

NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 17-F-0182 - Application of Mohawk Solar 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 in the Towns of Canajoharie and Minden, Montgomery County.

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

Issued and Effective: November 19, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	2
II.	BACKGROUND	2
A.	Description of the Project	2
B.	Procedural History	3
C.	Public Involvement and Comment	7
D.	Proposed Settlement	8
III.	REQUIRED STATUTORY FINDINGS	10
A.	Balancing under PSL §168	10
B.	Burden of Proof	11
IV.	FINDINGS UNDER PSL §168	12
A.	Disputed Issues	12
1.	Probable Environmental Impacts	12
a.	Threatened and Endangered Bird Species	12
i.	T&E Grassland Bird Species	14
ii.	T&E Bird Species Generally	27
b.	Grassland Mitigation and Agricultural Impacts	35
B.	Issues not Disputed - Resolved by Settlement	39
1.	Probable Environmental Impacts	39
a.	Impacts to Terrestrial Ecology/Invasive Species	39
i.	Impacts from Invasive Species	42
ii.	Impacts to Forest Ecology	43
b.	Wildlife Other Than Threatened and Endangered Bird Species and Habitat Other Than Occupied Habitat	45
c.	Ground and Surface Water Impacts	49
i.	Freshwater Wetlands	49
ii.	Streams and Surface Waters	52
iii.	Groundwater and Wells	55

iv.	Section 401 Water Quality Certification.....	57
d.	Air Impacts	58
2.	Land Use	60
a.	Agricultural	61
3.	Alternatives	63
4.	Public Health, Safety and Security.....	65
a.	Safety, Security and Emergency Response	65
b.	Noise and vibration	67
5.	Cultural, Historic and Recreational Resources	69
a.	Visual Impacts	69
b.	Impacts to Cultural and Historic Resources	69
6.	Impacts on Infrastructure	71
a.	Transportation	71
b.	Communications	73
c.	Utilities	74
7.	Decommissioning and Restoration.....	75
V.	COMPLIANCE WITH STATE AND LOCAL LAWS	77
A.	State Law	78
B.	Local Laws	79
VI.	BENEFICIAL ADDITION TO NY ELECTRIC GENERATION CAPACITY AND PUBLIC INTEREST.....	80
A.	Electric Generation Capacity	80
1.	Regional Benefits - Air quality and GHG Emissions	81
2.	Socioeconomic Effects	81
3.	Environmental Justice	82
VII.	CONCLUSION	84

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 November 19, 2020

BOARD MEMBERS PRESENT:

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

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

Dr. Elizabeth Lewis-Michl, Alternate for
Howard A. Zucker, M.D., J.D., Commissioner
New York State Department of Health

Vincent Ravaschiere, Alternate for
Eric Gertler, Acting Commissioner, President & CEO-designate
New York State Empire State Development

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

Greg Yacobucci, Ad Hoc Member

CASE 17-F-0182 - Application of Mohawk Solar 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 in the Towns of
Canajoharie and Minden, Montgomery County.

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

(Issued and Effective November 19, 2020)

BY THE BOARD:

I. INTRODUCTION

By this order, we grant to Mohawk Solar, LLC (Mohawk Solar or Applicant), a wholly owned subsidiary of Avangrid Renewables, LLC, a Certificate of Environmental Compatibility and Public Need (CECPN) to construct and operate a solar energy generating facility in the Towns of Minden and Canajoharie, Montgomery County, New York (the Towns). With the extensive conditions attached to and made part of this order, we determine the solar farm will meet all the statutory requirements for certification under Article 10 of the Public Service Law (PSL). Our decision is supported by the extensive evidentiary record compiled before the Presiding Examiners appointed by the Department of Public Service (DPS) and the Associate Examiner appointed by the Department of Environmental Conservation (DEC), as well as the extensive settlement proposal developed by the parties. We base our decision on the evidentiary record, initial and reply briefs of the parties, public comments, and all applicable law and policy.

II. BACKGROUND

A. Description of the Project

As agreed upon by the parties, the Mohawk Solar Electric Generating Facility (the Facility or Project) will consist of up to 529 acres of photovoltaic (PV) solar generating panels located on private land, either leased or purchased from the landowners, located in the Towns.¹ The PV panels will generate up to 90.5 MW of electricity and will be connected by underground collection lines that will deliver electricity to

¹ Hearing Exhibit 13, Settlement Proposal Appendix C [Layout Memo].

the bulk electric transmission system owned by Niagara Mohawk Power Corporation, doing business as National Grid. The collection substation and point of interconnection switchyard will be co-located east of the existing St. Johnsville-Marshville 115-kV transmission line. About 200 feet of transmission line will connect the substation and the switchyard. The Project also will require the construction of an operations and maintenance building in the Town of Canajoharie, approximately 52 transformers and 710 inverters, approximately 30 miles of grass and gravel access roads, a temporary laydown area, and approximately 27 miles of fencing.

B. Procedural History

On March 31, 2017, the Applicant filed a letter with the Secretary of the New York State Board on Electric Generation Siting and the Environment (Siting Board) indicating its intent to apply for an Article 10 Certificate for a proposed 90-MW photovoltaic solar energy project located in the Towns. The March 31, 2017 letter also served as a formal submittal of the Applicant's Public Involvement Program (PIP) Plan, pursuant to §1000.4 of Part 16 of the New York Codes, Rules and Regulations (NYCRR). After amendment and revision pursuant to DPS review, the Applicant filed its final PIP Plan on May 29, 2017.

On October 18, 2017, the Applicant submitted its Preliminary Scoping Statement (PSS). The PSS is part of the pre-application procedures prescribed by the Board in 16 NYCRR §1000.5. During the pre-application scoping phase, the project applicant, DPS, other statutory parties, and interested participants determine the nature and scope of the studies that the applicant must conduct to support its Article 10 application. The scope of the studies, documented in written stipulations, determine what information the project applicant

must include in its formal application. In general, an applicant's studies should evaluate the potential impacts of the project on the environment, public health, and other public interest factors. When the application is submitted, stipulations, if any, are used in conjunction with 16 NYCRR Part 1001, which states the required content of an Article 10 application, to determine whether the application complies with PSL §164.

Stakeholders provided comments on the Applicant's PSS on November 8, 2017, and the Applicant responded to the stakeholder comments on December 6, 2017. In addition, a pre-application intervenor fund of \$31,500 was established by the Applicant when the PSS was filed. The Towns were the only party requesting such funding and, as such, the full amount of the fund was awarded to the Towns to pay for eligible legal and engineering services.

After conducting several meetings to negotiate stipulations concerning the studies necessary to complete its application, the Applicant filed draft stipulations on December 17, 2018. After receiving comments on the draft stipulations, the Applicant filed final, executed stipulations on May 13, 2019.

On June 5, 2019, the Applicant filed the first iteration of its formal application for the Project. On June 10, 2019, the Secretary issued Notices regarding party status requests² and indicating the availability of the intervenor funds for the application phase of the proceeding. As with the pre-application phase intervenor funding, the Towns

² On August 8, 2019, the Examiners denied a request for party status made by an individual, Roger Caiazza, on the basis that he did not qualify for statutory party status under PSL §166(1).

were the only parties to request funding and, as such, the full amount of the fund was awarded to them by the Examiners in July 2019.

An application deficiency letter was issued on August 5, 2019. The Applicant filed application supplements on October 18 and November 20, 2019. By letter dated November 21, 2019, the Chair of the Siting Board sent formal notice to the Applicant that its application was deemed compliant with the requirements of PSL §164.

On December 17, 2019, the Examiners conducted a procedural conference to discuss applicable procedural rules and requirements, identify issues for adjudication, and establish a schedule for the filing of testimony and exhibits and an evidentiary hearing. The procedural schedule, adopted by ruling issued December 20, 2019, called for the filing of direct testimony and exhibits on March 27, 2020, rebuttal testimony and exhibits on April 17, 2020, and an evidentiary hearing to commence on April 27, 2020.

On January 6, 2020, the Applicant filed a Notice of Impending Settlement Negotiations, indicating that negotiations would be aimed at proposed certificate conditions and a proposed Site Engineering and Environmental Plan (SEEP) guide. In accordance with the Siting Board's rules, the required review of the notice was completed and reported on January 7, 2020. Thereafter, on January 15, 2020, the Examiners conducted a public statement hearing in Canajoharie, New York.

On March 26, 2020, the Applicant filed the Settlement Proposal, which included: (1) proposed Certificate Conditions; (2) proposed guidance for the development of a SEEP guide; (3) a proposed Settlement Layout; (4) the discovery agreed upon by the parties to be proposed for admission as record evidence; and (5) the revised Net Conservation Benefit Plan (NCBP) and Invasive

Species Control Plan (ISCP). Thereafter, each of the parties to this proceeding executed signature pages to the Settlement Proposal, with DEC and staff of the Department of Agriculture and Markets (DAM) making certain exceptions.

On March 27, 2020, the Towns and DPS Staff filed executed signature pages and direct testimony and exhibits wholly in support of the Settlement Proposal. Department of Health (DOH) Staff filed an executed signature page but did not file any direct testimony. DEC Staff submitted direct testimony and exhibits, as well as an executed signature page to the Settlement Proposal. DEC Staff excepted Proposed Certificate Conditions 82, 83, and 85, as well as the proposed SEEP guide. DAM Staff likewise submitted direct testimony and an executed signature page to the Settlement Proposal. DAM Staff excepted the NCBP.

On April 16, 2020, a Notice Canceling the Evidentiary Hearing was issued by the Secretary due to circumstances related to the COVID-19 pandemic. The Applicant filed rebuttal testimony and exhibits on April 17, 2020.

On May 6, 2020, the Examiners issued a ruling requiring additional submissions from any party that alleged an issue of material fact existed that warranted further litigation. Specifically, the Examiners opined that the matters that remained in dispute among the Applicant, DEC, and DAM centered on differing policy positions or legal arguments, rather than disputed facts.

Thereafter, on May 14, 2020, the Applicant filed a supplement to the Settlement Proposal, executed by the Applicant and DEC Staff. The Supplemental Settlement Proposal reflects an agreement between the Applicant and DEC Staff regarding Certificate Conditions and SEEP guide language, as well as a revised NCBP.

On June 4, 2020, the Hearing Examiners issued a ruling in which they found that an evidentiary hearing was not required. In the same ruling, the Hearing Examiners established a briefing schedule, indicated that they would entertain motions to admit pre-filed direct and rebuttal testimonies, including all exhibits presented in conjunction with said testimonies, and directed the parties to submit a stipulated Index to the Record.

On June 12, 2020, the parties, including DPS Staff, submitted motions to admit their pre-filed testimony and exhibits. On June 19, 2020, the Applicant submitted the Stipulated Exhibit List.

Initial briefs were timely submitted by the Applicant, DPS Staff, DEC Staff, DAM Staff, and the Towns. The Applicant thereafter submitted a reply brief. DPS Staff submitted a July 31, 2020, letter in reply to a request the Applicant made in its initial brief.

C. Public Involvement and Comment

The Article 10 process requires applicants to create a PIP plan in consultation with State agencies and other stakeholders. The PIP plan is designed to encourage participation from affected local, State and federal agencies to learn concerns about proposed projects.

Throughout the pre-application, scoping, and application phases, the Applicant implemented its public involvement program as described in the PIP plan. The Applicant held meetings with the Towns and County officials to provide Project updates and addressed questions from the officials and the public. The Applicant provided information about the Project to community members through mailings, open house meetings, newspaper postings, the local Project office, the toll-free number, and the Project website. The Applicant

provided notification regarding the Project's milestones to residents in the Project area, people listed on the stakeholder list, and landowners. The Applicant solicited feedback from visual stakeholders as well.

In addition, as mentioned above, the Hearing Examiners conducted a public statement hearing in January 2020 in Canajoharie, and public comments have been continually accepted and posted on DPS's DMM website since November 2017. Eight individuals have submitted comments on the Project via DMM, and five local community members spoke at the public statement hearing. Most of the comments received are in support of the Project.

Most comments in support of the Project note the economic benefits to the local area farmers, local towns and schools, the ability to resume agricultural activities after decommissioning of the Facility, and that the Project provides for the development of green, renewable energy. The concerns raised about the Project focus on environmental, health, financial and community impacts. The concerns include dust abatement, water supply impacts, the overall health effects to the local and surrounding communities, the use of pesticide, negative impact on property values, the temporary nature of the economic benefits, the Applicant selling the Facility, and concerns that the energy the Facility generates will be provided to downstate -- rather than local -- communities.

D. Proposed Settlement

The Settlement Proposal includes largely agreed-upon Certificate Conditions and a SEEP guide, as well as a Settlement Layout and Memo developed by the Applicant in response to issues

raised by the parties.³ In addition, the Settlement Proposal includes discovery and other documentary evidence that the parties agreed to enter into the evidentiary record and used in testimony in support of the Settlement Proposal. These documents reflect updates to the Facility, which the Applicant agreed to in response to issues raised by the parties.⁴

After direct and rebuttal testimony was filed, the Applicant and DEC discussed potential resolution of issues that remained in dispute between them. These issues primarily related to threatened and endangered (T&E) species and certain proposed Certificate Condition language. DEC and the Applicant ultimately resolved the dispute related to proposed Certificate Condition 82 with respect to northern long-eared bat protections, and proposed Certificate Condition 83(a) with respect to restored areas within occupied habitat for T&E grassland birds.

In addition, DEC agreed that the revised NCBP adequately addresses its concerns.⁵ Specifically, the Applicant and DEC agreed that a compromise mitigation calculation of 167 acres adequately satisfied DEC's stated need for mitigation of adverse impacts to occupied habitat of T&E grassland bird species. The Applicant and DEC also agreed to limit the scope of review needed with respect to the NCBP by DEC during the compliance phase of the Project. Specifically, DEC and the Applicant agreed that DEC's review of the final NCBP will be

³ Hearing Exhibits 13-31.

⁴ Hearing Exhibit 13, Appendix D [Discovery], Appendix E [Revised NCBP and Revised ISCP].

⁵ Hearing Exhibit 13, Appendix E [Revised NCBP].

limited to any updated or changed information and to Sections 4.0 and 5.0 of the plan.⁶

Ultimately, the Proposed Settlement, together with the Settlement Supplement, resolve all but the following issues: disputes between DEC and the Applicant regarding proposed Certificate Condition 83(c)(i) and (d)(i) and proposed Certificate Condition 85; and disputes between the Applicant and DAM regarding agricultural impact calculations and concerns regarding potential additional impacts to agricultural lands as a result of the DEC-imposed T&E grassland bird species mitigation.

III. REQUIRED STATUTORY FINDINGS

A. Balancing under PSL §168

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. These include 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.⁷

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

⁶ A revised NCBP with agreed upon language for the remaining sections of the NCBP is attached as Appendix A to the Supplemental Settlement. Hearing Exhibit 30.

⁷ PSL §168(2)(a)-(d).

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 concerning, among other matters, the environment, public health and safety.⁸

In making these determinations, the Siting Board considers several factors, including available technology, 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.⁹ 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.¹⁰

B. 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 the Siting Board.¹¹ When factual matters are involved, the applicant must sustain that burden by a preponderance of the

⁸ PSL §168(3)(a)-(e).

⁹ PSL §168(4)(a)-(g).

¹⁰ PSL §168(5).

¹¹ 16 NYCRR §1000.12(b).

evidence, unless a higher standard has been established by statute or regulation.¹²

IV. FINDINGS UNDER PSL §168

A. Disputed Issues

1. Probable Environmental Impacts

a. Threatened and Endangered Bird Species

As noted above, 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. 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 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 protecting wildlife.¹³ The State environmental law protecting wildlife applicable to the Project is the State Endangered Species Act (Environmental Conservation Law §11-0535 [ECL Article 11]) and its implementing regulations at 6 NYCRR Part 182.

Pursuant to ECL Article 11 and 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

¹² 16 NYCRR §1000.12(c).

¹³ PSL §168(3)(c), (e).

acts" are defined to include any "adverse modification of habitat" of any species listed as endangered or threatened.¹⁴ 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.¹⁵

In Article 10 proceedings, incidental take permits are issued in the form of Certificate Conditions and Compliance Filings. An applicant must first avoid all impacts to listed species to the extent practicable. If an applicant can demonstrate, however, that full avoidance of the take of the listed species at issue is impracticable, the applicant must take measures to minimize to the maximum extent practicable any take of the species. The applicant must also prepare a NCBP containing mitigation measures that will result in a net conservation benefit to the species.¹⁶

As a result of settlement negotiations culminating in the parties' supplemental settlement proposal, the only issues remaining in dispute between the Applicant and DEC Staff regarding the Project's compliance with ECL Article 11 concern two proposed Certificate Conditions relating to threatened or endangered (T&E) grassland bird species, and one Condition relating to T&E bird species in general. In addition, a dispute remains between the Applicant and DAM Staff concerning the

¹⁴ 6 NYCRR §182.2(1).

¹⁵ 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).

¹⁶ 6 NYCRR §182.11.

impact of the Applicant's grassland bird NCBP on agricultural lands.

i. T&E Grassland Bird Species

DEC's grassland bird panel members testified, and the Applicant's grassland bird rebuttal panel agreed, that three species of listed grassland birds and their associated occupied habitat are present in the Project Area: the endangered Short-Eared Owl (*Asio flammeus*) (SEOW), and the threatened Upland Sandpiper (*Circus hudsonius*) (UPSA) and Northern Harrier (*Bartramia longicauda*) (NOHA).¹⁷ This is based upon information supplied with the application, including the 2017 Audubon Christmas Bird Count, Winter Raptor Survey conducted in 2017-2018, 2018 Breeding Bird Survey, and the North American Breeding Bird Survey filed with the Secretary of the Siting Board on June 5, 2019, site visits conducted by DEC Staff, and further information developed during the application process.¹⁸

As noted by the parties, there are two potential impacts to T&E grassland bird species associated with the Project: (1) construction impacts related to potential mortality and injury due to construction activities (direct take of individuals), and (2) operational impacts related to adverse modification to occupied habitat of T&E grassland species (direct take of occupied habitat).¹⁹ With respect to operational impacts, the parties agree that the Applicant has avoided and minimized to the maximum extent practicable any direct take of T&E occupied habitat.²⁰ The parties also agree that the

¹⁷ Transcript of Pre-filed Testimony (Tr.) 252-254, 418-419.

¹⁸ Hearing Exhibit 2, Application Exhibit 22; Tr. 253-255, 258.

¹⁹ Applicant Initial Brief, p. 21; DEC Staff Initial Brief, pp. 11-12.

²⁰ Applicant Initial Brief, pp. 21-22; DEC Staff Initial Brief, pp. 12-13.

Applicant's revised NCBP appended to the March 27, 2020 Settlement Proposal, which is still being developed by the Applicant and DEC Staff, once finalized and implemented will result in a net conservation benefit to the T&E grassland bird species.²¹ Accordingly, the Applicant urges the Siting Board to conclude that it has avoided, minimized, and mitigated operational impacts to T&E grassland species to the maximum extent practicable.²²

With respect to construction-related impacts to T&E grassland bird species, DEC Staff agrees with the Applicant that full avoidance of a direct take, which would require no construction activities in occupied habitat during the breeding and wintering seasons when T&E grassland bird species are likely to be present, is impracticable with respect to the Project.²³ The parties also generally agree that construction-related impacts can be avoided by implementing certain measures during construction. These measures include the prohibition on construction-related activities in occupied UPSA and NOHA breeding habitat from April 23 to August 15, and in occupied SEOW wintering habitat from November 1 to March 31.²⁴ They also include the use of an on-site environmental monitor when construction must occur during the breeding or wintering seasons to survey for the presence of T&E grassland birds prior to the commencement of construction activities.²⁵ However, the parties dispute whether several other grassland bird protection measures

²¹ Tr. 278-279. The final DEC-accepted NCBP will be attached to the SEEP. Hearing Exhibit 30, Supplemental Settlement Proposal, section III.

²² Applicant Initial Brief, pp. 21-22.

²³ DEC Staff Initial Brief, p.14.

²⁴ Hearing Exhibit 13, Proposed Certificate Condition 83(b).

²⁵ Hearing Exhibit 13, Proposed Certificate Condition 83(d)(i).

the Applicant proposes in Certificate Condition 83 fully avoid and minimize impacts to the species.

Proposed Certificate Condition 83(c)(i)

The first dispute concerns whether fields that have been used for row crop production should be subject to the timing and other restrictions applicable to construction activities in UPSA and NOHA occupied habitat during the April 23 to August 15 breeding season. In the Settlement Proposal, the Applicant proposed the following Certificate Condition 83(c):

If construction activities must occur between April 22 and August 16 in identified breeding habitat, such activities shall occur as follows:

- i. If fields within identified occupied breeding habitat areas are planted with row crops (i.e., corn, beans, or vegetables) in the farming season of the year prior to the commencement of construction and such fields were historically used for row crops during at least one of the prior six years, these fields will not be subject to timing restrictions or other restrictions when construction occurs.²⁶

In support of this Condition, the Applicant's grassland bird panel testified that fields that have been used for row crops are not the preferred nesting habitat for most grassland birds.²⁷ Based on information regarding the last six years of cover-type within portions of occupied habitat areas that will host solar panel arrays, "the Applicant would expect that at a minimum, fields that have been used for row crop production (e.g., corn, soybeans) in the last two years (2018 and 2019) would not be subject to timing restrictions or other

²⁶ Hearing Exhibit 13, Appendix A, Proposed Certificate Condition 83(c).

