff filed corrected testimony on June 25, 2020, and DEC Staff filed corrected testimony on July 3, 2020.

[30] Tr. Volume II, pp. 139-143. In its rebuttal testimony, Hecate Albany stated that it had adopted DEC Staff's proposed changes to Certificate Condition 89(c) and had updated this and certain other proposed Conditions.

Statement indicated that a final agreement between DEC and the Applicant has been reached, including a dispute surrounding proposed Certificate Condition 89(c).

DAM Staff indicated in its Issues Statement that it intended to litigate issues related to the Project's permanent conversion of prime agricultural land and other related issues. In its Issues Statement, Hecate Albany essentially agreed with DAM Staff's recitation of the agricultural-related issues to be litigated.

On June 24, 2020, the Examiners held a procedural conference with the parties by telephone to discuss their Issues Statements, further procedural requirements and submissions by the parties, and an appropriate process for developing an adequate record of the remaining disputed issues for adjudication and resolution by the Siting Board. During the procedural conference, counsel for Hecate Albany and DAM Staff indicated that despite the disputed issues remaining, they did not intend to cross-examine witnesses, that they were prepared to address those issues in written briefs, and that the July 1, 2020 evidentiary hearing was unnecessary. No other party asserted a need to hold an evidentiary hearing.

On June 25, 2020, the Town passed Local Law No. 4 of 2020 (Local Law 4), which revoked the moratorium set in Local Law 2020-3 and added a Solar Energy Law to the Town Code as Chapter 137 and established certain zoning, decommissioning and other requirements for solar facilities.[31] On July 29, 2020, Hecate Albany advised the Examiners and the parties by email that it would comply with all of the applicable substantive provisions in the solar law and was not seeking any waiver of

[31] Hearing Exhibit 1. The Town filed Local Law 4 with the Secretary of State on June 29, 2020.

its provisions, and that its May 11, 2020 waiver request was withdrawn as it was no longer necessary.[32]

On July 1, 2020, the Examiners issued a Ruling Establishing Procedural Schedule, which, relying on the issues defined by the parties in their issues statements, found a formal evidentiary hearing unnecessary based upon the representations of Hecate Albany and DAM Staff with respect to the remaining disputed issues and the fact that no other party asserted that a formal hearing was necessary. Among other things, the Ruling set the deadlines for the parties to file briefs in support or in opposition to the proposed Certificate Conditions and SEEP Guide.

On August 7, 2020, Hecate Albany, DPS Staff and DEC Staff filed briefs in support of the proposed stipulated Certificate Conditions. DAM Staff filed a brief challenging certain aspects of the Project insofar as they adversely impacted agricultural land. On August 28, 2020, Hecate Albany filed a reply brief that addressed DAM Staff's position.[33]

C. Public Involvement and Comments

Throughout the pre-application and application phases, Hecate Albany conducted public outreach. It met with municipal officials; held public information sessions; provided paper copies of the application and supplemental information to the Ravena-Coeymans-Selkirk Community Library, the Bethlehem Public Library, the Albany County Clerk's Office, and the Coeymans Town Clerk's Office; established a Facility website, email address,

[32] Hecate Albany reiterated this position in its Initial Brief, pp. 43-44.

[33] Although the Examiners initially scheduled a site visit to the Project area, the parties concluded that the visit was unnecessary.

and toll-free phone number to provide the public with opportunity to access Facility information and submit comments and questions; and held open houses on February 20, 2018, and December 11, 2019, and answered questions about the Facility and took in comments.[34] Hecate Albany maintained a public participation activity log that recorded all public consultations and outreach activities.

In addition to the public comments received at the February 18, 2020 public statement hearings, thirteen additional public comments were filed, nearly all of which expressed strong support for the Project. For example, in a June 15, 2018 letter to the Siting Board, then-Town Supervisor, Douglas A. Crandall, indicated the Town's support for the Project. On May 29, 2020, the current Town Supervisor, George McHugh, expressed the Town's continuing support for the Project, but advised the Siting Board of the six-month moratorium on the Town's processing, permitting and approvals for certain solar land uses under Local Law 2020-3. Supervisor McHugh further advised that Hecate Albany had been working with the Town on the Project's development for several years and that the Siting Board should elect not to apply the Town's moratorium to the Project.

III. FINDINGS AND DETERMINATIONS UNDER PSL § 168

A. Article 10 Standards

1. Burden of Proof

The applicant in an Article 10 proceeding has the burden to prove that, based on the evidentiary record, all findings and determinations required by PSL § 168 can be made by

[34] Hearing Exhibits 74, 175. Notice of the open houses were mailed to approximately 5,000 stakeholders, but only about 39 people attended the open houses.

the Siting Board.[35] When factual matters are involved, the applicant must sustain that burden by a preponderance of the evidence, unless a higher standard has been established by statute or regulation.[36] The evidentiary record must fully support the findings the Siting Board must make pursuant to PSL § 168 in issuing this Certificate and Order.

2. PSL § 168 Criteria

Pursuant to PSL § 168(2), the Siting Board must make express findings regarding the nature of probable environmental impacts, including cumulative impacts, resulting from the construction and operation of a proposed facility. This includes impacts to (a) ecology, air, ground and surface water, wildlife, and habitat; (b) public health and safety; (c) cultural, historic, and recreational resources, including visual, aesthetic and scenic values; and (d) transportation, communication, utilities and other infrastructure.[37]

Pursuant to PSL § 168(3), the Siting Board may not grant a certificate unless it determines that the Facility will be a beneficial addition to or substitution for the State's electric generation capacity and serve the public interest; that the Facility's adverse environmental impacts have been minimized or avoided to the maximum extent practicable, including any significant disproportionate impacts on the community in which it is located; and that the Facility is designed to operate in compliance with applicable State and local laws.[38]

In making these determinations, the Siting Board considers several factors, including available technology,

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35 16 NYCRR § 1000.12(b).

36 16 NYCRR § 1000.12(c).

37 PSL § 168(2)(a)–(d).

38 PSL § 168(3)(a)–(e).

reasonable alternatives, environmental impacts, impacts on related facilities, consistency with the State Energy Plan, impacts on community character and whether the community is disproportionately impacted by cumulative levels of pollutants, and any other social, economic, aesthetic, environmental considerations deemed pertinent.[39] In issuing a Certificate, the Siting Board may impose any terms and conditions it deems necessary and the Department of Public Service or the Commission "shall monitor, enforce and administer compliance with any terms and conditions" set forth in the Siting Board's Certificate and Order.[40]

B. Nature of Probable Environmental Impacts and Avoidance, Minimization and Mitigation Thereof - PSL § 168(2) and (3)(c)

1. Land Use

Section 1001.22(q) requires an Applicant to provide an analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources including the acres of agricultural land temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impacts.

Here, approximately 217.6 acres of the Facility Area consists of prime farmland or priority soil groups 1-4.[41] These

[39] PSL § 168(4)(a)–(g).

[40] PSL § 168(5).

[41] DAM's land classification system developed pursuant to Article 25-AA of the Agriculture and Markets Law includes 10 mineral soil groups (1-10) ranked based on potential to produce livestock feed, measured as tons of digestible nutrients (TDN) per acre per year. See Ag & Mkts Law 304-a and 1 NYCRR § 370.8

agricultural lands currently consist primarily of row crop fields where corn and soybeans are grown, and field crop fields where alfalfa, wheat, timothy, and oats are grown.[42] Construction of the Facility is expected to disturb approximately 252 acres of agricultural lands. DAM Staff and the Applicant disagree as to whether the impacts to priority soil groups are temporary or permanent, as well as on the Facility's impact to the local agricultural community.

DAM Staff

DAM Staff argues that the Project as proposed, including the terms of the Settlement Agreement, does not avoid or minimize significant adverse impacts to agricultural land. DAM Staff states that the majority of the Facility Area is located within a DAM certified Agricultural District. DAM Staff notes that State Agricultural Districts are formed by willing landowners to gain the protections of Agriculture and Markets Law (Ag & Mkts Law), Article 25-AA.[43] DAM Staff argues that the Project will displace approximately 300 acres of rotational agricultural land consisting of rotations of row crops and hay fields.

DAM Staff argues that it is the policy of the State to encourage the development and improvement of its agricultural lands to produce food and other agricultural products.[44] DAM Staff further argues that New York's most productive farmland "should be avoided to the maximum extent practicable for uses

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42 Hearing Exhibit 172, Application Exhibit 22.

43 Ag & Mkts Law Article 25-AA. The purpose of the legislation is "to provide a locally-initiated mechanism for the protection and enhancement of New York's agricultural land…". Ag & Mkts Law § 300.

44 DAM Staff Initial Brief, p. 11 (citing NY State Const. Art XIV, and Ag & Mkts Law, Art. 25-AA, § 300, Art. 25-AAA, § 321).

that are not consistent with the development and/or improvement of the agricultural lands for the production of food and other agricultural products or purposes."[45] DAM Staff also notes that Article 25-AAA, § 321 of Ag & Mkts Law provides that agricultural lands are irreplaceable, and in an effort to maintain the economic viability and environmental and landscape preservation values associated with agriculture, the State must explore ways to sustain the State's valuable farm economy and to protect farm operations and the land base associated with it.[46]

DAM Staff acknowledges that New York also has a policy to promote the development of renewable energy and states that it is willing to support the policy if such renewable development is not sited on the State's most productive farmland. DAM notes that mineral soil groups 1-4 are considered the most productive soils pursuant to the Department's soil classification system and such soils are natural resources to be protected.[47] DAM argues that "the only responsible balance" between the State's policies of preserving agricultural lands and increasing development of renewable energy generation is to prevent energy development from displacing agricultural activity on soil groups 1-4.[48]

DAM Staff argues the primary agricultural impact of the Project is the permanent conversion of farmland to nonagricultural use. DAM states that its goal for any project sited pursuant to Article 10 is to limit the conversion of mineral soil groups 1-4 to non-agricultural uses to an area no more than 10 percent of a project's footprint.

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[45] DAM Staff Initial Brief, p. 11.

[46] DAM Staff Initial Brief, pp. 11-12.

[47] 1 NYCRR § 370.1 et seq.

[48] DAM Staff Initial Brief, p. 12.

Here, DAM Staff argues that installation of solar arrays and ancillary facilities will make agricultural operations infeasible throughout the Facility Area. DAM also argues that agricultural land outside the Project's security fence is likely to be abandoned because the Project's orientation creates narrow strips of land that are not conducive to the size of common farm equipment. DAM acknowledges that the Project's orientation is largely the result of municipal setbacks, shading buffers, regulated stream buffers and wetland adjacent areas all limiting alternative orientation.

DAM also argues that indirect impacts to the agricultural community result from the conversion of agricultural lands. DAM argues that reducing or eliminating the cash crop commodities currently produced on the Project Area will impact local supply and demand potentially increasing prices and otherwise negatively impacting the local agricultural community.

DAM Staff argues that the local agricultural community cannot support the lease terms solar developers are willing to provide due to current markets. DAM argues that the structure of current agricultural markets requires that farm operations grow larger in order maximize production and cost efficiencies. DAM contends that conversion of productive farmland is likely to lead to further decline in local agriculture because of the increasing trend toward larger farm operations which require large tracts of land to operate efficiently. DAM notes that the trend in agribusiness toward larger farms producing more product more efficiently results in fewer farms and less farmland overall. DAM Staff asserts that market-driven competition has led to fewer small farms and fewer opportunities for small farms to grow and diversify. DAM Staff argues that a decline in local farming leads to an increase dependence on non-local food

production and loss of the rural heritage and the scenic beauty of the community.[49]

DAM Staff argues that absent competition from solar generation and other nonagricultural development, loss of agricultural land would generally be limited to the fallowing of lands with soil limitations (mineral soil groups 5-10) which are not conducive to efficient production. DAM states that, in its experience, high quality agricultural land will stay in agricultural production because large scale farms are willing to travel to surrounding towns for Prime Farmland (mineral soil groups 1-4).

According to DAM Staff, approximately 1,322 acres of agricultural land were converted to solar energy generation between 2016 and 2018, based on a review of DEC's SPDES permit activity. Based on its own data, DAM Staff states that approximately 2,371 acres of agricultural land has been converted to solar generation since 2019.[50] DAM Staff claims these numbers are continuing to grow and do not include converted lands outside certified agricultural districts. DAM Staff states that it anticipates approximately 33,000 acres of agricultural land to be converted to solar generation based on its assumption that all 6,499 MW of solar generation currently described in the "Active Article 10 Queue"[51] will be sited primarily on farmland.[52]

DAM Staff argues that the development of solar

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49 DAM Staff Initial Brief, p. 14.

50 DAM Staff Initial Brief, p. 15 citing DAM's Agricultural District Notice of Intent process under § 305-a of Ag & Mkts Law.

51 Available at https://www3.dps.ny.gov/W/PSCWeb.nsf/All/763B187DD5A792DE8525847400667D6B?OpenDocument

52 DAM Staff Initial Brief, p. 15.

generation on agricultural land interrupts agricultural heritage and the passing of farming knowledge between generations. DAM Staff claims this could disadvantage future generations who may become interested in resuming agricultural operations upon Project decommissioning.

DAM Staff also claims that the Applicant has only committed to returning the site to its current condition and has not committed to returning the site to agricultural production. DAM expresses concern that the Project could be "upgraded and tempt the landowners to renew the lease . . . for another 30 years."[53] DAM Staff notes that the Applicant has neither offered to assist an agricultural start-up business after decommissioning, nor guaranteed that farmers will be available to work the land upon decommissioning. DAM Staff concludes that without such promises, it can only view the Project's impacts to agricultural lands to be permanent. DAM Staff further argues the only way to ensure continued agricultural production on valuable farmland is to prohibit nonagricultural development of such land.

DAM Staff also takes issue with the wetlands identified and delineated in the Application. DAM Staff claims that at the time of decommissioning these wetlands may limit the area available to be restored to agriculture. DAM Staff argues that these wetlands were created by agricultural equipment compacting the sub-soil and that if best management practices had been followed, the soil would have been de-compacted, and the wetlands would not be present. DAM Staff further argues that if the delineations had taken place after another cultivation cycle or in a drier year, fewer wetlands would have been identified. DAM Staff argues that the land is less likely

[53] Id., p. 16.

to be returned to agricultural use upon decommissioning because these "questionable" wetlands may impede agricultural activities if they qualify for protection.[54]

DAM Staff states that it identified 235 acres of agricultural land impacted directly or indirectly by the Project and that 200 of these are priority soils (mineral soil groups 1-4). DAM Staff also claims that the Project will convert 19 percent of the prime farmland currently used as cropland, pasture or hay production in the Town of Coeymans to non-agricultural purposes and argues that this will significantly impact the local agricultural community.

DAM Staff states that when the development of solar generation cannot avoid impacts to soil groups 1-4, mitigation would be acceptable. DAM Staff envisions the mitigation taking the form of money to support the conservation of other local farmland with comparatively productive soils through land trusts or the encouragement of best management practices.

DAM Staff rejects the argument that lease payments to the landowner will provide stable income allowing the continuation of agricultural activities on nearby fields. DAM Staff claims that the Application overstates the amount of land remaining available for agriculture by the current farm operator. DAM Staff also argues that the same landowner/farm operator's involvement in another solar project proposed pursuant to PSL Article 10 "cannot be ignored."[55]

DAM Staff also argues that a designated, qualified, Environmental Monitor specific to agriculture is necessary to ensure proper construction and restoration techniques are followed. DAM Staff states that the Applicant must comply with

[54] DAM Staff Initial Brief, p. 17.

[55] DAM Staff Initial Brief, p. 20.

the Department's Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands[56] (AGM Solar Guidelines) to the maximum extent practicable, and that it must otherwise consult with the Department for acceptable alternatives.

Hecate Albany

Hecate Albany argues that the record demonstrates that the Facility, as governed by the Certificate Conditions, avoids or minimizes agricultural impacts to the maximum extent practicable. The Applicant acknowledges that approximately 251.78 acres of agricultural lands will be disturbed during construction but argues that only 25.48 acres of that land will be permanently impacted, of which approximately 19.16 acres are priority soils.[57] Hecate Albany argues that permanent impacts to agricultural soils are limited to areas subject to topsoil removal or grading including area for the inverter, inverter station, and junction box locations; laydown, trailer, and parking areas; paved roads; and areas subject to trenching.

Hecate Albany argues that other than minimal grading, the land under the panels will remain practically undisturbed and available to return to agricultural use upon decommissioning of the Facility. Hecate Albany also claims that the use of efficient panels minimizes the amount of land required to construct the 40 MW capacity Facility. The Applicant further argues that because the land under panels will be seeded and maintained during the life of the Facility, runoff will be reduced likely improving the condition of the soil.

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[56] Revision 10/18/2019.

[57] Hecate Albany Initial Brief, p. 9 (citing Case 16-F-0267, Atlantic Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued June 30, 2020), pp. 21–22).

Hecate Albany states that it will designate site-specific techniques in the final SEEP Guide to minimize or avoid construction-related impacts to agricultural resources in accordance with the AGM Solar Guidelines to the maximum extent practicable.[58] Hecate Albany notes that it has agreed to strip and segregate topsoil where backhoes are used for trenching and other excavating, will consolidate trenched areas to the maximum extent practicable and will minimize soil compaction through best practices. The Applicant will employ a Health, Safety, and Environmental Manager to oversee construction and restoration activities and ensure they comply with the AGM Solar Guidelines.

Hecate Albany states that upon decommissioning, it will return the Facility area to its prior state. All Facility-related aboveground structures will be removed, and the landowner will determine which access roads are removed.

Hecate Albany argues that DAM Staff overstates the Project's impacts to agriculture. Hecate Albany notes that DAM Staff's initial brief does not cite statutory or regulatory authority to support its goal of converting no more than 10 percent of mineral soils group 1-4 or for monetary mitigation. Hecate Albany also notes that the Siting Board has not adopted a mitigation payment for agricultural impacts.

Hecate Albany argues that it is unclear the impacts for which DAM Staff "is attempting to account."[59] Hecate Albany notes that DAM Staff discusses direct and indirect agricultural impacts in calculating land requiring mitigation payments but the 10 percent goal appears to apply to land that is converted on a permanent basis. The Applicant also argues that mitigation payments for permanent conversion contradict the requirement to

[58] See Hearing Exhibit 32, Certificate Condition 88.

[59] Hecate Albany Reply Brief, p. 12.

adhere to DAM's guidelines for decommissioning in order to preserve the soil resource, claiming that mitigation is unnecessary if the resource will be preserved.

Hecate Albany further argues that although approximately 50 percent of the farmland within the Facility area are priority soils, only a fraction of those soils will suffer permanent impacts. Hecate Albany acknowledges that "the Facility will occupy agricultural lands for an extended period," but argues that the impacts are temporary because the Facility "lacks significant permanent structures" and that permanent impacts are limited to areas of trenching and components other than panels. Hecate Albany argues that once restoration is complete, the land will be suitable for agriculture and the landowners will be able to use the land as they wish.

Hecate Albany argues that construction and operation of the Facility will avoid temporary impacts to priority soils by consolidating trenched areas to the extent practicable and the use of best practices including DAM's AGM Solar Guidelines. The Applicant further claims that reseeding and maintenance during the Facility's service life and upon decommissioning will stabilize the soils, allowing for restoration to substantially improve its current agricultural condition, as required by the Siting Board regulations.[60]

Hecate Albany rejects DAM Staff's claim that the Facility will significantly impact the local agricultural economy. The Applicant argues that the Facility would result in permanent impacts to only 0.69 percent of the Town's prime soils. Hecate Albany also argues that occupations related to agriculture industry represent only a small percentage of occupations in the Town of Coeymans. Hecate Albany notes that

[60] Hecate Albany Initial Brief, p. 13 (citing 16 NRCRR § 1001.29).

the Town's Comprehensive Plan states that 6 percent or 1,917 acres of lands within the Town are identified as having an agricultural use and argues that permanent impacts to approximately 19.16 acres of priority soils will not have a significant impact to the Town's agricultural community.

Hecate Albany also argues that DAM Staff overstates the impact of solar generation development on agriculture Statewide, noting that the Public Service Commission found that 6,900 MW of utility-scale solar installed exclusively on agricultural land in New York would occupy only approximately 0.16 percent of such land.[61] Hecate Albany acknowledges that solar projects often utilize farmland close to existing transmission lines to minimize development impacts. However, Hecate Albany argues that the record does not support DAM Staff's claim that utility scale solar is consuming large tracts of the best quality farmlands.[62]

Hecate Albany claims DAM Staff's arguments against the Facility's ability to reduce runoff are without merit. The Applicant notes that agricultural crops do not uptake all the nutrients present in soil, and surplus nutrients are subject to surface runoff when soils are bare which can negatively impact nearby waterbodies. Hecate Albany argues that the fully vegetated meadow habitat planned for the Facility is more efficient at nutrient binding and slowing runoff, thereby reducing negative impacts such as eutrophication in local

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61 Hecate Albany Initial Brief, p. 14 (citing Case 15-E-0302, Proceeding to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016), Appendix G, pp. 19–20.

62 Hecate Albany Initial Brief, p. 15 (citing Tr. Vol. I, p. 127).

waterbodies.[63]

Hecate Albany also rejects DAM Staff's arguments related to wetlands. Hecate Albany argues that it performed the wetland delineations in accordance with the applicable standards and that DEC Staff did not object to the delineation methods used. Hecate Albany argues that the soils, hydrology, and vegetation indicated the presence of wetlands at all the identified areas either by direct observation or through approved alternate methods appropriate for the disturbed conditions in the Facility Area. Hecate Albany also argues that DAM Staff's citation to the *New York State Freshwater Wetlands Delineation Manual* is incorrect because the New York State Manual only applies to State regulated wetlands, none of which are present in the Facility Area. Hecate Albany also claims that DAM Staff's wetland assessment failed to follow the applicable U.S. Army Corps of Engineers delineation manual and its Regional Supplement.[64]

Hecate Albany argues that DAM Staff's concerns regarding the impact of the wetland delineation on the potential to return the area to agricultural use is misplaced. The Applicant argues that "ongoing agricultural activities are generally exempt from Clean Water Act regulations, so wetlands would be available for farming."[65] Hecate Albany also argues that wetland delineations expire after five years limiting any long-term impact related to land use. Hecate Albany further argues that soil stabilization related to Facility installation will reduce the wetland limits and a Clean Water Act Section 404 permit can be obtained by the landowner as necessary.

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63 Hecate Albany Initial Brief, pp. 15-16 (citing Tr. Vol. II, pp. 149-151.

64 Hecate Albany Initial Brief, p. 16.

65 Hecate Albany Initial Brief, p. 17.

Discussion

We agree with DAM Staff that agricultural soils and particularly, the State's most productive soils (i.e. mineral soil groups 1-4) are an important natural resource. However, we do not find that the record supports DAM Staff's characterization of the Facility's impacts to agricultural lands. First, we disagree with DAM Staff that the Project's primary impact to agriculture is permanent. Although the lease term of up to 41 years is a significant period of time, we agree with Hecate Albany that because the panels do not require concrete foundations and the mounting structures require only minimal ground disturbance, permanent impacts are avoided.[66] Due to the consolidation of trenched and other disturbed areas as well as the requirement to decommission the Facility and to follow DAM's guidelines in regards to construction and decommissioning, we conclude that the areas of agriculture lands subject to permanent conversion are minimized. Second, we find that the Project may provide environmental benefits in the form of reduced runoff and soil erosion, potentially enhancing productivity of the resource over the long-term. Further, we find that the wetland delineations were performed properly and the existence of wetlands cannot be viewed as a negative impact resulting from the Facility.

We agree with DAM Staff that development pressures of all types impact the agricultural community. However, as DAM Staff acknowledges, it is the structure of today's agricultural markets and related market demand driving increased scale and consolidation of farm operations. The record here does not

[66] Compare other types of development including single family residential and light commercial which result in significant and permanent ground disturbance for foundation and/or footing installation.

support the argument that the solar industry is responsible for an outsized role in the development pressures facing agricultural lands. More importantly, we do not find that this Facility will have a significant negative impact on the local agricultural community given the minimal permanent conversion of agricultural land and the nature of the agriculture industry in the Town of Coeymans and Albany County.[67]

Though not determinative here because there are no current plans for an integrated agricultural operation, we believe that DAM Staff's unwillingness to consider agricultural operations unrelated to the dairy industry as mitigation is overly restrictive, particularly given the market forces and economic pressures that DAM Staff notes are impacting the industry. A successfully integrated agricultural operation would return the land to agricultural use in accordance with DAM's stated intent. It may also be able to provide additional income to the landowner and vegetation maintenance cost savings for the Facility.

Finally, the Certificate Conditions require adherence to DAM's AGM Solar Guidelines,[68] employment of a Health, Safety and Environmental Manager with agricultural qualifications,[69] as well as various reporting and coordinating requirements involving DAM Staff.[70] We find that these Certificate Conditions, which we adopt, will ensure that the Facility's impacts are minimized to the extent practicable.

2. Issues Not in Dispute

a. Alternatives

The Siting Board's Article 10 regulations, 16 NYCRR

[67] See Tr. Vol. II, pp. 145-146.

[68] Hearing Exhibit 32, Certificate Condition 88.

[69] Hearing Exhibit 32, Certificate Condition 72.

[70] Hearing Exhibit 32, Certificate Conditions 58, 75 and 80.

§ 1001.9, require an applicant to identify and describe reasonable and alternate sites for a proposed facility including an evaluation of comparative advantages and disadvantages. A "private" facility applicant may limit identification of reasonable alternatives to sites owned by, or optioned to it or its affiliates.[71] The Applicant did not provide an evaluation of alternative locations because, although its affiliates have other sites under their control, those sites are all slated for development of other solar facilities and, are not available alternative locations for the Facility.[72] The parties agree that the Facility design layout avoids and minimize wetlands, threatened and endangered species habitat, and other resources and considers archaeological resources and landowner preferences. Therefore, the Facility design layout is adopted, and we find that the Facility's construction and operation minimizes or avoids impacts to sensitive resources to the maximum extent practicable.

b. Public Health, Safety and Security

The Siting Board must make explicit findings regarding the nature of the probable environmental impacts of the construction and operation of the Facility on public health and safety.[73] The Siting Board cannot grant a Certificate without first making certain findings, including a finding that the construction and operation of the Facility will serve the public interest, and that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable.[74]

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71 16 NYCRR § 1001.9

72 Hearing Exhibit 143, Application Exhibit 9.

73 PSL § 168(2)(b)

74 PSL § 168(3)(b) and (c).

i. Safety, Security and Emergency Response

Section 1001.18 requires an applicant to provide information regarding site security during construction and operation of the project, as well as a safety response plan to ensure the safety and security of the local community.[75] Hecate Albany submitted plans for site security during construction and operation in its Application Exhibit 18. Also included in Exhibit 18 is the Applicant's proposed emergency response plan. Hecate Albany submitted the plans to the New York State Division of Homeland Security and Emergency Services and to local first responders for review and comment. Hecate Albany also invited the Coeymans Fire Department to attend a solar safety training meeting.

In addition, proposed Certificate Condition 51 requires the Certificate Holder to submit a Final Construction Site Security Plan, Operations Site Security Plan and Emergency Action Plan.[76] No party disputed the sufficiency of the Facility's safety, security, and emergency response measures.

ii. Noise and Vibration

Section 1001.19 requires an applicant to provide a study of the noise impacts of the construction and operation of the proposed facility. Hecate Albany provided an evaluation of noise conditions during construction and operation of the Facility in Application Exhibit 19.[77] The evaluation indicates that the noise levels from the Project at sensitive receptors are lower than the sound limits previously imposed by the Siting Board for wind generating facilities under Article 10. Further, Certificate Condition 39 requires Hecate Albany to file

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[75] 16 NYCRR § 1001.18.

[76] Hearing Exhibit 32, Certificate Condition 51.

[77] Hearing Exhibit 176.

a Final Complaint Resolution Plan with a separate procedure for addressing operational noise complaints.[78] Hecate Albany is required to present final design and computer noise modeling 60 days prior to the start of construction to demonstrate that the final design, including any changes to the design presented in the Application, complies with all proposed Certificate Conditions on noise.[79]

Construction sound levels will be temporary, intermittent and typical for a large construction project.[80] Hecate Albany will minimize construction noise to the maximum extent practicable by generally limiting construction activities that create discernable noise offsite to 7:00 AM to 6:00 PM Monday through Saturday.[81] Hecate Albany will also employ functioning mufflers, portable noise barriers and enclosures to prevent noisy equipment from impacting sensitive receptors.

Sound levels experienced by non-participating landowners during operation of the Facility are not expected to exceed 31 dBA. Participating landowners are not expected to experience cumulative sound levels in excess of 35 dBA. [82]

The Town's local law regarding noise exempts the installation and maintenance of utilities.[83] The nearby Village of Ravena prohibits loud construction activities between 10:00 P.M. and 7:00 A.M. However, loud construction activities are not expected to occur during these hours.[84]

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78 Hearing Exhibit 32, Certificate Condition 39.

79 Id., Certificate Condition 66.

80 Hearing Exhibit 176, p. 4.

81 Hearing Exhibit 32, Certificate Condition 77.

82 Hearing Exhibit 176, p. 9.

83 LOCAL LAW 7 OF 2020 CHAPTER 122 - PEACE AND GOOD ORDER, Article III, (C).

84 Hearing Exhibit 32, Certificate Condition 77.

Hecate Albany's evaluation indicates sound levels for ground-borne vibration are generally below human perception and below maximum vibration guideline criteria recommended by the American National Standards Institute and Federal Transit Administration guidelines. Infrasound and low-frequency noise will be below the levels required to cause minimal annoyance.[85]

Certificate Condition 68 requires Hecate Albany to provide revised sound modeling with the final specifications for construction equipment to be used that demonstrates the Facility is modeled to meet applicable local noise laws. The revised sound modeling will be performed in accordance with the SEEP Guide.[86] Hecate Albany must also respond to noise and vibration complaints according to the protocols established in the Noise Complaint Resolution Plan.[87]

Based on the record and the proposed Certificate Conditions, we conclude that the Project's impacts related to noise and vibration are minimal and that such impacts have been avoided or mitigated to the maximum extent practicable. We conclude further that the impacts to health and safety are minimal and have been avoided or mitigated to the maximum extent practicable.

c. Cultural, Historic and Recreational Resources

i. Archeological, Cultural and Historic Resources

Hecate Albany provided assessments of the archeological and cultural and historic resources in the Project area in Application Exhibit 20.[88] The design of the Facility generally avoids impacts to archeological resources. Further, Certificate Conditions 63 require measures to protect

[85] Hearing Exhibit 176, pp. 11-12.

[86] Hearing Exhibit 32, Certificate Condition 66.

[87] Hearing Exhibit 32, Certificate Condition 67.

[88] Hearing Exhibit 174, Application Exhibit 20.

archeological resources including limitations on construction in unevaluated areas, marking and avoiding known sites, and procedures to address unanticipated discoveries during construction.[89] Project components will likely be visible from the adjoining historic properties, including farmhouses and related outbuildings. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) Division for Historic Preservation correspondence states that the Project will have an adverse effect on two properties adjoining the Facility site and recommends mitigation.[90] Landscape screening will minimize views to the extent practicable. However, there will be remaining visibility from at least one adjoining historic-eligible farmstead property. Therefore, Certificate Condition 63(d) requires Hecate Albany to provide offset mitigation funding for local historic preservation initiatives.[91]

ii. Visual Impacts

Section 1001.24 requires an application to include a Visual Impact Assessment (VIA) to determine the extent and significance of facility visibility. The VIA must include visually sensitive resources, viewshed mapping, confirmatory field work, photographic overlays, cumulative visual impact analysis, and proposed visual impact mitigation.[92] The VIA submitted by Hecate Albany included a visual study area consisting of a 5-mile radius from the Project, as agreed to by the Parties. The VIA describes the character of the affected

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89 Hearing Exhibit 32, Certificate Condition 63.

90 Hearing Exhibit 214.

91 Hearing Exhibit 32, Certificate Condition 63(d). The provisions of Certificate Condition 63(d) will be implemented through review by federal agencies (pursuant to National Historic Preservation Act § 106) or per terms of the Certificate Condition as agreed among the Signatory Parties.

92 16 NYCRR § 1001.24.

area, including physiography and landform, waterbodies, roads, farms, land use patterns, and hamlets and villages.[93] Conservatively, the viewsheds analyses do not consider screening from vegetation or structures, differentiate between partial and full views, or consider attenuating factors such as distance, color, lighting, and atmospheric conditions. Hecate Albany provided photographic simulations of six representative viewpoints to demonstrate potential changes to the viewshed from the Facility, including the potential for screening to mitigate views of the Project.[94]

For residential viewers directly adjacent to the Facility, temporary impacts related to visibility are anticipated during construction. Visibility of construction activities from further vantage points will largely be screened by existing vegetation and topography. Similarly, long-term impacts related to Facility visibility during operation are expected to be limited. Views of panels, inverters, substations and other equipment from viewpoints 0.5 mile away will be generally screened by existing topography and vegetation.[95] For closer viewpoints, the Project will employ measures including vegetative screening, smaller groupings of panels, anti-reflective coatings, undergrounding of collection systems, minimizing outdoor night lighting at substations, and using a dulled, darkened chain-link fence finish or coating to minimize visibility.[96]

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93 Hearing Exhibit 167, Application Exhibit 24; Hearing Exhibit 198, Application Appendix 24-A, Visual Impact Assessment; and Hearing Exhibit 79, Updated Application Exhibit 24, Figures 24-1 and 24-2 - Viewshed Analysis and Visual Resource Inventory.

94 Hearing Exhibit 167, Application Exhibit 24.

95 Id.

96 Hearing Exhibit 32, Certificate Condition 43.

Hecate Albany also conducted a glare analysis. The model used is also conservative in that it does not consider vegetation and structures or offsite topographic shading and assumes sunny days 365 days per year. The analysis predicted some exposure of "green" glare at County Route 123.[97] The only array predicted to cause glare was subsequently eliminated from the Facility.[98] As a result of the final proposed Facility layout including the modifications and the mitigation measures included in the proposed Certificate Conditions, we find that the Facility will avoid or minimize visual impacts to the maximum extent practicable.

d. Ecology

PSL § 168(2)(a) expressly requires the Siting Board to make explicit findings regarding the potential environmental impacts of a project on ecology. To grant a Certificate, the Siting Board must determine that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State environmental law.[99] The State environmental law applicable to ecology generally is the State invasive species control law.[100]

i. Impacts to Terrestrial Ecology

Sections 1001.22 and 1001.23 require an applicant to provide information about the terrestrial and aquatic ecology in

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97 Hearing Exhibit 135, Supplemental Attachment 15-A. The model categorizes potential glare in three tiers of severity (ocular hazards) represented by different colors: green glare is likely to have a low potential for temporary after-image.

98 Hearing Exhibit 99, Second Supplement to the Application - Cover Letter and Overview.

99 PSL § 168(3)(c) and (e).

100 ECL § 9-1709; 6 NYCRR Parts 575 and 576.

the project area, analyze the potential impacts of the construction and operation of the project on the local ecology, and identify and evaluate measures to avoid or mitigate those impacts. Hecate Albany provided information regarding the potential environmental impacts of the Project on ecology in its Application Exhibit 22 (Terrestrial Ecology and Wetlands) and Exhibit 23 (Water Resources and Aquatic Ecology).[101]

The Applicant verified land use types in the Facility area during field surveys conducted in December 2018 and February 2019. The Facility area is approximately 61 percent agricultural land.[102] Three agricultural community types are present within the Facility area. Croplands consisting of row crops that include agricultural fields planted in corn, potatoes, and soybeans. They also include vegetable gardens in residential areas. This community type incorporates a large proportion of the Facility area. Croplands consisting of field crops include agricultural fields planted in alfalfa, wheat, timothy, and oats. This community type also includes hayfields that are rotated to pasture. Hay fields are widespread across the Facility area. Pasturelands encompass areas permanently (or recently) used for pasture for livestock. The area located just south of Kinley Road to the east of the Facility area, is used for livestock grazing.[103]

About 27 percent of the Facility area is forested.[104] Forested lands include deciduous, and mixed deciduous and

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[101] Hearing Exhibit 168, Application Exhibit 23; Hearing Exhibits 169-172, Application Exhibit 22.

[102] Hearing Exhibit 172, Application Exhibit 22, p. 1. Potential impacts to agricultural land uses are addressed in the section on Land Use above.

[103] Hearing Exhibit 172, Application Exhibit 22, p. 3.

[104] Hearing Exhibit 172, Application Exhibit 22, p. 1.

coniferous forest types, and are characterized as Appalachian oak-hickory forest, and hemlock-northern hardwood forest. Appalachian oak-hickory forest is a broadly defined community type. Dominant tree species observed in this community include, among others, red oak (*Quercus rubra*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*), white ash (*Fraxinus americana*), and sugar maple (*Acer saccharum*). Within the Facility area, characteristic variants of the hemlock-northern hardwood forest were found in small patches throughout the Appalachian oak-hickory forest community. Dominant tree species observed include, among others, eastern hemlock (*Tsuga canadensis*), sugar maple, and white pine (*Pinus strobus*). The forest areas at the north end of the Facility area are located on steeply sloped terrain adjacent to streams. These areas run roughly parallel to, and within 500 feet of, the western Facility Area boundary.[105]

Approximately 10 percent of the Facility area is open area, consisting of successional old fields and shrublands that were disturbed in the past, but have since been abandoned. Within the Facility area, the dominant species observed in successional old fields are red fescue (*Festuca rubra*), timothy (*Phleum pratense*), Kentucky bluegrass (*Poa pratensis*), false baby's breath (*Galium mollugo*), red clover (*Trifolium pratense*), and other clover species (*Trifolium spp*.). This community occurs near and generally outside the Facility area boundary. Successional shrublands were found along the eastern edge of the Facility area (primarily off-site). Other open areas include non-forested wetland areas, such as emergent marshes and shrub swamps.[106]

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[105] Hearing Exhibit 172, Application Exhibit 22, pp. 3-4.

[106] Hearing Exhibit 172, Application Exhibit 22, pp. 1, 4-5.

About two percent of the Facility area is developed with existing residential structures, paved and unpaved roads, and mowed areas. Generally, the area of disturbance for the Facility is within land in agricultural use (88 percent) with substantially less impacts proposed in forested and open lands (approximately 5 percent for each cover type).[107]

Construction and operation of the Facility will result in temporary impacts to plant communities, as well as the permanent loss, or the permanent conversion of plant communities. With respect to temporary impacts, about 118 acres of cropland will be affected. These areas will be allowed to return to the same or similar vegetative states that were present before construction. The permanent loss of vegetated habitats will result from building access roads, installing pad-mounted inverters, as well as constructing the collection substation, the POI switchyard, and the operation and maintenance (O&M) building. The permanent loss of vegetative habitat includes about 25 acres of cropland.[108]

The permanent conversion of plant communities will take place in areas underneath the PV panel arrays due to partial shading and changes in soil temperatures. Generally, these areas will not be graded or stripped of topsoil. However, in some areas, the existing vegetation will be cleared or mowed to an appropriate height prior to the installation of the arrays. Vegetative communities underneath the PV panel arrays will be maintained as early successional grassland communities and, after construction, will remain largely undisturbed during the subsequent operation of the Facility. The partial shading of the areas underneath panels may result in some permanent

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[107] Hearing Exhibit 172, Application Exhibit 22, pp. 1, 5.

[108] Hearing Exhibit 172, Application Exhibit 22, pp. 6-8, Table 22-4.

changes to about 133 acres, which includes about 102 acres of cropland. Because soil temperatures would decrease, it is anticipated that species recruitment will favor shade-tolerant plants.[109]

The background data review, agency coordination, and on-site surveys did not identify any rare or exemplary natural plant communities or critical habitats within the Facility Area. The proposed footprint of the Facility will result in minor impacts to mature and young successional forest habitats because PV panel arrays will be sited in active or fallow agricultural fields. Furthermore, Facility components, such as access roads and electrical trenches, have been co-located to the extent practicable in previously disturbed areas.[110]

In addition, Hecate Albany studied the Facility's impacts on geology, seismology, and soils, resulting in a Geotechnical Investigation Report, as required by 16 NYCRR § 1001.21.[111] By siting the Facility on a relatively flat, open area, Hecate Albany has avoided or minimized impacts that would cause soil erosion, detrimental bedrock fracturing, the introduction of slippage or failure planes, and the creation of subsurface instability.[112] During construction, relatively minimal soil disturbance will occur in order to place foundations and lay underground collection lines. The

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[109] Hearing Exhibit 172, Application Exhibit 22, pp. 8-9.

[110] Hearing Exhibit 172, Application Exhibit 22, p. 9; see also Hearing Exhibit 32, Certificate Condition 83.

[111] Hearing Exhibit 173, Application Exhibit 21, p. 1. If additional geotechnical investigations are required for the final design, Hecate Albany will prepare an updated report as required by proposed Certificate Condition 47 (see Hearing Exhibit 32), and the SEEP Guide § 3.11 [Final Geotechnical Engineering Report] (see Hearing Exhibit 67).

[112] Hearing Exhibit 173, Application Exhibit 21, p. 6; see also Hearing Exhibit 32, Certificate Conditions 47.

temporarily disturbed areas will be stabilized and restored using native seed mixes following construction.[113]

No parties dispute the effectiveness of the Applicant's avoidance and minimization measures. In addition, the parties have agreed to proposed Certificate Conditions related to the protection of terrestrial ecology, including a Condition for a manager to inspect all areas and to assure compliance with applicable environmental requirements during construction activities.[114]

Based on the record and the proposed Certificate Conditions, we conclude that the impacts to terrestrial ecology that are expected to occur are minimal and that the Project's impacts to plant and forest ecology have been avoided or mitigated to the maximum extent practicable. We conclude further that the impacts to geology, seismology, and soils that are expected to occur are minimal, and have been avoided or mitigated to the maximum extent practicable.

ii. Impacts from Invasive Species

Environmental Conservation Law (ECL) Article 9 requires that projects subject to State review be examined for any risks posed to the State's environment by invasive species, and that wherever practical, invasive species be prohibited and actively eliminated at project sites regulated by the State.[115]

Hecate Albany's application materials include field studies documenting the presence and extent of invasive species in the Project Area, and a proposed Invasive Species Management Plan (ISMP), which details the procedures to prevent and, when

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[113] Hearing Exhibit 32, Certificate Condition 87.

[114] Hearing Exhibit 32, Certificate Condition 72 (Health, Safety, and Environmental Manager).

[115] ECL §§ 9-1701, 9-1709(2)(b)(iv).

necessary, manage the spread of invasive species.[116] As a result of the settlement, several Certificate Conditions outline the measures to control invasive species. Certificate Condition 58 requires Hecate Albany to file a Final ISMP for the Project. The Final ISMP would include pre-construction invasive species control,[117] construction materials inspection and sanitation,[118] invasive species treatment and removal, and site restoration in accordance with the Facility's final approved stormwater and pollution prevention plan (SWPPP).[119] Certificate Condition 58 also requires Hecate Albany to periodically conduct a post-construction monitoring program that will collect data to evaluate the effectiveness of the ISMP.[120] Finally, during the clearing and construction phases, crews will be trained to identify Asian Longhorn Beetles, Emerald Ash Borers, and other invasive insects. If these insects are observed, the observations will be reported to DEC Staff.[121]

DEC and DPS Staff concluded that if we adopt Certificate Condition 58 in conjunction with the requirements in the SEEP Guide concerning the preparation and implementation of

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[116] Hearing Exhibit 168, Application Exhibit 23, p. 17, and Hearing Exhibit 172, Application Exhibit 22, p. 33; Hearing Exhibit 206 (Appendix 22-C [Invasive Species Management Plan]).

[117] For example, only locally sourced straw will be used for erosion control to minimize the risk of introducing invasive plant species (see Hearing Exhibit 32, Certificate Condition 85).

[118] Fill material will be free from all invasive species (see Hearing Exhibit 32, Certificate Condition 97).

[119] See Hearing Exhibit 32, Certificate Conditions 58 and 78(b).

[120] Hearing Exhibit 32, Certificate Condition 58.

[121] Hearing Exhibit 32, Certificate Condition 100.

a Final ISMP,[122] potential impacts from invasive species would be minimized to the maximum extent possible.[123]

Based on the record, proposed Certificate Conditions 58, 85, and 97, as well as the related SEEP Guide requirements concerning the identification and management of invasive species, we determine that the Project complies with ECL Article 9, and that impacts related to invasive species have been avoided or mitigated to the maximum extent practicable.

e. Environmental Impacts

i. Wildlife and Habitat

PSL § 168(2) requires the Siting Board to make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility on wildlife and habitat. Before granting an Article 10 Certificate, the Board must determine that any adverse environmental effects of the construction and operation of the facility on wildlife and habitat will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State law protecting wildlife, namely the State Endangered Species Act (ECL § 11-0535) and its implementing regulations at 6 NYCRR Part 182.

(a) Grassland Habitat Restoration

DEC Staff identified the State-threatened northern harrier (*Circus cyaneus*), the State-endangered short-eared owl (*Asio flammeus*), and the State-listed special concern horned lark (*Eremophilia alpestris*) as species of concern. As a result, the Applicant's consultant undertook species-specific

[122] See Hearing Exhibit 67, SEEP Guide § 2.11 (Invasive Species of Special Concern).

[123] DEC Staff Initial Brief, p. 10; DPS Staff Initial Brief, pp. 20-21.

surveys in the Facility area to determine whether any State-listed grassland birds use the proposed Facility Area during the breeding or wintering seasons.[124]

Wintering grassland raptor surveys were conducted in 2017-2018 and 2018-2019, and grassland breeding bird surveys were conducted in 2018. Neither the 2017-2018 raptor survey nor the 2018 bird survey identified any of the three species of concern in the Facility area during any of the survey events. However, the 2018-2019 raptor surveys identified a total of six northern harriers (three at stationary points, two more in the driving surveys, and one incidental observation).[125] Based on the distribution of the species in New York State, and a relative lack of observed presence of the species during species specific surveys, the parties agree that the construction and operation of the Facility is not likely to adversely affect the northern harrier.[126]

Impacts to grassland wildlife may occur due to potential grassland fragmentation or degradation. Such impacts, however, would be temporary due to the post-construction restoration.[127] As part of the settlement agreement, Hecate Albany will restore the agricultural lands to a stable vegetative condition by re-seeding with a native herbaceous seed mix after disturbance activities are completed to encourage

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[124] Hearing Exhibit 207, Application Appendix 22-B (Coeymans Habitat Assessment [redacted]), pp. 7-8.

[125] All surveys were completed during the appropriate season timeframe, and the methods used for each of the three surveys were consistent with the *NYSDEC Survey Protocol for State-listed Wintering Grassland Raptor Species* (Draft – 2015), and the *NYSDEC Draft Survey Protocol for State-listed Breeding Grassland Bird Species* (see Hearing Exhibit 207, Application Appendix 22-B, pp. 10-11).

[126] Hearing Exhibit 207, Application Appendix 22-B, p. 15.

[127] Hearing Exhibit 172, Application Exhibit 22, p. 18.

native grassland vegetative conditions. These temporarily disturbed areas include all areas within the Facility area that do not have impervious cover, such as temporary roads, material and equipment staging and storage areas, and electric line rights-of-way.[128] Given these measures,[129] we conclude that potential impacts to wildlife species that use grassland habitats have been avoided or minimized to the maximum extent practicable.[130]

(b) Threatened and Endangered Bat Species

Nine species of bats are present in New York for at least some portion of the year. They are: (1) the hoary bat (*Lasiurus cinereus*); (2) silver-haired bat (*Lasionycteris noctivagans*); (3) eastern red bat (*Lasiurus borealis*); (4) little brown bat (*Myotis lucifugus*); (5) big brown bat (*Eptesicus fuscus*); (6) tri-colored bat (*Permyotis subflavus*); (7) northern long-eared bat (NLEB) (*Myotis septrenionalis*); (8) Indiana bat (*Myotis sodalis*); and (9) eastern small-footed bat (*Myotis leibii*).[131] All New York resident bat species, except for the big brown bat, are designated as species of conservation concern, and the Indiana bat and NLEB are protected pursuant to ECL § 11-0535.[132]

Bats roost in trees during their development. In addition, bats rely on roost trees to serve as a home base for their nightly foraging.[133] The construction of solar energy projects in occupied bat habitat poses a threat to the trees

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[128] Hearing Exhibit 32, Certificate Condition 90.

[129] Hearing Exhibit 172, Application Exhibit 22, p. 24.

[130] See also DPS Staff Initial Brief, p. 18.

[131] Tr. Vol. I, p. 85.

[132] See 6 NYCRR § 182.2(y)(2); Tr. Vol. I, p. 86.

[133] Tr. Vol. I, p. 86.

where bats breed, roost, and feed outside the hibernation period.[134]

Pursuant to ECL Article 11 and 6 NYCRR Part 182, where an applicant proposes to engage in any activity that is "likely to result in the take or taking of any species listed as endangered or threatened," the applicant must satisfy the requirements to obtain an incidental take permit in accordance with 6 NYCRR § 182.11. A "take" or "taking" is broadly defined under 6 NYCRR § 182.2(x) to include not only the "killing," or "capturing," of any species listed as endangered or threatened, but also "all lesser acts such as disturbing, harrying or worrying." "Lesser acts" are defined to include any "adverse modification of habitat" of any species listed as endangered or threatened.[135] The "adverse modification of habitat" includes any alteration of the "occupied habitat" of any listed species that, as determined by DEC, is likely to negatively affect one or more essential behaviors of such species.[136]

The Facility area is located about 2.5 miles from an Indiana bat hibernaculum, which is the winter home for hibernation. Indiana bats depend upon hibernacula. Such dependence is an essential behavior of the species as defined by 6 NYCRR § 182.2(f).[137] Accordingly, this occupied habitat is a protected, regulated resource pursuant to ECL Article 11 and

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134 Tr. Vol. I, p. 89.

135 6 NYCRR § 182.2(l).

136 6 NYCRR § 182.2(b), (o). "Essential behaviors" are behaviors exhibited by a threatened or endangered species that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering. 6 NYCRR § 182.2(f).

137 Tr. Vol. I, pp. 87-88.

Part 182.[138]

Potential impacts to Indiana bats that may result from the construction and operation of the Facility are either a direct take of individual bats, or a take of occupied habitat.[139] The best practice to avoid a direct take of individual species members is to limit the amount of forested habitat cleared, and to relocate any necessary forest clearing as far away from roost trees or hibernacula as possible.[140]

Pursuant to the regulations, an applicant must first avoid all impacts to listed species to the extent practicable.[141] As a result of settlement negotiations, Hecate Albany and DEC Staff resolved all issues regarding the Facility's compliance with ECL Article 11 and implementing regulations.[142] To fully avoid all impacts to Indiana bats, the Applicant and DEC Staff agreed on Certificate Condition 89 which, among other terms, require the Certificate Holder to undertake tree-clearing activities during the hibernation season, which extends from November 1 to March 31.[143]

In its initial brief, DEC Staff requests that the Siting Board adopt this agreed-upon condition as part of any PSL Article 10 Certificate it may issue to ensure that the Facility complies with ECL Article 11 and 6 NYCRR Part 182 with respect to Indiana bats. DEC Staff notes further that, in addition to fully avoiding impacts to Indiana bats, Certificate Condition 89 would also reduce direct impacts to other bat species. Finally,

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138 See 6 NYCRR § 182.2(o); Tr. Vol. I, p. 89.

139 Tr. Vol. I, p. 89.

140 Tr. Vol. I, pp. 90-91.

141 See 6 NYCRR § 182.11.

142 Hecate Albany Initial Brief, pp. 30-32; see also Hearing Exhibit 32, Certificate Conditions 89, 91, and 92.

143 Hearing Exhibit 32, Certificate Condition 89.

DEC Staff observes that if the Siting Board issues a Certificate that authorizes tree clearing other than from November 1 to March 31, the Applicant will be required to develop and implement an approved net conservation benefit plan to comply with provisions of ECL Article 11 and 6 NYCRR Part 182.[144]

Based upon the Certificate Conditions agreed to by the Applicant and DEC Staff, we conclude that the construction and operation of the Facility will comply with ECL Article 11 and 6 NYCRR Part 182. We also conclude that impacts to all bat species have been avoided or minimized to the maximum extent practicable.

(c) Wildlife Other Than Threatened and Endangered Bat Species and Habitat Other Than Occupied Habitat

With respect to impacts to wildlife generally, Hecate Albany argues in its initial brief that construction-related impacts to wildlife will be limited to incidental injury or mortality due to construction activities, habitat disturbance or loss and displacement associated with clearing and earth-moving activities, and displacement of wildlife due to noise and human activities.[145] Potential impacts from habitat loss or conversion, fragmentation, and disturbance or displacement are not expected to significantly affect wildlife populations.[146] Based on settlement discussions, Hecate Albany notes that the parties developed Certificate Conditions that include measures designed to mitigate impacts to the maximum extent

[144] DEC Staff Initial Brief, p. 9-10; DPS Staff notes further that Certificate Condition 89 applies to Indiana bats as well as NLEB (see DPS Staff Initial Brief, p. 20).

[145] Hecate Albany Initial Brief, pp. 28-29.

[146] Hearing Exhibit 172, Application Exhibit 172, p. 23.

practicable.[147]

No parties dispute Hecate Albany's assertions regarding impacts to wildlife and wildlife habitat in general. Accordingly, based upon the record and the agreed-upon Certification Conditions related to wildlife and habitat, which we adopt, we conclude that adverse impacts to wildlife and wildlife habitat have otherwise been avoided or mitigated to the maximum extent practicable.

ii. Surface and Ground Water Impacts

Before granting an Article 10 Certificate, PSL § 168(2) requires the Siting Board to make findings regarding the nature of the probable environmental impacts of construction and operation of a facility on ground and surface water resources. Pursuant to PSL § 168(3)(c) and (e), the Board must determine that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State freshwater wetland protection, water pollution control, and stream protection laws and regulations, and State water quality standards.