²⁷ Tr. 422-423.

restrictions listed in Condition 83(d) when construction occurs.”²⁸

In its pre-filed direct testimony, DEC Staff’s grassland bird panel also testified that fields planted in row crops are not the preferred nesting habitat for grassland birds. However, DEC’s grassland bird panel noted that row crops are often in place on the landscape on a rotational basis. Fields provide suitable nesting habitat when planted with hay, alfalfa, or left fallow for one or more years following the presence of row crops. Accordingly, the panel testified that the circumstance that a field was planted in row crops for one out of the prior six years is insufficient to show historic use of a parcel as row crop. The panel testified that if six years ago, a field was used to grow corn, and then was left fallow, that field would revert to habitat appropriate for grassland bird species. Instead, DEC’s grassland bird panel asserted that information regarding the last six years of cover-type in occupied habitat must be evaluated to determine if a field has been used sufficiently enough for row crops such that the construction timing window would not be applied.²⁹ Accordingly, DEC Staff proposed to revise Condition 83(c)(i) to provide:

If fields within identified occupied breeding habitat areas are planted with row crops (i.e., corn, beans, or vegetables) in the farming season of the year prior to the commencement of construction and such fields were historically used for row crops during the prior

²⁸ Hearing Exhibit 78, Annotated Version of Exhibit NYSDEC-GB-6, p. 2. The panel noted that the referenced information was provided in the rebuttal testimony and was provided as a supplemental response to item 4 of the Applicant’s response to IR DEC-3. Id.; see Hearing Exhibits 13, Appendix D (DEC IR-03); 76 (GR-R4 Historical Vegetative Cover Data for Agricultural Fields within Occupied Habitat); 77 (GR-R5 Agricultural Fields and Row Cropland within Occupied Habitat).

²⁹ Tr. 288-289; Hearing Exhibit 65, NYSDEC-GB-6 Revised, p. 2.

six years, upon consultation with DEC, these fields may not be subject to timing restrictions or other restrictions listed in Condition 83(d) when construction occurs. (Emphasis added.)³⁰

In its briefs, the Applicant continues to assert that fields that have been used for row crop production in the two years proceeding commencement of construction should not be subject to timing restrictions or the other restrictions listed in Condition 83(d).³¹ The Applicant asserts that two years of crop rotation is sufficient to ensure that the fields are unlikely to be occupied by T&E grassland bird species. Moreover, the Applicant argues that the "two-year" look back is supported by DEC Staff's testimony that row crops are not preferred habitat, and that it takes a year or more following the presence of row crops to become habitat. The Applicant argues that DEC Staff has not provided any biological support or basis for why a two-year period is not acceptable. The Applicant also notes that in its rebuttal testimony, it provided DEC Staff with the "additional information" on the historic use of the agricultural fields within the occupied habitat.³² However, the Applicant asserts that DEC has still not agreed to identifying an alternative to the two-year "look back" it has proposed.³³

The Applicant further argues that DEC Staff's position that it should consult with DEC on the condition of each agricultural field prior to construction is unnecessarily

³⁰ Hearing Exhibit 65, p. 2.

³¹ Applicant Initial Brief, p. 23; Applicant Reply Brief, pp. 4-5.

³² Applicant Initial Brief, p. 24, citing Hearing Exhibit 76, Applicant Exhibit GB-R4, and Hearing Exhibit 77, Applicant Exhibit GB-R5.

³³ Applicant Initial Brief, p. 24.

complex, burdensome, costly, and inconsistent with the State Legislature's mandates in the Climate Leadership and Community Protection Act (CLCPA).³⁴ The Applicant argues that from a timing standpoint, the burden on DEC Staff to schedule field visits to conduct its assessment is not practical and, without any consistent criteria or metrics, places the Applicant "at the mercy of the DEC Staff 'in field' determinations."³⁵ The Applicant asserts that in order to manage the complex construction of a large-scale solar facility, it must have the information and determination in advance so that construction can be staged, planned, and contracted. Accordingly, the Applicant proposes the following revision to Condition 83(c)(i):

If fields within identified occupied breeding habitat areas are planted with row crops (i.e., corn, beans, or vegetables) in the last two farming seasons prior to the commencement of construction and such fields were also historically planted with row crops during at least one of the prior six years, these fields will not be subject to timing restrictions or other restrictions when construction occurs. (New language emphasized.)³⁶

In its initial brief, DEC Staff continues to urge adoption of its proposed Certificate Condition 83(c) to minimize the potential for the direct take of UPSA and NOHA during the breeding season. DEC Staff argues that the Applicant's expectation that fields that have been used for row crop production in the last two years would not be subject to timing restrictions and the requirement for on-site environmental monitoring when construction occurs is conclusory and

³⁴ L. 2019, ch. 106, effective January 1, 2020.

³⁵ Applicant Initial Brief, p. 24; Applicant Reply Brief, p. 5.

³⁶ Applicant Initial Brief, pp. 24-25.

unsupported by record evidence. DEC Staff asserts that additional information is required before it can be determined whether construction windows or a monitor is required for each field. Such information includes information regarding the 2020 growing season or any subsequent growing season should construction occur after 2020, the timing of construction activities, and how many fields any version of Condition 83(c) would apply to.³⁷

DEC Staff also notes testimony supporting the conclusion that UPSA and NOHA are using the agricultural landscape, and breeding or exhibiting other essential behaviors in different fields with rotating crops.³⁸ DEC Staff notes that although row crops are not preferred, that contention alone does not establish that construction in such fields would not result in a take without DEC Staff reviewing the history to determine the likelihood of a take on a field-by-field basis.³⁹ DEC Staff also notes the testimony of the Applicant's grassland bird panel that UPSA preferentially use recently fallow fields during the nesting season.⁴⁰ DEC Staff asserts that it is necessary to know when construction will begin in relation to when a field first sat fallow to determine whether UPSA may be present in those field.⁴¹

In light of the above uncertainties, DEC Staff argues that its proposed language for Certificate Condition 83(c)(i) is necessary to effectively minimize the risk of a direct take of

³⁷ DEC Staff Initial Brief, pp. 15, 17.

³⁸ DEC Staff Initial Brief, p. 16.

³⁹ DEC Staff Initial Brief, p. 16.

⁴⁰ Tr. 423.

⁴¹ DEC Staff Initial Brief, pp. 16-17.

UPSA and NOHA during Project construction.⁴² In the alternative, in light of the Applicant's recognition that use of an environmental monitor would avoid direct impacts to T&E grassland species during construction,⁴³ DEC Staff urges that proposed Certificate Condition 83(c) be stricken all together, and that a monitor be required for all fields in occupied habitat, regardless if planted with row crops or other cover types.

Discussion

We adopt Certificate Condition 83(c) as proposed by the Applicant in its briefing, with one modification. Based on the record, including testimony that row crops are not the preferred habitat for grassland bird species and that it takes one or more years following the presence of row crops for fields to become habitat, we conclude that the likelihood that grassland bird species would be present in fields that were planted with row crops in the two years prior to construction is minimal. Accordingly, the conduct of construction activities in those fields is unlikely to result in the take of T&E grassland bird species.

Moreover, although the construction timing and other restrictions in Condition 83(d) would not apply to the subject fields under the Applicant's proposed Condition, the provisions of Conditions 84 and 85(a) remain applicable in the event that T&E grassland species are encountered during construction. We conclude that these provisions are sufficient to avoid and minimize impacts to T&E grassland bird species from construction activities in the fields at issue without the additional restrictions required by Condition 83(d). Thus, we adopt the

⁴² DEC Staff Initial Brief, p. 17.

⁴³ Tr. 427, 438, 442.

Applicant's proposed Condition 83(c), but with the clarification that only the Condition 83(d) restrictions are inapplicable to fields planted with row crops for the two years prior to construction.

Proposed Certificate Condition 83(d)(i)

The dispute regarding Certificate Condition 83(d) centers on the steps to be taken if the on-site environmental monitor detects T&E grassland bird species during construction. In the Settlement Proposal, the Applicant proposed the following language:

If construction activities must occur between October 31 and April 1 in identified occupied wintering habitat, or between April 22 and August 16 in identified occupied breeding habitat outside of row crop areas described above, such activities shall occur as follows:

- i. The area(s) proposed for active construction will be assessed by an on-site environmental monitor or biologist who shall conduct surveys for grassland T&E bird species. The surveys will occur daily until construction activities have been completed in the occupied habitat area, unless otherwise agreed to by DEC. If no T&E grassland bird species are detected during the survey, the area will be considered clear for twenty-four (24) hours, when another survey will be performed. If grassland T&E bird species are detected the Certificate Holder will follow condition 85(a). (Disputed language emphasized.)⁴⁴

The portion of Certificate Condition 85(a) applicable here, as proposed by the Applicant, provides:

- ii. If in consultation with DEC, and DEC confirms, an area at least five hundred (500) feet in radius

⁴⁴ Hearing Exhibit 13, Appendix A, Proposed Certificate Condition 83(d).

around the active⁴⁵ nest of the T&E species will be posted and avoided and remain in place until a notice to continue construction, ground clearing, grading, non-emergency maintenance or restoration activities are granted by DPS in concurrence with DEC; and

- iii. The active nest or roost will not be approached under any circumstances unless authorized by DPS in concurrence with DEC.

In pre-filed testimony, DEC Staff proposed more restrictive language, by replacing the language emphasized above with:

If any T&E grassland bird species are detected within 200 meters of where construction will occur, NYSDEC will be notified within 24 hours and prior to any of the above activities occurring. NYSDEC will then determine next steps to avoid potential take. Any habitat disturbance within 200 meters of an observation shall be halted and may not resume until the Certificate holder receives authorization from NYSDEC.

In support of the 200-meter buffer, the DEC grassland bird panel testified that the buffer is needed to prevent the take of an individual. The panel stated that if the Applicant is unable to meet construction windows, the more stringent conditions proposed by DEC Staff must be included to avoid a take, and the Applicant cannot follow the standard condition for the entire facility in Condition 85(a).⁴⁶

In pre-filed rebuttal testimony, the Applicant's grassland bird panel stated that the 200-meter is overly restrictive because it could apply to individual birds that are flying over an area outside the Facility Site where no

⁴⁵ DEC Staff objects to the pre-posting consultation and the use of the term "active." These objections are discussed below.

⁴⁶ Hearing Exhibit 65, p. 3.

construction activities will occur. The panel further stated that this is especially burdensome given that the on-site monitor or biologist will be conducting surveys for T&E species.⁴⁷

In its briefs, the Applicant indicates that it has agreed to: (1) use an on-site environmental monitor or biologist to conduct a daily survey for T&E grassland bird species in occupied habitat in areas proposed for active construction; (2) report to DEC any T&E species exhibiting breeding and roosting behavior; (3) avoid the area around the nest, roost, or areas where the species were seen exhibiting breeding or roosting behavior; and (4) maintain an area of at least 500 feet in radius around any active nests or roosts discovered. The Applicant asserts that these conditions are reasonable and protective and ensure that impacts to nesting and roosting birds will be avoided and minimized to the maximum extent practicable.⁴⁸

The Applicant criticizes DEC Staff's proposed condition as unnecessarily expanding the trigger for work stoppages, placing the Project's construction timeline at risk. The Applicant argues that DEC Staff has not provided any factual or evidentiary support for why a 200-meter (approximately 656 feet) buffer is required around "any detection" of a T&E species, regardless of the behavior being displayed.⁴⁹ Instead, the Applicant notes that the 500-foot buffer has been adopted in other Article 10 proceedings for all State-listed species, including T&E grassland bird species.⁵⁰ The Applicant further

⁴⁷ Hearing Exhibit 78, p. 3.

⁴⁸ Applicant Initial Brief, p. 25; Applicant Reply Brief, p. 7.

⁴⁹ Applicant Initial Brief, p. 26; Applicant Reply Brief, pp. 8-9.

⁵⁰ Applicant Reply Brief, p. 8.

argues that the term "detection" is unclear, and could result in work stoppages based on "bird flyovers" where the bird is not otherwise at risk from construction equipment.⁵¹ The Applicant also argues that DEC Staff has been unwilling to commit to a specific timeframe for reviewing and responding to T&E observations, and that delays in responding could contribute to construction delays, added costs, and uncertainties.⁵²

In its initial brief, DEC Staff agrees in concept that the use of an environmental monitor during construction under proposed Certificate Condition 83(d)(i) would minimize impacts to T&E grassland bird species. However, DEC Staff argues the Applicant's proposed condition does not satisfy the requirements of Part 182. DEC Staff asserts that the Applicant's reliance on Condition 85(a) is misplaced. DEC Staff notes that Condition 85(a) is a standard condition that has been included in all Article 10 Certificates, even for projects that comply with applicable construction windows.⁵³ DEC Staff argues, however, that due to the likely presence of T&E grassland bird species in occupied habitat during breeding and wintering seasons and, thus, the higher risks associated with construction in that habitat during those seasons, the more protective 200-meter buffer is justified in this case.⁵⁴ DEC Staff argues that the buffer is further justified by the fact that the T&E grassland

⁵¹ Applicant Initial Brief, p. 26.

⁵² Applicant Initial Brief, p. 26; Applicant Reply Brief, p. 9.

⁵³ DEC Staff Initial Brief, p. 19, citing Case 16-F-0267, Application of Atlantic Wind LLC (Deer River) - Wind Electric Generation Siting, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued June 30, 2020) (Deer River Wind Order), Appendix A, p. 30.

⁵⁴ DEC Staff Initial Brief, p. 20. DEC Staff cites DEC's grassland bird testimony that states, "[i]t is highly probable that these species have been present during the last several breeding and wintering seasons." Tr. 345.

birds involved fly and exhibit essential behaviors (which include more than just breeding or roosting) over large home ranges, and that roosting or nesting may occur nearby.⁵⁵ DEC Staff supports its position by citing the testimony of DEC's grassland bird panel, who testified regarding the large ranges that all three T&E species have in the Project area.⁵⁶ In order to minimize impacts to the maximum extent practicable, as required by Part 182, DEC Staff argues that the 200-meter buffer is necessary, and any detection of the species should trigger the buffer and notification to DEC.

DEC Staff notes that its proposed condition is consistent with the recently-issued Deer River Wind Certificate, which imposed a 1,000-meter buffer.⁵⁷ DEC Staff also asserts that the Applicant's concerns about a "bird flyover" over an area outside the Facility Site where no construction activities are occurring is unfounded. DEC Staff notes that proposed Condition 83(d)(i) applies only to monitoring in active construction areas in occupied habitat and would not be triggered if an individual bird is observed flying beyond 200 meters from actively occurring construction activities.

Discussion

Based upon the weight of record evidence, we conclude that the 500-foot buffer proposed by the Applicant is sufficient to ensure that the risk of a direct take of the T&E grassland bird species involved here is avoided and minimized to the maximum extent practicable, as required by Part 182. We agree

⁵⁵ DEC Staff Initial Brief, p. 21.

⁵⁶ Tr. 343 (SEOW's home range where they exhibit foraging and roosting is approximately 540 acres); Tr. 345 (UPSA's home ranges are 491 to 612 acres), Tr. 344 (NOHA require expansive areas of open grassland and marshes for nesting and foraging).

⁵⁷ Deer River Wind Order, Appendix A, p. 29.

with DEC that due to the likely presence of T&E grassland birds in their occupied habitat during the breeding and wintering seasons, construction during those seasons poses higher risks to the species. However, we agree with the Applicant that concerns about the "higher risk" of construction is addressed not only by the use of a buffer, but primarily by the use of the on-site environmental monitor, who would conduct daily surveys to detect any grassland T&E bird species exhibiting breeding or roosting behavior. Accordingly, based on the use of the monitor together with the standard 500-foot buffer, we conclude that Certificate Condition 83(d)(i) as proposed by the Applicant is sufficient to avoid the direct take of grassland T&E species during Project construction and, thus, is in compliance with Part 182.⁵⁸

ii. T&E Bird Species Generally

The remaining dispute between the Applicant and DEC Staff concerns the Applicant's proposed changes to Certificate Condition 85, which provides the procedures the Applicant would follow in the event a nest or roost of T&E bird species is discovered during Project construction or operation. Proposed Certificate Condition 85(b) governs the discovery of a threatened bald eagle nest or roost, and Condition 85(a) governs the discovery of the nest or roost of other federally or State-listed T&E bird species.

In its Settlement Proposal, the Applicant proposed three changes to Condition 85 as proposed by DEC Staff: (1) that Condition 85 only apply to "active" nests or roosts; (2) that the protective buffer around a discovered nest or roost be posted only after consultation with and confirmation by DEC

⁵⁸ We note that the 1,000-foot buffer in the Deer River Wind Order was the result of a negotiated settlement and, accordingly, the Siting Board did not pass on whether that buffer was necessary to comply with Part 182.

Staff; and (3) that the provisions governing the discovery of a bald eagle nest or roost apply only during construction, and not during the operational phase of the Project.⁵⁹

In pre-filed testimony, DEC's grassland bird panel raised objections to each of the Applicant's proposed changes.⁶⁰ The panel disagreed with the inclusion of the term "active." The panel noted that bald eagles use the same nest site, so "active" or not, it should be reported. The panel further noted that winter raptors often use the same roost site, and those sites can be identified without birds being present, such as through the observation of case pellets, feathers, or droppings in a particular area. The panel stated that the site may not appear to be "active" if no birds are observed, but the information must be reported.⁶¹

With respect to the timing for creating a protective buffer, the DEC panel testified that the posting of the buffer should occur before consultation with DEC to ensure that the nest or roost is not disturbed by any activity the Applicant was undertaking in that area.⁶² With respect to the discovery of a nest or roost during the operational phase of the Project, the panel testified that the nest or roost could be impacted by operational activities and result in a take. Accordingly, DEC

⁵⁹ Hearing Exhibit 13, Appendix A, Proposed Certificate Condition 85; Hearing Exhibit 78, pp. 3-5 (with changes highlighted).

⁶⁰ The DEC grassland bird panel also noted that the term "roost" was left out of Condition 85(a)(i), and that it should be included. Hearing Exhibit 65, p. 4. The Applicant does not object to the change. Applicant Reply Brief, p. 11. Accordingly, Condition 85(a)(i) is modified to include the term "roost."

⁶¹ Hearing Exhibit 65, p. 4.

⁶² Hearing Exhibit 65, p. 4.

needs to be notified and the protections noted in the condition must be adhered to until consultation with DEC has occurred.⁶³

In rebuttal, the Applicant's grassland bird panel justified use of the term "active" on the ground that with respect to bald eagles, no bald eagle nests are currently located within or near the Facility Site. Accordingly, the only nest that could occur before, during, or after construction would be a new, active nest, which the Applicant would report pursuant to Condition 85. With respect to the nests or roosts of other T&E bird species, the panel asserted that the substantial work restrictions imposed by the condition should only be applied if there is a real possibility of a take of a listed T&E species. The panel stated that casual observations of listed species within 500 feet of the Facility, in and of itself, is unlikely to result in the take of the observed individual, and is insufficient justification for ceasing construction or operation activities, which could have significant cost, schedule, and power generation implications. The panel asserted that such restrictions would only be justified "in areas of consistent repeated use by the bird in question, where project activity could result in the abandonment of a specific site that is important to the survival/well-being of the bird, its nest, or young."⁶⁴

With respect to the discovery of a bald eagle nest or roost during the operational phase of the Project, the Applicant's grassland bird panel disputed whether a bald eagle nest or roost could be impacted by Facility operations arguing that there is no evidence in the record to support that an already operational solar energy facility would impact an eagle

⁶³ Hearing Exhibit 65, p. 5.

⁶⁴ Hearing Exhibit 78, p. 4.

nest that was built after the facility began operation.⁶⁵ The panel testified that “[b]ald eagles routinely nest in areas with high levels of human disturbance; therefore, even if a nest were established near or within the Facility Site, we do not see how the Facility could affect bald eagles in any way.”⁶⁶

In its briefs, the Applicant continues to advocate for limiting Condition 85 to reporting and avoiding only “active” nests and roosts. The Applicant argues that no real possibility of a take exists if a nest or roost is inactive or abandoned for reasons unrelated to the proposed Project. The Applicant further argues that the only way to reliably identify a T&E species nest or roost is if one or more birds are observed going to or from the location.⁶⁷

The Applicant criticizes DEC Staff’s proposed condition on the ground that DEC Staff failed to justify why a buffer around an inactive nest or roost is necessary. The Applicant argues that placing a buffer around an inactive nest or roost with no species present is unnecessary to protect the species from a take, and ceasing construction or maintenance activities due to the presence of an unoccupied nest or roost could have significant cost, schedule, and power generation implications. The Applicant expresses the further concern that unnecessary work stoppages during the operational phase of the Project could prevent the Applicant from repairing equipment. The Applicant asserts that this potential implication “creates significant risk around the operation of the Project, may be unfinanceable and would have a devastating impact on the industry

⁶⁵ Tr. 452-453; Hearing Exhibit 78, p. 5.

⁶⁶ Tr. 452-453.

⁶⁷ Applicant Initial Brief, p. 27; Applicant Reply Brief, pp. 9-10.

more broadly.”⁶⁸ The Applicant argues that at a minimum, the Condition should provide that DEC’s required buffer areas do not prohibit the Applicant from repairing the Project to permit the continued generation and delivery of electricity from the Project. The Applicant notes that DEC Staff agreed to similar language in other proceedings.⁶⁹ In addition, if a determination from DEC is required, DEC should be required to make its determination within a reasonable and defined timeframe to ensure that project construction and operation are not unreasonably delayed.⁷⁰

With respect to the timing of the establishment of the protective buffer, the Applicant argues that consultation with DEC prior to establishing a buffer is required to ensure that DEC responses to the Applicant’s reports in a timely manner, and will avoid unnecessarily delaying construction for inactive nests or roosts.⁷¹

With respect to impacts to bald eagles during the operational phase of the Project, the Applicant reiterates its disagreement with DEC Staff concerning whether the operation of a solar farm can impact the nest or roost of a bald eagle constructed during the operational life of a project. The Applicant argues that if a bald eagle newly occupies the Facility Site, it would be doing so despite the existing disturbance, which the Applicant asserts are typically minimal for an operating PV solar facility with very few moving parts,

⁶⁸ Applicant Initial Brief, p. 28.