(a) Freshwater Wetlands

The public policy of the State of New York is to preserve, protect, and conserve freshwater wetlands and the benefits they provide, to prevent the despoliation and destruction of freshwater wetlands, and to regulate use and development of such wetlands to secure the natural benefits of freshwater wetlands, consistent with the general welfare and beneficial economic, social, and agricultural development of the State.[148] State approval must be obtained for any proposed

[147] Hecate Albany Initial Brief, p. 30; see Hearing Exhibit 32, Certificate Conditions 72-74, 78, 81-106.

[148] Tr. Vol. I, p. 98.

project that may impact State-regulated freshwater wetlands, or the associated regulated adjacent area, which generally extends 100 feet from the boundary of a State-regulated wetland.[149] The standards for issuance of a freshwater wetlands permit are outlined at 6 NYCRR § 663.5. The Siting Board must determine whether the Facility's construction and operation would otherwise conform with the requirements of ECL Article 24 and 6 NYCRR Part 663 (Freshwater Wetlands Permit Requirements) by complying with the permit issuance standards set forth at 6 NYCRR § 663.5.

The wetland delineation report shows that no State-regulated wetlands are located within the Facility area. Rather, surveys showed only newly delineated federally regulated wetlands. As a result, the Applicant has avoided impacts to State-regulated wetlands and adjacent areas.[150]

As part of the settlement, the Applicant and DEC Staff agree to Certificate Conditions as well as terms outlined in the SEEP Guide related to wetlands, if the Facility layout is altered, or State-regulated wetlands or adjacent areas are otherwise impacted during the life of the Facility.[151]

In its initial brief, DEC Staff requests that the Siting Board adopt the agreed-upon Certificate Conditions and the SEEP Guide in any Article 10 Certificate it may issue to ensure that the Facility complies with the applicable State statutory and regulatory standards set forth in ECL Article 24

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[149] See 6 NYCRR § 663.2(b).

[150] Tr. Vol. I, pp. 104-105; Hearing Exhibit 76.

[151] Hearing Exhibit 32, Certificate Conditions 78, 93-99; Hearing Exhibit 67, SEEP Guide § 2.6 (Wetlands) and § 3.17 (Wetlands and Waterbodies). See also Hecate Albany Initial Brief, pp. 34-36.

and Parts 633 and 664.[152]

With respect to delineated wetlands not subject to ECL Article 24 (non-jurisdictional wetlands), Hecate Albany will employ best management practices and other measures to ensure that potential impacts to this group of wetlands are avoided or minimized.[153] In its initial brief, Hecate Albany states that it submitted a Joint Application for Permit to the U.S. Army Corps of Engineers (USACE) for its Clean Water Act (CWA) Section 404 permit, and filed a request to the Siting Board for the Section 401 Water Quality Certification (WQC).[154] Hecate Albany notes that the Joint Application for Permit summarizes and quantifies all proposed impacts to wetlands and streams regulated by USACE under CWA Section 404 resulting from the construction and the operation of the Facility. The Joint Application for Permit also describes the avoidance and minimization measures reflected in the Facility plans, and details restoration and mitigation measures.[155]

Based on the record, as well as the proposed Certificate Conditions and SEEP Guide negotiated by the parties, we conclude that the Facility is designed to operate in compliance with all applicable State freshwater wetland protection laws and regulations, and that the adverse impacts to delineated wetlands have been avoided or minimized to the maximum extent practicable.

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[152] DEC Staff Initial Brief, pp. 11-12.

[153] Hearing Exhibit 96 (Updated Application Exhibit 22[i]), p. 13.

[154] With cover letters dated July 15, 2020, and August 31, 2020, Hecate Albany filed its Joint Application for Permit, and Request for Water Quality Certification with the Siting Board (see DMM Nos. 129-131).

[155] Hecate Albany Initial Brief, p. 34; Hearing Exhibit 96 (Updated Application Exhibit 22[i]), p. 13.

(b) Streams and Surface Waters

ECL Article 15 and the regulations at 6 NYCRR Part 608 establish the State's environmental laws regarding the disturbance of protected streams. Pursuant to ECL Article 15, State approval is required for disturbances of streams classified as C(T) or higher in the DEC's stream classification system.[156] In addition, Hecate Albany must comply with State water pollution control law by obtaining coverage under DEC's General SPDES Permit for Stormwater Discharges from Construction Activity (GP-0-20-00) (General Permit), which requires, among other things, preparation of a Stormwater Pollution Prevention Plan (SWPPP).[157] As previously discussed, the Project also requires a WQC pursuant to Section 401 of the federal CWA and, accordingly, Hecate Albany must demonstrate compliance with State water quality standards provided at 6 NYCRR § 608.9. Finally, the adverse impacts to streams and surface waters from the construction and operation of the Facility must be minimized or avoided to the maximum extent practicable.[158]

After reviewing available resources, such as the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), DEC data, topographic maps, and aerial imagery, among others, the Applicant identified and delineated surface water bodies in the area 500 feet from the Facility's limit of disturbance envelope. The Application materials include a

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156 ECL § 15-0501; 6 NYCRR § 608.2.

157 Effective date January 29, 2020; see 6 NYCRR § 750-1.21(b)(2). The General Permit is issued pursuant to the DEC's authority under ECL Article 17, Titles 7 and 8, and Article 70. The General Permit was issued pursuant to the federal Clean Water Act, and DEC remains the permit-issuing authority for the General Permit for Article 10 projects. See PSL § 172(1).

158 PSL § 168(3)(c).

summary of key information for the stream segments that will be impacted during construction of the Facility.[159]

Various State-regulated waterbodies including 85 delineated streams and one Class C stream[160] are located within the Facility area. The Applicant estimates a total of 185 linear feet of impacts to mapped and delineated tributaries, and 56 linear feet of impacts in the Class C stream.[161] None of these impacts occurs in State regulated Class C(T) or above streams.[162]

As part of the settlement, the Applicant and DEC Staff agree to Certificate Conditions as well as terms outlined in the SEEP Guide related to streams and water quality. The Certificate Conditions outline mitigation measures concerning all potential construction activities that may adversely impact streams and surface waters. For example, Hecate Albany must meet several culvert pipe and structure dimensions for all permanent stream crossings.[163] Any in-stream work must not cause any permanent impediment to native aquatic organisms, and restored stream channels must be equal in width, depth, gradient, length, and character to the pre-existing stream channel.[164] Moreover, waterbodies that must be avoided will be demarcated for the duration of the construction and restoration

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159 Hearing Exhibit 168, Application Exhibit 23, p. 5 and Table 23-3 (*Streams Identified within the Wetland Survey Area*), pp. 5-9.

160 H-214-5 is an unnamed tributary of Coeymans Creek (H-214).

161 Hearing Exhibit 8 (Response to Information Request – DEC-7), which includes a revised Table 23-4 (Tr. Vol. I, p. 107).

162 Tr. Vol. I, p. 107.

163 Hearing Exhibit 32, Certificate Condition 104; Hearing Exhibit 67, SEEP Guide § 3.17 (Wetlands and Waterbodies).

164 Hearing Exhibit 32, Certificate Conditions 102 and 106.

phases.[165] These waterbodies will have "protected area" signs, exclusionary fencing, and erosion controls to protect and clearly identify their boundaries.[166] Hecate Albany will not permanently restrict any stream flow.[167] If clearing vegetation in stream corridors is necessary, clearing will be limited to that material which poses a hazard or hinderance to construction activity or depicted in the SEEP Guide.[168] Finally, trees will not be felled into any streams or onto stream banks.[169]

In its initial brief, DEC Staff requests that the Siting Board adopt these agreed-upon Certificate Conditions and the sections of the SEEP Guide in any Article 10 Certificate it may issue to ensure the Facility's compliance with the applicable State statutory and regulatory standards set forth in ECL Article 15, Part 608, and State water quality standards.[170] Similarly, DPS Staff argues that the Certificate Conditions and the SEEP Guide establish requirements for standard practices designed to avoid or otherwise minimize impacts to surface waters during the construction and the operation of the Facility.[171]

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165 Hearing Exhibit 32, Certificate Condition 78(a).

166 Hearing Exhibit 32, Certificate Condition 78(b); Hearing Exhibit 67, SEEP Guide § 2.5 (Waterbodies), and § 2.10 (Ecologically and Environmentally Sensitive Areas).

167 Hearing Exhibit 32, Certificate Conditions 105–106.

168 Hearing Exhibit 32, Certificate Condition 83; Hearing Exhibit 67, SEEP Guide § 3.17 (Wetlands and Waterbodies).

169 Hearing Exhibit 32, Certificate Condition 83(a)(ii).

170 DEC Staff Initial Brief, p. 13; see also *Application of Canisteo Wind Energy, LLC* (Case 16-F-0250), Order Granting Certificate with Conditions (issued March 13, 2020), pp. 19-20, and *Application of Deer River Wind, LLC* (Case 16-F-0267), Order Granting Certificate with Conditions (issued June 30, 2020), pp. 12-14.

171 DPS Staff Initial Brief, p. 22.

Because no streams with a classification of Class C(T) or higher are proposed to be disturbed, an approval pursuant to ECL Article 15 is not required for the Project. With respect to impacts to the delineated streams, Hecate Albany asserts that direct impacts to surface water resources have been avoided to the extent practicable through Facility design.[172]

Based upon the record and the agreed-upon Certificate Conditions and the terms of the SEEP Guide related to streams and surface waters, which we adopt, we conclude that the Project will comply with all State laws and regulations governing streams and surface waters, and that impacts to those waters from Project construction and operation have been avoided or minimized to the maximum extent practicable.

(c) Groundwater and Wells

PSL § 168 requires the Siting Board to make explicit findings regarding a project's probable impacts on groundwater resources and determine whether those impacts will be minimized or avoided to the maximum extent practicable. Hecate Albany conducted studies and surveys to identify and locate groundwater aquifers, as well as any known existing private wells and public drinking water intakes in the Facility area. The Facility area does not overlay any primary groundwater aquifers. However, the Applicant determined that two DEC-mapped unconfined principal aquifers are located under small portions of the Facility area.[173]

The Applicant undertook a phased approach to identify existing groundwater wells within and proximate to the Facility area. Hecate Albany reviewed DEC well completion records for the groundwater study area. Subsequently, Hecate Albany sent

[172] Hecate Albany Initial Brief, pp. 34-36.

[173] Hearing Exhibit 168, Application Exhibit 23, p. 1, and Table 23-1 (Groundwater Aquifers with the Facility Area).

Freedom of Information Law (FOIL)[174] requests to the New York State Department of Health (NYSDOH), DEC, and the Albany County Department of Health (ACDOH) to identify the locations of existing water wells within a 0.5-mile radius of the Facility Area. Based on the responses received, the Applicant summarized the well data in Appendix 23-A and Figure 23-2.[175]

The Application materials identify one commercial well within the groundwater study area, which is located east of Coeymans Creek. During construction, no blasting is anticipated to occur, and only minimal grading will be required.[176] Because blasting is not proposed, Hecate Albany did not conduct a well survey.[177] However, if blasting becomes necessary to construct the Facility, Certificate Condition 48 will require the Applicant to provide a blasting plan, and additional Certificate requirements will become applicable to protect potable water supply wells.[178] Excavations for substation foundations, roadways, and underground collection lines are expected to be relatively shallow and are not anticipated to intercept groundwater within the surrounding aquifers.[179] Nevertheless, the Applicant has agreed to a Certificate Condition that would provide for a complaint procedure to bring potential issues

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174 See Public Officers Law, Article 6, §§ 84-90.

175 Hearing Exhibit 168, Application Exhibit 23, p. 2.

176 Hearing Exhibit 168, Application Exhibit 23, p. 2.

177 Hearing Exhibit 168, Application Exhibit 23, p. 4.

178 Hearing Exhibit 32, Certificate Condition 48; Hearing Exhibit 67, SEEP Guide § 2.5 (Waterbodies), § 3.11 (Final Geotechnical Engineering Report), and § 3.13 (Final Blasting Plan). DPS Staff notes that these and the other Certificate requirements are reasonable and generally consistent with Siting Board precedent pursuant to Article 10 (see DPS Staff Initial Brief, p. 21 citing 10 NYCRR Appendix 5B, *Standards for Water Wells*, Table 1).

179 Hearing Exhibit 168, Application Exhibit 23, p. 2.

affecting drinking water supplies, or groundwater quality or quantity to Hecate Albany's attention for investigation and resolution.[180]

A potential impact to groundwater is the introduction of pollutants from the accidental discharge of petroleum or other chemicals used during construction, operation, or maintenance. Measures to avoid, minimize, and mitigate such discharges are addressed in the Preliminary Spill Prevention, Control and Countermeasures Plan, and the Inadvertent Return Plan for the Project.[181]

Based upon the record and the proposed Certificate Conditions, which we adopt, we conclude that the Facility will comply with applicable State public health and safety requirements for drinking water wells, and that the probable impacts to groundwater and wells have been avoided or mitigated to the maximum extent practicable.

iii. Air Impacts

Before granting an Article 10 Certificate, the Siting Board is required by PSL § 168(2) to make findings regarding the nature of the probable environmental impacts of construction and operation of a facility on air quality. Pursuant to PSL § 168(3)(c) and (e), the Board must determine that the adverse environmental effects of the construction and operation of the facility on air quality will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State air pollution control laws and regulations.

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[180] Hearing Exhibit 168, Application Exhibit 23, p.3; Hearing Exhibit 32, Certificate Condition 39; Hearing Exhibit 67, SEEP Guide § 3.5 (General Construction), and § 3.12 (Inadvertent Return Plan).

[181] Hearing Exhibit 168, Application Exhibit 23, pp. 16-17. See also, Hearing Exhibit 32, Certificate Condition 60.

During construction, the Facility may result in minor, temporary adverse air impacts associated with vehicle emissions, dust from earthmoving activities and travel on unpaved roads, and emissions from fossil fuel-fired generators. To minimize localized air impacts, the Applicant would require contractors to adhere to best management practices, including prohibiting unnecessary idling of equipment and adherence to New York State guidance on fugitive dust emissions.[182]

After construction, the Facility would generate electricity without combusting fuel or releasing pollutants into the atmosphere.[183] According to the Applicant, the Facility would have an overall positive impact on air quality and would contribute to meeting New York's climate change and renewable energy goals.[184]

As noted by DPS Staff, the Facility does not require any federal, State, or local air emissions permits. DPS Staff recommends the Siting Board find that the impacts associated with air emissions during construction of the Facility will be avoided, minimized, or mitigated to the maximum extent practicable.[185] No party raised concerns related to potential impacts to air quality.

Based upon the record, we conclude that the Facility's potential impacts to air quality have been minimized or avoided to the maximum extent practicable, and that the Facility will be constructed and operated in compliance with all applicable State air pollution control laws and regulations.

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[182] Hearing Exhibit 178, Application Exhibit 17, p. 1.

[183] Hearing Exhibit 178, Application Exhibit 17, p. 1.

[184] Hecate Albany Initial Brief, pp. 18-19.

[185] DPS Staff Initial Brief, pp. 13.

f. Infrastructure Impacts

a. Transportation, Communications and Utilities

Section 1001.25 requires an applicant to provide a conceptual site plan of all facility site access roads and driveways, and an analysis of traffic and transportation impacts related to the construction and operation of the facility. Hecate Albany has identified those impacts to transportation as primarily temporary construction disturbances and increased traffic on Interstate 87, US Route 9W, CR 396, and CR 101. There will be no full-time employees based at the Facility Area and maintenance visits are anticipated to occur less than monthly returning roadways to previous traffic volumes and frequencies following construction.[186] The SEEP Guide requires Hecate Albany to submit copies of any required "Route Evaluation Study," "Road Use Agreements," or utility crossing agreements, and submission of a "Traffic Control Plan." Parking or idling of construction vehicles or construction equipment at public roadside locations for extended periods of time is prohibited.[187] Hecate Albany is required to coordinate with the State, County, and local municipalities to respond to any locations that may experience any traffic flow or capacity issues resulting from Facility construction.[188] The parties recommend the requirement to hold a preconstruction meeting with agencies, including the New York State Department of Transportation (NYSDOT) and Town Supervisors and Highway Department, and to provide maps showing designated travel routes, construction worker parking and access road locations and a general project schedule.[189]

The regulations at 16 NYCRR § 1001.26 require an

[186] Hearing Exhibit 166, Application Exhibit 25.

[187] Hearing Exhibit 67, SEEP Guide.

[188] Hearing Exhibit 32, Certificate Condition 40

[189] Hearing Exhibit 32, Certificate Condition 75.

analysis and discussion of a proposed facility's potential impacts to communication systems. Hecate Albany provided this information in Application Exhibit 26.[190] There are no underground cable or fiber optic telecommunication lines within the boundaries of the Facility Area and no publicly available mapping was found depicting the locations of underground or fiber optic lines within the 2-mile study area. A field reconnaissance identified several underground telecommunications lines generally following major transportation routes within the 2-mile study area. However, according to the Application the routes are not within the Facility area and will not be disturbed physically or subject to unintended bonding.[191] Therefore, no negative impacts on communication systems or telecommunication connections located within the 2-mile study area are anticipated from construction or operation of the Facility. However, the agreed to Certificate Conditions provide for handling of complaints related to the construction and operation of the Facility, which could be utilized in the event of impacts to communication systems or telecommunication connections.[192]

Section 1001.12 requires that applications include discussions of conformance with Public Service Commission requirements and plans to avoid interference with existing utility systems, which Hecate Albany provided.[193] The agreed to Certificate Conditions require that the Certificate Holder comply with the requirements of the Commission's regulations regarding the protection of underground facilities (16 NYCRR

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190 Hearing Exhibit 165, Application Exhibit 26.

191 Id.

192 Hearing Exhibit 32, Certificate Condition 39.

193 Hearing Exh. 183, Application Exhibit 12.

Part 753) and that prior to the commencement of operations, the Certificate Holder shall become a member of Dig Safely New York.[194] Hecate Albany is also required to comply with all requirements of the Commission's regulations regarding identification and numbering of aboveground utility poles (16 NYCRR Part 217).[195] Further, the SEEP Guide includes comprehensive guidelines and requirements for identification of existing utilities and installation of Project facilities as co-located or crossing existing utilities within the Project area, including potential submission of utility owner approved details of such installations and any required impact studies.

Based on the record and the proposed Certificate Conditions, including the SEEP Guide requirements, we find that the probable impacts on transportation, communications, and utilities from construction and operation of the Facility have been appropriately identified and will be minimized to the greatest extent practicable.[196]

g. Decommissioning, Site Restoration, and Financial Security

Section 1001.29 require submission of a plan for the decommissioning and restoration of the facility site and must include how decommissioning and site restoration shall be funded and a schedule for the conduct of decommissioning and site restoration activities. Hecate Albany provided the required information in its Application.[197] The parties have agreed to a Certificate Condition providing the details regarding the structure of decommissioning and site restoration provisions, financial assurance requirements, and obligations regarding

[194] Hearing Exhibit 32, Certificate Condition 69

[195] Hearing Exhibit 32, Certificate Condition 71.

[196] See PSL § 168(2)(d).

[197] Hearing Exhibit 161, Exhibit 29.

submissions of estimates and financial agreements.[198] Certificate Condition 49 requires the Certificate Holder to file a final "Decommissioning Plan" with the Secretary which shall include a decommissioning and site restoration cost estimate based on final design of the Project and procedures and timeframes for providing written notice to the Town of Coeymans, Department of Environment Conservation, the host and adjacent landowners of planned decommissioning and site restoration activities prior to commencement of those activities. The parties have also agreed to a requirement that the Certificate Holder adhere to the New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects – Construction mitigation for Agricultural lands.[199]

Regarding financial assurances the agreed to Certificate Conditions require a letter of credit, to be based on the final overall decommissioning and site restoration estimate and to be held by the Town of Coeymans. No offset for salvage value is permitted in calculating the estimate, and updates reflecting inflation and other changes shall be submitted to the Secretary after one year of operation and every fifth year thereafter. Proof that the letter of credit has been obtained in the final decommissioning and site restoration estimate amount and copies of agreements between the Certificate Holder and the Town of Coeymans, establishing a right for the Town to draw on the financial security are required to be filed with the Secretary.[200] Considering the agreed upon Certificate Condition we find that the adverse impacts related to decommissioning and site restoration activities will be

198 Hearing Exhibit 32, Certificate Condition 49.

199 Hearing Exhibit 32, Certificate Condition 88.

200 Hearing Exhibit 32, Certificate Condition 49.

minimized or avoided to the maximum extent practicable.[201]

C. Compliance with State and Local Laws and Regulations – PSL § 168(3)(e)

PSL § 168(3)(e) requires the Siting Board to find that the Facility is designed to operate in compliance with all applicable substantive State and local laws and regulations concerning public health and safety and the environment and makes such legal requirements applicable to the Certificate Holder in the construction and operation of a proposed major electric generating facility. With certain limited exceptions, State and local procedural requirements for facilities are preempted, including any local approval, consent, permit, certificate, or other condition for construction and operation of a generation facility.[202] Hecate Albany set forth the applicable substantive State and local requirements in Hearing Exhibits 158 and 159.

1. Compliance with Applicable State Laws

Hecate Albany asserts that the record supports the Siting Board's finding that the Facility will comply with the applicable substantive provisions of State law, including the requirements governing threatened and endangered species (ECL Article 11), invasive species (ECL Article 9), streams and wetlands (ECL Articles 15, 17 and 24), and spills, ground water and water supplies (Article 17).[203] Both DPS Staff and DEC Staff concur with this assertion conditioned upon the adoption of the Stipulated Certificate Conditions.[204] No other party disputes

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201 PSL § 168(3)(c).

202 PSL § 172(1); 16 NYCRR § 1001.31(a).

203 Hecate Albany Initial Brief, p. 43; Hearing Exhibits 127, 172.

204 Tr. Vol. I, pp. 51-52, 55-56; DPS Brief, p. 28; DEC Brief, pp. 11-12.

that the Facility will comply with applicable State laws.[205]

Hecate Albany agreed to Certificate Conditions 89 to 92, which require mitigation of any potential impacts to endangered and threatened bat species and avian species. Moreover, DEC Staff asserts that the design of this Facility has fully avoided taking or otherwise impacting Indiana Bats because construction activities, such as tree clearing, will not be undertaken outside the hibernation period.[206]

While Hecate Albany asserts that the construction of the Facility "entirely avoids State-regulated wetlands," including the 100-foot buffer zone, it has nevertheless agreed to implement best management practices and other measures to avoid any potential impacts that may occur.[207] With respect to federally-regulated wetlands, Stipulated Certificate Condition 93 requires the Certificate Holder to meet all federal standards and conditions of any conditions and regulatory requirements in the Clean Water Act Section 401 Water Quality Certification and in 6 NYCRR Part 608. In addition, Condition 64 requires Hecate Albany to develop, in consultation with USACE, DPS Staff and DEC Staff, a federal wetlands mitigation plan detailing how it will avoid or minimize federal wetland impacts and requires mitigation measures to be located in the same watershed to the maximum extent practicable, while avoiding New York State farmland with soil classifications 1 to 4. The plan must be submitted as a compliance filing and monitoring reports are also

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205 Hecate Albany Initial Brief, p. 43.

206 DEC Brief, pp. 8-10; Certificate Condition 89.

207 Hecate Albany Initial Brief, p. 34; Hearing Exhibit 76, 96; Tr. Vol. I, pp., 104-105. DEC agrees that the Project area contains no State-regulated wetlands and thus Hecate Albany has entirely avoided such impacts. DEC Brief, pp. 11-12.

required if the USACE requires compensatory mitigation.[208]

With respect to stream protection under ECL Article 15, stipulated Certificate Condition 81 requires daily inspections of equipment used in or near streams for leaks and a spill kit available at work sites where such equipment is being used. Condition 86 and the Facility's the Storm Water Pollution Prevention Plan requires practical measures to achieve minimum cover of disturbed soils following construction, thereby preventing runoff into streams.

The record indicates that ground water is between approximately 10 feet to 27 feet beneath the surface, with an unconfined principal aquifer under a portion of the Facility.[209] Hecate Albany identified existing water supply wells within one-half mile of the Facility. With respect to ground water and water supply potential impacts, Stipulated Certificate Condition 48 provides for the protection from impacts during construction through several prohibitions on blasting and other activities. For example, it requires the Certificate Holder to engage a third party to perform pre- and post-construction water supply testing and if a NYSDOH-certified laboratory concludes that a water supply meeting federal and State standards pre-construction fails to meet those standards post-construction, the Certificate Holder is required to construct a new water supply well.[210]

In addition to the foregoing protections, Stipulated Certificate Conditions 15 and 72 require the Certificate Holder

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[208] Hecate Albany indicates that it has submitted its Clean Water Act Section 404 permit to the United States Army Corps of Engineers (USACE), which details the avoidance, mitigation, and restoration measures for any impacts. Hecate Albany Initial Brief, p. 34.

[209] Hearing Exhibit 168.

[210] Certificate Condition 68(e).

to retain a dedicated Health and Safety Manager to oversee compliance with health, safety and environmental requirements.

Finally, stipulated Certificate Conditions 41 and 42 require Hecate Albany to submit as compliance filings all required permits and approvals for the construction and operation of the Facility and that relevant Facility plans will be revised consistent with the conditions in such permits and approvals.

Based upon the record and the Stipulated Certificate Conditions discussed above, we find that the Certificate Holder will comply with the substantive requirements of all State laws and requirements, as PSL § 168(3)(e) requires.

2. Compliance with Applicable Local Laws

Upon the applicant's request, the Siting Board may elect not to apply, in whole or in part, a substantive local environmental or public health and safety requirement if found to be "unreasonably burdensome" in view of the technology or the needs of, or costs to, ratepayers located inside or outside of the municipality in which the facility is located.[211] Thus, an applicant may request a waiver of local substantive requirements, but has the burden of justifying its request by showing "the degree of burden caused by the requirement, why the burden should not reasonably be borne by the Applicant, that the request cannot reasonably be obviated by design changes to the proposed facility, the request is the minimum necessary, and the adverse impacts in granting the request are mitigated to the maximum extent practicable."[212]

Hecate Albany asserts that it will comply with all

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[211] Id.

[212] 16 NYCRR § 1001.31(e).

local requirements and DPS Staff concurs.[213] After initially seeking a waiver of Coeymans Local Law 3, which established a solar facility moratorium, Hecate Albany now indicates that it has reviewed the substantive requirements of Coeymans Local Law 4 that superseded Local Law 3, and that the Facility will comply with its provisions.[214] Hecate Albany further indicates that it therefore is no longer seeking a waiver of the substantive provisions of Coeymans Local Law 4.

Hecate Albany submitted a Decommissioning Plan with its application that detailed the measures to be undertaken, such as planning, monitoring, consulting, disassembling and removing Facility components, recycling or disposing of components, and regrading and planting at the Facility site.[215] It included an estimate of the cost of these measures, excluding any salvage value. Stipulated Certificate Conditions 49 requires submission of a final Decommissioning Plan and the establishment of a letter of credit for the benefit of the Town of Coeymans as financial assurance for the required measures.