⁶⁹ Applicant Initial Brief, p. 28, citing Case 17-F-0599, Application of East Point Energy Center LLC – Solar Electric Generation Siting, Proposed Certificate Conditions (dated June 29, 2020), Condition 91.

⁷⁰ Applicant Reply Brief, p. 10.

⁷¹ Applicant Reply Brief, pp. 10-11.

relatively low noise levels, and infrequent personnel and vehicle visits. The Applicant argues that requiring up to a 1,320-foot buffer around a recently built bald eagle nest, could have significant cost and power generation implications, and could prevent the Applicant from making necessary repairs to restore the loss of power generation, all without sufficient justification. The Applicant urges the Siting Board to adopt its proposed Condition arguing that it adequately and reasonably addresses construction and operation impacts to T&E bird species and ensures those impacts have been minimized or avoided to the maximum extent practicable.⁷²

In its initial brief, DEC Staff continues to argue that the Applicant's proposed changes should be rejected to ensure that proposed Condition 85 complies with Article 11 and Part 182 and avoids a direct take of T&E bird species. Citing testimony that an active nest may not "appear" active when birds are not present, DEC Staff contends that determining whether a nest or roost is "active" requires certain expertise and, therefore, DEC Staff must be consulted in order to make the determination.⁷³ With respect to the timing for posting a buffer, DEC Staff asserts that compliance with Part 182 requires that the protective buffer be put into place immediately upon the discovery of a nest or roost to ensure that the nest or roost is not disturbed, thereby preventing an unauthorized take.⁷⁴

With respect to the inclusion of "operational life" in Condition 85(b) for the protection of bald eagles, DEC Staff notes that the language it proposes for Condition 85(b) is not

⁷² Applicant Initial Brief, pp. 28-29; Applicant Reply Brief, pp. 11-12.

⁷³ DEC Staff Initial Brief, p. 22, citing Hearing Exhibit 65.

⁷⁴ DEC Staff Initial Brief, pp. 22-23.

novel and has been included in every Article 10 Certificate that contains bald eagle protections.⁷⁵ While DEC Staff agrees that bald eagle nests have not been documented at the Project area, Staff argues that it does not necessarily follow that a nest will never be found. DEC Staff argues that its proposed language is intended to ensure that if, at any time during the life of the Project, a bald eagle nest or roost is discovered, proper precautions are put in place to prevent any unauthorized and avoidable take.⁷⁶

DEC Staff further argues that the Applicant's assertion that bald eagles routinely nest in areas with high levels of human disturbances and, therefore, a nest established near or within the Project area would not be affected is unsupported by any citation to the record or otherwise. DEC Staff also notes that the Applicant's preliminary Operations and Maintenance (O&M) Plan references periodic maintenance activities in the Project area during operation. DEC Staff asserts that the Applicant has not provided any evidence to show that the disturbances associated with maintenance or other operational activities associated with a solar project are any different from any previous Article 10 projects. Accordingly, DEC Staff argues that the Condition 85(b) it proposes is necessary to ensure that the Project's maintenance and other operational activities do not disturb a bald eagle nest or roost, in contravention of ECL Article 11 and Part 182.

Discussion

With respect to limiting Condition 85 to only "active" nests, we adopt the Applicant's recommendations. As noted above, the Applicant would employ an environmental monitor to

⁷⁵ DEC Staff Initial Brief, p. 24.

⁷⁶ DEC Staff Initial Brief, p. 23.

oversee construction activities. We conclude that a duly qualified and experienced environmental monitor would be able to make the determination whether a newly discovered nest or roost is "active," provided that the monitor employs the generally accepted scientific indicia applicable to making the determination. Those indicia include not only whether one or more birds are observed going to or from the location, as noted by the Applicant, but also whether young birds or eggs, freshly molted feathers or plucked down, or current year's mutes (whitewash) are observed.⁷⁷ Active nests or roosts may also be identified in the absence of birds through the observation of case pellets, feathers, or droppings in a particular area, as noted by DEC Staff.⁷⁸ Provided the environmental monitor applies the generally-accepted scientific standards for identifying active nests or roosts, we conclude that limiting Condition 85 to active nests and roosts will comply with Part 182.

As to the remaining changes to Condition 85 proposed by the Applicant, based on the record, we conclude that the Applicant has not provided a sufficient basis for departing from the standard conditions imposed in Article 10 Certificates applicable to the discovery of the nests or roosts of T&E bird species during the construction and operational phases of an Article 10 project. With respect to the timing of the establishment of a protective buffer, the record supports the conclusion that the buffer needs to be put in place immediately upon the discovery of a nest or roost so as to avoid a take of T&E bird species while DPS and DEC are being consulted. The

⁷⁷ See, e.g., U.S. Fish and Wildlife Service, Eagle Conservation Plan Guidance, Module 1 - Land-based Wind Energy Version 2 (April 2013), p. 36 (definition of "occupied nest"). To the extent necessary, we take official notice of this document (State Administrative Procedure Act §306[4]).

⁷⁸ Hearing Exhibit 65, p. 4.

Applicant has not seriously disputed this or provided any record evidence that would lead to a contrary conclusion.

With respect to the inclusion of "operational life" in Condition 85(b) for the protection of bald eagles, again, we note that the Condition is standard for Article 10 proceedings, and the Applicant has not provided enough justification for departing from the standard condition in this case. It is undisputed that the Project will involve regular maintenance, repair, and other activities during the operational phase of the Project. The protective measures provided for in Condition 85(b) must be applied to the operational phase of the Project to ensure that those activities will not disturb any newly discovered bald eagle nest or roost in contravention of Article 11 and Part 182. Accordingly, we accept the remainder of Condition 85 as proposed by DEC Staff.

In sum, we adopt Conditions 83 and 85 as modified herein. Based on these Conditions, and the parties' agreed-upon Certificate Conditions and SEEP guidelines related to T&E bird species, we conclude that the Project will be constructed and operated in compliance with ECL Article 11 and Part 182.

b. Grassland Mitigation and Agricultural Impacts

As discussed above, the Applicant and DEC Staff agreed that the Applicant has adequately addressed DEC Staff's concerns related to avoidance and minimization measures for operational impacts (built facilities) to T&E grassland bird species habitat, and has proposed acceptable mitigation as presented in the revised NCBP submitted on March 27, 2020. In its initial brief, the Applicant reports that it currently proposes to site mitigation off the Project site and is engaging in discussions with land trust organizations and landowners to identify suitable mitigation lands that meet the agreed upon criteria for those lands. In addition, the mitigation lands are proposed to

be managed according to DEC's Best Management Practices for Grassland Birds (Grassland Bird BMPs).⁷⁹

Although the Applicant and DEC Staff agree regarding operational impacts and mitigation generally, DAM Staff objects to the conversion of the State's agricultural lands to a non-agricultural land use as part of any T&E grassland bird mitigation plan. Specifically, DAM Staff objects to any proposed grassland bird mitigation on-site or off-site on New York State Agricultural Land Classification soil groups 1-4 (priority soils) or that does not allow for the continuation of normal agricultural land uses. In support of its objection, DAM Staff cites to State policies encouraging the conservation, development and improvement of agricultural lands.⁸⁰ DAM Staff contends that "[t]he use of agricultural land for mitigation of impacts to occupied grassland bird habitat and protection of agricultural lands are not [sic] mutually exclusive and cannot co-exist with proper management of agricultural land used for mitigation."⁸¹ In particular, DAM Staff contends that the mowing restrictions contained in DEC's Grassland Bird BMPs - which, among other restrictions, provides that all mowing must be done between August 16 and October 1 - imposes an unreasonable restriction on farming that ultimately will render the agricultural land unusable for meaningful agricultural production and, thereby, permanently convert productive agricultural land to a non-agricultural use.⁸²

In its pre-filed testimony, DAM Staff testified that if grassland mitigation lands included priority soils and

⁷⁹ Applicant Initial Brief, pp. 29-31.

⁸⁰ DAM Staff Initial Brief, p. 10, citing NY Const, Art XIV, §4 and Agriculture and Markets Law §321.

⁸¹ DAM Staff Initial Brief, p. 10.

⁸² DAM Staff Initial Brief, pp. 10-11.

restrictions that limit or prohibit agricultural activities, the Project may exceed DAM's acceptable threshold for the permanent conversion of priority soils (i.e. 10 percent). DAM Staff asserts that such exceedance would require the Applicant to fund agricultural conservation easements on similar or better soils according to the value for the Project area's agricultural impact.⁸³

DAM Staff states that given its policy to prioritize soil groups 1-4, no grassland bird mitigation should be sited on active agricultural lands comprised of these soil groups, including the off-site mitigation selected in this proceeding. Instead, DAM Staff requests that the Applicant be directed to utilize early successional scrub land or abandoned farmland for mitigation. In the alternative, DAM Staff requests that it be consulted for the review of proposed mitigation sites.⁸⁴

In its briefs, the Applicant argues that DAM Staff is attempting to place further limitations on the types of grassland mitigation it can pursue not because the Facility impacts agricultural lands, but because DAM Staff disagrees with DEC Staff's approach to mitigation. The Applicant notes that although it is required to meet the substantive requirements of ECL Article 11 and Part 182, no similar statutory or regulatory requirements for impacts to agricultural lands exist. Accordingly, the Applicant contends that the Siting Board lacks authority to further condition claimed impacts associated with mitigation required by ECL Article 11. Moreover, the Applicant argues that requiring it to fund agricultural conservation easements to satisfy DAM Staff's concerns regarding mitigation required by DEC Staff would be absurd and inequitable, and

⁸³ Tr. 397.

⁸⁴ DAM Staff Initial Brief, pp. 11-12.

"would unfairly place applicants in the position of having to implement costly additional mitigation not because of actual project impacts (i.e. built facilities), but because [DAM] and [DEC] disagree on what constitutes an 'impact' which requires mitigation and how it can be accomplished."⁸⁵

The Applicant further states that finding suitable potential grassland mitigation areas that meet all DEC Staff's criteria already is exceedingly difficult. The Applicant argues that finding a potential mitigation area that meets DEC Staff's criteria while also fully avoiding priority soils may be impossible. The Applicant notes that the need to find landowners interested in participating in grassland bird mitigation further complicates the situation. Given the difficulties already encountered in finding suitable grassland mitigation, the Applicant urges the Siting Board not to further restrict the lands available to applicants by adopting DAM Staff's conditions nor penalize the Applicant by requiring additional agricultural mitigation should mitigation lands include priority soils, or be subject to DEC's best management practices for grassland birds.⁸⁶ The Applicant also objects to DAM Staff's request that DAM be consulted on grassland bird habitat mitigation land, citing seemingly irreconcilable differences between the positions of DEC Staff and DAM Staff regarding suitable and appropriate lands and Grassland Birds BMPs.⁸⁷

Discussion

PSL §168(3)(c) and associated regulations provide the Siting Board with the standard of review to apply in evaluating

⁸⁵ Applicant Initial Brief, pp. 31-32.

⁸⁶ Applicant Initial Brief, pp. 33-34.

⁸⁷ Applicant Reply Brief, pp. 14-15.

the impacts to agricultural resources that may result from the T&E grassland bird mitigation measures incorporated in a final NCBP. Under these provisions, the Applicant must show that impacts to relevant agricultural resources would be "minimized or avoided to the maximum extent practicable," and offer "mitigation measures to minimize the impact to [such] resources."⁸⁸

The Siting Board recognizes the importance of conserving highly productive agricultural lands in the State. Based on the current record, however, we cannot determine whether the impacts to agricultural resources resulting from the grassland bird mitigation measures will be avoided or minimized. The identification and selection of mitigation lands is still on-going and, consequently, the types of lands that will be involved in the final selection and what grassland bird management practices will be required are unknown. Accordingly, the determination will be made during the Compliance phase of this Project. When the final NCBP is submitted in a Compliance Filing for approval, DAM Staff will have the opportunity to comment on whether the final mitigation plan meets the Article 10 standard.⁸⁹

B. Issues not Disputed - Resolved by Settlement

1. Probable Environmental Impacts

a. Impacts to Terrestrial Ecology/Invasive Species

PSL §168(2)(a) expressly requires the Siting Board to make explicit findings regarding the potential environmental

⁸⁸ PSL §168(3)(c); 16 NYCRR §1001.22(q).

⁸⁹ Hearing Exhibit 13, Appendix A, Proposed Certificate Condition 30(a); Hearing Exhibit 30, Supplemental DEC Settlement, SEEP Guide Section B(15). To the extent that DAM Staff objects to DEC's Grassland Birds BMPs, this proceeding is not the appropriate forum to litigate that issue.

impact 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.⁹⁰ The State environmental law applicable to ecology generally is the State invasive species control law.⁹¹

Part 1001 requires an applicant to provide information about the terrestrial (16 NYCRR §1001.22) and aquatic ecology (16 NYCRR §1001.23) in 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. The Applicant 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),⁹² and in its ISCP (updated February 2020).⁹³

The Project area is located in Montgomery County approximately one mile south of the Mohawk River on the New York State Appalachian Plateau.⁹⁴ According to the New York State Office of Real Property Services (ORPS) classification codes, land use within Montgomery County is dominated by agriculture (47.3%), residential land (25.6%), and vacant land (16%).⁹⁵ Approximately 136,440 acres of agricultural land is located

⁹⁰ PSL §168(3)(c) and (e).

⁹¹ ECL §9-1709; 6 NYCRR Parts 575 and 576.

⁹² Hearing Exhibit 2.

⁹³ Hearing Exhibit 13, Appendix E.

⁹⁴ Hearing Exhibit 2, Application Exhibit 4, p. 2.

⁹⁵ Hearing Exhibit 2, Application Exhibit 4, p. 2.

within the County, of which 31% occurs as vacant farmland, 28.5% is used for dairy farming, and 21.8% for field crops.⁹⁶

The Facility Site totals approximately 2,360 acres in area and is largely comprised of open agricultural land.⁹⁷ According to National Land Cover Data (NLCD), cultivated crops and pasture/hay together represent approximately 72% of the Facility Site, while deciduous forest represents approximately 10% and woody wetland approximately 8%. The Facility Site also includes between 1% and 5% of shrub/scrub, emergent wetlands, and open space.⁹⁸

Construction and operation of the Facility will result in impacts to plant communities. These impacts include temporary disturbance due to vegetation clearing for construction, as well as permanent loss of vegetated habitats (mostly agricultural) by conversion access roads, pad-mounted inverters, the collection substation, point of interconnection switchyard, and the O&M building. The area underneath the PV panel arrays will generally not be subject to grading or stripping of topsoil. In some areas, existing vegetation will be cleared or mowed to an appropriate height prior to installation of the arrays. Vegetation communities underneath the PV panel arrays will be maintained as early successional grassland communities and will remain largely undisturbed during construction and operation of the Facility. However, it is anticipated that the partial shading of the areas underneath panels may result in some changes to these communities as soil

⁹⁶ Hearing Exhibit 2, Application Exhibit 4, p. 2.

⁹⁷ Hearing Exhibit 2, Application Exhibit 22, p. 1.

⁹⁸ Hearing Exhibit 2, Application Exhibit 22, p. 1.

temperatures are expected to decrease, and species recruitment will favor more shade-tolerant plants.⁹⁹

Construction of the Facility will result in temporary disturbance of up to 173.3 acres of agricultural land, and permanent disturbance of up to 74.8 acres of agricultural land. In addition, 452.6 acres of agricultural land will be converted to an early successional community in the footprint of the PV panel arrays, the majority of which is used for hay production and pasture.¹⁰⁰ Construction of the Facility will also result in the temporary disturbance of 24.9 acres of successional old field, 6.8 acres of successional shrubland, and 2.4 acres of disturbed/developed communities. The Facility will permanently impact 18.1 acres of successional old field, 3.5 acres of successional shrubland, and less than an acre of disturbed/developed communities. In addition, 52.9 acres of successional old field, 30.6 acres of successional shrubland, and less than an acre of disturbed/developed communities will be converted to an early successional community in the footprint of the PV panel arrays. No temporary disturbance or permanent loss of open water vegetation communities are anticipated.¹⁰¹

i. 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.¹⁰²

⁹⁹ Hearing Exhibit 2, Application Exhibit 22, p. 4.

¹⁰⁰ Hearing Exhibit 2, Application Exhibit 22, p. 5.

¹⁰¹ Hearing Exhibit 2, Application Exhibit 22, p. 5.

¹⁰² ECL §§9-1701, 9-1709(2)(b)(iv).

The Application contains field studies documenting the presence and extent of invasive species in the Project Area, and a proposed ISCP detailing procedures for handling and preventing the spread of invasive species.¹⁰³ The ISCP was revised in February 2020 and submitted as part of the parties' settlement proposal.¹⁰⁴ DEC Staff noted its acceptance of the revised ISCP.¹⁰⁵

Based on the record, proposed Certificate Condition 57, and the revised ISCP, we determine that the Project complies with ECL Article 9 and impacts related to invasive species have been avoided or mitigated to the maximum extent practicable.

ii. Impacts to Forest Ecology¹⁰⁶

With respect to impacts to area ecology other than from invasive species, the Siting Board must determine that any adverse impacts to area ecology resulting from the construction and operation of the facility will be minimized or avoided to the maximum extent practicable.¹⁰⁷ As noted in the Application materials, 10% of the Project area is deciduous forest, and 8% is woody wetland.¹⁰⁸ The Applicant anticipates that 6.3 acres of forest will be permanently replaced with Facility components, 11.0 acres will be cleared and maintained by the Applicant as successional communities for the life of the Facility (e.g., areas within collection line rights-of-way, some small areas at

¹⁰³ Hearing Exhibit 2, Application Appendix 22-C.

¹⁰⁴ Hearing Exhibit 13, Application Appendix 22-C, Revised ISCP dated February 2020.

¹⁰⁵ DEC Staff Initial Brief, p. 34.

¹⁰⁶ Impacts to agricultural lands are addressed in the section on Land Use, infra.

¹⁰⁷ PSL §168(3)(c).

¹⁰⁸ Hearing Exhibit 2, Application Exhibit 22, p. 1.

the edge of PV panel arrays), and 1.0 acre will be cleared but allowed to naturally reforest.¹⁰⁹

Measures undertaken by the Applicant to avoid or mitigate plant community impacts include site planning to avoid the siting of Facility components in successional grasslands, shrubland, and forested areas. As a result, interior forest clearing or wetland disturbance in areas proposed to host PV panel arrays would not occur. In addition, Facility access roads would be sited on existing roads, farm lanes, and logging roads wherever possible, and areas would be confined to the smallest feasible areas. A Stormwater Pollution Prevention Plan (SWPPP) would be implemented to protect adjacent undisturbed vegetation and other ecological resources.¹¹⁰

No parties dispute the effectiveness of the Application avoidance and minimization measures. In addition, the parties have agreed to proposed Certificate Conditions related to the protection of forest ecology, including a Condition providing for use of an environmental monitor to conduct inspections of all areas requiring environmental compliance during construction activities.¹¹¹

Based on the record and the proposed Certificate Conditions, we conclude that the impacts to forest 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.

¹⁰⁹ Hearing Exhibit 2, Application Exhibit 22, p. 6.

¹¹⁰ Hearing Exhibit 2, Application Exhibit 22, pp. 7-8.

¹¹¹ Hearing Exhibit 13, Appendix A, Condition 64; Hearing Exhibit 13, Appendix B, SEEP Guide Section B(2).

b. Wildlife Other Than Threatened and Endangered Bird Species and Habitat Other Than Occupied 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 as noted above, the State Endangered Species Act (ECL §11-0535) and its implementing regulations at 6 NYCRR Part 182.¹¹²

The Applicant's studies and surveys documented the plant and animal species occurring within the Project area.¹¹³ The predominant habitat types include agricultural land, successional old field, successional shrubland, mixed deciduous/coniferous forests, forested wetland, and non-forested wetlands and streams.¹¹⁴ No significant natural communities or State-listed plants, critical habitats, wildlife travel corridors and concentration areas, or important bird areas are known to occur within or immediately near the Facility site.¹¹⁵

With respect to listed animal species, in addition to the listed grassland bird species and bald eagles discussed above, the Applicant noted the likely presence of the threatened northern long-eared bat (*Myotis septentrionalis*) (NLEB) in the

¹¹² PSL §168(3)(c), (e).

¹¹³ Hearing Exhibit 2, Application Appendix 2-B.

¹¹⁴ Hearing Exhibit 2, Application Exhibit 22, pp. 2-5, 14-16.

¹¹⁵ Hearing Exhibit 2, Application Exhibit 22, pp. 2, 13-14.

Project area.¹¹⁶ In addition, NLEB hibernaculum has been documented within 4.25 miles of the Project site.¹¹⁷

The Applicant and DEC Staff agree that because the Project area is within five miles of a NLEB hibernaculum, the Project area contains NLEB occupied habitat subject to regulation pursuant to ECL Article 11 and 6 NYCRR Part 182.¹¹⁸ The Applicant and DEC Staff also agree that Project-related activities occurring within occupied habitat (that is, tree-clearing activities within 1.5 miles of known maternity roosts or five miles of hibernacula) may result in the direct take of NLEB during tree clearing.¹¹⁹ DEC Staff asserts that solar projects have the potential for indirect effects through adverse modification of habitat.¹²⁰

To fully avoid all impacts to NLEB, the Applicant and DEC Staff agreed to proposed Certificate Condition 82. Among other measures, Condition 82 provides that tree-clearing activities shall be conducted only during the hibernation season (November 1 to March 31).¹²¹ DEC Staff asserts that because proposed Condition 82 fully avoids impacts to NLEB, no further minimization or mitigation is required to comply with ECL Article 11. DEC Staff further asserts that proposed Condition 82 also would reduce direct impacts to other bat species. According, DEC Staff urges the Siting Board to adopt the agreed upon condition.¹²²

¹¹⁶ Hearing Exhibit 2, Application Appendix 2-B, p. 7.

¹¹⁷ Hearing Exhibit 2, Application Appendix 2-A.

¹¹⁸ Tr. 288, 469-470.

¹¹⁹ Tr. 289, 469.

¹²⁰ Tr. 289.

¹²¹ Hearing Exhibit 30, p. 2.

¹²² DEC Staff Initial Brief, p. 33.

DPS Staff also agrees that the provisions of proposed Certificate Condition 82 are adopted, it is anticipated that the proposed Project would not cause significant impacts to NLEB.¹²³ Based upon the record and the agreement of the parties, we adopt proposed Certificate Condition 82 and conclude that with respect to NLEB, the Project complies with ECL Article 11 and Part 182. We further conclude that impacts to all bat species have been avoided or minimized to the maximum extent practicable.

With respect to habitat other than grassland bird habitat, impacts to plant communities from construction and operation of the Facility include vegetation clearing and disturbance from construction, permanent loss of vegetated habitats by conversion to built facilities, and maintenance of vegetation underneath the PV panel arrays. Measures proposed by the Applicant to avoid and minimize impacts to habitat include site planning, including the siting of access roads and collection lines on existing roads, farm lanes, and utility rights-of-way wherever possible; confining areas of disturbance to the smallest feasible area; avoidance of any interior forest clearing or wetland disturbance in areas proposed to host PV panel arrays; implementation of a SWPPP and other measures to avoid, minimize, and mitigate impacts associated with erosion and sediment; management of vegetation during Facility operation pursuant to a Facility and Corridors Management Plan; and employment of an Environmental Monitor.¹²⁴ The Applicant asserts that these measures would ensure that Facility construction and

¹²³ DPS Staff Initial Brief, p. 20.

¹²⁴ Hearing Exhibit 2, Application Exhibit 22, pp. 7-8, 47; Application Appendix 21-B (Preliminary SWPPP); Hearing Exhibit 13, Condition 56 (Facility and Corridors Management Plan); Hearing Exhibit 13, SEEP Guide Sections A(12) and B(19) (same); Hearing Exhibit 13, Condition 64 (Environmental Monitor); Hearing Exhibit 13, SEEP Guide Section B(2) (same).

operation does not adversely impact protected plants, significant ecological communities, or vegetation generally.¹²⁵

With respect to impacts to wildlife generally, the Applicant indicates 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.¹²⁶ The highest risk of direct mortality to birds from construction is the potential destruction of a nest during initial vegetation clearing. Measures to avoid significant impacts to grassland-nesting birds include conducting construction activities in occupied habitat areas outside the breeding season to the extent practicable, and implementing various other protective measures during construction. Significant adverse impacts to forest-nesting birds during construction are not expected because the Applicant will conduct construction activities in these habitats outside of the breeding season to the extent practicable.¹²⁷ The Applicant asserts that given these measures, construction impacts are not expected to significantly affect wildlife populations.¹²⁸

The Applicant notes that once construction is complete, the Facility may cause habitat loss, some habitat degradation through fragmentation, and disturbance or displacement due to presence of PV panel arrays.¹²⁹ The Applicant notes that while maintaining areas under PV panel

¹²⁵ Applicant Initial Brief, p. 49.

¹²⁶ Hearing Exhibit 2, Application Exhibit 22, p. 20.

¹²⁷ Hearing Exhibit 2, Application Exhibit 22, p. 21.

¹²⁸ Applicant Initial Brief, p. 50.

¹²⁹ Hearing Exhibit 2, Application Exhibit 22, p. 23.

arrays as early successional habitat for the life of the Project may result in loss of habitat for some species, it will result in improved habitat for others.¹³⁰ The Applicant asserts that impacts from habitat loss or conversion, fragmentation, and disturbance or displacement are not expected to significantly affect wildlife populations.¹³¹

No parties dispute the Applicant'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.

c. Ground and Surface Water 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 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.

i. 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

¹³⁰ Hearing Exhibit 2, Application Exhibit 22, p. 23.

¹³¹ Hearing Exhibit 2, Application Exhibit 22, p. 23.

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.¹³² State approval must be obtained for any proposed 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.¹³³ 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 Wetland Permit Requirements) by complying with the permit issuance standards set forth at 6 NYCRR §663.5.

The Applicant's wetland delineation report for the Project identified two State-regulated wetlands within the Project area: Wetland C-18, a Class 1 wetland, and Wetland SS-1, a Class 2 wetland.¹³⁴ Based on the Proposed Settlement Layout for the Project, one of the Applicant's witnesses testified that the construction and operation of the Facility will result in only minor impacts to the State-regulated wetlands and that those impacts have been minimized to the maximum extent practicable.¹³⁵ With respect to Wetland SS-1, 0.22 acres of temporary impacts to the wetland's adjacent area would result from the installation of a buried collection line.¹³⁶ No other

¹³² Tr. 372.

¹³³ See 6 NYCRR §663.2(b).

¹³⁴ Tr. 380.

¹³⁵ Tr. 464.

¹³⁶ Tr. 464.

impacts to Wetland SS-1 or its adjacent area are expected. Direct impacts to Wetland C-18 are expected to include a total of 0.04 acre of permanent fill, 0.04 acre of permanent forest conversion, and 0.003 acre of temporary disturbance resulting from the construction of two access roads and the installation of buried collection lines leading to the Facility's collection substation. Direct impacts to the adjacent area of Wetland C-18 are expected to include 0.35 acre of permanent fill, 0.87 acre of permanent forest conversion, and 5.12 acres of temporary disturbance resulting from access road construction, buried collection line installation, and work areas associated with installation of PV panel arrays and construction of the O&M building.¹³⁷

DEC Staff's witness agreed that the Applicant has met its statutory and regulatory burdens under ECL Article 24 and Part 633 and avoided and minimized the Project's impacts to State-regulated wetlands and their adjacent areas to the maximum extent practicable.¹³⁸ Moreover, DEC Staff notes the proposed Certificate Conditions and SEEP guide provisions related to wetlands agreed to by the parties and states that the Applicant has agreed, to DEC Staff's satisfaction, to mitigate wetland impacts by filing a Wetland Mitigation Plan, prepared in coordination with DEC and DPS Staff, and a Wetland Mitigation Remedial Plan, if needed.¹³⁹ DEC Staff requests that the Siting Board adopt these agreed-upon Certificate Conditions and SEEP guide in the Article 10 Certificate to ensure the Project's

¹³⁷ Tr. 10.

¹³⁸ Tr. 381.

¹³⁹ DEC Staff Initial Brief, p. 37.

compliance with the applicable State statutory and regulatory standards.¹⁴⁰

With respect to delineated wetlands not subject to ECL Article 24 (non-jurisdictional wetlands), the Applicant's witness testified that the Project, as originally proposed and as further refined through settlement negotiations resulting in the Proposed Settlement Layout, is designed to avoid and minimize significant impacts to delineated wetlands to the maximum extent practicable.¹⁴¹ Measures to avoid and minimize impacts to delineated wetlands include designing PV panel arrays to avoid significant impacts, relocating access roads, substation boundaries, and collection lines, and using the jack and bore method for wetland crossings. No parties dispute the Applicant's assertions.

Based on the record, and the proposed Certificate Conditions and SEEP guide negotiated by the parties, we conclude that the Project 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.

ii. Streams and Surface Waters

ECL Article 15 and DEC's 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.¹⁴² In addition, the Applicant must comply with State

¹⁴⁰ DEC Staff Initial Brief, p. 38.

¹⁴¹ Tr. 460-462.

¹⁴² ECL §15-0501; 6 NYCRR §608.2.

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 things, preparation of a SWPPP.¹⁴³ The Project also requires a water quality certification (WQC) pursuant to Section 401 of the federal Clean Water Act and, accordingly, the Applicant 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 Project must be minimized or avoided to the maximum extent practicable.¹⁴⁴

The Applicant delineated nine streams within the Project's study area, totaling approximately 23,313 linear feet (4.42 miles). Of those, three streams are classified as Class C in DEC's stream classification system.¹⁴⁵ Based upon the Proposed Settlement Layout, temporary impacts to delineated streams are estimated to be 732 linear feet, and permanent stream impacts are estimated to be 109 linear feet.¹⁴⁶

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, the Applicant asserts that direct impacts to surface water resources have been avoided to the extent practicable through Facility design. The Applicant

¹⁴³ 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).

¹⁴⁴ PSL §168(3)(c).

¹⁴⁵ Tr. 382.

¹⁴⁶ Hearing Exhibit 82, p. 5.

further asserts that unavoidable impacts have been minimized by using existing or narrow crossings, and using appropriately sized culverts to maintain natural stream substrate and hydrological connectivity; minimizing the clearing of vegetation adjacent to surface waters, including at crossings; and installing and maintaining erosion control devices throughout the construction process until the site is stabilized or restored, among other measures.¹⁴⁷

DEC Staff and DPS Staff note that the Applicant agreed to certain Proposed Certificate Conditions and SEEP guide provisions related to streams and water quality. DEC Staff urges the Siting Board to adopt these agree-upon Conditions and SEEP guide provisions in any ultimate Article 10 Certificate in order to ensure the Project's compliance with applicable State statutory and regulatory standards and State water quality standards.¹⁴⁸ Similarly, DPS Staff asserts that several Conditions and SEEP guide provisions establish requirements for standard practices designed to avoid or otherwise minimize impacts to surface waters during Project construction.¹⁴⁹

Based upon the record and the agreed-upon Proposed Certificate Conditions and SEEP guide provisions related to streams and surface waters, which we adopt, we conclude that the Project will comply with all State law 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.

¹⁴⁷ Applicant Initial Brief, pp. 57-58.

¹⁴⁸ DEC Staff Initial Brief, p. 39.

¹⁴⁹ DPS Staff Initial Brief, p. 22.

iii. 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. The Applicant conducted studies and surveys to identify and locate groundwater aquifers and known existing private wells and public drinking water intakes in the Project area. The studies revealed that the Facility site overlays parts of three unconsolidated aquifers mapped by DEC. The studies also revealed that the Facility site does not border or contain any part of a primary aquifer or a sole source aquifer. In addition, no known public water intake locations or water withdrawals occur within one mile of proposed Facility components.¹⁵⁰

In the Application, the Applicant asserted that, despite proximity to mapped aquifers, the Facility is not anticipated to result in any significant impacts to groundwater quality or quantity, drinking water supplies, aquifer protection zones, or groundwater aquifers in the Facility area. 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. If shallow or perched groundwater is encountered during construction, common engineering practices, such as dewatering, would be employed. The small areas of impervious surfaces, dispersed through the Facility site, that would be constructed are expected to have a negligible effect on groundwater recharge.¹⁵¹ The Applicant does not plan to install

¹⁵⁰ Hearing Exhibit 2, Application Exhibit 23, pp. 2-3; Application Exhibit 23(A); Figure 23-2.

¹⁵¹ Hearing Exhibit 2, Application Exhibit 23, p. 5.

a private water well or wastewater system for the O&M building, which is intended to be used only for equipment storage.¹⁵²

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.¹⁵³

With respect to drinking water resources, the Applicant proposed water supply protection measures included in proposed Certificate Condition 81 that impose setbacks from wells and water supplies, testing requirements, and mitigation, if needed. DPS Staff notes that the setbacks agreed to in Condition 81 are consistent with DOH requirements for minimum separation distance to protect water wells from contamination.¹⁵⁴ DPS Staff asserts that these and the other requirements of Certificate Condition 81 are reasonable and generally consistent with Siting Board precedent pursuant to Article 10.¹⁵⁵

Based upon the record and proposed Certificate Condition 81, which we adopt, we conclude that the Project 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.

¹⁵² Hearing Exhibit 2, Application Exhibits 38, 39.

¹⁵³ Hearing Exhibit 2, Application Exhibit 23, p. 5; Application Appendix 23-B, 23-C.

¹⁵⁴ DPS Staff Initial Brief, p. 21, citing Appendix 5B, Standards for Water Wells, Table 1.

¹⁵⁵ DPS Staff Initial Brief, pp. 21-22.

iv. Section 401 Water Quality Certification

As noted above, a Section 401 WQC is required for the Project. In its briefs, the Applicant notes that it has filed a Joint Application for Permit with the United States Army Corps of Engineers under Section 404 of the federal Clean Water Act, including a request for a WQC under Section 401 of the Act from the Siting Board.¹⁵⁶ The Applicant asserts that notices and service of the WQC application were made in accordance with 16 NYCRR §1000.8 and the materials were submitted to DPS's DMM system.¹⁵⁷ The Applicant also notes that DEC Staff agrees that the Applicant has avoided and minimized impacts to wetlands and streams to the maximum extent practicable and, with the adoption of the agreed-upon Certificate Condition, DEC Staff agrees that the Project complies with all applicable State statutory and regulatory standards, including State water quality standards.¹⁵⁸ Accordingly, the Applicant requests that the Siting Board issue the WQC along with the Article 10 Certificate.

In its July 31, 2020, letter submitted in reply to the Applicant's initial brief, DPS Staff recommends against granting this request. DPS Staff argues that issuing the WQC at this point in the Article 10 proceeding would be premature. DPS Staff states that its review of the Joint Application, which was filed on May 18, 2020, is ongoing. DPS Staff indicates that the Army Corps requested additional information from the Applicant on June 1, 2020, and DPS Staff requested additional information on July 15, 2020. DPS Staff states that, as of the date of its reply letter, the Applicant had not responded to either agency,

¹⁵⁶ Applicant Initial Brief, p. 63; Hearing Exhibit 32.

¹⁵⁷ Applicant Initial Brief, p. 63; Hearing Exhibit 33.

¹⁵⁸ Applicant Reply Brief, p. 13.

and DPS Staff had requested an extension of the Army Corps' 60-day review period.

DPS Staff cites the Article 10 regulations, which allow for delegation of a Section 401 WQC to the Director or Bureau Chief of the Environmental Certification and Compliance Unit (Designee), rather than going through the process of Siting Board review.¹⁵⁹ DPS Staff asserts that delegation to the Designee will allow DPS Staff sufficient time to review and address supplemental information provided by the Applicant, which Staff contends is information that goes beyond the information required by the Article 10 regulations. Moreover, DPS Staff argues, if the Siting Board issues a WQC at this time, modifications to the Project that result from final site design, which are still being worked out, may require modification of or amendment to the Certificate. In addition, DPS Staff notes that the Applicant has not submitted a draft WQC into the record for the Siting Board's consideration.

We deny the Applicant's request that for a WQC at this time. The Applicant has provided no basis for departing from the usual procedures under Section 1000.8, and we agree with DPS Staff that it would be premature for us to issue the WQC based on the record before us.

d. 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

¹⁵⁹ 16 NYCRR §1000.8(a)(7).

maximum extent practicable, and that the facility is designed to operate in compliance with applicable State air pollution control laws and regulations.

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.¹⁶⁰

After construction, the Facility would generate electricity without combusting fuel or releasing pollutants into the atmosphere.¹⁶¹ 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.¹⁶²

As noted by DPS Staff, the Facility does not require any federal, State, or local air emissions permits. DPS Staff urges the Siting Board to find that the impacts associated with air emissions during construction of the Facility will be avoided, minimized, or mitigated to the maximum extent practicable.¹⁶³ 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

¹⁶⁰ Hearing Exhibit 2, Application Exhibit 17, pp. 3-4.

¹⁶¹ Hearing Exhibit 2, Application Exhibit 17, pp. 3-4.

¹⁶² Applicant Initial Brief, p. 41.

¹⁶³ DPS Staff Initial Brief, pp. 14-15.

constructed and operated in compliance with all applicable State air pollution control laws and regulations.

2. Land Use

The Siting Board must find that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable.¹⁶⁴ Under the regulations, each application must include a qualitative assessment of the compatibility of the facility existing, proposed and allowed land uses, and local and regional land use plans.¹⁶⁵ Read together, these require an applicant to demonstrate that the proposed facility is compatible with existing and proposed land uses and demonstrate that identified impacts on land use will be avoided or minimized to the maximum extent practicable.

In this case, the Applicant's analysis of land use impacts is set forth in Exhibit 4 to the Application and in Supplemental Application Exhibit 4.¹⁶⁶ Those record materials show that the Applicant identified existing and proposed land uses, using publicly available data, within a 5-mile radius of the Facility Site.¹⁶⁷ In addition, the Applicant reviewed land use-related data, including comprehensive plans for Towns in the Study Area, data relating to specially designated areas (e.g., inland waterways, groundwater management zones, agricultural districts, flood hazard areas, etc.), recreational areas and other sensitive land uses (e.g., wild, scenic and recreational river corridors, open space, archaeological, geologic,

¹⁶⁴ PSL §168(3)(c).

¹⁶⁵ 16 NYCRR § 1001.4(i).

¹⁶⁶ Hearing Exhibit 2, Application Exhibit 4; Hearing Exhibit 4, Application Supplement, Appendices 4-B and 4-C, Figure S4-6, and Application Supplemental Exhibit 4.

¹⁶⁷ Hearing Exhibits 2 and 4, Application Exhibit 4.

historical or scenic areas, etc.), and regional planning documents.¹⁶⁸

The PV panels, substation, switchyard, and O&M building fenced footprint would result in the cumulative conversion of approximately 701 acres of the 2,361-acre site from its current use to built facilities. This represents approximately 30% of the Facility Site. Additional land impacts associated with Facility operation will be temporary, infrequent, and minimal. Aside from occasional maintenance and repair activities, Facility operation will not interfere with ongoing land use.¹⁶⁹

With the approved local variances, the Facility is compatible with existing and proposed local zoning regulations and districts and Facility components will be located within districts allowing solar development. The Project is consistent with the comprehensive plans for the host Towns, which encourage development to broaden the tax base and provide employment.

No substantial permanent changes in land use are anticipated due to Facility construction and operation and no changes are predicted outside of the Facility Site. The Facility will not result in a significant change in land use and will promote the long-term economic viability of the region by supplementing the income of participating farmers and landowners and protecting the agricultural and rural community character of the region.¹⁷⁰

a. Agricultural

Approximately two-thirds of the Facility Site is categorized as "agricultural" by ORPS, which is defined as

¹⁶⁸ Hearing Exhibits 2 and 4, Application Exhibit 4.

¹⁶⁹ Hearing Exhibits 2 and 4, Application Exhibit 4(i).

¹⁷⁰ Hearing Exhibit 2, Application Exhibit 4(i) and 4(p).

"property used for the production of crops or livestock."¹⁷¹ The top four dominant agricultural uses within the Facility Site include hay (approximately 62%), row crops (approximately 28%), pasture (approximately 5%) and trees (approximately 5%).¹⁷² Of the approximately 700 acres of total land use conversion to built facilities,¹⁷³ approximately 75% (524 acres) is actively being used as agricultural land while approximately 22% (155 acres) is currently vacant land. Of these lands, only a small percentage are considered "priority soils" by DAM.¹⁷⁴

In response to discussions during settlement, the Applicant updated the layout to combine PV arrays 3C, 3E, and 3F and to remove the northeastern portion of array 3J. This agreement to remove, relocate, or combine PV arrays and linear components was stipulated to as part of the proposed settlement.¹⁷⁵ These changes further avoided or minimized impacts to agricultural land beyond the proposed design presented in the Application.¹⁷⁶

At the time DAM Staff executed the Settlement Proposal, that agency took exception to the NCBP.¹⁷⁷ Subsequently, through settlement discussions, the Applicant and DAM Staff resolved the dispute by agreeing to locating grassland bird mitigation outside the project area, as noted above. In this way, the Project, as modified, will limit the conversion of highly productive priority agricultural soils to approximately

¹⁷¹ Applicant Initial Brief, p. 36.

¹⁷² Hearing Exhibit 2, Application Exhibit 4(a) and Figure 4-2.

¹⁷³ Hearing Exhibit 2, Application Exhibit 4, Table 4-4.

¹⁷⁴ Hearing Exhibit 13, Appendix C, Layout Memo.

¹⁷⁵ Hearing Exhibit 13, Appendix C, Layout Memo.

¹⁷⁶ Tr. 220-221.

¹⁷⁷ DAM Initial Brief, p. 7.

10%. This is an impact level that DAM Staff has deemed acceptable for the siting of development projects.¹⁷⁸

3. Alternatives

All Article 10 applications must, among other things, identify and describe reasonable and alternate sites for the proposed facility and evaluate the advantages and disadvantages of the proposed and alternative sites at a level of detail sufficient to allow a comparative assessment of the alternatives. This assessment must be performed considering environmental setting, engineering feasibility, and the objectives and capabilities of the applicant.¹⁷⁹ A private facility applicant may limit its identification and description of reasonable alternatives to sites owned by, or under option to it or its affiliates.¹⁸⁰

The Applicant states that it has reduced, avoided, and minimized probable environmental impacts from the proposed Facility to the maximum extent practicable through an iterative design process described in Exhibit 9 of the Application and in the Settlement Proposal.¹⁸¹ During the design phase, prior to submitting its application, the Applicant studied existing conditions at the Facility Site. Based on this, when designing the Project layout, the Applicant shifted components away from identified resources of concern to the extent practicable given critical siting constraints, including local ordinances and

¹⁷⁸ Tr. 396; DAM Initial Brief, p. 7; Applicant Initial Brief, p. 39. We note that because the parties have agreed to the 10% threshold, we have not determined on the merits that the 10% threshold is appropriate in Article 10 proceedings. Our acceptance of the 10% threshold in this proceeding should not be read as establishing that threshold for future proceedings.