Coeymans Local Law 4, § 8(H)(1) and § 10(B) provide that Solar Energy Systems that have been abandoned or that are not producing electricity for a period of one year shall be removed. We find that Certificate Condition 49 is ambiguous insofar as it does not make clear the period of inoperability that would trigger decommissioning, as required by Local Law 4. We therefore amend Certificate Condition 49 to require that the final Decommissioning Plan provide for decommissioning if the criteria of inoperability for one year is met, in accordance

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[213] Hecate Albany Initial Brief, pp. 43-44; DPS Brief, pp. 28-29.

[214] Hecate Albany Initial Brief, pp. 43-44; Hearing Exhibit 1.

[215] Hearing Exhibits 141, 162.

with Coeymans Local Law 4 § 8(H) and § 10(B) provide.[216]

Based upon the Certificate Conditions and Hecate Albany's representations, we find that the Certificate Holder will comply with the substantive requirements of all local laws and requirements, as PSL § 168(3)(e) requires, including Coeymans Local Law 4 governing solar facilities.

D. The Facility is a Beneficial Addition to the Electric Generation Capacity of the State – PSL § 168(3)(a)

1. Regional Benefits, Air Quality and Greenhouse Gas Emission Reductions

The Siting Board's regulations require submission of electric system production modelling for a proposed facility.[217] DPS Staff reviewed the Applicant's forecasts of economic and environmental impacts from the Project. DPS Staff states that the Applicant's forecast of a decline in wholesale energy prices is reasonable.[218] Both DPS Staff and the Applicant analyses indicate that Facility will likely result in a decrease in carbon dioxide (CO2) and nitrogen oxides (NOx) emissions.[219] The Project is not expected to have an adverse impact on annual operation of must-run zero emission resources.[220] Accordingly, we determine that there are expected to be air emission benefits associated with this Project.

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[216] Certificate Condition 49(g) is added as follows:

> The final Decommissioning Plan shall comply with the criteria established under Coeymans' local laws governing the one-year period of inoperability that requires decommissioning.

[217] 16 NYCRR § 1001.8.

[218] Hearing Exhibit 144, Application Exhibit 8, p. 4.

[219] Id., p. 1.

[220] Hearing Exhibit 144, Application Exhibit 8, p. 5; Hearing Exhibit 56; Tr. Vol. I, pp. 32-37.

E. Environmental Justice – PSL § 168(2)(d) and (3)(d)

An Article 10 application must include "an identification and evaluation of significant and adverse disproportionate environmental impacts of the proposed facility, if any, resulting from its construction and operation," with respect to Environmental Justice areas, in accordance with 6 NYCRR Part 487.[221] An Environmental Justice area is defined as "a minority or low-income community that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, State, local, and tribal programs and policies."[222]

Based upon data obtained from DEC's Geospatial Information System (GIS) Tools for Environmental Justice, Hecate Albany determined that no potential environmental justice areas exist within a 0.5-mile radius of the Facility area.[223] Hecate Albany also determined that the nearest potential environmental justice area is located approximately 7 miles north of the Facility area boundary in the City of Albany.

Due to the distance between the proposed Facility and the potential environmental justice area in Albany, Hecate Albany concluded that the Facility is not expected to have an impact on this or any other environmental justice area. Accordingly, a full Environmental Justice Analysis pursuant to 6 NYCRR § 487.6 was not required.[224]

Based on its review of Exhibit 28 of the Application, DPS Staff concludes that the construction and operation of the

[221] PSL §§ 164(1)(f) and 168(2)(d); 16 NYCRR § 1001.28.

[222] 6 NYCRR § 487.3(l); also see 6 NYCRR § 487.4.

[223] Hearing Exhibit 163, Application Exhibit 28, p. 1.

[224] Hearing Exhibit 163, Application Exhibit 28, p. 1.

Facility is not expected to have any environmental justice impacts and that the Siting Board should find that Hecate Albany met its burden pursuant to PSL § 168.[225] Based upon our review of the record, we agree and adopt DPS Staff's recommendation.

F. Consistency with State Energy Plan and Policies – PSL § 168 (4)(e)

In making its determination here, PSL § 168(4)(e) requires the Siting Board to consider whether the construction and operation of the Project is consistent with State energy policies and long-range energy planning objectives and strategies contained in the most recent State Energy Plan (SEP).

The SEP implementing regulations provide that "[a]ny energy-related action or decision of a state agency, board, commission or authority shall be reasonably consistent with the forecasts and the policies and long-range energy planning objectives and strategies contained in the [State Energy] Plan, including its most recent amendment."[226]

The 2015 SEP's stated policy is to foster capital investment in the State's energy infrastructure in order "to develop a cleaner, smarter, modernized, resilient and reliable grid."[227] The SEP's main strategy is to support the development of a broad spectrum of renewable energy generation and production, which will "play a critical role in shaping New

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225 DPS Staff Initial Brief, p. 31.

226 9 NYCRR § 7840.1(d).

227 "The Energy to Lead: New York State Energy Plan" (2015), Vol. 1, pp. 12-13. In April 2020, the New York State Energy Planning Board adopted amendments to the 2015 SEP, which updated the SEP to include New York's new Clean Energy Goals consistent with the Climate Leadership and Community Protection Act (CLCPA). The CLCPA's goal is for New York to be 100 percent carbon free electricity by 2040, but also contains interim goals.

York's energy future."[228] Thus, the SEP recognizes the need for investment in largescale renewable generation, such as the solar energy Facility proposed here, in order to achieve the State's long-term energy planning and carbon reduction objectives.

This Facility will provide renewable energy without creating long-term greenhouse gas emissions. It has the potential to displace fossil fuel generation, a major component of greenhouse gases. It will also generate economic development and jobs and has overall support in the community in which it is located. We therefore find that the construction and operation of the Project is consistent with the State Energy Plan, as required by PSL § 168(4)(e).

G. Socioeconomic Effects

The Siting Board's regulations require submission of estimates of the number of direct jobs (permanent and temporary) as well as indirect or induced jobs to be generated by a proposed Facility.[229] DPS Staff believes that the Hecate Albany's direct construction and operational job impact estimates appear to be reasonable based on the size of the Projects and other New York State solar generation projects. We recognize that the job impact figures are estimates and the parties have agreed to a Certificate Condition requiring a tracking report of the actual number of direct jobs created and payments to local jurisdictions made during the construction and operational phases of the Project.[230] Considering the Application

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[228] The SEP recognizes the need for investment in largescale renewable generation, such as solar energy facilities, in order to achieve the State's long-term energy planning and carbon reduction objectives.

[229] 16 NYCRR § 1001.27

[230] Hearing Exhibit 32, Certificate Condition 36.

and its supplements, along with adopting proposed Certificate Condition 36, we can find that the construction and operation of the Facility will result in socioeconomic benefits.

H. Public Interest – PSL § 168(3)(b)

PSL § 168(3)(b) requires the Board to determine that construction and operation of the Project will serve the public interest. In making this determination, we consider several factors under PSL § 168(4) including, among other things, the state of available technology; the nature and economics of reasonable alternatives; the Facility's impacts on the environment, community character, transportation, and utilities; the Facility's consistency with New York's energy policies and long-range planning objectives and strategies; and such additional social, economic, visual/aesthetic, and other considerations that the Board deems pertinent.[231]

Based on this record, we have considered the Facility's beneficial impact to improving air quality and to meeting the State's renewable energy objectives.[232] We also have considered the Facility's direct and indirect economic benefits, including creation of full- and part-time technical and labor positions that Hecate Albany plans to fill with Albany County residents.[233] In addition, Hecate Albany expects to make payments in lieu of taxes to Albany County, the Town of Coeymans, and the Ravena-Coeymans-Selkirk School District approximately $3.6 million over the life of the Facility, as

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231 PSL § 168(4)(a)-(g).

232 Hearing Exhibits 144, 178; Tr. Vol. I, pp. 40-41.

233 Hearing Exhibit 164; Tr. Vol. I, pp. 43-44. Certificate Condition 36 requires the Certificate Holder to track all direct jobs created from the construction and operation of the Facility and submit a tracking report to the Secretary.

well as lease payments to host landowners.[234]

As detailed above, we have also considered the Facility's impact on the environment and community character and we find that those impacts will be avoided or minimized to the maximum extent practicable through the Stipulated Certificate Conditions.

Finally, we find compelling the community's overall support for the Facility throughout this proceeding. Hecate Albany worked closely with the community throughout this proceeding and local residents and officials unanimously support the Facility. Thus, based on the totality of the record and subject to the Certificate Conditions attached to this Order, we find that construction and operation of the Facility will serve the public interest.

IV. CONCLUSION

Based on the record before us, the arguments of the parties, and all applicable laws, regulations, and policies, we grant the Certificate of Environmental Compatibility and Public Need to Hecate Albany subject to the Certificate Conditions attached to this Order as Appendix A and Attachments A and B.

The Board on Electric Generation Siting and the Environment orders:

1. The Certificate Conditions agreed to by certain parties and modified here are adopted and, together with this Order, constitute the decision of this Siting Board in this proceeding.

[234] Hearing Exhibit 164, pp. 8; 12; 150.

2. Except as noted herein, all objections to the Certificate Conditions asserted by the Staff of the Department of Agriculture and Markets are denied.

3. Subject to the Certificate Conditions set forth in this Order and appended to it, a Certificate of Environmental Compatibility and Public Need is granted, pursuant to Article 10 of the Public Service Law, to Hecate Energy Albany 1, LLC and Hecate Energy Albany 2, LLC (Certificate Holders) for the construction and operation of a solar facility with a capacity of 40 megawatts, consisting of an array of ground-mounted photovoltaic solar panels and associated Facility components to be located in the Town of Coeymans, Albany County, provided that they file a written acceptance of the Certificate pursuant to 16 NYCRR § 1000.15(a) within 30 days after the date of issuance of this opinion and order or within 30 days of the issuance of the Siting Board's final decision upon any petition for rehearing.

4. Upon acceptance of the Certificate granted in this Order or at any time thereafter, the Certificate Holders shall serve copies of all compliance filings in accordance with the requirements set forth in 16 NYCRR § 1002.2(c) and applicable Certificate Conditions. Pursuant to 16 NYCRR § 1002.2(d), interested persons and parties may file comments on the compliance filings within 21 days of its service date.

5. Prior to the commencement of construction, the Certificate Holders shall comply with those requirements of Public Service Law § 68 that do not relate to the construction and operation of the facility by obtaining Public Service Commission permission and approval as an electric corporation.

6. If the Certificate Holders decide not to commence construction of the Project or any portion of the Project, they shall so notify the Secretary in writing within 30 days of making such decision and shall serve a copy of such notice upon

all parties and all entities entitled to service of the application or to notice of the application.

7. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, include a justification for the extension, and be filed at least three days prior to the affected deadline.

8. This proceeding is continued.

By the New York State Board
on Electric Generation Siting
and The Environment,

(SIGNED) MICHELLE L. PHILLIPS
Secretary

CERTIFICATE CONDITIONS

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Certificate Conditions

I. Project Authorization

1. Hecate Energy Albany 1 LLC and Hecate Energy Albany 2 LLC (Hecate Albany or the Certificate Holders) are authorized to construct and operate the Coeymans Solar Farm (Facility), as described in the Application by Hecate Albany for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 of the New York State Public Service Law (PSL) (the Application) and clarified by the Certificate Holders' supplemental filings, updates and replies to discovery data requests, and additional exhibits, except as waived, modified or supplemented by the New York State Board on Electric Generation Siting and the Environment's (Siting Board's) Order Granting Certificate (Certificate) or other permits.

2. Pursuant to Title 16 of the New York Codes, Rules and Regulations (NYCRR) §1000.15, the Certificate Holders shall, within 30 days after the issuance of the Certificate, file with the Siting Board either a petition for rehearing or a verified statement that it accepts and will comply with the Certificate for the Facility. Failure of the Certificate Holders to comply with this condition shall invalidate the Certificate.

3. The Certificate Holders are responsible for obtaining all necessary permits and any other approvals, easements, and rights-of-way that may be required for the Facility and which the Siting Board is not empowered to provide or has expressly authorized. In addition, the Siting Board expressly authorizes the Public Service Commission (Commission) to require approvals, consents, permits, certificates or other conditions for the construction or operation of the Facility under the PSL, if applicable, with the understanding that the Commission will not duplicate any issue already addressed by the Siting Board and will instead only act on its police power functions related to the entity as described in the body of this Article 10 Certificate.

4. If the Certificate Holders believe that any action taken, or determination made, by a State or local agency or their respective staffs, in furtherance of such agency's review of any applicable regulatory permits or approvals, or actions or the lack thereof by a utility subject to the Commission's jurisdiction, is unreasonable or unreasonably delayed, conditioned, or withheld, the Certificate Holders may petition the Siting Board or the Commission, as the case may be, upon reasonable notice to that agency or utility, to seek a determination of any such unreasonable or unreasonably delayed,

conditioned, or withheld action or determination. The permitting agency, agency staff, or utility, as the case may be, may respond to the petition, within ten days, to address the reasonableness of its action or determination.

5. Authorization is provided for construction, operation, and maintenance up to 285.2 acres of a photovoltaic solar power Facility located in the Town of Coeymans, Albany County, New York, including solar panels, inverters, transformers, temporary and permanent access roads, aboveground and underground electrical lines, two collection substations, existing storage buildings, onsite temporary staging/laydown areas, fencing, lighting, and other temporary and permanent features necessary for the construction and long-term safe and reliable operation and maintenance of the Facility as further described in the Application. The Facility will provide energy to the New York State electric grid via two points of interconnection, both within the Facility Area, on the existing National Grid 115 kV Long Lane-Lafarge transmission line, which crosses the southern portion of the Facility Area. The total net generating export capacity of the Facility as measured at the Point of Interconnection shall be up to approximately 40 megawatts (MWs) alternating current (AC).

6. If the Certificate Holders decide not to commence construction of any major portion of the Project, it shall so notify the Secretary to the Siting Board (Secretary) in writing within 30 days of making such decision and shall serve a copy of such notice upon all parties in the same manner and at the same time as it files with the Secretary. The Certificate Holders may make adjustments to the design and layout of the Facility provided that such adjustments are not likely to result in any significant adverse environmental impacts in comparison to such impacts as proposed or approved or the identification of an adverse environmental impact not included in the Application.

7. The Certificate Holders have not asserted that they have the power of eminent domain to acquire real property or demonstrated that the feasibility of the Project relies in any way upon the Certificate Holders or any other entity having the power of eminent domain or exercising the power of eminent domain to acquire permanent or temporary real property rights for the Facility or for any of the access roads, construction staging areas, or interconnections necessary to service the Facility. By granting this Certificate to Hecate Albany, an entity in the nature of a merchant generator and not in the nature of a fully regulated public utility company with an obligation to serve customers, the Siting Board is not making a finding of public need for any particular parcel of land such that a condemnor would be entitled to an exemption from the

provisions of Article 2 of the New York State Eminent Domain Procedure Law (EDPL) pursuant to Section 206 of the EDPL. As a condition of this Certificate, the Certificate Holders shall not commence any proceedings or cause any other entity having the power of eminent domain to commence any proceedings under the EDPL to acquire permanent or temporary real property rights for the Facility or for any of the access roads, construction staging areas, or interconnections necessary to service the Facility without an express amendment to this Certificate, granted by the Siting Board finding a public need for such acquisition.

8. This Certificate will automatically expire in seven years from the date of issuance of this Certificate (the "Expiration Date") unless the Certificate Holders have completed construction and commenced commercial operation of the Facility prior to said Expiration Date.

9. The Secretary, or the Secretary to the Commission after the Siting Board's jurisdiction has ceased, may extend any deadlines established by this order for good cause shown. Any request for an extension must be in writing, include a justification for the extension, and be filed at least one day prior to the affected deadline.

II. General Conditions

10. Upon receipt of any and all permits for the Project, the Certificate Holders shall file notice of receipt of the permit(s) with the Secretary as soon as practicable. Should any permits be denied, the Certificate Holders shall file with the Secretary documentation demonstrating the reasons for the denial and how it plans to proceed with the Facility in light of the denial. Prior to the commencement of applicable phases of construction, the Certificate Holders shall file with the Secretary its applicable New York State Department of Transportation Highway Use and Occupancy permits, County and/or Town Road Use and Occupancy Permits, and any other required permits identified in Exhibits 31, 32, and 33 to the Application, as may be applicable or required to begin construction.

11. The Certificate Holders shall implement the impacts avoidance, minimization, and mitigation measures, as described in the Application and clarified by Hecate Albany's supplemental filings, updates, replies to discovery data requests and additional exhibits, and this Certificate.

12. The Certificate Holders shall construct and operate the Facility in accordance with the substantive provisions of the applicable local laws as identified in Exhibit 31 of the Application and as such Application has been further clarified and supplemented by the Certificate Holder, except for the Town of Coeymans's April 27, 2020 moratorium on permits and certificates of occupancy for solar facilities (Local Law 2020-3), which the Siting Board elects not to apply as unreasonably burdensome in this proceeding.

13. The Certificate Holders shall incorporate and implement, as appropriate, in all compliance filings and construction activities, American National Standards Institute (ANSI) standards and measures for engineering design, construction, inspection, maintenance and operation of its authorized Facility, including features for Facility security and public safety, utility system protection, plans for quality assurance and control measures for Facility design and construction, utility notification and coordination plans for work in close proximity to other utility transmission and distribution facilities, vegetation and Facility maintenance standards and practices, emergency response plans for construction and operational phases, and complaint resolution measures.

14. The Certificate Holders shall work with National Grid, and any successor Transmission Owner (as defined in the New York Independent System Operator (NYISO) Agreement), to ensure that, with the addition of the Facility (as defined in the Interconnection Agreements between the Certificate Holder, NYISO and National Grid), the Facility will have power system relay protection and appropriate communication capabilities to ensure that operation of the National Grid transmission system is adequate under Northeast Power Coordinating Council (NPCC) standards, and meets the protection requirements at all times of the North American Electric Reliability Corporation (NERC), NPCC, New York State Reliability Council (NYSRC), NYISO, and National Grid, and any successor Transmission Owner (as defined in the NYISO Agreement). Prior to interconnecting the Facility to the transmission system, the Certificate Holders shall obtain National Grid's review and approval of the Facility's relay protection and communication system.

15. The authority granted in the Certificate and any subsequent Order(s) in this proceeding is subject to the following conditions necessary to ensure adherence with such Order(s):

    a) The Certificate Holders shall regard the Department of Public Service Staff (Staff or DPS Staff), authorized pursuant to PSL §66(8), as the Siting Board's representatives in the field and, after the Siting Board's

jurisdiction has ceased, as the Commission's representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate, or may violate, the terms of the Certificate, Compliance Filings, or any other order in this proceeding, such DPS Staff may issue a stop work order for that location or activity.

b) A stop work order shall expire 24 hours after issuance unless confirmed by the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, including by Order issued by the Chair of the Siting Board or by one Commissioner of the Commission. DPS Staff shall give the Certificate Holders notice by electronic mail of any application to the Siting Board or Commissioner to have a stop work order confirmed. If a stop work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Chair of the Siting Board, Commissioner, the Siting Board or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of DPS Staff, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.

c) Stop work authority shall be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, DPS Staff will consult wherever practicable with the Certificate Holder's representative(s) possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holder's project managers and the Director of the DPS Office of Electric, Gas and Water. If DPS Staff issues a stop work order, neither the Certificate Holders nor the contractor(s) will be prevented from undertaking any safety-related activities as they deem necessary and appropriate under the circumstances. Issuance of a stop work order or the implementation of measures as described below may be directed at the sole discretion of DPS Staff during these discussions.

d) If DPS Staff discovers a specific activity that represents a significant environmental threat that is, or immediately may become, a violation of the Certificate, Compliance Filings, or any other Order in this proceeding, DPS Staff may -- in the absence of responsible Certificate Holders'

supervisory personnel, or in the presence of such personnel who, after consultation with DPS Staff, refuse to take appropriate action -- direct the field crews to stop the specific potentially harmful activity immediately. If responsible Certificate Holders' personnel are not on site, DPS Staff will immediately thereafter inform the Certificate Holder's construction supervisor(s) and/or the Facility's dedicated health, safety, and environmental manager ("HSE Manager") of the action taken. The stop work order may be lifted by DPS Staff if the situation prompting its issuance is resolved.

e) If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, DPS Staff may, in the absence of responsible Certificate Holders' supervisory personnel, or in the presence of such personnel who, after consultation with DPS Staff, refuse to take appropriate action, direct the Certificate Holders or the relevant contractors to implement the corrective measures identified in the approved Certificate or Compliance Filings. However, all directives must follow the protocol established for communication between parties as required by the *Project Communications Plan*.

The field crews shall immediately comply with DPS Staff's directive as provided through the communication protocol. DPS Staff will immediately thereafter inform the Certificate Holder's Construction Inspector(s) and/or HSE Manager of the action taken. DPS Staff will promptly notify the New York State Department of Environmental Conservation (DEC), Division of Environmental Permits, Chief, Energy Project Management Bureau, 625 Broadway, Albany, NY 12233-1750 and the Natural Resource Supervisor for Region 4, of any activity that involves a violation of a permit issued by the DEC for the Facility pursuant to federally delegated or approved authority, as required by PSL § 172(1).

16. The Certificate Holders shall notify its contractors that the Siting Board may seek to recover penalties for any violation of the Certificate and other Orders issued in this proceeding, not only from such Certificate Holder, but also from its contractors and that contractors also may be liable for other fines, penalties, and environmental damage.

17. The Certificate Holders shall construct and operate the Facility in a manner that conforms to all substantive State requirements identified in Exhibit 32 of the Application.

18. Activities required to enable engineering and environmental surveys and access for testing necessary for preparation of final facilities design, Compliance Filings, and site plan preparation, including minor trimming, cutting, and removal of vegetation and trees for such purposes, are not considered construction. Tree removal shall be limited to the clearing windows described in Condition 89.

III. **Notifications**

19. At least 14 days prior to the Certificate Holder's commencement of site preparation, clearing and construction, the Certificate Holders shall notify the public as follows:

    a) Provide notice by mail to host landowners, adjacent landowners within 2,500 feet of the final layout to be constructed, and persons who reside on such property (if different from the landowner);

    b) Provide notice to local Town and County officials and emergency personnel;

    c) Publish notice in the local newspapers of record for dissemination and at least one free publication if available (e.g., Pennysaver);

    d) Provide notice for display in public places, which shall include, but not be limited to, the Town Hall of the host municipality, the library in the host municipality, the post office in the host municipality, the Facility website, document repositories, and the Facility construction trailers/offices(when such are located on site); and

    e) File notice with the Secretary for posting on the DPS Document Matter Management website.

20. The Certificate Holders shall write the notice(s) required in Condition 19 in language reasonably understandable to the average person and shall ensure that the notice(s)contain:

    a) A map of the Facility;

    b) A brief description of the Facility;

    c) The construction schedule and transportation routes;

    d) The name, mailing address, local or toll-free telephone number, and email address of the Facility Development Manager and Construction Manager;

e) The locations of Project information (website, repositories, etc.) and procedure and contact information for registering a complaint; and

f) Contact information for the Secretary to the Siting Board and Commission.

21. Upon distribution of Notice, and prior to commencement of construction, the Certificate Holders shall notify the Town Board of the affected municipality where the Notice required in Condition 19 has been posted.

22. At least seven (7) business days prior to commencement of construction, the Certificate Holders shall file with the Secretary an affirmation that it has provided the notifications required by this Section III and include a copy of the notice(s) under this Section as well as a distribution list.

23. Prior to the end of construction, the Certificate Holders shall notify the entities identified in Condition 19(a), 19(b), and 19(e) with the contact name, telephone number, email and mailing address of the Facility Operations Manager.

24. The Certificate Holders shall file a written notice with the Secretary within 30 days of Mechanical Completion as defined in the Certificate Holder's construction contracts and provide an anticipated date of commencement of commercial operation of the Facility.

25. At the same time a Notice of Termination is issued under the State Pollutant Discharge Elimination System ("SPDES") General Permit, the Certificate Holders shall notify the Secretary that all post-construction restoration has been completed in compliance with this Certificate and the Order(s) approving all applicable compliance filings.

IV. **SEEP, Information Reports and Compliance Filings Requirements**

A. **Site Engineering and Environmental Plan**

26. Prior to the commencement of construction of the Facility, the Certificate Holders shall submit a Site Engineering and Environmental Plan (SEEP) in accordance with the attached "Guidance for the Development of Site Engineering and Environmental Plans for the Coeymans Solar Farm" (SEEP Guide), which shall describe in detail the final Facility design and the environmental protection measures to be implemented during construction of the Facility. The Certificate Holder's adherence to the SEEP Guide will be achieved to the maximum extent practicable. Any deviation from the relevant and

applicable requirements of the SEEP Guide attached to this order shall be justified in the SEEP and shall be subject to approval by the Siting Board, as applicable. The SEEP will include a table outlining the specific Certificate Conditions, informational reports, and compliance filings incorporated into the SEEP with references to the section of the SEEP where those conditions may be found.

a) The SEEP shall be submitted in accordance with the rules for submittal, public comment, and decisions set forth in 16 NYCRR §1002.2 such that the Siting Board, or Commission after the Board's jurisdiction has ceased, can review and approve the incorporated compliance filings as outlined in this Certificate.

B. Information Reports

The following written information reports and other documents shall be filed with the Secretary in accordance with 16 NYCRR §1002.4. The following information reports and other documentation shall be filed with the Secretary prior to the commencement of construction date, unless otherwise noted:

1. General

27. Documentation, redacted as needed to protect confidential information, demonstrating that all necessary agreements are in place for use of the Facility Area for starting construction and operation (e.g., landowner agreements, easements, or Good Neighbor Agreements).

28. Interconnection:

a) The Interconnection Agreement between the NYISO, National Grid, and the Certificate Holder. Any updates or revisions to the Interconnection Agreement shall be filed throughout the life of the Project.

b) Except in the event of an emergency, if any interconnection equipment or associated control system with materially different characteristics is installed throughout the life of the Project, the Certificate Holders shall provide to National Grid information regarding the need for, and the nature of, the change per the requirements and deadlines of the Interconnection Agreement. Such information will simultaneously be filed the Secretary. If any such change is made in the event of an emergency, the Certificate Holders shall notify the Secretary as soon as practicable, but in no event later than one week after the date of installation.

29. Facilities Studies:

    c) Subject to critical infrastructure restrictions, all final Facilities Studies issued by National Grid and the NYISO shall be provided to DPS Staff within 14 days of final issuance by NYISO.

    d) Any updated facilities agreements also will be filed throughout the life of the Facility.

30. Any System Impact Studies (SISs) performed in accordance with the NYISO Open Access Transmission Tariff (OATT) approved by the Federal Energy Regulatory Commission, and all appendices thereto, reflecting the interconnection of the Facility.