¹⁷⁹ 16 NYCRR §1001.9(a),(b).

¹⁸⁰ 16 NYCRR §1001.9(a).

¹⁸¹ Applicant Initial Brief, p. 40.

setbacks. The Applicant describes this as an iterative process carried out during the pre-application and application phases and during discussions with Parties as part of the settlement process.¹⁸² The goal was to ensure that the proposed Facility layout avoided and minimized probable environmental impacts to the maximum extent practicable.¹⁸³ The product of these efforts was the Settlement Layout. The parties agree that, as proposed under the Settlement Layout, the Project will reduce, avoid, and minimize probable environmental impacts from the proposed Facility to the maximum extent practicable.¹⁸⁴

In support of the proposed settlement, DPS Staff testified that the Settlement Layout "further avoid[s] wetlands, threatened and endangered species habitat, and agricultural resources beyond the avoidance and minimization in the proposed design presented in the Application."¹⁸⁵ DPS Staff opines that the Settlement Layout supports a finding that the Facility's construction and operation minimizes or avoids impacts to wetlands and threatened and endangered species to the maximum extent practicable.¹⁸⁶

We find that the Applicant has established that the preferred alternative best promotes the public health and welfare. The alternatives analysis presented in Application Exhibit 9 and the agreed-upon Settlement Layout meet the requirements of Article 10 and enable us to find that the

¹⁸² Hearing Exhibit 2, Application Exhibit 9; Hearing Exhibit 13, Appendix C, Layout Memo.

¹⁸³ Applicant Initial Brief, p. 40.

¹⁸⁴ Hearing Exhibit 1, Stipulation 9; Hearing Exhibit 2, Application Exhibit 9.

¹⁸⁵ Tr. 220-221.

¹⁸⁶ DPS Staff Initial Brief, p. 14. The other parties do not challenge the Applicant's approach with respect to alternatives.

proposed Facility layout properly balances siting constraints and minimization of environmental resource impacts with the generation of the maximum amount of renewable energy to meet the Applicant's objectives and goals and achieve the significant public health and economic benefits of solar energy generation in comparison to other alternatives.¹⁸⁷

4. Public Health, Safety and Security

a. Safety, Security and Emergency Response

The regulations impose requirements related to the cybersecurity requirements of a proposed facility.¹⁸⁸ Among other things, Exhibit 18 must contain a description of a cyber security program for the protection of digital computer and communication systems and networks supporting the facility, demonstrating compliance with current information technology standards, and provision for periodic validation of compliance by an independent auditor.

In this case, the Applicant must comply with applicable provisions of the North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards 002-014. NERC is a recognized standards-setting body. NERC's CIP-002 through CIP-014 regulations are generally accepted in the information technology industry.

To ensure the safety and security of the Facility and protect both the local community and on-site personnel, an applicant must include, in Application Exhibit 18, a Safety Response Plan, a Health and a Safety Plan, and an Emergency Action Plan. These documents must identify contingencies

¹⁸⁷ Hearing Exhibit 2, Application Exhibit 9; Hearing Exhibit 13, Appendix C, Layout Memo.

¹⁸⁸ 16 NYCRR §§1001.2, 1001.5, and 1001.40.

constituting a safety and security emergency and describe emergency response measures for each identified contingency.¹⁸⁹

The Applicant has developed and will implement plans for site security, worker safety, and emergencies.¹⁹⁰ The Applicant submitted the Preliminary Site Security Plan and Preliminary Emergency Action Plan to the New York State Division of Homeland Security and Emergency Services (DHSES), in fulfillment of requirements and to local emergency responders.¹⁹¹

Site access will be restricted to ensure public safety.¹⁹² The Applicant has consulted, and will coordinate with, local emergency responders during both construction and operation.¹⁹³ In the proposed certificate conditions, the Applicant made specific commitments related to coordination with and notification of local emergency departments during construction and operations.¹⁹⁴

No issues were raised in this case with respect to this topic. The Applicant submitted Exhibit 18 to DPS Staff for review, which included a statement that they had provided a "Site Security Plan" to DHSES.¹⁹⁵ DHSES has not informed DPS Staff of any inadequacies or necessary changes they require for the "Site Security Plan."

Based on the above, both the Applicant and DPS Staff concluded that the Facility will be constructed and operated

¹⁸⁹ 16 NYCRR §1001.18(d).

¹⁹⁰ Hearing Exhibit 2, Application Appendices 18-A, 18-B, 18-C.

¹⁹¹ Hearing Exhibit 2, Application Exhibit 8.

¹⁹² Hearing Exhibit 2, Application Exhibit 15.

¹⁹³ Hearing Exhibit 2, Application Exhibit 18.

¹⁹⁴ Hearing Exhibit 13, Appendix A, Certificate Conditions 23, 45 and 46.

¹⁹⁵ Hearing Exhibit 2, Application Exhibit 18.

safely and securely. No other party has raised any issues on this topic.

b. Noise and vibration

The Applicant has fully evaluated the potential noise and vibration impacts associated with the construction and operation of the Facility and has proposed noise limits that: minimize annoyance, minimize complaints; are attainable; and are protective of human health and the environment.¹⁹⁶ The Applicant presented studies demonstrating that there are no health impacts associated with the Applicant's design goals and proposed noise limits as contained Condition 60 of the Settlement Proposal.¹⁹⁷ The Application demonstrates that the Project as designed will produce a maximum daytime sound level of 38.2 dBA at participating residence and 34.1 dBA at non-participating residences. The Application also shows that the Project as designed will produce a maximum nighttime sound level of 25.3 dBA at participating residences and 28.2 dBA at non-participating residences.

In general, potential sound impacts from all aspects of the Project are expected to be minimal and no community sound impact is anticipated to result from the operation of the Project. The Project's sound modeling shows the Project is well below sound limits imposed in other Article 10 proceedings, and the DPS Staff Settlement Panel agrees that the potential adverse environmental noise impacts from operation of the Facility have been minimized with the design presented in the Application and the conditions agreed to in the Settlement Proposal.¹⁹⁸

¹⁹⁶ Hearing Exhibit 2, Application Exhibit 19; Application Appendix 19-A.

¹⁹⁷ Hearing Exhibit 13, Appendix A, Certificate Condition 60.

¹⁹⁸ Tr. 223-225.

Proposed Certificate Conditions 60 and 61 contain noise limits for non-participating residences, non-participating portions of lands, and for participating residences. These conditions reasonably limit the daytime and nighttime impacts from noise. The proposed Certificate Conditions also include provisions for construction noise.

Based on the estimated sound impacts from the Project design and the proposed Certificate Conditions, there is no need to require post-construction sound testing at the most impacted participating and non-participating residences.¹⁹⁹ This result would be consistent with noise standards previously adopted for wind generating facilities under Article 10. Moreover, the Applicant has agreed 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.²⁰⁰ The Applicant also has agreed to perform this modeling and calculations by following the provisions included in the section entitled "Sound" in the proposed SEEP guide.²⁰¹ Based on these provisions, DPS Staff recommends that the Siting Board adopt proposed Certificate Conditions 60 and 61 and the section entitled "Sound" in the SEEP guide, and make a finding that the noise impacts from the operation of the Facility will be minimized or avoided to the maximum extent practicable, in accordance with PSL §168(2)(c) and (3)(c).

¹⁹⁹ Tr. 225-226.

²⁰⁰ DPS Staff Initial Brief, pp. 16-17.

²⁰¹ DPS Staff Initial Brief, p. 17.

5. Cultural, Historic and Recreational Resources

a. Visual Impacts

Application Exhibit 24 addresses visual impacts of the proposed Facility. Through discovery, DPS Staff requested information and specifications regarding how mitigation measures were to be implemented. In response to DPS-4, the Applicant provided detailed planting specifications and methods. Specifications are incorporated into Certificate Condition 59. In addition, DPS Staff requested additional simulations to demonstrate the effectiveness of potential mitigation measures. The Applicant provided photo-simulations showing proposed landscape screen planting with both "leaf on" and "leaf off" simulations. This information demonstrates seasonal Project visibility from several viewpoints (while incorporating the Applicant's plantings specifications for the Facility).²⁰²

Based on its review of this information, DPS Staff concluded that the Project as currently proposed under the settlement documents and subject to the proposed Certificate Conditions, will avoid or minimize to the maximum extent practicable, adverse impacts to visual resources.²⁰³ Therefore, DPS Staff recommends a finding by the Siting Board that the Facility will avoid or minimize impacts to visual resources.²⁰⁴

b. Impacts to Cultural and Historic Resources

The Facility will have no physical impacts to aboveground historic resources because no historic structures will be damaged or removed. The Facility's potential effect on a given historic property would be a change in the property's

²⁰² Hearing Exhibit 13, Appendix D, pp. 17-79.

²⁰³ Tr. 208-209, 219-221.

²⁰⁴ No party challenged DPS Staff's conclusions and similar provisions have been adopted in several other cases. Tr. 208.

visual setting, resulting from the introduction of PV panel arrays or other Facility components.²⁰⁵

The Applicant conducted a historic resources survey for the Facility in accordance with the Phase IA Historic Architectural Resources Survey Work Plan.²⁰⁶ The Applicant also prepared a Historic Resources Effects Analysis.²⁰⁷ There are 21 S/NRHP-listed or eligible properties that will have potential views of the Facility. The effect of the Facility on these resources is dependent on a number of factors, including the distance to the Facility, the number of visible PV panels, the extent to which the Facility is screened or partially screened by buildings, trees, or other objects, and the amount of existing visual clutter and/or modern intrusions in the view.

There is only one identified S/NRHP-eligible historic property, which is approximately 150 feet from the perimeter fence of the Facility. The visual impact of the Facility on this property will be minimized by the visual mitigation planting plan.

The next step in the review of impacts to cultural and historical resources is to wait until the involved federal agency initiates a formal consultation process under Section 106 of the National Historic Preservation Act. Once this process begins, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) will finalize its review and provide the involved agency with its recommendations on effects and possible mitigation measures.

In anticipation of this process, the parties have stipulated to proposed Certificate Condition 54, which calls for

²⁰⁵ Hearing Exhibit 2, Application Exhibit 20(b)(1).

²⁰⁶ Hearing Exhibit 2, Application Appendix 20-C.

²⁰⁷ Hearing Exhibit 2, Application Appendix 20-D.

(a) plans to avoid or minimize impacts to archaeological and historic resources to the extent practicable, (b) preparation of a final Unanticipated Discovery Plan, (c) consultation with OPRHP and DPS staff if complete avoidance of archaeological sites is impossible, and (d) preparation of a final Cultural Resources Mitigation and Offset Plan.²⁰⁸ The Applicant and DEC Staff recommend that the Siting Board find and determine that the Applicant has avoided, minimized, and mitigated impacts to cultural and historic resources to the maximum extent practicable, consistent with PSL § 168(3)(c). No party objects to this recommendation.

Based on the above, we find that the Project has avoided, minimized, and mitigated impacts to cultural and historic resources to the maximum extent practicable

6. Impacts on Infrastructure

PSL §168(2)(d) requires the Siting Board to make findings regarding the nature of probable environmental impacts of the construction and operation of a facility including impacts on transportation, communication, utilities, and other infrastructure. PSL §168(3)(c) requires a determination that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable. There are no disputes among the parties with respect to these issues.

a. Transportation

In the Application, the Applicant provided, among other things, a conceptual site plan of all facility site access roads and driveways; an analysis of traffic and transportation impacts related to the construction and operation of the facility; a description of airspace usage, including military

²⁰⁸ Hearing Exhibit 13, Appendix A, Certificate Condition 54.

operations, in the vicinity of the facility; and a discussion of potential impacts to air traffic control and air navigation, which required consultation with the Department of Defense.²⁰⁹ The Applicant reported that the probable impacts to transportation are expected to be minimal and primarily limited to temporary construction disturbances.²¹⁰

The parties have agreed upon several Certificate Conditions to mitigate these potential transportation impacts.²¹¹ Among those are Proposed Certificate Condition 50, which requires the Applicant to consult the host Towns when developing final construction routes and, if any route to be used to haul equipment or materials requires a permit, to file copies of the necessary permits with the Secretary.²¹² Proposed Certificate Condition 50 also requires the Applicant to provide the Secretary with a final "Route Evaluation Study," "Traffic Control Plans," and any Road Use agreements entered into with Montgomery County and any affected towns.

In addition, Proposed Certificate Condition 61 addresses noise resulting from transportation and Project construction. Pursuant to that Condition, the Applicant must comply with all local laws regulating construction noise, maintain functioning mufflers on all transportation and construction machinery, and respond to noise and vibration complaints according to the protocols established in the

²⁰⁹ 16 NYCRR §1001.25

²¹⁰ Hearing Exhibit 2, Application Exhibit 25, Application Appendices 25-A and 25-B.

²¹¹ Hearing Exhibit 13, Appendix A, Certificate Conditions 29, 30, 50, 61.

²¹² Hearing Exhibit 13, Appendix A.

Complaint Resolution Plan required by Certificate Condition
44.²¹³

Based on the Application materials and the proposed Certificate Conditions, which we hereby adopt, we find that the Project's adverse environmental transportation effects should be minimal, and we determine that any such adverse effects will be minimized or avoided to the maximum extent practicable. In addition, pursuant to PSL §172, we authorize the Towns or other appropriate municipality, and delegate to the New York State Department of Transportation authority to issue and approve road or highway work permits or approvals required for the construction or operation of this Project.

b. Communications

The regulations at 16 NYCRR §1001.26 require Applications to provide analyses and a discussion of proposed facilities related to potential impacts to communication systems. According to the information provided by the Applicant, the Facility is not expected to have any material impact on any communication systems, such as AM/FM radio, television, telephone, microwave transmission, military or civilian radar, air traffic control, armed forces, global positioning system (GPS), LORAN (a long-range navigation system), amateur radio, or the NYS Mesonet system.²¹⁴ No party has disputed or otherwise challenged the information provided in the application. Nevertheless, proposed Certificate Conditions 24 and 44 require the Applicant to submit a complaint resolution plan for both the construction and operation phases of the

²¹³ Hearing Exhibit 13, Appendix A.

²¹⁴ Hearing Exhibit 2, Application Exhibit 26, Application Appendices 26-A through 26-C.

Project to address any allegations of impacts to communications systems that may arise.²¹⁵

The information provided in the application, along with the Proposed Certificate conditions, which we hereby adopt, is sufficient for us to find that the Project will not have a material impact on communications systems.

c. Utilities

16 NYCRR §1001.12 requires, among other things, that applications include discussions of conformance with Public Service Commission requirements and plans to avoid interference with existing utility systems. In this case, one fiber optic cable, owned and operated by Spectrum, was identified as being potentially affected by the Project, as it runs through the center of the Project site and along Clinton Road, where buried collection lines will be placed.²¹⁶ The Applicant proposes to construct the Facility such that interference with the fiber optic cable will be avoided.

In addition, several proposed certificate conditions were agreed upon by the parties to ensure that the Project does not interfere with existing utility systems. Proposed Certificate Condition 62 requires compliance with the requirements of the regulations of the New York State Public Service Commission (PSC) regarding the protection of underground facilities²¹⁷ and, prior to the commencement of operations, to become a member of Dig Safely New York.²¹⁸ Proposed Certificate Condition 63 requires compliance with all of the PSC's regulations regarding identification and numbering of

²¹⁵ Hearing Exhibits 2, 13, Application Exhibit 26.

²¹⁶ Hearing Exhibit 2; Application Exhibit 12.

²¹⁷ 16 NYCRR Part 753.

²¹⁸ Hearing Exhibit 13, Appendix A.

aboveground utility poles.²¹⁹ Finally, the SEEP guide includes comprehensive guidelines and requirements for the 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.²²⁰

The information in the application, along with the proposed SEEP specifications and the proposed Certificate Conditions, provide adequate support in the record for us to find that the Project will not have any significant adverse impacts on related utilities.

7. Decommissioning and Restoration

To ensure the avoidance or minimization of environmental impacts to the maximum extent practicable, the Article 10 regulations require an applicant to plan for a facility's decommissioning and site restoration and to provide a financial guarantee that the area in which a facility is located will be returned to its pre-construction state. The goal is to restore the Facility site to conditions as close to pre-construction characteristics as possible, including restoration of native vegetation, habitat, and land use.

The Application provided a detailed decommissioning plan and assessment of estimated costs of decommissioning, as well as a methodology for periodically revising the decommissioning estimate to ensure costs are reflective of inflation and market changes over the course of the Project's life.²²¹ The decommissioning plan describes steps for removal of

²¹⁹ See 16 NYCRR Part 217.

²²⁰ Hearing Exhibit 13; Appendix B, SEEP Guide Section A, 1(a), (l), (m).

²²¹ Hearing Exhibit 2, Application Exhibit 29, Appendix 29-A.

Facility components and restoration of the Facility Site, including measures for site cleanup, backfilling, grading, reseeding and revegetation, and monitoring.²²² The parties generally disputed only two issues with respect to the decommissioning plan in the Application: financial security mechanisms and whether net salvage value should be factored into the cost of removal in the Applicant's decommissioning estimate.

Through settlement negotiations, the parties agreed upon Proposed Certificate Condition 43. This Condition requires the Applicant to file, as a compliance filing, a final Decommissioning Plan.²²³ The final Decommissioning Plan shall include a decommissioning and site restoration estimate based on final design of the Project and a description of procedures and timeframes for providing written notice to the Towns, DEC, and landowners of planned decommissioning and site restoration activities prior to commencement of those activities. In addition, where appropriate, the Applicant will restore agricultural lands according to the New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands (Revision 10/18/2019).²²⁴

Proposed Certificate Condition 43 also requires the Applicant to provide financial assurance exclusively in the form of letters of credit, to be held by each town hosting Facility components. The proposed Condition further requires that the letters of credit shall be based on the final overall decommissioning and site restoration estimate and does not permit offsets for salvage value in the calculation of the cost

²²² Hearing Exhibit 2, Application Appendix 29-A.

²²³ Hearing Exhibit 13, Appendix A.

²²⁴ Hearing Exhibit 13, Appendix A, Condition 58.

estimate. Updates reflecting inflation must be submitted to the Secretary after one year of operation and every fifth year thereafter. The amounts of the letters of credit obtained by the Applicant will be based upon the estimated costs associated with the removal and restoration of the facilities located in each Town. As part of the requirements of Condition 43, the Secretary will receive from the Certificate Holder proof that the letters of credit have been obtained in the final decommissioning and site restoration estimate amount and copies of agreements between the Certificate Holder and the Towns, establishing a right for each Town to draw on the financial security dedicated to its portion of the Facility.

The agreed-upon requirements of Proposed Certificate Condition 43 are generally consistent with the decommissioning and site restoration certificate conditions included orders in prior proceedings for wind generating facilities seeking CECPNs pursuant to PSL Article 10. Based upon the Application materials, as well as Certificate Condition 43, which we hereby adopt, we find that the probable environmental impacts resulting from decommissioning and site restoration have been satisfied.

V. COMPLIANCE WITH STATE AND LOCAL LAWS

PSL §168(3)(e) addresses the applicability of State and local law requirements to the construction and operation of a proposed major electric generating facility under Article 10. It requires the Siting Board to find that the facility is designed to operate in compliance with all applicable State and local laws and regulations concerning the environment, public health and safety, all of which are binding on the applicant.²²⁵ With certain limited exceptions, State and local procedural

²²⁵ PSL §168(3)(e).

requirements for solar facilities are preempted, including any local approval, consent, permit, certificate, or other condition for construction and operation of a facility.²²⁶

The Siting Board may elect not to apply, in whole or in part, a substantive local environmental or public health and safety requirement if we find that, as applied to the proposed facility, it is "unreasonably burdensome" in view of the technology or the needs of, or costs to, ratepayers whether located inside or outside of the municipality in which the facility is located.²²⁷ An applicant may seek a waiver of a local substantive requirement and 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."²²⁸ Thus, we may elect not to apply, in whole or in part, any otherwise applicable local requirement if we find that it is unreasonably burdensome.²²⁹

A. State Law

The discussion of issues elsewhere in this Order supports our finding that, subject to appropriate Certificate Conditions and SEEP guide, the construction and operation of Facility would comply with applicable State laws and regulations.

²²⁶ PSL §172(1); 16 NYCRR §1001.31(a).

²²⁷ PSL §172(1); 16 NYCRR §1001.31(a).

²²⁸ 16 NYCRR §1001.31(e).

²²⁹ PSL §168(3)(e).

B. Local Laws

The Application included the Applicant's requests that the Siting Board waive provisions of the Town of Canajoharie solar law that require a minimum boundary line setback for Facility components, as well as provisions of the Town of Minden solar law related to acreage limitations, boundary line setbacks, and visual screening requirements.²³⁰ The Towns initially expressed concerns that certain aspects of the Application failed to comply with the Towns' respective solar laws. However, the Applicant acceded to the Towns' requests that the Applicant apply to the Towns' zoning boards of appeals for area variances. In granting the variance applications, the Towns found that the requested variances are appropriate, and the benefits associated with the variances outweigh the minimal impacts associated with the grant of such requests.²³¹

The parties now agree that the Siting Board should make a finding that the Project is designed to operate in compliance with applicable local laws and regulations, except for those local laws that parties have agreed should be waived by the Siting Board.²³² However, we do not simply accept a host municipality's grant of a variance as a substitute for our own independent determination. Rather, we must be independently satisfied that the Applicant made an adequate showing of hardship. In this case, we find that the Applicant adequately demonstrated that the provisions of the Towns' solar laws for which the Applicant requested waivers are unreasonably burdensome and restrictive based on the layout of this Project.