31. The Certificate Holders shall file PV solar module model(s) information for the Facility, if not already provided to the Siting Board.

32. The Facility's electrical collection system shall be designed in accordance with applicable standards, codes, and guidelines as specified in Exhibit 5 of the Application.

33. In the event that the final Facility design requires a Special Protection System, the Certificate Holders shall file a report with the Secretary regarding implementation of such system, which is designed to avoid possible overloads from certain transmission outages, as well as copies of all studies that support the design of such a system. In addition, the Certificate Holders shall provide all documentation for the design of special protection system relays, with a complete description of all components and logic diagrams. Prior to commencement of operations, the Certificate Holders shall demonstrate through appropriate plans and procedural requirements that the relevant components of the Special Protection System will provide effective protection.

34. Prior to the Certificate Holders providing final design plans and profile drawings of the interconnection facilities, the Certificate Holders shall work with National Grid to ensure such documents are in accordance with the Interconnection Agreement and National Grid's Electric System Bulletins, as well as the New York State High Voltage Proximity Act.

35. A Relay Coordination Study that has been reviewed and accepted by National Grid shall be filed at least thirty days prior to the projected date for commencement of commercial operation of the Facility or upon acceptance by National Grid, or upon completion of equipment testing under the Interconnection Agreement if acceptance by National Grid is delayed.

36. The Certificate Holders shall file with the Secretary, within one year after the Facility becomes operational, a tracking report of the actual number of direct jobs created during the construction and operational phases of the Facility, as well as the actual tax payments to local jurisdictions made during the construction and operation phases of the Facility.

37. Prior to commencement of construction, the Certificate Holders shall submit to DPS Staff a *Facility Communications Plan* identifying the Certificate Holder's construction organizational structure, contact list, and protocol for communication between parties. The plan shall include the names and contact information of all individuals responsible for Project oversight.

38. The Certificate Holders shall file complete documentation of its emergency procedures and list of emergency contacts. The Certificate Holders shall file annually with the Secretary an updated copy of its emergency procedures and list of emergency contacts and with documentation of any modifications. The Certificate Holders may file separate emergency procedures for construction and operation. Emergency procedures for construction must be filed prior to the commencement of construction and emergency procedures for operation must be filed prior to the commencement of commercial operation.

39. The Certificate Holders shall submit a *Final Complaint Resolution Plan* for both the construction and operation phases of the Facility, which shall be developed in consultation with the Town. The plan shall also contain a separate procedure to address operational noise complaints. A copy of the *Final Complaint Resolution Plan* shall be shared with to the Town and filed at the Facility document repositories and on the Facility website. The plan shall address complaint reporting and resolution procedures for anticipated construction and operation issues. The plan shall include protocols for:

    a) registering a complaint;

    b) notifying the public of the complaint procedures;

    c) responding to and resolving complaints in a consistent and respectful manner;

    d) logging and tracking of all complaints received and resolutions achieved;

    e) reporting to DPS Staff any complaints not resolved within 30 days of receipt;

f) mediating complaints not resolved within 60 days; and

g) providing annual reports of complaint resolution tracking to DPS Staff that shall also be filed with the Secretary.

40. The Certificate Holders shall coordinate with the State, County, and local municipalities, as applicable, to respond to any locations that may experience any traffic flow or capacity issues, unanticipated in the Application, that result from Facility construction. The Certificate Holders shall file with the Secretary the following regarding potential transportation impacts in accordance with applicable requirements in Section 3.7 (Transportation) of the SEEP Guide attached as Appendix A prior to the commencement of the specific construction activity requiring such permitting:

a) Copies of all necessary transportation permits from the affected State, County, and Town agencies. Such permits shall include but not be limited to: Highway Work Permits to work within the Right-of-Way (ROW), permits to exceed posted weight limits, Highway Utility Permits to work within the ROW, Traffic Signal Permits to work within the ROW, Special Haul Permits for oversize/overweight vehicles, and Divisible Load overweight Permits; and

b) Maps of final transportation routes for Project component deliveries.

2. <u>Permits and Approvals</u>

41. Copies of any and all federal permits and/or approvals required to conduct jurisdictional activities associated with certain aspects of construction and operation of the Facility shall be filed with the Secretary upon receipt of such permits and/or approvals. If, due to conditions of federal permits and/or approvals, relevant Facility plans require changes that are likely to result in significant adverse environmental impacts or an adverse environmental impact not included in the Application, the design drawings and applicable compliance filings shall be revised accordingly and submitted for review and approval pursuant to 16 NYCRR §1002.2 and §1002.3, as appropriate.

42. Copies of any local or state permits and/or approvals required for construction and operation of the Facility, if such approvals were authorized by the Siting Board, shall be filed with the Secretary if not otherwise included. If, due to conditions of local or state permits and/or approvals, relevant Facility plans require changes that are likely to result in significant adverse environmental impacts or an adverse

environmental impact not included in the Application, the design drawings and applicable compliance filings shall be revised accordingly and submitted for review and approval pursuant to 16 NYCRR §1002.2 and §1002.3, as appropriate.

a) The Board hereby authorizes the New York State Department of Transportation (NYS DOT) to administer permits associated with Oversize/Overweight Vehicles and deliveries; Highway Work Permits; and associated Use and Occupancy approvals as needed to construct and operate the Facility.

3. Plans, Profiles, and Detail Drawings

43. Prior to commencement of commercial operation of the Facility, the Certificate Holders shall file an attestation affirming that the Facility design incorporates the following measures for visual impact minimization:

a) Advertisements or conspicuous lettering identifying the PV solar module manufacturer, or any other supplier entity, other than typical site signage at site entrances, shall not be allowed;

b) “Good housekeeping” would be implemented to maintain the Facility Area free of debris, trash, and waste during construction;

c) Vegetation clearing essential for visual screening will be limited. Some vegetation clearing and trimming of vegetation may be planned to provide area for solar panels and to mitigate shading of solar panels, however several swaths of forested wetlands within the Facility Area will be retained and will provide screening to offsite views;

d) Vegetative screening will be provided along portions of the western and southwestern side of the Facility Area to help screen views of the solar panels and substations from residences and travelers along CR 101. Vegetation screening also will be planted along a portion of the eastern side of the Facility Area to help screen views of the solar panels from the residence on Kinley Road. Vegetative screening shall be planted, inspected, and maintained based on plant health and vigor;

e) Per recommendations received from OPRHP, potential visual impacts to Kinley Farm and Rowe Farm, located north of the Facility, will be mitigated through a Letter of Resolution approved by OPRHP, the Certificate Holder, and several local historical organizations, identifying donation payments to these organizations. The OPRHP-approved Letter of Resolution shall be provided to DPS;

f) The site environmental conditions cause the PV arrays to be broken up into smaller sections interspersed with natural vegetated landscape which will help to mitigate the visual effects from surrounding areas;

g) When construction is complete, areas disturbed during the construction process will be reseeded;

h) Panels will have anti-reflective coatings that will reduce the level of reflectivity;

i) The electrical collection system will be located underground, to the extent practicable. Structures will only be constructed overhead for portions where necessary based on engineering, construction, or environmental constraints;

j) Outdoor night lighting at the site entrances and substations will be kept to the minimum required for health and safety, security, or emergencies. Maintenance lighting will be manually activated in the event of an outage or other repair-related event at the substation or at other equipment locations during nighttime hours and will be turned off after repairs are completed;

k) The chain-link fence surrounding the Facility Area will have a dulled galvanized finish or coating to reduce its contrast with the surroundings and will be screened by existing or planted vegetation;

l) Lighting at site entrances will avoid use of drop down light fixtures and be directed so to avoid spilling light offsite.

44. As-built drawings in both hard and electronic form shall be provided as follows within six months of the commencement of commercial operation of the Facility and shall include the following:

a) Geographic Information System (GIS) shapefiles showing PV arrays, roads, inverters, transformers, AC collection lines, substation and switchyard, Facility fencing, interconnection line, entrance gates, utility crossings, and property line setbacks (provided to DPS and DEC);

b) Collection circuit layout map (provided to DPS and DEC and filed with the Secretary); and

c) PDF as-built drawings showing details for all Project components, including, but not limited to: PV arrays, roads, inverters, transformers, AC collection lines, substation and switchyard, Facility fencing, interconnection line, entrance gates, utility crossings,

and property line setbacks (provided to DPS and DEC and filed with the Secretary).

45. A *Final Site Security Plan* for Facility construction must be submitted prior to the commencement of construction and security provisions for operation must be submitted prior to the commencement of commercial operation.

46. A DEC-accepted *Final Storm Water Pollution Prevention Plan* (SWPPP), 5-acre waiver (if necessary), and DEC's acknowledgement of the Notice of Intent for coverage under SPDES General Permit for Stormwater Discharges from Construction Activity in effect at the time shall be filed prior to construction.

4. <u>Environmental</u>

47. If additional geotechnical investigations are required for the final design of the Facility, the Certificate Holders shall prepare an updated "Geotechnical Engineering Report" verifying subsurface conditions and characterizing subsurface conditions at the Facility site, including where horizontal directional drilling (HDD) is proposed. The Geotechnical Engineering Report shall identify appropriate mitigation measures required in locations with highly corrosive soils, soils with a high frost risk, soils with high shrink or swell potential, and locations where subsurface karst conditions are observed. This report shall be submitted prior to commencement of construction.

48. Water Supply Protection:

    a) A blasting plan is not expected to be required as blasting is not anticipated. However, if determined to be necessary, a blasting plan will be prepared that includes procedures and timeframes for notifying host communities and property owners (or those living on the property if different) within one-half mile radius of the blasting site. The notification provided shall include information regarding filing a complaint.

    b) Blasting and pier and post-driving activities shall be prohibited within 100 feet of any existing, active potable water supply well.

    c) The Certificate Holders shall engage a qualified third party to perform pre- and post-construction testing of the potability of water wells within the below specified distances of construction disturbance before commencement of civil construction and after completion of construction to ensure the wells are not impacted, provided Certificate Holders are granted access by the property owner:

i. blasting within 1,000 feet of a known existing, active potable water supply well on a non-participating parcel;

ii. pier or post installations within 200 feet of an existing, active potable water supply well on a non-participating parcel;

iii. HDD operations within 500 feet of an existing, active potable water supply well on a non-participating parcel.

d) Blasting shall be prohibited within 500 feet of any existing, active water potable supply well or water supply intake on a non-participating parcel.

e) Should the NYSDOH-certified laboratory testing conclude that the water supplied by an existing, active potable water supply well met federal and New York State standards for potable water prior to construction, but failed to meet such standards post-construction, the Certificate Holders shall cause a new water well to be constructed, in consultation with the property owner, at least 100 feet from collection lines and access roads and at least 200 feet from all other Facility components, as practicable given siting constraints and landowner preferences.

C. Compliance Filings

The following plans, drawings, and other documents shall be filed for approval by the Siting Board in accordance with the rules for submittal, public comment, and decisions set forth in 16 NYCRR §1002.2 and §1002.3. The Certificate Holders shall implement all requirements of the compliance filings, as approved or amended by the Siting Board. Required compliance filings shall be filed with the Secretary prior to the commencement of construction date for that portion of the Facility covered by the particular compliance filing, unless otherwise noted.

1. General

49. Prior to installation of PV panel arrays, a *Final Decommissioning Plan* shall be submitted. Financial security will be in the form of a letter of credit, established by the Certificate Holder, to be to be solely for the benefit of, and held by the Town of Coeymans. The letter of credit shall remain in effect for the life of the Project and shall not be subject to claims or encumbrances of the Certificate Holder’s secured or unsecured creditors nor considered to be property of a bankruptcy estate. The total amount of the financial security created for the Town of Coeymans will represent the total final

decommissioning and site restoration estimate, as described below. The financial security shall remain active until the Facility is fully decommissioned. The *Final Decommissioning Plan* will include the following:

a) A final decommissioning and site restoration estimate (offset for project salvage value is not permitted in the calculation of the estimate) based on the final Facility layout. The costs will be allocated to the Town of Coeymans based on the estimated cost associated with removal and restoration of the facilities. The estimate shall be updated by a qualified independent engineer licensed to practice engineering in the State of New York to reflect inflation and any other changes after one year of Facility operation, and every fifth year thereafter. Updated estimates will be filed with the Secretary after one year of Facility operation and every fifth year thereafter;

b) Documentation indicating approval by the Town of Coeymans of an acceptable form of letter of credit;

c) Proof that the letter(s) of credit have been obtained in the final decommissioning and site restoration estimate amount, as calculated pursuant to the Final Decommissioning Plan;

d) Copies of agreements between the Certificate Holders and the Town of Coeymans, establishing a right for the Town of Coeymans to draw on the financial security;

e) Procedures and timeframes for providing written notice to the Town of Coeymans, DEC, and host and adjacent landowners of planned decommissioning and site restoration activities prior to commencement of those activities. Where former agricultural lands will be returned to their former agricultural state, the Certificate Holders will follow the restoration of agricultural lands according to the Solar Energy Projects – Construction mitigation for Agricultural lands (Revision 10/18/2019), to the maximum extent practicable; and

f) The Certificate Holder’s decommissioning plan shall adhere to all state laws and regulations in effect at the time of decommissioning regarding the disposal and/or recycling of components.

50. Prior to the commercial operation date, the Certificate Holders shall file with the Secretary, updated *Operation and Maintenance Plan*(s) for the Facility. The plan(s) shall demonstrate conformance with manufacturer’s required

maintenance schedules, the SWPPP, SPCC, and good utility practice.

2. Health and Safety

51. A Final Construction Site Security Plan, Operations Site Security Plan and Emergency Action Plan to address site security during construction and operation shall be provided to DPS Staff, the NYS Division of Homeland Security and Emergency Services, and local emergency responders that serve the Facility. The Certificate Holders may submit separate emergency procedures for construction and operation, if preferred. Emergency procedures for construction must be submitted prior to the commencement of construction and emergency procedures for operation must be submitted prior the commencement of commercial operation.

52. Final site-specific construction Quality Assurance and Quality Control Plan (QA/QC Plan), to be developed in coordination with the selected construction contractor.

53. Prior to the commencement of construction of the collection substations, a *Facility Exterior Lighting Plan Drawing* shall be submitted for review and approval by the Siting Board. The Plan shall address:

    a) Security, maintenance, and emergency lighting needs at the collection substations and the main entrance;

    b) plan and profile figure to demonstrate the lighting area needs and proposed lighting arrangement at the collection substations and where otherwise required within the Facility Area;

    c) emergency lighting should be designed to provide safe working conditions at appropriate locations and only activated during nighttime maintenance activities;

    d) exterior lighting design shall be specified to avoid off-site lighting effects, by:

        i. use of task lighting as appropriate to perform specific tasks; task lighting shall be designed to be capable of manual or auto-shut off switch activation rather than motion detection; and

        ii. for lighting other than where required for safety or emergency lighting, full cutoff fixtures, with no drop- down optical elements (that can spread illumination and create glare), shall be required for permanent exterior lighting.

3. Plans, Profiles, and Detail Drawings

54. Maps, site plans, profile figures, and environmental controls and construction details incorporating all components of the final layout of the Project shall be provided as compliance filings and shall comply with the requirements set forth in the SEEP Guide to the extent such requirements are applicable to the Project.

55. Final design drawings, site plans, and construction details shall be filed as compliance filings, shall include the informational requirements stated in the SEEP Guide, and will show Facility setback dimensions that meet or exceed the setback requirements adopted by the Board.

56. The drawings and plans shall provide all information required by the SEEP Guide, relating to Facility component crossings of, or co-locations with, existing pipelines within the Facility Area.

57. The Certificate Holders shall provide Geographic Information System (“GIS”) shapefiles to DPS and DEC showing PV arrays, roads, inverters, transformers, AC collection lines, substation and switchyard, Facility fencing, interconnection line, entrance gates, utility crossings, and property line setbacks.

4. Environmental

58. Final Invasive Species Management Plan (ISMP) for the Project. The Final ISMP shall include pre-construction invasive species control, if necessary, construction materials inspection and sanitation, invasive species treatment and removal, and site restoration in accordance with the Facility’s final approved SWPPP. A post-construction monitoring program (MP) shall be conducted in year 1, year 3, and year 5 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISMP effectiveness. At the conclusion of the MP, a report shall be submitted to DPS Staff, DEC, and NYS Department of Agriculture and Markets (“AGM”), and filed with the Secretary, that assesses how well the goal of no net increase of invasive species per the recommendation of the ISMP is achieved. In the event that the report concludes that ISMP goals are not met, and there is an increase of invasive species due to Facility construction, the Certificate Holder, DPS, DEC and AGM will meet to consider why initial control measures were ineffective and the probability of successful additional treatment measures without the need for perpetual treatments.

59. An Inadvertent Return Plan showing all locations where horizontal directional drilling (HDD) is proposed (if

applicable). The plan shall assess the potential impacts from frac-outs at the proposed drilling locations, establish measures for minimizing the risk of adverse impacts to nearby environmental resources, and contain details as outlined in Section B of SEEP Guide.

60. A final Spill Containment and Counter Measures (SPCC) Plan to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Facility construction will be developed and kept onsite in accordance with any applicable regulations. a) The SPCC Plan must be consistent with DEC Spill Reporting and Initial Notification Requirements Technical Field Guidance.

61. The SWPPP will specify appropriate measures to be used to minimize fugitive dust and airborne debris from construction of the Facility.

62. The Certificate Holders shall file a *Final Landscaping Plan* with the Secretary within one year of the commercial operation date of the Facility.

63. Cultural Resources Protection Measures shall be considered in the Facility plans, including:

    a) Plans to avoid or minimize impacts to archeological and historic resources to the extent practicable. Construction, including site preparation, clearing or other disturbance, shall not be allowed in any areas that have not been reviewed and approved for the presence of cultural resources. The Certificate Holders shall indicate, on a final SEEP or equivalent documents, measures for avoidance of archaeological sites identified within the Facility Area, if applicable. The mapped locations of all identified archaeological sites within 100 feet of proposed Facility-related impacts shall be identified as “Environmentally Sensitive Areas” or similar on the final Facility construction drawings, and marked in the field by construction fencing with signs that restrict access.

    b) A Final *Unanticipated Discovery Plan*, establishing procedures in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan will include a provision for immediate work stoppage of all ground-disturbing construction activities within 100 feet upon the discovery of possible archaeological resources or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a Registered Professional Archaeologist, qualified according to New York

Archaeological Council Standards. Work shall not resume in the area of such resources or remains until written permission is received from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP).

c) If complete avoidance of archaeological sites is not possible, the Certificate Holders shall consult with the NYSOPRHP and DPS Staff to determine if Phase II investigations or mitigation is warranted. The results of any Phase II investigations and/or identification of mitigation measures will be included in the plans.

d) A Final C*ultural Resources Mitigation and Offset Plan*, either as adopted by a federal permitting agency in subsequent National Historic Preservation Act (NHPA) §106 review, or as proposed in the Application Supplements and as revised in further consultation with New York State Historic Preservation Office (SHPO) in the event that the NHPA §106 review does not require that the mitigation plan be implemented, or as further supplemented pending any negotiations among parties. Proof of mitigation funding awards for offset project implementation to be provided within two years of the start of construction of the Facility shall be included.

64. The compliance filings will include information regarding how the Certificate Holders have avoided and minimized wetland impacts to the maximum extent practicable. If wetland mitigation is required, a final wetland mitigation plan addressing impacts to federally regulated wetlands shall be developed in coordination with the U.S. Army Corps of Engineers (ACOE), DEC, and DPS, as necessary to satisfy applicable federal and State regulations. The plan shall provide for compensatory wetland mitigation for permanent conversion or loss of existing federal jurisdictional wetland area due to construction of the Facility. Mitigation efforts should be located in the same watershed to the maximum extent practicable; however, farmland with a NYS land classification soil group 1-4 will be avoided to the maximum extent practicable. The plan will include:

a) the creation, enhancement, and/or preservation of compensatory wetland functions or values at a ratio consistent with federal regulations;

b) performance standards success criteria for determining wetland mitigation success;

c) specifications for post construction monitoring for at least five years after completion of the wetland mitigation; and

d) after each monitoring period, the Certificate Holders shall take corrective action, if necessary, for any areas that do not meet the above referenced performance standards (success criteria) to increase the likelihood of meeting the performance standards at the end of the monitoring period.

65. If the ACOE requires compensatory mitigation for the proposed wetland impacts, then the Certificate Holders will submit any and all monitoring reports to the Secretary, ACOE, and DEC as required and in accordance with permit requirements and general conditions.

V. **Noise and Vibration**

66. The Certificate Holders shall present to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary at a minimum of 60 days prior to the start of construction as Compliance Filings:

a) Final drawings for the Solar Generating Facility, incorporating any changes to the design, including:

i. Location of all noise sources and receptors identified with Geographic Information System (GIS) coordinates and GIS files.

ii. Proposed grading and noise source heights and ground elevations.

iii. Site plan and elevation details of substation components as related to the location of all relevant noise sources (e.g. transformers, emergency generator, HVAC equipment, if any).

iv. Any identified mitigations, specifications, and appropriate clearances (e.g. for sound walls, barriers, and enclosures, if any).

v. Sound information from the manufacturers for all noise sources (e.g. Transformers, inverters, HVAC equipment, emergency generators, if any).

b) Revised sound modeling with the final specifications of equipment selected for construction to demonstrate that the Project is modeled to meet Local Laws on noise (if any) and the following sound goals:

i. 35 dBA Leq-1-hour maximum equivalent continuous average sound level from the Substation transformer(s) outside any permanent or seasonal non-participating residence within the 35 dBA noise

contour from any substation transformer(s), on the presumption that a 5 dBA prominent tone penalty applies to a basic design goal of 40 dBA.

ii. 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the Facility outside at any permanent or seasonal non-participating residences from other daytime-only operational sound sources associated with the Facility, such as inverters and medium voltage transformers. If the sound emissions from these sources are found to contain a prominent discrete tone at any non-participating residence whether through modeling, calculation, or pre-construction field testing, then the sound levels at the receptors shall be subject to a 5 dBA penalty; i.e., a reduction in the permissible sound level to 40 dBA Leq-1-hour.

iii. 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the Facility across any portion of non-participating property, except for portions delineated as wetlands and utility rights of way. This shall be demonstrated with modeled sound contours and discrete sound levels at worst-case locations. No penalties for prominent tones will be added in this assessment.

iv. 50 dBA Leq-1-h, maximum equivalent continuous average sound level from the Facility outside any participating residence. No penalties for prominent tones will be added in this assessment.

c) Final computer noise modeling and tonal evaluation shall be conducted in accordance with the specifications in the SEEP Guide

67. The Certificate Holders shall comply with the following conditions regarding construction noise:

a. Comply with all local laws regulating construction noise;

b. Maintain functioning mufflers on all transportation and construction machinery;

c. Respond to noise and vibration complaints according to the Protocols established in the Noise Complaint Resolution Plan.

68. The Certificate Holders must design and build the Facility to comply with all Certificate Conditions on Noise and Vibration. No post-construction noise testing will be required.

VI. Facility Construction and Maintenance

A. General

69. At least 15 days prior to the start of construction, the Certificate Holders shall become a member of Dig Safely New York. The Certificate Holders shall require all contractors, excavators, and operators associated with its facilities to comply with the requirements of the DPS's regulations regarding the protection of underground facilities (16 NYCRR Part 753).

70. If blasting is required, blasting shall be designed and controlled to meet the limits for ground vibration set forth in United States Bureau of Mines Report of Investigation 8507 Figure B-1 and air overpressure shall be under the limits set forth in the Conclusion section in United States Bureau of Mines Report of Investigation 8485 (USBM RI 8507 and USBM RI 8485) to protect structures from damage.

71. The Certificate Holders shall comply with all requirements of the DPS's regulations regarding identification and numbering of above ground utility poles (16 NYCRR Part 217).

72. The Certificate Holders shall require its construction contractor to have a dedicated HSE Manager to monitor and oversee compliance with health, safety, and environmental commitments and permit requirements. The general qualifications for the HSE Manager will be provided to DPS and DEC prior to the initiation of construction activities. The HSE Manager shall perform twice-weekly inspections of construction work sites and, in consultation with DPS Staff, issue regular reporting and compliance audits. The Certificate Holders shall require its construction contractor to identify and provide qualifications and contact information for the HSE Manager. The HSE Manager will be qualified to monitor agricultural issues, which will be part of the HSE Manager's responsibilities. The Certificate Holders shall consult with AGM to ensure the HSE Manager has the necessary agricultural qualifications. The HSE manager also will have the ability to identify and report the presence of species as needed to fulfill the obligations of other project Certificate Conditions including Conditions 91 and 92.

73. The HSE Manager shall have stop work authority over all aspects of the Project.

74. The Certificate Holders shall require that the HSE Manager and construction supervisors are equipped with sufficient access to documentation, transportation, and communication equipment to effectively monitor such Certificate Holder's contractor's compliance with the provisions of every Order issued in this

proceeding with respect to such Certificate Holder's Project components and to those sections of the Public Service Law, Environmental Conservation Law, Section 401 Water Quality Certification, and the SEEP or equivalent documents.

75. At least 14 days before the commencement of construction, the Certificate Holders shall hold a pre-construction meeting with DPS Staff with invitations offered to AGM Staff, DOT, Town Supervisor and Highway Department, and DEC Staff. The Certificate Holder's construction contractor and the HSE Manager shall be required to attend the preconstruction meeting.

    a) An agenda, the location, and an attendee list shall be agreed upon between DPS Staff and the Certificate Holders and distributed to the attendee list at least one week prior to the meeting;

    b) Maps showing designated travel routes, construction worker parking and access road locations and a general project schedule shall be presented at the meeting;

    c) The Certificate Holders shall supply draft minutes from this meeting to the attendee list for corrections or comments, and thereafter the Certificate Holders shall issue the finalized meeting minutes; and

    d) If, for any reason, the original construction contractor cannot finish the construction of the Project, and one or more new construction contractors are needed, there shall be another meeting with the same format as outlined above.

76. Modifications to the approved SEEP or equivalent documents:

    a) All proposed changes to the approved SEEP or equivalent documents shall be reported to DPS Staff. DPS Staff will refer any proposed changes in which there is no discernable potential for increased adverse environmental impact or that are not directly related to contested issues decided by the Hearing Examiners or the Siting Board during the proceeding, to the Chief of the Environmental Certification and Compliance Section for approval. Proposed changes to the SEEP or equivalent documents shall be reviewed expeditiously. DPS Staff will refer changes that are likely to result in any significant adverse environmental impacts in comparison to such impacts as proposed or approved or the identification of an adverse environmental impact not included in the Application to the Siting Board for approval.

    b) Upon being advised that DPS Staff will refer a proposed change to the Siting Board, the requesting Certificate

Holders shall notify all parties to the proceeding, as well as property owners and lessees whose property may be affected by the proposed change. The notice shall:

i. describe the original conditions and the requested change;

ii. state that documents supporting the request are available for inspection at specified locations, including the Facility's website and document repositories; and

iii. state that persons may comment by writing or calling (followed by written confirmation) the Secretary within 30 days of the notification date. Any delay in receipt of written confirmation will not delay Siting Board action on the proposed change.

c) The Certificate Holders shall not execute any proposed change until the requesting Certificate Holders have received oral or written approval, except in emergency situations threatening personal injury, property, or severe adverse environmental impact. Any oral approval from DPS Staff will be followed by written approval from the Chief of the Environmental Certification and Compliance Section in the Office of Electric, Gas and Water, or the Siting Board as soon as possible thereafter.