²³⁰ Hearing Exhibit 2, Application Exhibit 31; See Application Exhibit 24; Tr. 231.

²³¹ Hearing Exhibit 12.

²³² Tr. 231, 414.

Consequently, we waive the acreage limitations, boundary setbacks, and visual screening requirements in the Town of Minden's solar law, and the boundary line setback requirements in the Town of Canajoharie's solar law. Accordingly, subject to the Certificate Conditions, the construction and operation of the Facility will comply with applicable local laws.

VI. BENEFICIAL ADDITION TO NY ELECTRIC GENERATION CAPACITY AND PUBLIC INTEREST

Public Service Law §168(3) requires the Siting Board to make a finding as to whether the Facility will be a beneficial addition to or substitution for the electric generation capacity of the State and will be in the public interest.²³³ Among the factors the Board must consider when making this finding are the consistency of the construction and operation of the Facility with the State's energy policies; the State's long-range energy planning objectives; and additional social, economic, and any other factors deemed relevant.²³⁴

A. Electric Generation Capacity

The Application included the New York Independent System Operator's System Reliability Impact Study, which found that the Facility would cause no significant adverse impacts on New York's electrical system.²³⁵ The Applicant's production cost modeling indicated, and DPS Staff agreed, that the Facility would have only a de minimus impact on the dispatch of must-run zero emissions electric generation in the State.²³⁶ In addition, the Applicant's forecast showed a decline in wholesale energy prices for New York State with the Project in service, which was

²³³ PSL §168(3)(a), (b).

²³⁴ PSL §168(4).

²³⁵ Hearing Exhibit 2, Application Exhibit 8.

²³⁶ Tr. 211.

consistent with the forecast presented by DPS Staff.²³⁷ Finally, the additional of this Facility will improve fuel diversity in the State and increase the State's renewable energy generation capacity, thereby reducing the State's reliance on non-renewable resources, such as natural gas, coal, and oil.

1. Regional Benefits - Air quality and GHG Emissions

The latest State Energy Plan (SEP), issued in 2015, and the Clean Energy Standard (CES) adopted by the Public Service Commission in Case 15-E-0302, emphasize the importance of renewable electric generation. The Applicant demonstrated that the Facility addresses both State and regional air pollution and greenhouse gas emission reduction goals, including the SEP goal of reducing greenhouse gas emissions in the State 40% by 2030 and the Regional Greenhouse Gas Initiative's (RGGI) goal of reducing greenhouse gas emissions from the energy generating sector by an additional 30% below 2020 levels by 2030 in RGGI participating states.²³⁸ Notably, both the Applicant's and DPS Staff's simulations showed a decrease in carbon dioxide (CO₂) and nitrogen oxides (NO_x) emissions because of the Project.²³⁹ Moreover, the Facility will contribute to the goals of the CLCPA.

2. Socioeconomic Effects

The Siting Board's regulations require the Applicant to, among other things, provide estimates of the number of temporary (e.g., construction) and permanent (e.g., operational) jobs (collectively direct jobs) related to the facility, along with secondary employment (indirect) jobs

²³⁷ Hearing Exhibit 2, Application Exhibit 8; Tr. 211.

²³⁸ Hearing Exhibit 2, Application Exhibits 2, 8, 10, 17; Tr. 211-212.

²³⁹ Hearing Exhibit 2, Application Exhibit 8; Tr. 210-215.

generated by the Facility²⁴⁰. The Applicant's direct construction and operation job impact estimates are reasonable for the scale of the Project as compared to other New York State solar generation projects.²⁴¹ Because the job impact numbers are estimates, which may change according to Project timelines, budgets and other factors, proposed Certificate Condition 37 requires the Applicant to file with the Secretary, within 15 months after the Project becomes operational, 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.

Based upon the foregoing, we find that the Facility will be consistent with the energy policies and long-range planning objectives and strategies contained in the most recent SEP, as well as the additional relevant social, economic, and other factors. Accordingly, subject to the Certificate Conditions attached to this Order, which we hereby adopt, we find that the construction and operation of the Facility will be a beneficial addition to or substitution for the electric generation capacity in the State and will be in the public interest.

3. Environmental Justice

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

²⁴⁰ 16 NYCRR §1001.27.

²⁴¹ Hearing Exhibits 2, 13 [Attachment D], Application Exhibits 10, 27; Tr. 217-218.

NYCRR Part 487.²⁴² 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."²⁴³

Based upon data obtained from DEC's Geospatial Information System (GIS) Tools for Environmental Justice, the Applicant determined that no potential environmental justice areas exist in the impact study area, which is defined as

the geographic area of at least a one-half mile radius around the location of a proposed major electric generating facility in which the population is likely to be affected by at least one potentially significant adverse environmental impact resulting from the construction and/or operation of the facility that is different in type, scope, or magnitude compared to the population located in the broader geographic area surrounding the facility.²⁴⁴

The Applicant determined that the nearest potential environmental justice area is located approximately 10 miles northeast of the Facility area boundary in the City of Johnstown, Fulton County.

Because of the distance between the proposed Facility and the potential environmental justice area in Johnstown, the Applicant 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.²⁴⁵

²⁴² PSL §§164(1)(f) and 168(2)(d); 16 NYCRR §1001.28.

²⁴³ 6 NYCRR §487.3(1); see also 6 NYCRR §487.4.

²⁴⁴ Hearing Exhibit 2, Application Exhibit 28, p. 1.

²⁴⁵ Hearing Exhibit 2, Application Exhibit 28, p. 1.

DPS Staff indicates that, based on its review of Exhibit 28 of the Application, the construction and operation of the Facility is not expected to have any environmental justice impacts and that the Siting Board should find that the Applicant met its burden pursuant to PSL §168.²⁴⁶ Based upon our review of the record, we agree and adopt DPS Staff's recommendation.

VII. CONCLUSION

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

The Board on Electric Generation Siting and the Environment orders:

1. This order constitutes the decision of this Siting Board in this proceeding.
2. Subject to the 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 Mohawk Solar LLC for the construction and operation of a solar generating facility with a capacity of 90.5 megawatts, consisting of up to 529 acres of photovoltaic (PV) solar generating panels located on private land, either leased or purchased from the landowners, and associated Facility components to be located in the Towns of Minden and Canajoharie, Montgomery County, New York, and interconnecting to National Grid's existing St. Johnsville-Marshville 115-kV transmission line, provided that Mohawk Solar LLC files a written acceptance

²⁴⁶ DPS Staff Initial Brief, p. 32.

of the Certificate pursuant to 16 NYCRR §1000.15(a) within 30 days after the date of issuance of this order or within 30 days after the issuance of the Siting Board's final decision upon a petition for a rehearing, if any.

3. Upon acceptance of the Certificate granted in this order or at any time thereafter, Mohawk Solar LLC shall serve copies of its 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 any compliance filing within 21 days after its service date.

4. Prior to the commencement of construction, Mohawk Solar LLC 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.

5. If Mohawk Solar LLC decides not to commence construction of the Project or any portion of the Project, it shall so notify the Secretary in writing within 30 days after making such decision and shall serve a copy of such notice upon all parties and all entities entitled to service of the application or notice of the application.

6. 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.

7. This proceeding is continued.

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

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

APPENDIX A

CERTIFICATE CONDITIONS

APPENDIX B

GUIDANCE FOR THE DEVELOPMENT OF
SITE ENGINEERING AND ENVIRONMENTAL PLAN

Mohawk Solar

Certificate Conditions

Case No. 17-F-0182

I. Project Authorization

- 1 The Certificate Holder is authorized to construct and operate the Facility (or the Project), as described in the Application by Mohawk Solar, LLC (Mohawk Solar) 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 Holder's supplemental filings, 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 or other permits.
- 2 Pursuant to Title 16 of the New York Codes, Rules and Regulations (NYCRR) §1000.15, the Certificate Holder 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 Project. Failure of the Certificate Holder to comply with this condition shall invalidate the Certificate.
- 3 The Certificate Holder is responsible for obtaining all necessary permits and any other approvals (including those pursuant to PSL §§68, 69, and 70, if applicable), land easements, and rights-of-way that may be required for this 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 PSL §§68, 69 & 70, 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 Holder believes 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 Holder may petition the Siting Board or the Commission, as the case may be, upon reasonable notice to that agency, 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 Facility construction is authorized for photovoltaic (PV) solar energy generating project in the Towns of Canajoharie and Minden, in Montgomery County, together with the following: PV panels producing direct current (DC) mounted on metal pier structures, inverters to convert DC electricity to alternating current (AC) electricity, transformers, 34.5 kilovolt (kV) underground collection system, collection substation, point of interconnect switchyard, transmission or gen-tie line, temporary or permanent access roads, fencing and gates, operations and maintenance building, underground communication/fiber cables, and temporary staging areas. The total nameplate capacity of the Facility shall not exceed 90.5 megawatts (MWs).

6. If the Certificate Holder decides not to commence construction of any portion of the Project (not including the removal of panels, inverters, or associated infrastructure as a result of final facility design), it shall so notify the Secretary to the Siting Board (Secretary) promptly after making such decision and shall serve a copy of such notice upon all parties and all entities entitled to service of the application or notice of the application. Such removals shall not require an amendment to the Certificate.
7. Pursuant to Section 401 of the Clean Water Act, the Certificate Holder shall file a request/application for a Water Quality Certification with the Secretary, prior to the commencement of construction of the Facility in areas regulated under federal law. This request shall be filed and served and noticed pursuant to 16 NYCRR §1000.8(a)(8) and shall be filed concurrently with the permit application filed with the United States Army Corps of Engineers (USACE or Corps) pursuant to Section 404 of the Clean Water Act. Construction activities regulated under federal law may not commence until a Water Quality Certification has been issued:
 - a) Upon receipt, copies of any federal permits and/or approvals required to conduct jurisdictional activities under Sections 401 or 404 of the Clean Water Act associated with certain aspects of construction and operation of the Facility shall be filed with the Secretary. If relevant Project plans require modifications due to conditions of federal permits, the final design drawings and all applicable compliance filings shall be revised accordingly and submitted pursuant to 16 NYCRR 1002.
 - b) Should any federal permits and/or approvals required to conduct jurisdictional activities under Sections 401 or 404 of the Clean Water Act be denied, the Certificate Holder shall file with the Secretary documentation demonstrating the reasons for the denial and how it plans to proceed with its Project plans in light of the denial.
8. The Certificate Holder has not asserted that it has the power of eminent domain to acquire real property or demonstrated that the feasibility of the Project relies in any way upon the Certificate Holder 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 the Certificate Holder, 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 Holder 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, authorizing such proceedings.

9. This Certificate will automatically expire in seven years from the date of issuance of this Certificate (the “Expiration Date”) unless the Certificate Holder has completed construction and commenced commercial operation of the Facility prior to said Expiration Date.
10. The Secretary to the Siting Board, or 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 24 hours prior to the expiration of the affected deadline.
11. Decisions on compliance filings will generally be made at the next available session of the Board or the Commission, as the case may be, provided the compliance filing is received sufficiently in advance of such sessions that there is adequate time in the circumstances to receive comments and process the matter. If DPS Staff determine that a compliance filing requires additional information, details or deliberation, such that the filing will not be decided at the next available session of the Board or Commission, DPS Staff will notify the Certificate Holder within 30 days of submission of the filing and inform the Certificate Holder of all required information.

II. General Conditions

12. Certificate Holder and its contractors shall not commence construction until a “Notice to Proceed with Construction” has been issued by the Secretary or by the Deputy Director of the Environmental Certification and Compliance Section of the DPS Office of Electric, Gas & Water. The “Notice to Proceed with Construction” will be issued promptly after all applicable pre-construction compliance and informational filings have been filed by the Certificate Holder and approved, accepted or revised by the Commission or Secretary. The Notice to Proceed will not be unreasonably withheld or delayed by the Commission or Secretary.
13. Commencement of construction is defined as the beginning of tree cutting, site clearing, ground disturbance, site preparation and grading activity, and construction of the Facility. Commencement of construction does not include testing or surveying (such as geotechnical drilling) and similar pre-construction activities to determine the adequacy of the site for construction and the preparation of filings pursuant to these conditions and other activities, such as limited staging and limited tree cutting, that are required to perform such pre-construction activities.
14. Construction may commence in phases or stages provided the Certificate Holder files all applicable compliance and informational filings prior to the commencement of construction for each phase or stage of the Facility. Phases of construction have been identified as (a) Site Preparation, which includes tree clearing; (b) Commencement of Civil Construction; and (c) Commencement of Operations.
15. Commencement of commercial operation or commercial operation date (COD) is defined as the date on which the Facility as a whole first commences generating or transmitting electricity for sale, excluding electricity generated or transmitted during the period of on-site test operations during commissioning of the Project.

16. The Certificate Holder shall implement the impacts avoidance, minimization and mitigation measures, as described in the Order Granting Certificate.
17. The Certificate Holder shall construct and operate the Facility in accordance with the substantive provisions of the applicable local laws identified in Exhibit 31 of the Application, except for those local laws the Siting Board waives as unreasonably burdensome, as stated in the Order Granting Certificate.
18. The Certificate Holder shall construct and operate the Facility in a manner that conforms to all substantive State requirements identified in Exhibit 32 of the Application.
19. The Certificate Holder 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.
20. The Certificate Holder 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 Agreement between the Certificate Holder, NYISO and National Grid), the system 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). Certificate Holder may be required to demonstrate compliance with applicable NPCC criteria and shall be responsible for the costs to verify that the relay protection system is in compliance with applicable NPCC, NYISO, NYSRC, NERC and National Grid criteria.
21. 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 Holder shall regard 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, DPS Staff may issue a stop work order for that location or activity. Any stop work orders shall be, to the maximum extent possible, limited to affected portions of the Project.

- b) A stop work order shall expire 24 hours after issuance, or earlier if the issue promoting the stop work order is resolved, 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 shall use best efforts to provide Certificate Holder notice of any application to the Siting Board or Commission to have a stop work order confirmed. If a stop work order is confirmed, Certificate Holder may seek reconsideration from the confirming Commissioner, 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 and consequential damages 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 authorized representative(s). 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 Holder nor the Contractor 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 Holder supervisory personnel, or in the presence of such personnel who, after consultation with DPS Staff, refuse to take objectively appropriate action, direct the field crews to stop the specific potentially harmful activity immediately. If responsible Certificate Holder personnel are not on site or available by telephone, DPS Staff will immediately thereafter inform the Certificate Holder's construction supervisor(s) (during Construction), National Control Center (during operation) and environmental monitor(s) 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 Holder supervisory personnel, or in the presence of such personnel who, after consultation with DPS Staff, refuse to take objectively appropriate action, direct the Certificate Holder or the relevant Contractors to implement the corrective measures identified in the approved Certificate. However, all directives must follow the protocol established for communication between parties as identified in a flowchart of proper communications which will be included in the relevant Facility

plans (QA/QC, Site Security Plan, Facility Communication and Complaint Resolution Plan, as appropriate), and made available at the construction site for Mohawk Solar. The field crews shall immediately comply with DPS Staff's directive as provided through the communication protocol. DPS Staff will immediately thereafter inform Certificate Holder's Construction supervisor(s) and or Environmental Monitor(s) of the action taken.

22. The Certificate Holder will adhere to National Grid and NYISO requirements for any additional studies, as well as design parameters involving relays and other necessary components per the interconnection agreement.

III. Notifications

23. At least 14 days prior to the Certificate Holder's commencement of construction date, the Certificate Holder shall notify the public as follows:
 - a) Provide notice by mail to host landowners, and to adjacent landowners within 2,500 feet of parcels with Project components, and persons who reside on such property (if different than the landowner);
 - b) Provide notice to local Town and County officials and emergency personnel;
 - c) Publish notice in the Towns' official newspapers of record for dissemination including at least one free publication, if available (e.g., Pennysaver);
 - d) Provide notice for display in public places, which will include, but not be limited to, the Town Halls of the host communities, at least one library in each host community, at least one post office in each host community, the Facility website, and the Facility on-site construction and local offices; and
 - e) File notice with the Secretary for posting on the DPS Document Matter Management website.
24. The Certificate Holder shall write the notice(s) in language reasonably understandable to the average person and shall ensure that the notice(s) contain(s):
 - a) A map of the Project at a scale appropriate for the Facility Site;
 - b) A brief description of the Project;
 - c) The construction schedule;
 - d) The name, mailing address, local or toll-free telephone number, and email address of the main contact associated with the Project for all inquiries, including complaints;
 - e) Instructions on how to register a complaint (e.g. in writing, by telephone, in-person and on-line) and where to find a copy of the Facility Complaint Resolution Plan; and

- f) Contact information for the Siting Board and Commission.
- 25. Upon distribution of Notice, and prior to commencement of construction, the Certificate Holder shall notify the Town Supervisors and Town Clerks of all areas where information regarding the Project, Project activities, and Project contact information have been posted.
- 26. At least seven (7) business days prior to commencement of construction, the Certificate Holder shall file with the Secretary an affirmation that it has provided the notifications required by this Section III regarding Notifications and include a copy of the notice(s) and distribution list.
- 27. The Certificate Holder shall file a written notice with the Secretary within 14 days in advance of the declared date of commencement of commercial operation of the Facility. Prior to project declared Commercial Operation Date, the Certificate Holder shall notify the entities identified in Condition 23 and provide a telephone number, email and mailing address for the Mohawk Solar Operations and Maintenance (O&M) Facility.
- 28. Within 14 days of the completion of all final post-construction restoration, the Certificate Holder shall notify the Secretary that all such restoration has been completed in compliance with this Certificate and the Order(s) approving all applicable compliance filings.
- 29. At least 14 days before the commencement of construction, the Certificate Holder shall convene a pre-construction meeting and invite DPS Staff, Staff of the New York State Department of Agriculture and Markets (DAM), New York State Department of Transportation (DOT), Town Supervisors and Highway Departments, County Highway Department, and DEC to attend. The Balance of Plant (BOP) construction contractor and the environmental compliance monitor shall be required to attend the preconstruction meeting. The invitation for the meeting will be provided at least one week in advance.
 - a) An agenda, the location, and an attendee list shall be agreed upon between DPS Staff and the Certificate Holder 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 distributed to the attendee list at least one week prior to the meeting;
 - c) The Certificate Holder shall supply draft minutes from this meeting to the attendee list for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes;
 - d) If, for any reason, the BOP Contractor cannot finish the construction of the Project, and one or more new BOP contractors are needed, there shall be another preconstruction meeting with the same format as outlined above.

IV. SEEP, Information Reports and Compliance Filings Requirements

A. Site Engineering and Environmental Plan (SEEP)

30. Prior to the commencement of construction of the Facility, the Certificate Holder shall submit a Site Engineering and Environmental Plan (SEEP) in accordance with the attached “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of Mohawk Solar” (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 information will be reported to and shall be filed with Secretary to the Siting Board in accordance with 16 NYCRR §1002.4. The following information shall be filed prior to the commencement of activity pertaining to the phase of construction in which the information is relevant.

General

31. A table of all participating landowners associated with Mohawk Solar shall be provided to DPS Staff and redacted to protect confidential information prior to the Commencement of Construction.
32. Interconnection:
- a) Provide a copy of the Interconnection Agreement (IA) between the NYISO, National Grid, and the Certificate Holder upon receipt. Any updates or revisions to the Interconnection Agreement shall be submitted throughout the life of the Project.
- b) Except in the event of an emergency, if any equipment or control system with materially different characteristics than in the IA is installed throughout the life of the Project, the Certificate Holder shall, at least 90 days before any such change is made, provide information regarding the need for, and the nature of, the change to National Grid and file such information with the Secretary. If any such change(s) is made in the event of an emergency, the Certificate Holder shall notify the Secretary as soon as practicable, within one week of the date of installation.
33. All Facilities Studies issued by National Grid and the NYISO related to the Facility, and any updated facilities agreements, will be filed throughout the life of the Facility.

34. Any System Reliability Impact Study (SRIS) required as part of a future Facility modification or upgrade, 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 modified Facility will be filed.
35. The Certificate Holder shall file with the Secretary within 60 days after the commercial operation date a certification that the collector lines were constructed to the latest editions of ANSI standards. 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.
36. Prior to Certificate Holder providing final design plans and profile drawings of the interconnection facilities, the Certificate Holder shall work with National Grid to ensure such documents are in accordance with the Interconnection Agreement and Facility Study Report and National Grid's Electric System Bulletins, as well as the New York State High Voltage Proximity Act.
37. The Certificate Holder shall file with the Secretary, within 15 months after the Project becomes operational, 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.

Local or State Permits and Approvals

38. Upon receipt, 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 and not otherwise included in other filings (e.g., Stormwater Pollution Prevention Plan (SWPPP), MS4 approvals (if applicable), 5-acre waiver (if necessary), DEC's acknowledgment of Notice of Intent for coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity, county or local permits for sewage and water, and local certificates of completion and temporary certificates of completion issued by a qualified independent engineering firm engaged by the Towns) shall be filed with the Secretary. If relevant Project plans require modifications due to conditions of local or state permits, the final design drawings and all applicable compliance filings shall be revised accordingly.

Plans, Profiles, and Details Drawings

39. As-Built Plans in both hard and electronic copies shall be filed within one year of the commencement of commercial operation of the Facility and shall include the following:
 - a) GIS shapefiles showing all components of the Project (PV panel array locations, electrical collection system, substation, buildings, access roads, point of interconnection, etc.);
 - b) Collection circuit layout map; and

- c) Details for all Project component crossings of, and co-located installations with existing high-pressure pipelines showing: cover; separations; any protection measures installed; locations of such crossings; and co-located installations.
40. The following shall be filed prior to installation of any PV panels, if not already provided to the Siting Board:
- a) Equipment specifications indicating that the PV panels have received an Underwriters Laboratories (UL) certification.