77. Construction and routine maintenance activities on the Project which may result in discernable noise offsite shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Saturday, with the exception of certain construction activities which may need to occur during extended hours beyond this schedule.

78. Before construction begins in any portion of the Facility Area, markers will be placed, where practicable, to demarcate limits of disturbance and shall be left in place and remain undisturbed until completion of construction activities and restoration of the impacted area.

a. The Certificate Holders shall stake and/or flag the following:

i. the limits of disturbance;

ii. other areas needed for construction such as, but not limited to, work areas, laydowns, and storage areas;

iii. designated restrictive areas and sensitive environmental resources; and

iv. streams and waterbodies that need to be avoided.

b. Legible "protected area" signs, exclusionary fencing, and erosion controls pursuant to the approved SWPPP shall be

installed along the approved work area to protect and clearly identify the boundaries of non-work areas associated with wetlands, waterbodies, and wetland/waterbody setbacks (e.g., Additional Temporary Work Space setbacks, refueling restrictions, etc.). The location of the existing pipeline that occurs onsite shall also be marked. This shall be done prior to any disturbance or vehicular traffic through such areas. Signs, fencing, and silt fence must be removed following completion of the project and after all disturbed areas are appropriately stabilized and planted as described in the SWPPP and in certificate conditions.

79. The Certificate Holders shall confine construction and subsequent maintenance for its Project Components to the Facility Area and approved additional work areas, as delineated in approved construction plans (SEEP or equivalent documents). If a local contractor is used for the work, the local contractor’s facility may also be used as a marshaling yard.

80. The Certificate Holders shall organize and conduct monthly site-compliance inspections for DPS Staff, and provide notice of such inspections to AGM Staff, the Town Supervisor and DEC Staff, as requested by DPS during construction and restoration of the Facility Area.

    a. The Certificate Holders shall ensure that the required safety procedures and worksite hazards are communicated to site inspectors in a documented tailboard meeting prior to entry onto the site of work on such Certificate Holder’s Project Components.

    b. The monthly inspections shall include a review of the status of compliance with all conditions contained in the Certificate and any other Order issued in this proceeding, other legal requirements and commitments, as well as a field review of the Project site, if necessary. The inspection also may include:

        i. review of all complaints received, and their proposed or actual resolutions;

        ii. review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies and indicate how the Certificate Holders have responded to the public, local governments, or other agencies;

        iii. review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and

iv. other items the Certificate Holders or DPS Staff consider appropriate.

c. The Certificate Holders shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to agencies involved in the inspection audit.

B. Environmental

81. All equipment used within bed or banks of streams or in federally regulated wetlands must be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if found to be free of any leakage. A spill kit must be available at the immediate work site and any equipment observed to be leaking must be removed from the work site, and leaks must be contained, stopped, and cleaned up immediately.

82. Any construction debris (e.g., building materials, refuse from the work site) shall be completely removed prior to completion of restoration of the Facility Area and disposed of at a permitted waste disposal facility authorized to receive such material.

83. Tree and vegetation clearing shall be limited to the minimum necessary for Facility construction and operation.

a. While clearing natural vegetation in stream corridors, clearing shall be limited to that material which poses a hazard or hinderance to the construction activity or as depicted in the SEEP.

i. Snags that provide shelter in streams for fish shall not be disturbed unless they cause serious obstructions, scouring, or erosion.

ii. Trees shall not be felled into any stream or onto the immediate stream bank.

84. In connection with vegetation clearing, the Certificate Holders shall:

a. comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL § 9-1303 and any quarantine orders issued thereunder;

b. not create a maximum wood chip depth greater than three inches, except for chip roads (if applicable), nor store or dispose wood chips in wetlands, within stream banks, delineated floodways, active agricultural fields, or areas to be decommissioned to agricultural fields; and

c. coordinate with landowners to salvage merchantable logs and fuel-wood. Where merchantable logs and fuel-wood will

not be removed from the site during clearing activities, construction plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery.

85. Use of non-locally sourced straw for erosion control or other construction-related purposes is prohibited to minimize the risk of introduction of invasive plant species.

86. The Certificate Holders shall implement all practical measures to achieve the minimum cover specified in the SWPPP across all disturbed soil areas by the end of the first full growing season following construction.

87. The Certificate Holders shall restore disturbed areas, ruts, and rills to original grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations. Disturbed roadways shall be restored to their original preconstruction condition or improved. Erosion and sediment control measures shall be constructed and implemented in accordance with the SWPPP.

88. The Certificate Holders will designate the site-specific techniques to be indicated in the final SEEP or equivalent documents and environmental controls documents, to minimize or avoid construction-related impacts to agricultural resources in accordance with AGM's Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands, to the maximum extent practicable.

C. Threatened and Endangered Species

89. **T&E** Bat **Protection Measures** – The following restrictions will be implemented for all tree clearing anywhere in the Project area occurring at any time, unless otherwise agreed to with DEC and DPS staff:

    a) All tree clearing activities within the Project site necessary for construction, operation, restoration or maintenance (except for tree hazard removal necessary to protect human life or property) will be conducted between November 15 and March 31, except for provided for in Condition 89(b) below;

    b) Between April 1 and November 14, if select trees must be cut, a qualified biologist will perform an emergence survey at each tree, and trees where no bats were observed will be cut within twenty-four (24) hours. Such a survey will be performed on every tree equal to or greater than four (4) inches in diameter at breast height (dbh) that needs to be cut;

c) Except for tree hazard removal necessary to protect human life or property, no Project components will be sited or tree clearing activities will occur at any time in areas with trees having a dbh of 4 inches or greater in the following areas:

i. Within one quarter mile (0.25) of any known Indiana bat (*Myotis sodalis*) or northern long-eared bat (*Myotis septentrionalis*) (NLEB) hibernaculum;

ii. Within one hundred fifty (150) feet of any known NLEB maternity roost;

iii. Or within five hundred (500) feet of any known Indiana bat maternity roost;

d) For all tree clearing activities occurring between one quarter (0.25) and two and a half (2.5) miles of an Indiana bat hibernaculum, the Certificate Holders shall ensure that tree clearing activities in the Project Area do not result in the overall forested canopy coverage within the entire 2.5-mile radius around the hibernaculum becoming less than 35%;

e) The Certificate Holders shall have the HSE Manager present on site during all tree clearing activities. If any bats are observed flying from a tree, or from a tree that has been cut, tree clearing activities within five hundred (500) feet of the tree shall be suspended and DEC shall be notified as soon as possible. If any bat activity is noted, a stop work order for tree clearing shall immediately be issued and shall remain in place until such time as DEC and DPS Staffs have been consulted and both agencies authorize resumption of work;

f) If at any time during construction of the Project, any Indiana Bat maternity roost trees are discovered within the Project Area, construction within 500 feet of the maternity roost trees in the Project Area will immediately cease, and DEC and USFWS will be notified within twenty-four (24) hours of discovery. A re-evaluation of the potential impacts of the Project on federally-listed and state-listed bat species will be required.

90. **Grassland Vegetation Restoration Measures –** All temporary disturbance or modification of established grassland vegetation coverage in the Project Area as a result of construction, restoration, or maintenance activities will be restored to either a native herbaceous seedmix or the pre-existing native grassland vegetative conditions by re-seeding with an appropriate native seed mix after disturbance activities are completed. These temporarily disturbed or modified areas include all areas within the Facility Area that do not have

impervious cover, such as temporary roads, material and equipment staging and storage areas, and electric line rights of way.

91. **Record All Incidental Observations of T&E Species -** During construction, restoration, maintenance, and operation of the Project and associated facilities, the Certificate Holders shall maintain a record of all observations of New York State-listed T&E species, state species of special concern (SSC) and species of greatest conservation need (SGCN) as follows:

    a) ***Construction:*** During construction, the on-site HSE Manager identified in the SEEP will be responsible for recording observations of any T&E species, SSC, and SGCN. All observations shall be reported in the HSE Manager's regular reporting discussed in Certificate Condition 72, which shall also be provided to DEC as part of the routine reporting requirements, and regardless if any T&E species, SSC, or SGCN are or are not observed. Reporting of such observations shall include the information described below under Reporting Requirements. If a T&E species is observed to be demonstrating breeding or roosting behavior, it will be reported to DEC within twenty-four (24) hours of observation;

    b) ***Post-construction:*** After construction is complete, incidental observations of any T&E species, SSC and SGCN will be documented and reported to DEC in accordance with the Reporting Requirements.

    c) ***Operation and Maintenance:*** During regular operation and maintenance, the Certificate Holders will be responsible for training operation and maintenance staff to focus on successfully identifying the following T&E bird species: short-eared owl (*Asio flammeus*), northern harrier (*Circus hudsonius*), Henslow's sparrow (*Ammodramus henslowii*), sedge wren (*Cistothorus platensis*) and upland sandpiper (*Bartramia longicauda*). The Certificate Holders will keep a record of incidental observations of these species and report all observations to DEC within one week of the event.

    d) ***Reporting Requirements:*** All reports of T&E species will include the following information: species; number of individuals; age and sex of individuals (if known); observation date(s) and time(s); GPS coordinates of each individual observed (if operation and maintenance staff do not have GPS available the report must include the nearest PV panel array, cross roads location, or other natural features present near the observation location); behavior(s) observed; identification and contact information of the observer(s); and the nature of and

estimated distance to any Project construction, maintenance or restoration activity.

92. Discovery of T&E Species Nests or Dead, Injured or Damaged T&E Species

a) Excluding bald eagles and T&E bat species, if at any time during construction or operational life of the Project, a nest or roost of a federally- or State-listed T&E species is discovered, or if any T&E species are observed by the Certificate Holder's on-site HSE Manager or other designated agents in the Project Area exhibiting breeding or roosting behavior, the following actions shall be taken:

i. DEC and DPS shall be notified within twenty-four (24) hours of discovery or observation and prior to any further disturbance around the nest, roost, or area where the species were seen exhibiting any breeding or roosting behavior;

ii. An area at least five hundred (500) feet in radius around the nest or roost of T&E species will be posted and avoided and remain in place until notice to continue construction, ground clearing, grading, maintenance or restoration activities are granted by DPS in concurrence with DEC (the Certificate Holders may engage in emergency activities [such as those situations threatening personal injury, property, or severe adverse environmental impact] within such radius); and

iii. The nest or roost will not be approached under any circumstances unless authorized by DPS and DEC.

b) If at any time during construction or operational life of the Project a nest or roost of a bald eagle is discovered within the Project Area, or if eagles are observed in the Project Area exhibiting breeding or roosting behavior, the following actions shall be taken:

i. DEC and DPS shall be notified within twenty-four (24) hours of discovery or observation and prior to any disturbance around the nest or roost, or area where eagles were seen exhibiting breeding or roosting behavior and prior to any further disturbance around the nest or roost;

ii. An area of at least one quarter (0.25) mile (1,320 feet) (if there is no visual buffer), or six hundred and sixty (660) feet (if there is a visual buffer) in radius around the nest or roost will be posted and avoided until notice to continue construction, ground clearing, grading, maintenance or restoration

activities are granted by DPS and DEC (the Certificate Holders may engage in emergency activities [such as those situations threatening personal injury, property, or severe adverse environmental impact] within such radius); and

iii. The nest(s), nest tree(s) or roost(s) will not be approached under any circumstances unless authorized by DPS in concurrence with DEC.

c) If any dead, injured, or damaged federally- or State-listed T&E species, or their eggs or nests thereof are discovered by the Certificate Holder's on-site HSE Manager or other designated agents at any time during the life of the Project within the Facility Site, the Certificate Holders will immediately (within 24 hours) contact DEC and USFWS, if federally-listed species are discovered, to arrange for recovery and transfer of the specimen(s). The following information pertaining to the find shall be recorded:

i. species;

ii. age and sex of the individual(s), if known;

iii. date of discovery of the animal or nest;

iv. condition of the carcass, or state of the nest or live animal;

v. GPS coordinates of the location(s) of discovery;

vi. name(s) and contact information of the person(s) involved with the incident(s) and find(s);

vii. weather conditions at the site for the previous forty-eight (48) hours;

viii. photographs, including scale and of sufficient quality to allow for later identification of the animal or nest; and

ix. an explanation of how the mortality/injury/damage occurred, if known.

d) Electronic copies of each record, including photographs, will be provided to DEC and USFWS within 24 hours of discovery. All discovered portions of the specimen(s) will be covered in place until DEC or USFWS retrieves the specimen(s) or provides direction otherwise. If the discovery is followed by a non-business day, the Certificate Holders will ensure all the information listed above is properly documented for transfer.

e) DPS shall also be notified if any dead, injured, or damaged federally- or State-listed T&E species, or their parts, eggs or nests thereof are discovered.

D. Wetlands and Streams, Vegetation, and Invasive Species

93. If any wetland/stream permits are required for the construction, operation and/or maintenance of the Facility, the Certificate Holders shall meet all federal standards and conditions of the permit as well as any conditions and regulatory requirements issued under the Section 401 Water Quality Certification and 6 NYCRR Part 608 in consultation with DEC. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paintings, concrete, leachate, or any other environmentally deleterious materials associated with the Facility.

    a. At the end of each workday, all equipment and machinery, excluding dewatering pumps, shall be stored and safely contained more than 100 feet landward of the federally regulated wetlands and waterbodies outside the limits of disturbance or in designated protected areas. This will serve to avoid the inadvertent leakage of deleterious substances into the regulated area. Dewatering pumps operated closer than 100 feet from the wetland or waterbody must be on an impervious surface and absorbents capable of containing any leakage of petroleum products.

    b. All equipment used within bed or banks of streams or in federally regulated wetlands must be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if found to be free of any leakage. A spill kit must be on hand at the immediate work site and any equipment observed to be leaking must be removed from the work site, and leaks must be contained, stopped and cleaned up immediately.

94. Fuel or other chemical storage tanks, other than permanent transformers depicted in the final design, shall be located in an area greater than 300 feet landward of the federally regulated wetland. If the above requirement cannot be met by the Certificate Holder, the storage areas must be designed to completely contain any and all potential leakage. Such a containment system must be approved by DEC staff in writing prior to installation of the storage tank.

95. All mobile equipment, excluding dewatering pumps, must be fueled in a location at least 100 feet from wetlands and waterbodies unless moving the equipment will cause additional environmental impact. Dewatering pumps operated closer than 100 feet from the stream bank, wetland, or waterbody, must be within a secondary containment large enough to hold the pump and accommodate refueling.

96. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to DEC's Spill Hotline (1-800-457-7362) within two hours, in accordance with the DEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. Any such spills shall be reported in accordance with State and federal regulations.

97. All fill material shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, fly ash, broken concrete, demolition debris, garbage, household refuse, tires, woody materials including tree or landscape debris, metal objects, and all invasive species.

    The introduction of materials toxic to aquatic life is expressly prohibited.

98. Turbid water resulting from dewatering operations, including water that has infiltrated the construction site, shall not be discharged directly or allowed to enter any wetland, stream or water body within the Facility Area. Visibly turbid discharges from blasting, land clearing, grading, excavation, dewatering, or dredging operations and from construction activities, including water that has infiltrated the construction site, shall not enter any wetland or surface waterbody, including those downstream or outside the construction zone.

99. All disturbed soils within wetlands must be seeded with an appropriate native seed mix. Mulch shall be maintained until the disturbed area is permanently stabilized. Additional seeding shall be completed as necessary to achieve the minimum vegetative cover specified in the SWPPP across all disturbed areas.

    a. Installation of underground collection lines in wetlands shall be performed using the following methods, to be indicated in the final SEEP or equivalent documents and environmental controls documents:

        i. the Certificate Holder shall implement best management practices to minimize soil compaction;

        ii. Where backhoes will be used for trenching and other excavation, all topsoil shall be stripped and segregated from subsoils. The Co-Applicants will consolidate trenching areas to the maximum extent practicable to minimize impacts to agricultural soils;

        iii. all reasonable efforts shall be made to backfill open trenches within the same workday if rain is predicted and as soon as practicable otherwise; and

iv. all excess materials shall be completely removed from wetlands to upland areas. Excess topsoil from agricultural areas will be spread within the immediate agricultural areas within the approved LOD.

100. To control the spread of invasive insects, the Certificate Holders shall provide training for clearing and construction crews to identify the Asian Longhorn Beetle and the Emerald Ash Borer and other invasive insects of concern as a potential problem at the Facility Area. If these insects are found, they must be reported to the DEC as soon as practicable.

101. Waste concrete or concrete from truck cleanout activity and any wash water from trucks, equipment, or tools if done on site, must be contained in a manner that will prevent it from escaping into the streambank or into the stream channel and entering the stream, or entering wetland, or any other waterbody. Disposal of waste concrete or wash water should be at least 100 feet from any wetland or waterbody to the maximum extent practicable.

102. The restored stream channel shall be equal in width, depth, gradient, length, and character to the pre-existing stream channel and tie in smoothly to profile of the stream channel upstream and downstream of the project area. The planform of any stream shall not be changed.

103. The Certificate Holders shall be responsible for checking all culverts and assuring that they are not crushed or blocked during construction and restoration of the Project. If a culvert is blocked or crushed, or otherwise damaged, the Certificate Holders shall repair the culvert or replace it with alternative measures appropriate to maintaining proper drainage.

104. The creation, modification or improvement of any permanent road/stream crossing must meet the following requirements:

a) culvert pipes shall be designed to safely pass the 2% annual chance storm event;

b) culvert pipes must be embedded a minimum of 20% of the diameter of the culvert beneath the existing grade of the stream channel;

c) width of the structure must be a minimum of 1.25 times (1.25X) width of the mean high-water channel, as practicable; and

d) the culvert slope shall remain consistent with the slope of the adjacent stream channel. For slopes greater than 3%, an open bottom culvert must be used, to the maximum extent practicable.

105. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.

106. Any in-stream work or restoration authorized by this Certificate, including the installation of structures and bed materials, shall not result in permanent impediment to passage of native aquatic organisms, including fish. Any in-stream work (excluding dewatering practices associated with dry trench crossings) and restoration shall be constructed in a manner which maintains low flow conditions and preserves water depths and velocities similar to undisturbed upstream and downstream reaches necessary to sustain the movement of native aquatic organisms. Any in-stream structures placed in a stream must not create a drop height greater than 6 inches.

a. All disturbed stream banks below the normal-high water elevation must be graded to the original grade as appropriate, and adequately stabilized. All other areas of soil disturbance above the ordinary high- water elevation, or elsewhere shall be:

i. stabilized with natural fiber matting;

ii. seeded with an appropriate perennial native conservation seed mix; and

iii. mulched with straw within two days of final grading. Mulch shall be maintained until suitable vegetation cover is established. Destroyed bank vegetation shall be replaced with shrub willow or silky dogwood planting, native trees, or other suitable native species.

VII. **Facility Operation**

107. The Certificate Holders shall operate the Facility in accordance with the Interconnection Agreement, approved tariffs and applicable rules and protocols of National Grid, NYISO, NYSRC, NPCC, NERC and successor organizations.

108. The Certificate Holders shall operate the Facility in full compliance with the applicable reliability criteria of National Grid, NYISO, NPCC, NYSRC, NERC and successors. If it fails to meet the reliability criteria at any time, the Certificate Holders shall notify the NYISO immediately, in

accordance with NYISO requirements, and shall simultaneously provide the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary and National Grid a copy of the NYISO notice.

109. The Certificate Holders shall obey unit commitment and dispatch instructions issued by NYISO, or its successor, to maintain the reliability of the transmission system. In the event that the NYISO System Operator encounters communication difficulties, the Certificate Holders shall obey dispatch instructions issued by the National Grid Control Center, or its successor, in order to maintain the reliability of the transmission system.

110. Good Utility Practices:

    a. The Certificate Holders shall abide by Good Utility Practice, which shall include, but not be limited to, NERC, NPCC, NYSRC, and NYISO criteria, rules, guidelines and standards, including the rules, guidelines and criteria of any successor organization to the foregoing entities.

    b. When applied to the Certificate Holder, the term Good Utility Practice shall also include standards applicable to an independent power producer connecting to the distribution or transmission facilities or system of a utility.

    c. Except for periods during which the authorized facilities are unable to safely and reliably convey electrical energy to the New York transmission system (e.g., because of problems with the authorized facilities themselves or upstream electrical equipment), the Facility shall be exclusively connected to the New York transmission system via the facilities identified and authorized in these conditions.

111. The Certificate Holders shall work with National Grid engineers and safety personnel on testing and energizing equipment in the authorized interconnection and collection substations. If National Grid's testing protocol is not used, a testing protocol shall be developed and provided to National Grid for review and acceptance. Subject to critical infrastructure restrictions, the Certificate Holders shall file with the Secretary a copy of the final testing report within 30 days of National Grid's acceptance.

112. After entering the Interconnection Agreement, the Certificate Holders shall notify DPS Staff of meetings related to the electrical interconnection of the project to the National Grid

transmission system and provide the opportunity for DPS Staff to attend those meetings.

113. Transmission Related Incidents:

a. The Certificate Holders shall call the DPS Bulk Electric System Section within one hour to report any transmission-related incident where causation can be attributed to the Facility that affects the operation of the Facility. Facility trips due to transmission outages not caused by the Facility shall be exempt from this requirement unless physical damage is caused by or to the Facility as a result of the transmission outage.

b. The Certificate Holders shall file with the Secretary a report on any such incident within seven days and provide a copy of the report to National Grid. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented.

c. The Certificate Holders shall work cooperatively with National Grid, NYISO, NYSRC, NERC, and the NPCC to prevent any future occurrences.

114. If National Grid or the NYISO identify Adverse Operating Effects, as defined in the Interconnection Agreement, the Certificate Holders shall be obligated to address those concerns in accordance with the requirements of the Interconnection Agreement.

115. If, subsequent to the completion of construction of the Facility, no electric power is generated and transferred out of the Facility for a period of more than a year, DPS Staff or the Commission may consider advising the Siting Board that the amendment, revocation or suspension of the Certificate may be appropriate.

116. Facility Malfunction:

a. In the event that a malfunction of the Facility causes a significant reduction in the capability of such Facility to deliver power, the Certificate Holders shall promptly provide DPS Staff and National Grid copies of all notices, filings, and other substantive written communications with the NYISO as to such reduction, any plans for making repairs to remedy the reduction, and the schedule for any such repairs.

b. The Certificate Holders shall provide monthly reports to DPS Staff and National Grid on the progress of any repairs.

c. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders shall provide a detailed report to DPS Staff, setting forth the progress on the repairs and indicating whether the repairs will be completed within one year of the date of failure. PV panels shall be decommissioned if they are non-operational for a period of one year and one day. However, if the Certificate Holders is expecting delays due to a part manufacturer or complications regarding the repair, it shall petition the Secretary for an extended amount of time if it is expected that solar components will not be in operation for more than one year and one day. The petition shall include an explanation of the circumstance and an estimation of the amount of time it will take to repair the components and shall demonstrate why the repairs should continue to be pursued.

117. In the event of a fire or other catastrophic event involving the Facility and its associated equipment, the DPS Chief of Bulk Systems shall be notified no later than 48 hours following such an event.

CASE 17-F-0617

Guidance for the Development of Site Engineering and Environmental Plans (SEEP)

for the

Coeymans Solar Farm

Albany County, New York

May 2020

Prepared by:

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ISSUE AND REVISION RECORD

Revision	Date	Description
A	05/11/2020	Initial Release
B	05/14/2020	First Revised Version

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APPENDICES

1.0 DEFINITIONS

Acronyms/Abbreviations	Definition
AC	alternating current
Adjacent or Contiguous	Located on the same parcel of real property or on separate parcels of real property separated by no more than 500 feet.
AGM	New York State Department of Agriculture and Markets
Certificate	Certificate of Environmental Compatibility and Public Need
Certificate Holder	Hecate Energy Albany 1 LLC and Hecate Energy Albany 2 LLC
CR 101	Albany County Route 101
DC	direct current
ECMP	Environmental Compliance and Monitoring Plan
Facility	Coeymans Solar Farm
Facility Area	approximately 436 acres located within the Town of Coeymans, Albany County, New York
Facility Components	Linear Facility Components and Non-Linear Facility Components
Facility Site	The parcels hosting Facility Components
HSE	Health, Safety, and Environmental
ISMP	Invasive Species Management Plan
Linear Facility Components	Electric transmission lines, electric collection or distribution lines, and temporary and permanent access roads.
MW	megawatt
Non-Linear Facility Components	PV arrays, inverters, collection and interconnection substation, permanent weather stations, buildings, temporary concrete batch plant and temporary laydown yard/staging area(s).
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDPS	New York State Department of Public Service
O&M	operations & maintenance
OPRHP	New York State Office of Parks, Recreation and Historic Preservation
PV	photovoltaic
ROW	right-of-way
SEEP	Site Engineering and Environmental Plan
SPCC	Spill Prevention, Containment and Countermeasures
SWPPP	Storm Water Pollution Prevention Plan

2.0 SECTION A – PLANS, PROFILES AND DETAIL DRAWINGS

Section A of the following Site Engineering and Environmental Plan (SEEP) Guide describes the requirements for development of final facility engineering details; site plans for construction, restoration, and environmental control measures; plan and profile drawings of the development site and facility components; and maps of the facility site and the overall facility setting as appropriate to demonstrate compliance with the Certificate of Environmental Compatibility and Public Need (Certificate) for the Coeymans Solar Farm.

As identified in the Certificate received for the Facility, the SEEP will include a table outlining the specific Certificate Conditions incorporated into the SEEP with references to the section of the SEEP where those conditions may be found. If the SEEP Guide conflicts with any of these Certificate Conditions, or if the Certificate Conditions require more information than required by the SEEP Guide, the Certificate Conditions shall be controlling. Plan sheets will be generated showing the location and design details for all Facility components, including linear facilities such as electric collection lines, transmission lines and associated access roads, communications lines, ; and temporary and permanent access roads. Plans also shall indicate the location and size of all major structures, features and buildings, photovoltaic (PV) arrays, inverters, substations, switchyards and point-of-interconnection locations, including associated access roads, visual mitigation plantings, and the limits of disturbance for work area associated with any component of the Facility. Plans shall include plan-view drawings or photo-strip maps, and illustrations including but not limited to the information provided in Section 2.1.

2.1 PLAN AND PROFILE DETAILS

2.1.1 Solar Array and Related Non-Linear Components:

For all proposed PV panel locations and other Non-Linear Facility components, the Certificate Holder shall provide site plans, profiles, and detail drawings (scale minimum 1 inch = 200 feet)[1] including:

1. A copy of the American Land Title Association survey showing locations of existing utility infrastructure.
2. Details and specifications of the selected PV module, inverter, and mounting structure.
3. Plan drawings which show:
    - PV Arrays
    - Inverters
    - Combiner Boxes
    - Step-Up Transformers
    - DC String Wiring
4. Foundation drawings including plan, elevation, and section details for each foundation type proposed; drawings shall include a piling plan showing the locations of each pile with a coding system to identify different types of piles. Applicable criteria regarding foundation design shall be listed and described in the drawings and details.
5. Details showing limits of clearing, temporary and permanent grading, and laydown space; and details of the Storm Water Pollution Prevention Plan (SWPPP) should be indicated.
6. The drawings shall provide details of landscaping prescribed to screen adjacent homes, roadsides, and historical structures, as required by the Certificate. The drawings shall describe the location, quantity and suitable species of the proposed landscape planting and earthwork as needed.
7. The location and boundaries of any areas proposed to be used for fabrication, designated equipment parking, staging, access, lay-down, conductor pulling and splicing; and ; operations and maintenance

[1] Contour lines at appropriate scale are desirable on the plan view or photo-strip map if they can be added without obscuring the required information.

buildings, yards and equipment storage areas. Indicate any planned fencing, surface improvements and landscaping that will be used for screening. Demonstrate setback distances appropriate to Facility design; and conformance with applicable requirements of the Certificate.

8. If an on-site concrete batch plant will be utilized during construction, the Certificate Holder shall provide the following: (information required per subpart "iv" below shall be provided for any concrete that will be used for the Project, regardless of whether a concrete batch plant is proposed):
    - final details and site plan of the concrete batch plant location, size, access, and layout, at a reasonable scale to show all components (including conveyor layout, equipment, tanks, drainage system, settlement, catchment pits, flush systems, and stockpile areas) and proximity of its location to other Facility components and existing features;
    - final layouts showing all proposed components of the concrete batch plant drainage system, including arrows representing potential water flow to any proposed catchment pits, etc.
    - temporary lighting that avoids offsite light trespass;
    - general concrete testing procedures, including a plan outlining the Certificate Holder's monitoring and testing of concrete procedures in conformance with the Building Code of New York State, ACI, ASTM, and any other applicable specifications.
    - The locations or description of locations for concrete chute washout and any other cleaning activities (e.g., equipment cleaning for control of invasive species).
9. Maps showing the location for an operations and maintenance (O&M) building if included in the Facility. If an existing building is not utilized, prior to construction of the O&M building, the Certificate Holder shall provide the final O&M building details and construction drawings. Plans for the O&M building property will indicate zoning designation; compliance with use and area requirements, and setbacks to property lines; access, employee parking, building details, exterior lighting details; any outdoor storage areas, fencing and signage; and related site development information. This information may be submitted after commencement of construction of the Facility but at least 60 days prior to the construction of the O&M building.

2.1.2 Linear Facility Components:

Plan drawings with profile details shall be generated for all Linear Facility Components including electric transmission lines, electric collection or distribution lines, and access roads.

For above-ground electric lines and any underground electric lines outside the Facility Area plans shall include the line profile[2] (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet). For underground electric lines inside the Facility Area, the drawings shall include representative cross sections of the cable trench.

1. Collection system circuits map for the collection substation and collection line circuits indicating locations and the number of required circuits per circuit-run.
2. Design and details of single and multiple electric circuit underground and overhead collection lines including circuit layout (single, double, triple, etc.) within the Facility Area shall include plan and cross-section details, conductor sizing, and relevant design details..
3. Design and details of underground and overhead electric lines located outside the Facility Area shall include plan and profile drawings, design details, clearing and right-of-way (ROW) widths, proposed guying, and associated clearing.

[2] The lowest conductor of an overhead electric transmission, collection or distribution facility design shall be shown in relation to ground elevation at the maximum permissible conductor temperature for which the line is designed to operate, i.e., normally the short-time emergency loading temperature specified by the New York Independent System Operator. If a lesser conductor temperature is used for the line profile, the maximum sag increase between the conductor temperature and the maximum conductor temperature shall be indicated for each ruling span. For underground design, show relation to final surface grade, indicating design depth-of-cover.

4. The boundaries of any new, existing, and/or expanded utility ROW or road boundaries, and where linear Facility lines or cables are to be constructed outside the Facility Area shall be shown, including any areas contiguous to the ROW or street within which the Certificate Holder will obtain additional rights.
5. The location of each overhead Linear Facility structure (showing its height, material, finish and color, and type), structural foundation type (e.g., concrete, direct bury) and dimensions, fence, gate, down-guy anchor, and any counterpoise required (typical counterpoise drawings will suffice recognizing that before field testing of installed structures the Certificate Holder may be unable to determine the specific location of all required counterpoise), conductors, insulators, splices, and static wires and other components attached to Linear Facility structures.

For paved access roads the plan drawing shall show the following items. Profiles of paved access roads are only required if civil works are required to establish appropriate longitudinal and cross slopes. Profiles of unpaved and unimproved access corridors are not required due to a lack of civil works.

1. Each Facility access road will be identified by a unique name designation. Each access road will be shown on a scaled drawing indicating the width. Temporary and permanent cut and fill contours for each road also shall be shown at two-foot contours. Access controls such as gates shall be indicated, with typical or specific design indicated as applicable to individual sites and identifying construction and material details of gates and berms.
2. Discuss the types of access roads or paths that will be used including consideration of:
    a. temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile underlayment, gravel surface, etc.);
    b. permanent installations (e.g., cut and fill earthen road, geotextile under-layment gravel surface, paved surface, etc.);
    c. of existing roads, driveways, farm lanes, rail beds, etc.; and,
    d. other access, e.g., helicopter or barge placement.
3. For each temporary and permanent access type, provide a typical installation plan view and typical cross section with appropriate distances and dimension and identification of material. Location-specific cross side views and profiles are only required if civil works are required to establish appropriate longitudinal and cross slopes. Where existing access ways will be used, indicate provisions for upgrading for Facility construction. Demonstrate accommodation of planned or proposed future access to sites and lands within or adjacent to the facilities locations (and landowner requested improvements (e.g., access roads across linear facilities such as wires, pipes, or conduits.).
4. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide re-vegetation materials specifications. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:
    a. check dam (for ditches or stabilization of topsoil);
    b. broad-based dip or berm (for water diversion across the access road);
    c. roadside ditch with turnout and sediment trap;
    d. French drain;
    e. diversion ditch (waterbar);
    f. culvert (including headwalls, aprons, etc.);
    g. sediment retention basin (for diverting out-fall of culvert or side ditch); and,
    h. silt fencing.
5. Indicate the type(s) of stream or wetland crossing method to be used in conjunction with temporary and permanent access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions, alignment, extent of clearing) for each crossing device and rationale for their use. Stream crossing methods and design may include but not be limited to:
    a. timber mat or other measures to prevent soil compaction;

b. culverts including headwalls;
c. bridges (either temporary or permanent); and,
d. fords.

All diagrams and specifications for roads crossings should include material type and size to be placed in streams and on-stream approaches.

Additionally, plan drawings for the Facility shall include the following items:

1. Existing utility and non-utility structures on or adjacent to the Facility, indicating those to be removed or relocated (include circuit arrangements where new structures will accommodate existing circuits, indicate methods of removal of existing facilities, and show the new locations, types and configurations of relocated facilities). Depict each Facility conductor's clearance from the nearest adjacent overhead electric transmission or distribution lines and communications lines.
2. Existing underground utility or non-utility structures including but not limited to gas, water, telecommunication or electric cable or pipeline. The relationship of the Facility to adjacent fence lines; roads; railways; airfields; property lines; hedgerows; fresh surface waters; wetlands; other water bodies; significant habitats; associated facilities; water springs; adjacent buildings; water wells; or structures; major antennas; oil or gas wells, pipeline facilities, and compressor and pressure-limiting and regulating stations. Regarding co-location and crossing of existing utilities by Facility components, the following additional information shall be provided:
    a. Results of any cathodic protection impact studies;
    b. Any approval documentation (including a statement that Facility installations meet existing utility owner technical and safety requirements and copies of all relevant technical and safety manuals) from each existing utility that will be co-located with or that will be crossed by Facility components (including construction equipment crossings of existing utilities);
    c. Details of available existing utility owner approved crossing guidance (crossed by Facility components) showing methods, separation of existing utility and Facility components, cover, installation of protection measures, and workspace, including any bore pits or similar features;
    d. Details of existing utility owner approved co-location installations (with Facility components) showing separation distances of existing utilities and Facility components and any required or recommended protection measures; and
    e. Details and descriptions of available existing utility owner approved methods regarding Facility construction equipment crossing of existing utilities approved by each existing utility owner.
3. The location, design details, and site plan of any proposed Facility components, generator sites, collection station, control building, new or expanded switching station, substation, or other terminal or associated utility or non-utility structure (attach plan[3] - plot, grading, drainage, and electrical - and elevation views with architectural details at appropriate scales). Indicate the type of outdoor lighting, including design features to avoid off- site illumination and minimize glare; the color and finish of all structures; the locations of temporary or permanent access roads, parking areas, construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, relocated structures, and details of any plans for water service and sewage and waste disposal.

2.2 STORMWATER POLLUTION PREVENTION

The Compliance Filing plan drawings will include the acknowledged SWPPP plans (and approved MS-4 SWPPP plans if applicable) and drawings, and indicate the locations and details of soil erosion and sediment control

[3] Preferably 1" = 50' scale with 2-foot contour lines for detail plans

measures and any proposed permanent stormwater management controls developed in accordance with the New York Standards and Specifications for Erosion and Sediment Control (e.g., stabilized construction entrances, drainage ditches, silt fences, check dams, and sediment traps) in effect at the time the Certificate is issued. Such plan and drawings shall include contingencies for construction during extreme weather events to avoid and minimize the cumulative impacts of multiple proximate disturbed areas. A construction sequencing plan that identifies the order of operations for installation of appropriate erosion and sediment controls and best management practices prior to conducting ground-disturbing activities (including vegetation clearing) will be included in the SWPPP and denoted on appropriate drawings and plans. The construction sequencing plan will include processes related to stream crossings, installation of riprap and culverts, and trenching.

2.3 VEGETATION CLEARING AND DISPOSAL METHODS

Forest clearing will be limited to occur between November 15 and March 31 without restrictions. Clearing outside this period will be subject to certain restrictions outlined in the Certificate Condition 89. This unrestricted tree clearing window and any restrictions imposed outside this seasonal window will be identified on relevant construction drawings, along with the following:

1. the locations of sites requiring trimming or clearing of vegetation including both above and below ground (i.e., stumps) and the geographic limits of such trimming or clearing;
2. the specific type and manner of cutting, disposition or disposal method for vegetation (e.g., chip; cut and pile; salvage merchantable timber, etc.);
3. the disposal locations of all vegetation (including stumps) to be cut or removed from each site;
4. any geographical area bounded by distinctly different cover types requiring different cut- vegetation management methods;
5. any geographical area bounded at each end by areas requiring distinctly different cut- vegetation methods due to site conditions such as land use differences, population density, habitat or site protection, soil or terrain conditions, fire hazards, or other factors;
6. site specific vegetation treatment or disposal methods, including any property-owner required details such as log storage or wood chip piling areas, or “no-herbicide” zones;
7. areas requiring danger tree removal (i.e., trees with cracks or decay in proximity of a Facility components and corridors);
8. the location and details of any areas where specific vegetation protection measures will be employed including those measures to avoid damage to specimen tree stands of desirable species, important screening trees, hedgerows, etc.; and
9. identification of invasive species within/adjacent to the area of clearing, and specific disposal methods required for invasive species pursuant to the Facility’s Invasive Species Management Plan (ISMP).

2.4 BUILDING AND STRUCTURE REMOVAL

Indicate the locations of any buildings or structures to be demolished, moved, or removed. Provide plans for site access; and plans and standards for control of dust, runoff and containment of any debris or other waste materials related to removals.

2.5 WATERBODIES

1. Indicate the name, water quality classification and location of all rivers and streams, (whether perennial and intermittent) and drainages within the construction area, or any rivers and streams impacted by grading or filling, or crossed by any proposed Linear Facility Component or access road constructed improved or maintained for the Facility. On the plan and profile drawings, indicate:

   a. stream crossing method and delineate any designated streamside "protective or buffer zone" in which construction activities will be restricted to the extent necessary to minimize impacts on rivers and streams;
   b. the activities to be restricted in such zones; and,
   c. identify any designated floodways or flood hazard areas within the Facility, or otherwise used for Facility construction or the site of associated facilities. Provide topographic and flood hazard area elevations (if determined by engineering study); and specifications for facilities to be located within designated flood hazard or floodway zones; and design engineering and construction measures to demonstrate conformance with local ordinances, avoid damage to facilities, or avoid increasing flood elevation at any other location due to Facility installation and operation.
2. Show the location of all potable water sources, including springs and wells on or within 100 feet of the Facility components and 500 feet of horizontal directional drilling (HDD) location (if applicable)s, indicating on a site-by-site basis, precautionary measures to be taken to protect each water source.

2.6 WETLANDS

1. All wetlands located within the Facility Area or crossed by or adjacent to any access road to be constructed, improved, used or maintained for the Facility shall be depicted on plan drawings. Each wetland will be identified by an identification number.
2. Indicate the location of any wetland within or adjoining the Facility or any temporary access road, as determined by site investigation and delineation.
3. Identify crossing methods and buffer/impact limits for all wetlands on plan drawings.
4. Prior to initiating construction activities, the perimeter of wetlands and associated buffers shall be flagged in the field to clearing identify clearance/disturbance limits and other wetland areas to be avoided during construction.
5. A flagging plan indicating colors and schematics identifying different wetland impact types shall be included.

2.7 LAND USES

The limit of disturbance for the Facility does not contain any areas that will be retained for continued agricultural use. The Facility does not include any areas that have geologic or historic sensitivity, and does not contain any scenic or park resources. No sensitive land uses or resources are located in proximity to the Facility, and the Facility is not located near recreational uses that could be affected by the construction process. However, if any of these sensitive resources occur within the Facility limit of disturbance, the following will be mapped.

1. Agricultural Areas:
   a. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland. Designations and descriptions will be those in current use by the NYS Department of Agriculture and Markets (AGM).
   b. Indicate the location of any known unique agricultural lands including maple sugarbush sites, organic muckland, and permanent irrigation systems, as well as areas used to produce specialty crops such as vegetables, berries, apples, or grapes.
   c. Indicate the location of vulnerable soils in agricultural areas that are more sensitive than other agricultural soils to construction disturbance due to factors such as slope, soil wetness, or shallow depth to bedrock.
   d. Indicate the location of all known land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies.
   e. Designate the site-specific techniques to be implemented to minimize or avoid construction-related impacts to agricultural resources.
2. Sensitive Land Uses and Resources:

   a. Identify and indicate the location of known sensitive land uses and resources that may be affected by construction or maintenance of the Facility or by construction- related traffic (e.g., hospitals, emergency services, sanctuaries, schools, and residential areas).
3. Geologic, Historic, and Scenic or Park Resources:
   a. Indicate the locations of geologic, historic, and existing or planned scenic or park resources and specify measures to minimize impacts to these resources (e.g., specified setback distances, vegetation protection, fencing, signs).
4. Recreational Areas:
   a. Indicate the locations where existing recreational use areas, designated trails, trailhead parking areas or associated access driveways would affect or be affected by the Facility location, site clearing, construction, operation or management of the Facility.

2.8 ACCESS ROADS, LAY-DOWN AREAS AND WORKPADS

1. Indicate the locations of temporary and permanent access roads, lay- down areas, parking areas, and other designated appurtenant workspaces.
2. Provide construction type, material, and dimensions and their associated limits of disturbances.
3. Indicate provisions for upgrading any existing access roads.
4. If access is required for continued agricultural activities, ensure sufficient access for farm operators (crossings or turn-offs) for the site-specific agricultural equipment and/or livestock.

2.9 NOISE SENSITIVE SITES

Show the locations of sound sensitive receptors on the drawings, and identify locations and specifications of measures planned to mitigate construction noise as required by the Certificate. Identify on the drawings or specifications, the applicable noise limits and criteria as described in the Certificate.

2.10 ECOLOGICALLY AND ENVIRONMENTALLY SENSITIVE AREAS

Site plans will identify the general locations of any known ecologically and environmentally sensitive sites (e.g., rare, threatened, and endangered species or habitats [i.e., vernal pools located within 100 feet of the limit of disturbance]; agricultural districts; and special flood hazard areas), that are within or adjacent to the Facility, or with 100 feet of any access roads to be constructed, improved or maintained for the Facility. Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs “Sensitive Environmental Areas, No Access”).

The Facility does not contain any sensitive archaeological sites, and none are located within 100 feet of the Facility. However, if determined to be necessary, measures for avoidance of archaeological sites identified within the Facility shall be indicated on the final site plans. The mapped locations of all identified archaeological sites within 100 feet of proposed Facility-related impacts shall be identified as “Environmentally Sensitive Areas” or similar on the final Facility construction drawings and marked in the field by construction fencing with signs that restrict access.

2.11 INVASIVE SPECIES OF SPECIAL CONCERN

Prior to construction and as required by the Certificate, location(s) of invasive species within and immediately adjacent to the Facility’s limit of disturbance will be identified and a summary of the prescribed method to control the spread of the identified species on the site during construction will be identified on relevant construction plans and included in contractor’s worker orientation training program. The summary will identify commitments to avoid bringing in invasive species from other sites on equipment and avoiding spread during construction activities.

2.12 VEGETATION CONTROLS AND HERBICIDES

Details provided in the Facility's ISMP will be provided to identify areas where herbicides will be used, and prescribed treatment methods for specific vegetation control will be included on the drawings or work specifications. Areas where no herbicides are allowed (wetlands, streams, adjacent areas to wetlands and streams, organic farms, etc.) will be labeled on the site plans and construction drawings. In areas where herbicides are allowed, such use will be conducted by NYSDEC-certified pesticide applicators in accordance with all label restrictions and notification requirements.

2.13 VISUAL MITIGATION LANDSCAPING AND BUFFERS

The location of visual mitigation planting areas and specific planting modules proposed will be shown on the site plans, and will identify species composition, planting plans and specifications for each of the mitigation modules.

3.0 SECTION B – DESCRIPTION AND STATEMENT OF OBJECTIVES, TECHNIQUES, PROCEDURES, AND REQUIREMENTS

Section B addresses the description and statement of objectives, techniques, procedures, and requirements (i.e., the narrative portion of the of the SEEP Compliance Filing). In this portion of the filing, requirements of 16 New York Codes, Rules and Regulations (NYCRR) §1002.3 will be addressed. Chapters or sections of the document shall identify whether it is addressing a specific certificate condition. This section of the SEEP follows the proposed outline for the SEEP document as described in Section C.

The narrative portion of the SEEP and referenced Compliance filings for the Facility shall include, but need not be limited to, all the information provided in Section 3.

3.1 FACILITY LOCATION AND DESCRIPTION

This section of the SEEP should contain:

1. A brief description of the final Facility location;
2. A description of the construction hours and schedule as presented in the Certificate Conditions; and
3. A description of the infrastructure selected for the Facility including any manufacturer provided information regarding the design, safety and testing information for the PV modules, inverters, substation, and transformer to be installed during construction.

3.2 ENVIRONMENTAL COMPLIANCE AND MONITORING PLAN

An Environmental Compliance and Monitoring Plan (ECMP) will be developed for the construction phase of the Facility and a copy will be included in the SEEP. The SEEP will include a Facility communications plan, along with the names, titles, qualifications and contact information of all individuals responsible for ensuring minimization of environmental impact by the Facility and for enforcing compliance with environmental protection provisions of the Certificate and the compliance filings. The ECMP will include, but not limited to, the following:

1. Certificate Holder's project manager;
2. Engineering Procurement Construction project manager;
3. Engineering Procurement Construction full-time construction supervisor; and
4. Full time health, safety, and environmental manager.

The Certificate Holder may utilize one or more additional qualified individuals to satisfy the Facility oversight responsibilities associated with the health, safety, environmental, and agricultural inspections.

The ECMP also shall include:

1. Protocols for supervising demolition, vegetation clearing, use of herbicides, construction, and site restoration activities to ensure minimization of environmental impact and compliance with the environmental protection provisions specified by the Certificate.
2. Specify responsibilities for personnel monitoring all construction activities, such as clearing, sensitive resource protection, site compliance, change notices, etc.
3. Details for environmental training that will be incorporated into contractor and subcontractor on-site worker orientation training and include environmental protection and regulatory requirements for conservation of natural resources.
4. Include a statement that the Certificate Holder has made compliance with the SEEP an obligation of its contractors and has provided a copy to those employees and contractors engaged in demolition, clearing, construction and restoration.
5. Describe the procedures to "stop work" in the event of a Certificate violation.

6. The company's designated contact including 24/7 emergency phone number, for assuring overall compliance with Certificate conditions.
7. Ensure that required safety procedures and worksite hazards are communicated to site inspectors in a documented tailboard meeting prior to entry onto the site of work on such Certificate Holder's Facility Components.
8. Include a procedure for providing New York State Department of Public Service (NYSDPS) Staff, AGM, and NYSDEC with construction look ahead schedules indicating construction activities and location schedules, including a procedure for providing scheduling updates..

3.3 FACILITY COMMUNICATION AND COMPLAINT RESOLUTION PLAN

The SEEP shall include a copy of the final Complaint/Comment Submission Form, which shall include protocols for:

1. Communication between parties, including a flowchart of proper communications;
2. The Certificate Holder shall provide at least a two week notice to the associated farm operator (landowner or leased operator) prior to project staking/flagging for construction activity to provide an opportunity for the producer to harvest crops.
3. Notifying the Towns and public of the complaint procedures;
4. Registering a complaint;
5. Responding to and resolving complaints in a consistent and respectful manner;
6. Responding to complaints during operations and involving responsible staff to resolve in a respectful manner;
7. Logging and tracking of all complaints received, and resolutions achieved;
8. In cases of unresolved complaints, a written response to the complainant will be provided within 30 days of receipt of the complaint and any complaints not resolved within 30 days of receipt will be reported to DPS Staff;
9. Reporting to senior Facility Management and involvement of town officials as needed to resolve the complaints. Engagement of third conflict resolution expert, if necessary;
10. Mediating complaints not resolved within 60 days; and
11. Providing annual reports of complaint resolution tracking to DPS staff that shall also be filed with the Secretary.

3.4 HEALTH AND SAFETY PLANS

1. The Final Emergency Action Plan that shall be implemented during Facility construction. Copies of the final plan also shall be provided to DPS Staff, the NYS Division of Homeland Security and Emergency Services, the Towns and local emergency responders that serve the Facility. The plan will also address follow-up inspections for panels and substation facilities following emergency events for high winds, tornadoes, and hurricanes.
2. The Final Site Security Plan for Facility construction. Copies of the final plan also shall be provided to DPS Staff, NYS Division of Homeland Security and Emergency Services, the Towns, and local emergency responders that serve the Facility. The plan shall include, but not be limited to, the following:
    a. posting signs at the edges of the ROW in those locations where the collection lines intersect public roads; and
    b. working with the County Sheriff, and local law enforcement officials in an effort to prevent trespassing.
    c. the Final Health and Safety Plan that shall be implemented during Facility construction;
    d. a final site-specific construction Quality Assurance and Quality Control Plan.
3. Compliance with the applicable local, state, and/or federal health and safety regulations will govern Facility construction and operation.

4. The Facility is not expected to result in any public health or safety concerns associated with gaseous, liquid or solid wastes. Routine inspection of the storage of these materials will be conducted to ensure compliance with best management practices.
5. An ECMP will be implemented during Facility construction, and the Certificate Holder will require that the construction contractor assign a Health, Safety, and Environmental (HSE) Manager to act as the Facility's Environmental Monitor, and will provide NYSDPS Staff a copy of the HSE Manager qualification requirements. The ECMP will be filed with the NYSDPS and NYSDEC, as part of the Compliance Filing. The ECMP will include the following components:
    a. Planning - Prior to the start of construction, the HSE Manager will review the Certificate and any other environmental permits and, based upon the conditions/requirements of the permits, prepare an environmental management document (Environmental Compliance Manual) that will be utilized for the duration of the construction and operation of the Facility.
    b. Training -The HSE Manager will incorporate environmental training into its site worker orientation sessions that will be mandatory for all contractors and subcontractors before they begin working within the Facility Area.
    c. Preconstruction Coordination - The contractor(s), the HSE Manager and applicable state agency staffs (NYSDPS and other agency and local government staff) will conduct a meeting and walkover of areas to be affected by construction activities.
    d. Construction and Restoration Inspection - The monitoring program will include daily inspection of construction work sites by the HSE Manager during active site work periods (and then weekly during less active periods). The HSE Manager will keep a log of construction activities and will issue periodic/regular (typically weekly during active periods and monthly through final site restoration and NOT) reporting and compliance audits. SWPPP inspections and logging must be conducted according to SWPPP timing requirements.
6. Once construction is complete, the Environmental Compliance Manual will be revised to eliminate construction-only obligations, with the remaining obligations integrated into the O&M Plan.

3.5 GENERAL CONSTRUCTION

1. Provide a copy of the SWPPP which will provide an Erosion and Sediment Control Plan and will specify appropriate measures that will be used to minimize fugitive dust and airborne debris from construction activity as outlined in the New York State Standards and Specifications for Erosion and Sediment Controls (New York State Department of Environmental Conservation [NYSDEC] 2016[4]). The Erosion and Sediment Control Plan also will contain trenching details including:
    a. In locations where electric collection lines and transmission lines will be installed by open trenching, particularly along or across areas of steep slopes, the Erosion and Sediment Control Plan will describe measures to address temporary erosion contingencies (e.g., stormwater events with open trench) and erosional risks that will extend the life of the Facility (e.g., "piping" erosion after backfilling of the trench). Related subsurface drainage to relieve hydraulic pressure behind trench plugs or breakers for the life of the facility also may be addressed.
    b. The following measures to address in-trench erosion may be implemented, as necessary:
        i. Trench Plugs:
            1) Temporary trench plugs may be placed in the excavated trench to impede the flow of water down the trench. Hard plugs (unexcavated earth segments of the ditch line) will be maintained adjacent to streams and wetlands to protect those

[4] NYSDEC. 2016. New York State Standards and Specifications for Erosion and Sediment Controls. Available online at: https://www.dec.ny.gov/chemical/29066.html.

resources until cable installation activities occur. Soft plugs (replaced trench spoil, fill, sandbags) may be spaced in the trench in sloping areas to reduce erosion and trench slumping. Hay or straw bales may not be used as for temporary trench plugs.