C. Compliance Filings

The following plans, drawings, and other documents shall be filed for approval by the Siting Board or Public Service Commission in accordance with the rules for submittal, public comment, and decisions set forth in 16 NYCRR §1002.2 and §1002.3, unless otherwise noted. The Certificate Holder 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 the phase identified as directly related to the filing, unless otherwise noted.

General

- 41. Prior to the commencement of construction, the Certificate Holder shall submit a “Communications Plan” identifying the Certificate Holder’s construction organizational structure, contact list, and protocol for communication between parties. The Certificate Holder shall provide to DPS Staff and the Towns the names and contact information of individuals responsible for Project oversight. The Certificate Holder may utilize one or more qualified individuals to satisfy the Project oversight responsibilities associated with the environmental monitor and the agricultural-specific environmental monitor.
- 42. The Certificate Holder shall file “Operation and Maintenance Plan(s)” for the Facility with the Secretary prior to commencement of operations. The plan will address vegetation and stormwater management as well as maintenance of built facilities and equipment, including conformance with manufacturer’s required maintenance schedules.
- 43. 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 and will be established by the Certificate Holder to be held by each Town hosting Facility components. The total amount of the financial security created for the Towns 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:
 - 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 Project layout. The costs will be allocated between the Towns of Canajoharie and Minden based on the estimated cost associated with the removal and restoration of the facilities located in each Town. 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 Project operation and every fifth year thereafter;

- b) Documentation indicating approval by the Towns of an acceptable form of letter of credit;
 - c) Proof that the letters of credit have been obtained in the final decommissioning and site restoration estimate amount, as calculated pursuant to the Decommissioning Plan;
 - d) Copies of agreements between the Certificate Holder and the Towns, establishing a right for each Town to draw on the financial security dedicated to its portion of the Facility;
 - e) Procedures and timeframes for providing written notice to the Towns, DEC and 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 Holder will follow the restoration of agricultural lands according to the Solar Energy Projects – Construction mitigation for Agricultural lands (Revision 10/18/2019); 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.
44. The Certificate Holder shall submit a “Complaint Resolution Plan” for both construction and operation phases of the Project. A copy of the Complaint Resolution Plan shall be submitted to DPS Staff, the Towns and filed at the Facility document repositories. The Plan shall address complaint reporting and resolution process for construction and operational phases. The Certificate Holder may submit separate Complaint Resolution Plans for construction and operation. Complaint procedures for construction must be submitted prior to the commencement of construction and complaint procedures for operation must be submitted prior to the commencement of commercial operation.

Health and Safety

45. A final “Emergency Action Plan” that shall be implemented during Facility construction, and operation. Copies of the Emergency Action Plan 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 Holder 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.
46. A “Site Security Plan” for Facility construction and operations will be submitted. Copies of the final Site Security Plan shall be provided to DPS Staff, the NYS Division of Homeland Security and Emergency Services, the Town Supervisors and local emergency responders that serve the Facility. The Certificate Holder may submit separate Site Security Plans for

construction and operation. Security procedures for construction must be submitted prior to the commencement of construction and security procedures for operation must be submitted prior the commencement of commercial operation.

47. A “Health and Safety Plan” that shall be implemented during Facility operation and construction will be submitted. The Certificate Holder may submit separate health and safety procedures for construction and operation. Health and safety procedures for construction must be submitted prior to the commencement of construction and health and safety procedures for operation must be submitted prior the commencement of commercial operation.
48. A final site-specific construction “Quality Assurance and Quality Control Plan” (QA/QC Plan) will be submitted prior to the commencement of construction.
49. Prior to the installation of exterior lighting on facility components a “Facility Exterior Lighting Plan” shall be submitted, which shall address:
 - a) security lighting needs at PV panel arrays, substation and switchyard sites, the Facility Operations and Maintenance building site, and any exterior equipment storage yards;
 - b) plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement at the collection substation site, the Facility Operations and Maintenance building site, and any exterior equipment storage yards;
 - c) lighting should be designed to provide safe working conditions at appropriate locations;
 - d) exterior lighting design shall be specified to avoid off-site lighting effects, by:
 - i. using 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;
 - ii. requiring full cutoff fixtures, with no drop-down optical elements (that can spread illumination and create glare) for permanent exterior lighting; and
 - e) manufacturer’s cut sheets of all proposed lighting fixtures shall be provided.

Transportation

50. The Certificate Holder will develop final construction routes in consultation with the Towns and will use the final construction routes in preparing the final construction drawings. The Certificate Holder shall file the following:
 - a) Pursuant to 16 NYCRR §1002.4, prior to using a route to haul equipment or materials requiring a permit, the Certificate Holder shall file copies of all necessary transportation permits from the affected State, County, and Town agencies for such equipment and materials on such route. Such permits shall include but not be limited

to: Highway Work Permits to work within the highway Right-of-Way (ROW), permits to exceed posted weight limits, Highway Utility Permits to work within the highway ROW, Traffic Signal Permits to work within the highway ROW, Special Haul Permits for oversized or overweight vehicles, and Divisible Load overweight Permits;

- b) Final or updated “Route Evaluation Study,” including maps of final transportation routes for Project component deliveries;
- c) “Traffic Control Plans” for any City, Town, or Village that may experience delays to local traffic during construction activities. The “Traffic Control Plans” shall include copies of any Road Use Agreements with Montgomery County and any affected towns where the local roads will be utilized for delivery or construction vehicle transportation; and
- d) Upon receipt, pursuant to 16 NYCRR §1002.4 copies of all necessary agreements with utility companies for raising overhead wires where necessary to accommodate the oversized or overweight delivery vehicles, if applicable.

Plans, Profiles and Detail Drawings

- 51. The Certificate Holder shall provide all of the information required pursuant to Section A of the SEEP Guide as applicable to the Project. Maps, site plans, profile figures, and environmental controls and construction details incorporating all components of the final layout of the Project shall be provided in the SEEP for Mohawk Solar.
 - a) Shapefile data shall be provided to DPS Staff, DEC and the Towns upon submittal of the SEEP document for the final locations of PV panel arrays, collection lines, transmission lines, substation, designated clearing, construction and laydown areas, access ways, limits of disturbance and other Project facilities.

Environmental

- 52. The Certificate Holder shall prepare a “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.
- 53. An Inadvertent Return Plan showing all locations where horizontal directional drilling (HDD) or jack and bore is proposed. 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.
- 54. Cultural Resources Protection Measures, 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 where potentially significant archaeological resources have been identified. The Certificate Holder shall indicate, on a final SEEP or equivalent documents, measures for avoidance of archaeological sites identified within the Facility site. The mapped locations of all identified archaeological sites within 100 feet (31 meters) 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) “Final Unanticipated Discovery Plan,” which establishes procedures in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan includes a provision for immediate work stoppage upon the discovery of possible archaeological resources or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a Registered Professional Archaeologist (RPA). If the archaeologist determines that an archaeological resource has been discovered, additional information will be provided to the New York States Office of Parks, Recreation, and Historic Preservation/State Historic Preservation Office (NYSOPRHP/SHPO) following the archaeologist’s site visit. The additional information will either: (a) explain why the archaeologist believes the resource to be non-significant with respect to the State/National Register of Historic Places (S/NRHP); or (b) explain why the archaeologist believes the resource to be significant with respect to the S/NRHP and propose a scope-of-work for evaluating the significance of the resource and evaluating Facility-related impacts to it. In the latter case, the NYSOPRHP will be advised that unless an objection is received within five business days, the archaeologist will consider the proposed scope-of-work to have been accepted by the NYSOPRHP and proceed with its implementation.

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

- d) “Final Cultural Resources Mitigation and Offset Plan,” either as adopted by 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.

55. A final “Net Conservation Benefit Plan” (NCBP), for the take of State-listed grassland bird occupied habitat, shall be prepared in consultation with and accepted by DEC as indicated in the SEEP Guide. Such acceptance may not be unreasonably withheld, and consultations must take place in a timely manner. The NCBP shall be filed prior to commencement of ground

disturbance activities in occupied habitat. Mitigation actions identified in the NCBP shall be initiated prior to the start of ground disturbance or construction related activities in occupied habitat unless otherwise agreed to by DEC.

56. A long-range “Facility and Corridors Management Plan” shall be filed within one year after the commencement of operation. The plan shall address specific standards, protocols, procedures and specifications as indicated in the SEEP Guide.
57. The Certificate Holder shall prepare a Final “Invasive Species Control Plan” (ISCP) which shall be submitted by commencement of construction. The Final ISCP shall include pre-construction invasive species control if necessary, construction materials inspection and sanitation, and site restoration in accordance with the Facility’s final approved Storm Water Pollution Prevention Plan (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 ISCP effectiveness. At the conclusion of the MP, a report shall be submitted to DPS Staff, DEC, the Towns, and DAM, and filed with the Secretary, that assesses how well the goal of no net increase of invasive species per the recommendation of the Invasive Plant Species Survey Baseline Report (“Baseline Species Report”), due to construction of the Facility, is achieved. In the event that the report concludes that ISCP goals are not met, and there is an increase of invasive species due to Facility construction, the Certificate Holder, DPS, DEC and DAM will meet to consider why initial control measures were ineffective and determine if remedial control measures would be feasible and effective without the need for perpetual treatments.
58. The Certificate Holder shall prepare an Agricultural Area Plan consistent with the New York State Department of Agriculture and Markets “Guidelines for Solar Energy Project – Construction Mitigation for Agricultural Lands (Revision 10/18/2019).”

Visual

59. Prior to commencement of construction, the Certificate Holder shall submit a final Visual Mitigation Planting Plan (VMPP) which shall be appropriate for the scale of the Facility and visual character of the surrounding area and use only native species or orchard crop species, at any time during the implementation of the VMPP. In addition, the plan will specify that:
 - a) The Certificate Holder will retain a qualified Landscape Architect to inspect the visual mitigation plantings at one year following installation to identify any plant material that did not survive, appears unhealthy, and/or otherwise needs to be replaced. The Certificate Holder will remove and replace plantings that fail in materials, workmanship or growth within one-year following the completion of installing the plantings.
 - b) Following the first-year inspection, the Certificate Holder will retain a qualified Landscape Architect to review landscape plantings on an annual basis for the next 4 years (i.e., on annual basis for the first 5 years of project operation) to confirm that the landscape plantings are functioning to provide visual screening per the Visual Mitigation Planting Plan. Results of this review will be filed with the Secretary. The

landscape architect will recommend remedial measures identified, along with a schedule for implementation, if necessary.

- c) The Certificate Holder will review the visual mitigation plantings as part of routine maintenance following the five-year monitoring period to evaluate the health condition of the plantings.
- d) In the case of localized die-back of the mitigation plantings after the first five years, planting condition will be evaluated by a qualified Landscape Architect or other representative of the Certificate Holder to evaluate and determine if the mitigation plantings are accomplishing the mitigation/screening goals set forth in the Visual Mitigation Planting Plan. If the remaining vegetation does accomplish these goals, then no further action is necessary. If deemed insufficient, new plantings or other means of screening will be recommended for installation.
 - i. In the circumstance that the Certificate Holder will need to remove and replace plantings that fail, equipment operation required will comply with the Agricultural Area Plan consistent with the New York State Department of Agriculture and Markets “Guidelines for Solar Energy Project – Construction Mitigation for Agricultural Lands (Revision 10/18/2019)”.

Noise and Vibration

- 60. Sixty (60) days prior to commencement of construction, the Certificate Holder shall submit:
 - a) Final drawings for the Solar Generating Facility, incorporating any appropriate changes to the design including:
 - i. Location of all noise sources and receptors identified with Geographic Information Systems (GIS) coordinates and GIS files;
 - ii. Proposed grading and noise source heights and ground elevation;
 - iii. Site plan and elevation detail 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); and
 - v. Sound information from the manufacturers for all noise sources (e.g., transformers, inverters, and HVAC equipment, 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 Facility outside any permanent or seasonal non-participating residence within 1,500 feet of 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 or pre-construction field testing, then the sound emissions 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. No penalties for prominent tones shall be included in this assessment.
 - iv. 50 dBA Leq-1-hour, maximum equivalent continuous average sound level from the Facility outside any participating residence. No penalties for prominent tones shall be included in this assessment.
- c) Final computer noise modeling and tonal evaluation shall be conducted in accordance with the specifications in the SEEP Guide.
61. The Certificate Holder 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; and
 - c) Respond to noise and vibration complaints according to the Protocols established in the Complaint Resolution Plan.

V. Facility Construction

General

62. The Certificate Holder shall require all contractors, excavators, and operators associated with its facilities to comply with the requirements of the Commission's regulations regarding the protection of underground facilities (16 NYCRR Part 753). Prior to the commencement of operations, the Certificate Holder shall become a member of Dig Safely New York.

63. The Certificate Holder shall comply with all requirements of the Commission's regulations regarding identification and numbering of aboveground utility poles (16 NYCRR Part 217).
64. The Certificate Holder shall hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and permit requirements. The environmental monitor shall perform inspections of construction work sites and document work onsite in regular reports. The environmental monitor shall have stop work authority over all aspects of the Project. Any stop work orders shall be limited to affected areas of the Project. If DAM agrees that the independent third-party monitor is qualified on agricultural issues, one monitor can act as both environmental and agricultural monitor.
65. The Certificate Holder shall ensure that its environmental monitor and construction manager 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.
66. Construction activities on the Project shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday and 8 a.m. to 8:00 p.m. on Saturday, with the exception of construction and delivery activities which may need to occur during extended hours beyond this schedule on an as-needed basis.
 - a) Construction work hour limits apply to Facility construction and to construction-related activities including delivery and unloading of materials, maintenance and repairs of construction equipment at outdoor locations, large vehicles idling for extended periods at roadside locations, and related disturbances. This condition shall not apply to vehicles used for transporting construction or maintenance workers, small equipment, or tools to the site to begin construction or maintenance activities. This condition shall also not apply to activities that do not generate noise or routine maintenance.
 - b) If, due to safety or continuous operation requirements, construction activities are required to occur beyond the allowable work hours, the Certificate Holder shall notify DPS Staff, affected landowners and municipalities. Such notice shall be given at least 24 hours in advance, unless such construction activities are required to address emergency situations threatening personal injury, property, or severe adverse environmental impact that arise less than 24 hours in advance. In such cases, as much advance notice as is practicable shall be provided.
67. Prior to commencement of construction in any project component area, the Certificate Holder shall stake or flag the following:
 - a) The limits of tree clearing;
 - b) The limits of disturbance;

- c) Wetlands, streams, waterbodies and DEC wetland adjacent areas within limits of disturbance;
 - d) Designated restrictive areas and sensitive environmental resources.
 - e) All on or off ROW access roads; and
 - f) Other areas needed for construction such as, but not limited to, laydown, and storage areas and areas to be planted with landscaping as visual screening.
68. Tree and vegetation clearing shall be limited to the minimum necessary for Facility construction and operation unless otherwise authorized herein or authorized by the Board, or the Commission after the Board's jurisdiction has ceased.
69. The Certificate Holder shall confine construction and subsequent maintenance for its Project Components to the Facility site and approved additional work areas, as delineated in approved construction plans (SEEP documents or equivalent). If a local contractor is used for the work, the local contractor's facility may also be used as a marshaling yard.
70. The Certificate Holder shall organize and conduct monthly site-compliance inspections for DPS Staff as required during construction through final completion of the Facility site. A designated official or representative from the Towns, DEC and DAM shall also be invited to attend.

Environmental

71. The use of blasting is prohibited.
72. Construction vehicles and equipment will be equipped with a spill kit that is appropriate for the volume of fuel carried by the vehicle or equipment. Any leaks must be stopped and cleaned up immediately.
- a) Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to DEC's Spill Hotline (1-800-457-7362) within 2 hours, in accordance with the DEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. DPS Staff shall also be notified immediately after DEC notifications of all reported spills.
73. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying or burning of construction debris or excess construction materials will be allowed.
74. Cleared vegetation and slash will not be buried or burned.
75. In connection with vegetation clearing, the Certificate Holder 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, or active agricultural fields (unless directed and preferred by landowner);
 - 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, plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery. Wood stockpile locations will be limited to the locations identified on final project plans and profile drawings;
 - d) Use of hay is prohibited; and
 - e) The Certificate Holder shall implement all practical measures to achieve a minimum of 80% vegetative cover across all disturbed soil areas by the end of the first full growing season following construction.
76. The Certificate Holder shall restore disturbed areas, ruts, and rills to original or final grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations, unless the SEEP specifies otherwise. Disturbed roadways shall be restored to their original preconstruction condition or improved, unless otherwise agreed upon with landowner. Low weight to surface area equipment which will not create a visible rut that alters soil compaction shall be used and/or equipment shall be placed on temporary matting to minimize soil compaction and erosion
77. All erosion control fabric or netting must be 100% biodegradable natural product.
78. All fill shall consist of clean soil, sand 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, and metal objects. Reasonable efforts will be made to use fill materials that are visually free of invasive species based on onsite and source inspections.
79. To control the spread of invasive insects, the Certificate Holder shall provide training for clearing and construction crews to identify the Hemlock Woolly Adelgid and the Emerald Ash Borer and other invasive insects of concern listed per NYSDEC Part 575 Regulations as a potential problem at the project site. If these insects are found, they must be reported to the DEC as soon as practicable.
80. If applicable, concrete washout areas shall be located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, the SEEP shall provide justification and demonstrate that impacts to wetlands and waterbodies from concrete batch plants and concrete washout areas shall be avoided or minimized to the maximum extent practicable.

81. Water Supply Protection:

- a) Pier and post driving activities shall be prohibited within 100 feet of any existing, active potable water supply well;
- b) The Certificate Holder 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 Holder is granted access by the property owner:
 - i. collection lines or access roads within 100 feet of an 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; and
 - iii. HDD operations within 500 feet of an existing, active potable water supply well on a non-participating parcel.
- c) Should the third-party testing conclude that the water supplied by an existing, active water supply well met federal and New York State standards for potable water prior to construction, but failed to meet such standards post construction as a result of Project activities, the Certificate Holder 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.

VI. Threatened and Endangered Species

82. **Northern long-eared bat (NLEB) Protection Measures:**

- a) No tree clearing activities shall occur at any time within 150 feet of any known NLEB maternity roosts or one-quarter (0.25) mile of any NLEB hibernacula, and no Project component shall be sited or located within 150 feet of any known NLEB maternity roost or 0.25 mile any NLEB hibernaculum.
- b) The Certificate Holder shall leave uncut all known and documented roost trees and any trees within a 150-foot radius of a documented summer occurrence and within 0.25 mile of a documented winter occurrence.
- c) All tree clearing activities occurring within one and one half (1.5) miles of a NLEB maternity roost site or five (5) miles of a NLEB hibernaculum site (within NLEB occupied habitat) shall be conducted during the hibernation season (November 1 to March 31, inclusive) unless otherwise agreed to by DEC.
- d) The Certificate Holder shall have an Environmental Monitor present on site during all tree clearing activities occurring between April 1 and October 31 within NLEB occupied habitat.

- e) Within NLEB occupied habitat between April 1 and October 31, the Certificate Holder shall leave uncut all snag and cavity trees, as defined under New York State Department of Environmental Conservation (NYSDEC) Program Policy ONRDLF-2 Retention on State Forests, unless their removal is necessary for protection of human life and property. When necessary, snag or cavity trees may be removed after being checked by an Environmental Monitor or on-site biologist who shall conduct a survey for bats exiting the tree. This survey should begin 1/2 hour before sunset and continue until at least 1 hour after sunset or until it is otherwise too dark to see emerging bats. Unoccupied snag and cavity trees in the approved clearing area shall be removed within 24-hours of observation. These restrictions pertain to trees that are greater than or equal to 3 inches in diameter at breast height (dbh).
- f) At any time of year, if any bats are observed flying from a tree, or from a tree that has been cut, tree clearing activities within 150 feet of the tree shall be suspended (stop work order) and NYSDEC Wildlife Staff shall be notified as soon as possible. The stop work order shall remain in place until such time as NYSDEC and NYSDPS Staffs have been consulted and both agencies authorize resumption of work.
- g) If at any time during the life of the Project any NLEB maternity roost trees are discovered within the Project area, DEC will be notified within twenty-four (24) hours of discovery, and an area at least five hundred (500) feet in radius around the roost tree shall be marked and avoided until notice to continue construction, ground clearing, grading, non-emergency maintenance or restoration activities, as applicable, at that site is granted by DEC.