2) After cable installation, permanent sandbag or alternative trench breakers may be installed and spaced according to Appendix 1 "Trench Breaker Spacing" before backfilling. At the request of landowners or at the discretion of the environmental inspector or construction supervisor, un-disturbed areas ("hard plugs") may be left in place until cable installation commences, to accommodate equipment crossings. Hard plugs should be a minimum of 50 feet in length for areas where cable splices may occur. For animal and vehicle crossings of the trench line area, a plug 25 to 30 feet in length should suffice.

ii. Trench Breakers:

1) Trench breakers may be constructed of sandbags or alternative materials. Impervious materials may be used to retain water in the wetlands. Trench breakers should be installed at all wetland edges. The location of these impervious trench breakers may be determined in the field based on locations identified in the construction plan documents. Trench breakers also should be installed at the top of bank of each waterbody crossing.

iii. Backfill:

1) Backfill operations will commence immediately after cable installation operations and will continue until completed. When backfilling the trench, the following may apply:

a. Only on-site, native material should be used in backfill operations unless the native material does not meet specifications, or ledge rock is encountered in the trench. Imported material may be brought in to protect the cables and achieve depth-of-cover requirements. Imported backfill must be free of invasive species pursuant to Invasive Species Control Plan.

b. Where topsoil has been segregated from trench spoil, backfill will be done in reverse order with trench spoil returned first.

c. Excess spoil will be removed. Under no circumstances will excess spoil be spread along the ROW or stockpiled in a manner that permanently changes the soil profile.

d. Trench breakers made of foam, sandbags, or other impervious materials shall be installed at the edge of all wetlands. For those areas where conditions and topography warrant, and the Certificate Holder identifies prior to the start of construction, the installation of trench breakers at the upland/wetland boundaries is appropriate to minimize changes to hydrologic regime in the wetlands such as drainage from the wetland.

2. The SEEP shall attach a final Spill Prevention, Containment and Countermeasures (SPCC) Plan for construction to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Facility construction and operation. The SPCC Plan shall be applied to all relevant construction activities and address the following:

a. General Information about water bodies, procedures for loading and unloading of oil, discharge or drainage controls, procedures in the event of discharge discovery, a discharge response procedure, a list of spill response equipment to be maintained on-site (including a fire extinguisher, shovel, tank patch kit, and oil-absorbent materials), a statement that methods of disposal of contaminated materials in the event of a discharge will follow the appropriate requirements, and

spill reporting information. A statement that any spills shall be reported in accordance with state and/or federal regulations.

b. Storage, handling, transportation, and disposal of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances which may be used during, or in connection with, the construction, operation, or maintenance of the Facility.
c. Avoiding spills and improper storage or application.
d. Reporting, responding to and remediating the effects of any spill of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances in accordance with applicable state and federal laws, regulations, and guidance, and include proposed methods of handling spills of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances which may be stored or utilized during the construction and site restoration, operation, and maintenance of the Facility.
e. Providing of SPCC Plan to local emergency responders; notifying local emergency responders of locations of hazardous substance storage.

3.6 CLEAN UP AND RESTORATION

The drawings, plans, or specifications shall describe the program for clean-up and restoration following construction, including as applicable:

1. the removal and restoration of any temporary roads, lay-down or staging areas; the finish grading of any scarified or rutted areas; the removal of waste (e.g., excess concrete), scrap metals, surplus or extraneous materials or equipment used;
2. plans, standards and a schedule for the restoration of vegetative cover, including but not limited to, specifications and design standards for ground cover, including:
    a. species mixes and application rates by site and habitat type (i.e., upland, wetland);
    b. site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures); and
    c. acceptable final cover % by cover type.
3. wetland areas will be restored to contain their approximate original contours and seeded using native seed mix;
4. planting installation specifications and follow-up responsibilities if needed;
5. a schedule or projected dates of any seeding and/or planting if needed; and
6. removal of all erosion and sedimentation control equipment and best management practice materials (i.e., silt fence), once Facility soils have been stabilized.

3.7 TRANSPORTATION

Delivery of solar facility construction materials, excluding substation transformers, will be delivered by conventional legal weight tractor trailer vehicles and multiple axle dump trucks. There are no weight restrictions along the State and County roadways proximate to the Facility Area that will need to be avoided, and it is assumed that all culverts along the Access Routes will handle legal-weight vehicles.

1. The SEEP shall include copies of County Road Use Agreements, if any are required.. The SEEP will include copies of any crossing agreements as required with utility companies.
2. A Route Evaluation Study is not required as no over-height or over-weight deliveries are planned. However, if such deliveries are deemed necessary, a Route Evaluation Study will be prepared and provided as part of this section. Deliveries will be required to use the routes identified in the Article 10 application.
3. The SEEP shall attach a Traffic Control Plan that identifies:
    a. The delivery route(s) for oversize or over length equipment or materials and the route(s) for delivery of earthen materials and concrete.

   b. The plan shall describe the delivery of materials to the facilities site and shall indicate mitigation measures to manage traffic during construction and operation.
   c. Copies of all permits that may be required for the delivery of such equipment and materials shall be provided prior to such deliveries.
4. The Certificate Holder shall not permit construction vehicles or construction equipment to park or idle at public roadside locations for extended periods of time.

3.8 CONSTRUCTION VEGETATION CLEARING AND DISPOSAL METHODS

The SEEP shall attach a Facility Vegetation Clearing Management and Herbicide Use Plan that describes:

1. The approved vegetation and tree clearing window (November 15–March 31, without restrictions). Clearing outside this period will be subject to certain restrictions outlined in the Certificate Condition 89.
2. The specific methods for the type and manner of cutting and disposition or disposal methods for cut vegetation.
3. No burning of vegetation is planned. Cleared trees will first be salvaged for use as firewood or commercial wood processing. The remaining cleared vegetation will be chipped and spread on site for temporary stabilization. Stumps that may remain may be either stockpiled on-site (in non-wetland and non-agricultural areas) or disposed of at a licensed off-site landfill designated for receipt of such waste.
4. Indicates specifications and standards applicable to salvage, stockpiling or removal of material.
5. Identifies ownership of cleared vegetation based on landowner agreements (as applicable).
6. Specifies the locations where herbicides are to be applied. Provide a general discussion of the site conditions (e.g., land use, target and non-target vegetation species composition, height and density) and the choice of herbicide, formulation, application method and timing. Provide lists of desirable and undesirable vegetation species.
7. Describes the procedures that will be followed during chemical application to protect non- target vegetation, streams, wetlands, potable waters and other water bodies, and residential areas and recreational users on or within 100 feet of the ROW.

3.9 PLANS, PROFILES, AND DETAIL DRAWINGS

See Section A of the SEEP for the details to be provided on the Plans, Profiles and Detail Drawings.

3.10 LAND USES

The limit of disturbance for the Facility does not contain any areas that will be retained for continued agricultural use, areas that have geologic or historic sensitivity, and does not contain any scenic or park resources. No sensitive land uses or resources are located in proximity to the Facility, and the Facility is not located near recreational uses that could be affected by the construction process. If applicable, the SEEP will identify requirements identified in the Certificate Conditions as they relate to sensitive resources occurring within the Facility limit of disturbance, including a description of avoidance, minimization or mitigation for impacts to sensitive land uses not covered by other sections of the SEEP.

3.11 FINAL GEOTECHNICAL ENGINEERING REPORT

If additional geotechnical investigations are required for the final design of the Facility, the SEEP shall attach a final Geotechnical Engineering Report.

3.12 INADVERTENT RETURN PLAN

1. The SEEP shall attach an Inadvertent Return Plan showing all locations where HDD is proposed (if applicable). No HDD is currently planned for the Facility and no Inadvertent Return Plan is expected to be required. In the event this changes during detailed design, the plan shall assess potential impacts from frac-outs, establish measures for minimizing the risk of adverse impacts to nearby environmental resources, and require the following:
    a. Prior to conducting HDD, Material Safety Data Sheets (SDS) will be provided to NYSDPS and NYSDEC staff.
    b. Drilling fluid circulation shall be maintained to the extent practical.
    c. If inadvertent returns occur in upland areas, the fluids shall be immediately contained and collected.
    d. If the amount of drilling fluids released is not enough to allow practical collection, the affected area will be diluted with freshwater and allowed to dry and dissipate naturally.
    e. If the amount of surface return exceeds that which can be collected using small pumps, drilling operations shall be suspended until surface volumes can be brought under control.
    f. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area (i.e. wetlands and water bodies) the returns shall be monitored and documented.
    g. Drilling operations must be suspended if the surface returns pose a threat to the resource or to public health and safety.
    h. Removal of released fluids from environmentally sensitive areas will take place only if the removal does not cause additional adverse impacts to the resource. Prior to the removal of fluids from environmentally sensitive areas, NYSDPS and NYSDEC staff will be notified and consulted.
    i. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area NYSDPS and NYSDEC Staff shall be notified immediately and a monitoring report summarizing the location of surface returns, estimated quantity of fluid and summary of cleanup efforts shall be submitted within 48 hours of the occurrence.
    j. The plan shall establish protocols for recovery of inadvertent releases, handing and disposal.
    k. Any drilling fluid inadvertently discharged must be removed from agricultural areas.

3.13 FINAL BLASTING PLAN

1. The SEEP shall attach a site-specific final Blasting Plan (if blasting is required) designed to protect surrounding structures, including groundwater wells. If detailed design determines that blasting is required, the Blasting Plan shall include:
    a. Setbacks;
    b. Blasting safety protocols;
    c. Notification procedures for the public and emergency responders;
    d. Water well survey protocols; and
    e. Seismic monitoring protocols.

3.14 VISUAL MITIGATION

Provide details of landscape plans prescribed for the Facility that provide visual mitigation and screening for participating and adjacent property owners. Discuss existing or proposed vegetation screening, landscape planting, earthwork, or installed features to screen or landscape the Facility components. The work plan will include seasonal installation guidelines, follow up field assessments, and maintenance/replacement program. Vegetative screening will be implemented prior to or in conjunction with installation of the solar panel arrays, to the extent practicable. Plantings shall be installed during the spring or fall and be maintained for an establishment period to ensure survival. If plantings cannot be installed during the spring or fall, the Applicant shall provide additional care to any plantings

where increased watering may be required. All plantings should occur during the spring or fall planting season or otherwise include appropriate watering.

3.15 CULTURAL RESOURCES

1. The SEEP shall attach a Final Unanticipated Discovery Plan, establishing procedures to be implemented if resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan will include a provision for immediate work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a professional archaeologist, qualified according to New York Archaeological Council Standards. Work shall not resume in the area of such remains until written permission is received from the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).
2. The Facility will not impact archaeological sites. However, if it is determined that complete avoidance of archaeological sites is not possible, the Certificate Holder shall consult with the OPRHP and DPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be included in the plans.

3.16 AVIAN AND BAT IMPACTS

The SEEP shall describe tree clearing measures, including date restrictions and setbacks, to be implemented during construction and operation of the Project to avoid and minimize impacts to State-listed bird and bat species as outlined in the Certificate Conditions.

3.17 WETLANDS AND WATERBODIES

1. Provide a table listing all waterbodies located within the Facility site and include: Facility location (site plan and profile drawing sheet number and reference location); Stream Identification Name, Flow Classification, New York Stream Classification, , impact coordinates, specific construction activities and crossing method (specifying the approximate impact measurements in the Facility construction area).
2. A description of construction activities within wetlands and waterbodies outlining the following requirements:
    a. In vernal pool areas identified in the project plans per Section A of the SEEP, work should not occur during the peak amphibian breeding season (April 1 to June 15);
    b. Where installation of access roads are to be constructed through wetlands:
        i. Temporary access roads shall use timber mats, and;
        ii. Permanent access roads shall use a layer of geotextile fabric and at least six inches of gravel or crushed stone placed in the location of the wetland crossing after vegetation and topsoil is removed;
    c. The Certificate Holder shall utilize free span temporary equipment bridges or culverts designed to NYSDEC and/or United States Army Corps of Engineers (USACE) standards to cross all streams with flow at the time of the proposed crossing. This will outline how:
        i. Bridges or culverts may not be dragged through the stream and must be suitably anchored to prevent downstream transport during a flood.
        ii. Fill may not be placed within the stream channel below bank full elevation and placement of abutments or fill is authorized only above and outside bank full boundaries.
        iii. Geotextile fabric must be placed below and extending onto the bank and suitable side rails built into the bridges to prevent sediment from entering the waterbody.
    d. If there is an inadvertent puncturing of a hydrologic control for a wetland, then the puncture shall be immediately sealed, and no further activity shall take place until NYSDPS and NYSDEC staff are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved by NYSDPS and NYSDEC;

e. Work areas shall be isolated from flowing streams by use of sandbags, cofferdam, piping or pumping around the work area. Waters accumulated in the isolated work area shall be discharged to an upland settling basin, field or wooded area to provide for settling and filtering of solids and sediments before water is returned to the stream. Return waters shall be as clear as the flowing water upstream from the work area. Temporary dewatering structures (i.e., cofferdams, diversion pipes, etc.) and associated fill shall be completely removed, and the disturbed area shall be regraded and restored immediately following the completion of work;
f. All fish trapped within cofferdams shall be netted and returned, alive and unharmed, to the water outside the confines of the cofferdam, in the same stream;
g. All excess materials shall be completely removed to upland areas more than 100 feet from state-regulated wetlands and waterbodies and shall be suitably stabilized;
h. Cut vegetation in wetlands may be left in place (i.e. drop and lop) or will be piled in upland areas outside of the State regulated 100 foot adjacent areas.

3. Description of construction activities that will temporarily impact wetlands and waterbodies, including the extent of clearing and ground disturbance; proposed locations of roads; description of methods used to minimize soil compaction; and adherence to the following requirements as applicable:
    a. Before trenching occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of turbid trench water from entering wetlands or waterbodies;
    b. Trench breakers/plugs shall be used at the edges of wetlands as needed to prevent wetland draining during construction as described in Section B (5);
    c. Only excavated wetland topsoil, hydric soils, and subsoil shall be utilized as backfill at wetland restoration areas;
    d. When backfilling occurs in wetlands, the subsoil shall be replaced as needed, and then covered with the topsoil, such that the restored topsoil is the same depth as prior to disturbance.
4. Description of wetland restoration measures, including:
    a. Contours shall be restored to pre-construction conditions or approved post-construction state as soon as practicable;
    b. Wetlands shall be stabilized and seeded with an appropriate native wetland species mix (e.g. Ernst Wetland Mix [OBL-FACW Perennial Wetland Mix, OBL Wetland Mix, Specialized Wetland Mix for Shaded OBL-FACW], or equivalent, previously-identified mix), shall be completed to help stabilize the soils;
    c. Wetland restoration monitoring will be performed in accordance with the requirements of the SWPPP.
5. A Stream Crossing Plan for crossing streams shall be incorporated into the drawings or specifications and include:
    a. Appropriate typical-crossing diagrams and narratives for each stream crossing.
    b. Plan view and cross-sectional view drawings which depict the extent of clearing and disturbance (typicals will suffice);
    c. For any larger, perennial streams, an analysis of vertical and lateral profiles for stream crossing at the location of the proposed collection line crossing showing the stream bed is enough to prevent exposure of the collection line from stream erosion both vertically and horizontally for the life of the Facility.
    d. A description of restoration practices; and
    e. A description of the specific dewatering practices for stream crossings demonstrating consistency with SWPPP, and/or the use of additional best management practices (i.e., silt sacs, dewatering bags).
6. A description of stream restoration demonstrating adherence with the following:

1. The restored stream channel shall be equal in width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to profile of the stream channel upstream and downstream of the Facility area.
2. Any instream work or restoration shall not result in an impediment to passage of aquatic organisms;
3. Any in-stream work (excluding dewatering practices associated with dry trench crossings) and restoration shall be constructed in a manner which maintains low flow conditions and preserves water depths and velocities like undisturbed upstream and downstream reaches necessary to sustain the movement of native aquatic organisms. Any in-stream habitat structures shall not create a drop height greater than 6-inches;
4. All disturbed stream banks below the normal high-water elevation must be returned to the original grade as appropriate and adequately stabilized;
5. All other areas of soil disturbance above the ordinary high-water elevation, or elsewhere, shall be stabilized appropriately and seeded with an appropriate perennial native seed mix, and mulched with straw; and

7. If on-site wetland mitigation is required, the SEEP shall attach a copy of the final Wetlands Mitigation Plan, developed in coordination with USACE, NYSDEC, and NYSDPS Staff, , addressing permanent impacts to federally-regulated wetlands. The Wetlands Mitigation Plan will be developed in accordance with the requirements of the USACE Joint Permit Application, and at minimum shall:
    a. Describe all activities that will occur within wetlands regulated under the Clean Water Act, Section 404.
    b. For each wetland, indicate the type of activity (e.g., construction, filling, grading, vegetation clearing, and excavation).
    c. Describe the precautions or measures to be taken to protect all other wetlands associated drainage patterns and wetland functions, including describing as necessary the measures to be taken to protect stream bank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; applicable timing restrictions for in-stream work; stream bed and bank restoration measures; vegetation restoration measures; and other site-specific measures to minimize impacts, protect resources, and manage Facility construction.
    d. Provide anticipated timeline for mitigation work and the construction details;
    e. Describe performance standards that meet state and federal requirements for determining wetland mitigation success;
    f. Include specifications for post construction monitoring of the wetland mitigation consistent with the USACE authorization. After each monitoring period, the Certificate Holder shall take corrective action for any areas that do not meet the above referenced performance standards to increase the likelihood of meeting the performance standards. If, after the monitoring period end and the wetland mitigation is still not meeting the established performance standards, the Certificate Holder must continue annual monitoring and corrective actions until the mitigation areas meet the established success criteria or submits an alternative plan.

3.18 INVASIVE SPECIES MANAGEMENT PLAN

1. The SEEP shall attach a Final ISMP, based on the pre- construction invasive species survey of invasive species conducted within the Facility Area during the previous growing season. The ISMP shall include:
    a. measures that will be implemented to avoid and minimize the introduction of invasive species and control the spread of existing invasive species during construction (e.g., soil disturbance, vegetation clearing, transportation of materials and equipment, and landscaping/re-vegetation).
    b. construction materials inspection and sanitation, invasive species treatment and removal, and site restoration, and

c. post-construction monitoring in years 1, 3, and 5 following completion of construction and restoration, and reports submitted to agencies. The monitoring program shall collect information to facilitate evaluation of ISMP effectiveness.

3.19 SOUND

1. A statement that the Certificate Holder will comply with the following conditions regarding construction noise:
    a. Comply with all local laws regulating construction noise;
    b. Maintain functioning mufflers on all transportation and construction machinery;
    c. Respond to noise and vibration complaints according to the protocols established in the Complaint Resolution Plan.
2. Specify procedures to be followed to minimize noise impacts related to facility site clearing and construction of the Facility. Indicate the types of major equipment to be used in construction and Facility operation; sound levels at which that equipment operates; days of the week and hours of the day during which that equipment will normally be operated; any exceptions to these schedules; and any measures to be taken to reduce audible noise levels caused by either construction equipment or Facility operation.
3. Final computer noise modeling and tonal evaluation shall be conducted by using:
    a. The ISO-9613-2 Sound Propagation Standard with no meteorological correction (Cmet).
    b. All noise sources operating at maximum sound power levels, as applicable to the daytime and nighttime periods.
    c. A maximum ground factor of G=0.5.
    d. A factor of G=0 for water bodies, if any.
    e. A height of evaluation of 1.5 meters for all receptors.
    f. A temperature of 10 degrees Celsius and 70% Relative Humidity
    g. At a minimum, the sound results at the full-octave frequency bands from 31.5 Hz up to 8,000 Hz will be reported.
4. Sound modeling report shall include sound results in tabular and graphical format and conform to the following:
    a. Sound contours shall be legible and rendered above a map that shall include all sensitive sound receptors and boundary lines (differentiating participating and non-participating parcels); noise sources within the Sound Study Area (including transformer(s), inverters, and other noise sources, if any); collection lines and solar arrays.
    b. Sound contours shall be rendered at a minimum, until the 30 dBA noise contour is reached, in 1 dBA steps.
    c. Full-size hard copy maps (22" x 34") in 1:12,000 scale shall be submitted to DPS Staff.
    d. Only properties that have a signed contract with the Certificate Holder prior to the date of filing shall be identified as “participating”.
    e. GIS files used for the final computer noise modeling, including noise source and receptor locations and heights; topography, final grading; boundary lines, and participating status shall be forwarded to DPS Staff in digital media.
    f. Final computer noise modeling files shall be delivered to DPS-Staff by digital means.
5. For noise sources, other than the substation transformer(s) (e.g. inverters, Medium to Low Voltage transformers) and for non-participating receptors exceeding a sound level of 40 dBA L_{eq} as modeled above, a prominent tone analysis will be presented subject to the following requirements:
    a. The “prominent discrete tone” constant level differences (Kt) in ANSI S12.9-2013/Part 3 Annex B, section B.1, will be used as follows: 15 dB in low-frequency one-third-octave bands (from 25 up to 125 Hz); 8 dB in middle-frequency one-third-octave bands (from 160 up to 400 Hz); and, 5 dB in high-frequency one-third-octave bands (from 500 up to 10,000 Hz).

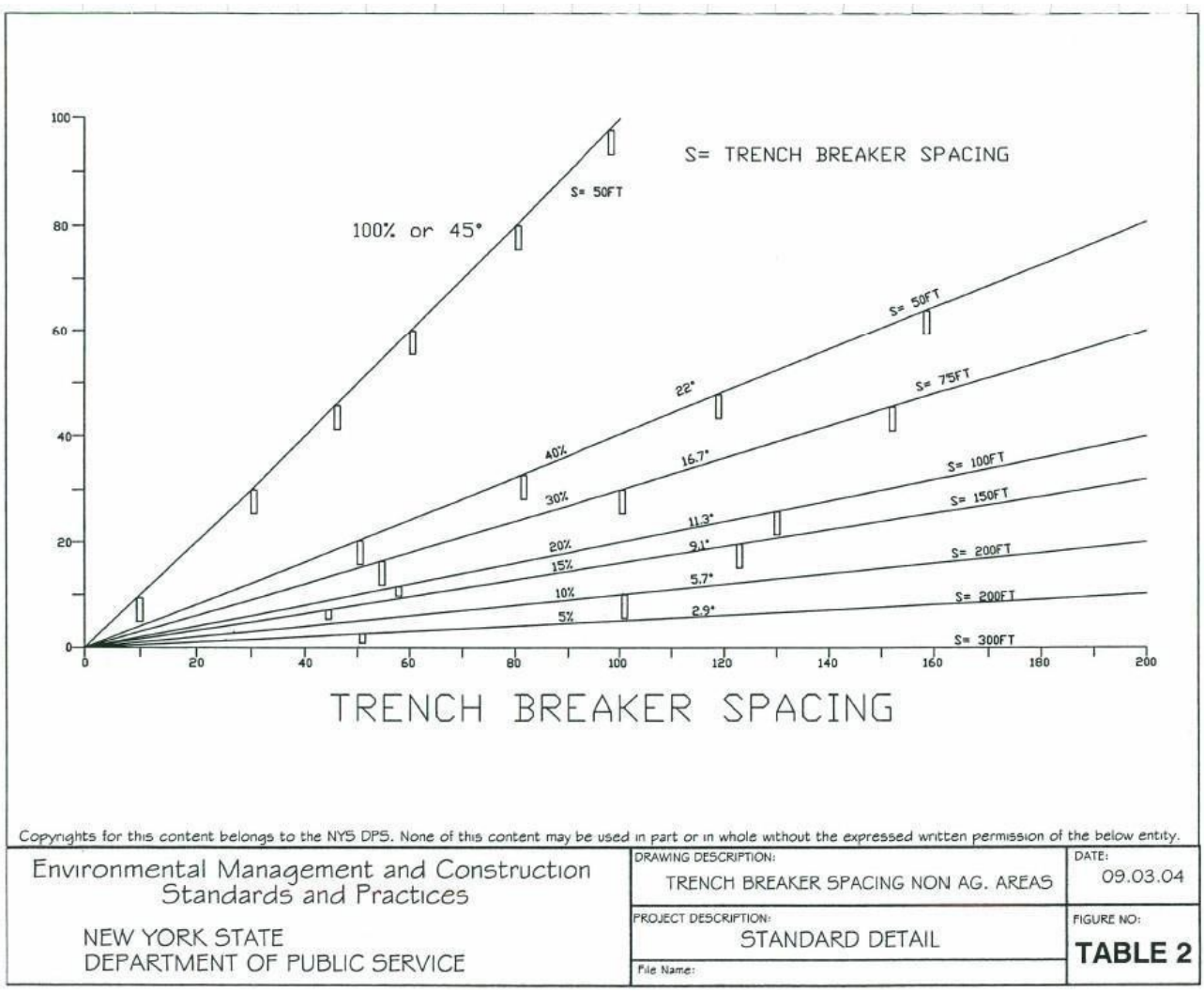
b. The analysis will use one-third octave band information from the manufacturers (from 20 Hz up to 10,000 Hz, if available). If no manufacturers' information is available, sound information can be based on field test(s). The field test(s) will report at a minimum sound pressure and sound power levels and clear explanations about how the test was conducted and Sound Power Levels were obtained. The analysis will be performed for a single noise source (e.g. central inverter) or a group of noise sources (e.g. a single inverters/transformer package), depending on available sound power level information.
c. For the purposes of tonality assessment, calculations will include the following Attenuations as specified in ANSI/ASA S12.62 / ISO 9613-2: 1996 (MOD). Acoustics – Attenuation of Sound During Propagation Outdoors-Part 2: General Method of Calculation:
    i. Attenuation due to geometrical divergence (Adiv)[5],
    ii. atmospheric absorption for a temperature of 10 degrees Celsius and 70% Relative Humidity (Aatm)[6],
    iii. Attenuation to the ground effect (Agr)[7,8],
    iv. Attenuation due to a barrier (Abar) if any[9], and
    v. No miscellaneous attenuations (Amisc) will be included.
d. If no manufacturers information or pre-construction field tests are available, sounds will be assumed to be tonal and the broadband overall (dBA) noise level at the evaluated position as determined with computer noise modeling shall be increased by 5 dBA for evaluation of compliance.

3.20 OPERATIONS SCHEDULE AND TIMING

This section of the SEEP should include a discussion of Pre-Operational and Post- Operational Filings and Expected Timing of Submissions. The Facility O&M Plan will include, at a minimum, a flowchart of proper communications and proper protocol for communications among parties, as relevant to the O&M of the Facility.

[5] Adiv can be assumed to be the same at all 1/3-octave bands or be omitted from analysis.
[6] The same full-octave band atmospheric attenuation coefficients indicated in Table 2 of ANSI S12.62 , can be used for the three adjacent one-third octave bands corresponding to each full-octave band.
[7] The same full-octave band attenuations as indicated in Table 3 of ANSI S12.62 , can be used for the three adjacent one-third octave bands corresponding to each full-octave band.
[8] Calculations will use the maximum height dimension of the equipment as the height of the noise source.
[9] Should the analysis show that a barrier will be needed, the barrier will be implemented before the start date of operations.

APPENDIX A. TRENCH BREAKER SPACING



Environmental Management and Construction Standards and Practices NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE	DRAWING DESCRIPTION: TRENCH BREAKER SPACING NON AG. AREAS	DATE: 09.03.04
	PROJECT DESCRIPTION: STANDARD DETAIL File Name:	FIGURE NO: TABLE 2