83. The Certificate Holder shall implement the following **Grassland Bird Protection Measures:**

- a) Areas within defined occupied habitat for State listed threatened or endangered (T&E) grassland bird species that are temporarily disturbed or modified as a result of construction activities will be restored to pre-existing grassland conditions by re-seeding disturbed soils with an appropriate native seed mix after construction activities are completed unless returning to agricultural production or otherwise agreed to by DEC. These temporarily disturbed or modified areas will include, but are not limited to temporary roads, material and equipment staging and storage areas, and electric line rights of way.
- b) To avoid direct impacts to T&E grassland bird species, the following work windows apply for all ground disturbance and construction-related activities, including restoration and equipment staging, storage, and transportation, within occupied habitat:
 - In occupied breeding habitat work shall be conducted only between August 16 and April 22;
 - In occupied wintering habitat work shall be conducted only between April 1 and October 31; and

- In areas of the Project where both breeding and wintering occupied habitat occurs, work shall be conducted only between August 16 and October 31, and between April 1 and April 22.
- c) If construction activities must occur between April 22 and August 16 in identified occupied breeding habitat, such activities shall occur as follows:
- i. If fields within identified occupied breeding habitat areas are planted with row crops (i.e., corn, beans, or vegetables) in the last two farming seasons prior to the commencement of construction and such fields were also historically planted with row crops during at least one of the prior six years, these fields will not be subject to timing restrictions or other restrictions listed in Condition 83(d) when construction occurs.
- d) If construction activities must occur between October 31 and April 1 in identified occupied wintering habitat, or between April 22 and August 16 in identified occupied breeding habitat outside of row crop areas described above, such activities shall occur as follows:
- i. The area(s) proposed for active construction will be assessed by an on-site environmental monitor or biologist who shall conduct surveys for grassland T&E bird species. The surveys will occur daily until construction activities have been completed in the occupied habitat area, unless otherwise agreed to by DEC. If no T&E grassland bird species are detected during the survey, the area will be considered clear for twenty-four (24) hours, when another survey will be performed. If grassland T&E bird species are detected, the Certificate Holder will follow condition 85(a).

84. **Record All Observations of T&E Species** - During construction, restoration, maintenance, and operation of the Project and associated facilities, the Certificate Holder shall maintain a record of all observations of New York State-listed T&E species, as follows:

- a) **Construction:** During construction, the on-site environmental monitors and/or environmental compliance manager identified in the SEEP will be responsible for recording occurrences of any T&E species within the Facility Site. All occurrences shall be reported in the bi-weekly monitoring report submitted to DPS and DEC and shall include the information described below under Reporting Requirements.
- b) **Post-construction:** During any post-construction wildlife monitoring survey(s), the environmental monitor(s) will be responsible for recording observations of any T&E species documented during wildlife surveys, which will be reported in any survey reports required to be submitted to DEC.
- c) **Operation and Maintenance:** During regular operation and maintenance, the Certificate Holder will be responsible for training operation and maintenance staff to focus on successfully identifying the following T&E bird species for which occupied habitat has been defined within the Facility area: short-eared owl (*Asio flammeus*), northern harrier (*Circus hudsonius*), and upland sandpiper (*Bartramia longicauda*). The Certificate Holder will keep a record of occurrences of these species with the Facility

Site and report all observations to DEC within one week of the identification of the T&E species.

- 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 and cross roads location); behavior(s) observed; identification and contact information of the observer(s); and the nature of and distance to any Project construction, maintenance or restoration activity.

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

- a) Excluding bald eagles, if at any time during construction or operational life of the Project an active nest or roost of a federally- or State-listed T&E bird species is discovered within the Facility Site (by the Certificate Holder's on-site environmental monitors, environmental compliance manager, or other designated agents), or if a State-listed species observed exhibiting breeding or roosting behavior within the Facility Site, the following actions shall be taken:
- i. DEC and DPS shall be notified within twenty-four (24) hours of identification of the active nest, roost or observation of the breeding or roosting behavior 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 active nest or roost of the T&E species will be posted and avoided and remain in place until a notice to continue construction, ground clearing, grading, non-emergency maintenance or restoration activities are granted by DPS in concurrence with DEC; and
 - iii. The active nest or roost will not be approached under any circumstances unless authorized by DPS in concurrence with DEC.
- b) If at any time during construction or operational life of the Project, an active nest or roost of a bald eagle is discovered (by the Certificate Holder's on-site environmental monitors, environmental compliance manager, or other designated agents) within the Facility Site, or if eagles are observed in the Facility Site exhibiting breeding or roosting behavior, the following actions shall be taken:
- i. DEC and DPS shall be notified within twenty-four (24) hours of identification and prior to any disturbance around the active nest or roost or area where eagles were seen exhibiting breeding or roosting behavior;
 - ii. An area of at least one quarter (0.25)-mile (1,320 feet) if there is no visual buffer or if there is a visual buffer an area of at least six hundred and sixty (660) feet in radius around the nest or roost will be posted and avoided until notice to continue construction activities are granted by DPS in concurrence with DEC; and

- iii. The active 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 environmental monitors, environmental compliance manager, or other designated agents) at any time during the life of the Project within the Facility Site, the Certificate Holder will immediately (within 24 hours of identification) 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:
 - 1. species;
 - 2. age and sex of the individual(s), if known;
 - 3. date of discovery of the animal or nest;
 - 4. condition of the carcass, or state of the nest or live animal;
 - 5. GPS coordinates of the location(s) of discovery;
 - 6. name(s) and contact information of the person(s) involved with the incident(s) and find(s);
 - 7. weather conditions at the site for the previous forty-eight (48) hours;
 - 8. photographs, including scale and of sufficient quality to allow for later identification of the animal or nest; and
 - 9. 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 and identification. All discovered specimen(s) or 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 Holder will ensure all the information listed above is properly documented for transfer. Unless otherwise, directed by DEC or USFWS, after all information has been collected in the field, the fatality specimen(s) will be placed in a freezer, or in a cooler on ice until transported to a freezer, until it can be retrieved by the proper authorities.
 - 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.
86. A Post-construction Avian Monitoring Plan (Monitoring Plan) for the Facility Site shall be developed in consultation with NYSDEC and a final, NYSDEC-accepted Monitoring Plan filed prior to the start of Project operation. The Monitoring Plan shall include breeding and wintering bird surveys, and include details of the surveys (i.e., start and end dates, point count and transect locations, frequency and scope of monitoring, methods for observation and survey, and reporting requirements). The Monitoring Plan will be used to gather data regarding use of the Facility Site by breeding and wintering birds, including State-listed species, after construction and will include at least one multi-season survey during the first three years of Project operation. Findings from the survey conducted will not trigger additional surveys or additional mitigation and will not result in changes to operations of the Project.

VII. Wetlands and Streams, Vegetation, and Invasive Species

87. The Certificate Holder shall perform all construction, operation and maintenance in a manner that avoids and minimizes adverse impacts to waterbodies, wetlands, and the one hundred (100)-foot adjacent areas associated with all State-regulated wetlands. The Certificate Holder shall ensure the provisions to protect wetlands, waterbodies, and adjacent areas are in accordance with the details contained in Appendix A of SEEP Guide.
88. The Certificate Holder shall notify DPS and DEC within 2 hours of discovery if there is a discharge to a wetland or waterbody resulting in a violation of New York Water Quality Standards.
89. If applicable, all work in protected streams is prohibited from September 15 through May 31 in cold water fisheries and March 15 through July 15 in warm water fisheries.
 - a) The Certificate Holder shall conduct all work in streams in dry conditions, using appropriate water handling measures to isolate work areas and direct stream flow around the work area. Any waters accumulated in isolated work areas shall be discharged to an upland settling basin, field, or wooded area to provide for settling and filtering of solids and sediment before water is return to the stream.
 - b) There shall be no visible contrast between return waters and flowing water upstream of work areas.
 - c) 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 completion of work in the area.
 - d) All excess materials shall be completely removed to upland areas and suitably stabilized in areas that are more than 100 feet from wetlands and waterbodies and shall be suitably stabilized.
 - e) Any instream work or restoration shall not result in an impediment to passage of aquatic organisms. 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.
90. To the extent practicable, buried utilities shall be installed using trenchless methods when traversing wetland and waterbodies. If a trenchless installation method is not practicable, other crossing methods such as open cut or direct burial shall be utilized in accordance with the methods within the Site Engineering and Environmental Plan for the Construction of Mohawk Solar (SEEP).
91. Open cut trenching for the installation of underground utilities in wetlands and waterbodies shall be conducted in one continuous operation and shall not exceed the length that can be completed in one day.
92. The Certificate Holder shall submit a site-specific Stream Crossing Plan for each delineated stream crossing (as defined in the SEEP Guide) and shall include detailed plan, profile and

cross-sectional view plans; drainage area and flow calculations; and location, quantity and type of fill.

93. There are no state-protected streams at the Facility Site. Bridges or culverts can be utilized at each permanent delineated stream crossing and culverts shall be designed as further outlined in the SEEP Guide.
94. All equipment and machinery shall be stored and safely contained more than one hundred (100) feet from wetlands and waterbodies at the end of each workday unless moving the equipment will cause additional environmental impact.
95. Fuel tanks or other chemical storage tanks shall be appropriately contained and located a minimum of three hundred (300) feet away from any wetland or waterbody. If the minimum setback cannot be achieved, storage shall be in accordance with the SEEP.
96. All mobile equipment, excluding dewatering pumps, must be fueled, repaired, or maintained in a location at least one hundred (100) feet from wetlands and waterbodies, to the maximum extent practicable or unless moving the equipment will cause additional environmental impact. Dewatering pumps operated closer than one hundred (100) feet from the stream bank, wetland, or waterbody, must be within a secondary containment large enough to hold the pump and accommodate refueling.
97. Turbid water resulting from dewatering operations shall not be allowed to enter any wetland, stream or water body. Water resulting from dewatering operations shall be discharged directly to settling basins, filter bags, or another approved device. All necessary measures shall be implemented to prevent any substantial visible increase in turbidity or sedimentation downstream of the work site.
98. Following completion of construction activities, all disturbed soils within federal and state-regulated freshwater wetlands and associated State-regulated 100-foot adjacent areas shall be restored as set forth in the SEEP Guide.
99. 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.
100. Installation of underground collection lines in wetlands shall be performed using the methods indicated in the SEEP Guide.
101. Installation of access roads through streams and wetlands shall be performed using the methods, indicated in the SEEP Guide.
102. In the event that construction results in an alteration to (i.e., lowering) wetland hydrology of a State-regulated freshwater wetland, the breach shall be immediately sealed, and no further activity shall take place until DPS and DEC staff are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved.
103. Disturbed streams shall be restored to equal width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to the profile of the stream channel upstream and downstream of the disturbance. All disturbed stream banks shall be mulched within two (2) days of final grading, stabilized with 100% natural or biodegradable fiber

matting, and seeded with an appropriate riparian seed mix specified in the SEEP. Disturbed vegetation shall be replaced with appropriate native shrubs, live stakes, or tree plantings as site conditions and Facility design allow, as appropriate for consistency with existing land uses.

104. Trees shall not be felled into any stream.
105. The Certificate Holder 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 Holder shall repair the culvert or replace it with alternative measures appropriate to maintaining proper drainage, embedment and aquatic connectivity.
106. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.
107. Following installation of underground facilities, wetlands and State-regulated 100-foot wetland adjacent areas shall be stabilized within 48 hours of final backfilling of the trench and restored to pre-construction contours as soon as practicable, but no later than 14 days of final backfilling. Immediately upon completion of grading, and as consistent with existing land uses, the area shall be seeded with a seed mix of native plants specified in the SEEP that is appropriate for wetlands and upland areas adjacent to wetlands. Overall vegetative cover in restored areas shall be monitored for a minimum of 5 years or until an 80% cover of plants with the appropriate wetland indicator status has been reestablished over all portions of the restored area. Invasive species growth in the restored areas shall be monitored during years one, three and five. The proportion of invasive species in the wetlands and State-regulated wetland adjacent areas cannot exceed the proportion that existed immediately prior to the start of construction as described in the baseline invasive species survey. If, after one complete growing season, the 80% cover requirement has not been established or the proportion of invasive species has increased, the Certificate Holder shall consult with DEC and prepare a "Wetland Planting Remedial Plan" (WPRP) and shall submit the WPRP to DEC and DPS for acceptance prior to implementation.
108. The Certificate Holder shall develop a final Wetland Mitigation Plan, that meets all NYS regulatory and permit requirements and general conditions. The Certificate Holder shall work with DEC to develop the final Wetland Mitigation Plan and shall submit the Wetland Mitigation Plan for DPS, and DEC review within six months of the commencement of construction. If, after five years, monitoring demonstrates that the wetland mitigation is still not meeting the established performance standards, the Certificate Holder must submit a Wetland Mitigation Remedial Plan (WMRP). Further requirements for the Wetland Mitigation Plan and WMPR are set forth in the SEEP Guide.

VIII. Facility Operation

109. The Certificate Holder 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.
110. The Certificate Holder shall operate the Facility in full compliance with the applicable reliability criteria of National Grid, NYISO, NPCC, NYSRC, NERC and successors. If the Certificate Holder fails to meet the reliability criteria at any time, the Certificate Holder shall

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

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

112. Good Utility Practices:

- a) The Certificate Holder 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 means the 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.

113. The Certificate Holder 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. The Certificate Holder shall file with the Secretary a copy of the final testing design protocol within 30 days of National Grid's acceptance.

114. The Certificate Holder 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.

115. Transmission Related Incidents:

- a) The Certificate Holder shall call the DPS Electric Safety and Reliability Section within a reasonable time to report any transmission related incident that affects the operation of the Facility.
- b) The Certificate Holder 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 Holder shall work cooperatively with National Grid, NYISO, NYSRC, NERC and the NPCC to prevent any future occurrences.
116. If National Grid or the NYISO bring concerns to the Commission, the Certificate Holder shall be obligated to address those concerns and shall make any necessary modifications to its Interconnection Facility if the NYISO or National Grid find such facilities are causing, or have caused, reliability problems to the New York State Transmission System.
117. If, subsequent to construction of the Facility, no electric power is generated and transferred out of such plant for a period of more than a year, the Commission may consider advising the Siting Board that the amendment, revocation or suspension of the Certificate may be appropriate.
118. 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 Holder shall promptly file with the Secretary and provide to 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 Holder shall provide monthly reports to the Secretary 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 Holder shall provide a detailed report to the Secretary, 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 a day. However, if the Certificate Holder is expecting delays due to a part manufacturer or complications regarding the repair of non-operational PV panel(s), it shall petition the Secretary for an extended amount of time if it is expected that certain PV panel(s) will not be in operation for more than one year and a day. The petition shall include an explanation of the circumstance and an estimation of the amount of time it will take to repair the PV panel(s).
119. In the event of a fire or other catastrophic event involving a PV panel and its associated equipment, the DPS Chief of Electric Safety and Reliability shall be notified no later than 12 hours following such an event and the Certificate Holder shall implement any requirements under the Emergency Action Plan as appropriate.
120. The Certificate Holder shall have an inspection program for PV panels and associated equipment. Logs shall be maintained on site identifying any major damage, defects or any other problems with the PV panels, or indicating that no such damage, defect or problem was found. The Logs shall summarize maintenance and inspection activities performed and the repairs undertaken.

GUIDANCE FOR THE DEVELOPMENT OF SITE ENGINEERING AND ENVIRONMENTAL PLAN FOR THE CONSTRUCTION OF MOHAWK SOLAR PROJECT

The proposed Mohawk Solar Project requires the submission of a Site Engineering and Environmental Plan (SEEP). The SEEP is intended to meet the requirements of New York State Code of Rules and Regulations 16 NYCRR Section 1002.3 and 1002.4 and describe in detail the final Facility design and the environmental protection measures to be implemented during construction of the Mohawk Solar Project (Facility). The SEEP shall include a description of existing and proposed conditions at the Facility, plan and profile drawings illustrating the linear and non-linear components of the Facility, construction access and clearing requirements, protective measures for streams, wetlands, and protected habitats, identification of sensitive receptors, agricultural lands, and protocols to protect previously unknown cultural resource sites during construction.

The SEEP is not intended to be a reiteration of the materials contained in the Application, but instead is intended to demonstrate compliance with the construction avoidance, minimization and mitigation measures, as described in the Application and as clarified by the Certificate Holder's supplemental filings, the Order Granting Certificate and the Certificate Conditions.

For reference, 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.

This SEEP guide includes the minimum requirements for the specific Certificate Conditions incorporated into the SEEP. The Certificate Holder's adherence to this 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.

Table of Contents

Section A – Plans, Profiles and Detail Drawings	1
1. Plan and Profile Details.....	1
2. Stormwater Pollution Prevention.....	5
3. Vegetation Clearing and Disposal Methods	5
4. Building and Structure Removal.....	6
5. Streams and Other Waterbodies.....	6
6. Wetlands	7
7. Land Uses.....	7
8. Access Roads and Workpads.....	8
9. Noise Sensitive Sites.....	8
10. Ecologically and Environmentally Sensitive Areas.....	8
11. Invasive Species.....	8
12. Vegetation Controls and Herbicides.....	8
13. Visual Mitigation Landscaping and Buffers.....	9
Section B – Description and Statement of Objectives, Techniques, Procedures, and Requirements.....	10
1. Facility Location and Description.....	10
2. Environmental Compliance and Monitoring Plan.....	10
3. Facility Communication and Complaint Resolution Plan.....	11
4. Health and Safety Plans.....	12
5. General Construction.....	12
6. Clean up and Restoration.....	14
7. Transportation.....	15
8. Construction Vegetation Clearing and Disposal Methods.....	16
9. Plans, Profiles, and Detail Drawings.....	16
10. Land Uses	16
11. Final Geotechnical Engineering Report.....	16
12. Inadvertent Return Plan.....	16
13. Visual Mitigation.....	17
14. Cultural Resources	18
15. Avian and Bat Impacts.....	18
16. Wetlands, Streams, and Other Waterbodies.....	19
17. Invasive Species Control Plan.....	24
18. Sound.....	24

19. Operations Plans/Reports, Schedule and Timing.....	26
Appendix 1 - Trench Breaker Spacing.....	29

Definitions

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, except for those areas adjacent to wetlands.

Linear Facility Components: electric transmission lines, electric collection or distribution lines, and temporary or permanent access roads, and fencing.

Non-Linear Facility Components: solar array, collection and interconnection substation, storage facility, O&M building (or storage facility), visual mitigation plantings, and staging/laydown area(s).

Facility Site: The parcels hosting Facility components.

Facility Components: Linear Facility Components and Non-Linear Facility Components.

Delineated streams: the nine (9) streams identified and delineated by Mohawk Solar (AA, AB, 3C, FF, 3K, 3M, OO, P, and PP)

Section A – Plans, Profiles and Detail Drawings

Section A of the following Site Engineering and Environmental Plan (SEEP) addresses the requirements for development of final facility engineering details; site plans for construction, restoration, visual mitigation plantings, 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 for the Mohawk Solar Project.

Plan sheets will be submitted 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 all temporary and permanent access roads, staging/laydown areas, and fencing. Plans shall also indicate the location and size of all major structures, features and buildings, 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 all of the following information:

1. Plan and Profile Details

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 showing:

- a. Locations of existing utility infrastructure based on an American Land Title Association (ALTA) survey.
- b. Details and specifications of the selected PV panel model(s).
- c. Foundation drawings including plan, elevation, and section details for each foundation type proposed; if multiple foundation designs are to be utilized for the Facility, the foundation type at each location shall be specified on site plans; applicable criteria regarding foundation design shall be listed and described in the drawings and details.
- d. Details showing limits of clearing, and temporary grading and permanent grading details based on the Stormwater Pollution Prevention Plan (SWPPP) should be indicated.
- e. Details showing the location and specific vegetation type to be planted at each designated visual mitigation area in accordance with the specifications and planting layout depicted in the Final Visual Mitigation Planting Plan as prepared by the Applicant's Landscape Architect. A distinct, site-specific Visual Mitigation Planting Plan will be developed and implemented at each designated visual impact area.

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.

- f. The location and boundaries of any areas proposed to be used for fabrication, designated equipment parking, staging, access, lay-down, conductor pulling and splicing; or other materials preparation or processing sites; operations and maintenance buildings, yards and equipment storage areas. Indicate any planned fencing, surface improvements or screening of storage and staging areas. Demonstrate setback distances appropriate to Facility design; and conformance with applicable requirements of the Certificate or local requirements.
- g. Maps showing the location for the selected operations and maintenance (O&M) (or storage facility) building, if proposed to be located on-site. If an existing building is not utilized on-site, prior to construction of the building, the Certificate Holder shall provide the final building details and construction drawings. Plans for the building property indicating: 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; water source and sewage disposal facilities (if applicable); and related site development information. This information may be submitted after commencement of construction of the Facility, in which case a plan for the timing of the submission of the building details and construction drawings will be provided.
- h. The locations or descriptions of locations for concrete chute washout and any other cleaning activities (e.g. equipment cleaning for control of invasive species).
- i. General concrete testing procedures including a plan outlining the Certificate Holder's monitoring and testing of concrete procedures in conformance with the American Concrete Institute (ACI) and International Building Code (IBC) specifications.

Linear Facility Components:

For all Linear Facility Components including: electric transmission lines, electric collection or distribution lines, and access roads, site plan and profile figures shall include profile drawings of Facility centerline; for electric lines (whether above ground or underground) plans shall include the Line² Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet) showing:

- a. *Collection System Circuits Map* for the collection substation and collection line circuits' configuration and location, indicating locations of all overhead and underground installations and the number of required circuits per circuit-run.
- b. Final design and details of single and multiple electric circuit underground collection lines. Each Project circuit layout (single, double, triple, etc.) shall include a cross-section and clearing and ROW widths needed for accommodating circuit installations. Typical cross-sectional detail should include the proposed topsoil stripping, stockpile segregation from subsoils, and typical equipment access.

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 Project design, show relation of Project to final surface grade, indicating design depth-of-cover.

- c. Final details of single and multiple-circuit overhead electric collection line layouts. Each Project circuit layout (single, double, triple, etc.) shall include typicals for all overhead structures, proposed guying, and associated clearing.
- d. The boundaries of any new, existing, and/or expanded utility right-of-way or road boundaries, and where linear Facility lines or cables are to be constructed overhead or underground; plus, any areas contiguous to the Facility or street within which the Certificate Holder will obtain additional rights.
- e. The location of each 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 for the Facility (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 Facility structures.
- f. 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 used during construction and the proposed width post- construction on the restoration plan. Temporary and permanent cut and fill contours for each road shall also 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, berms, and associated plantings, if applicable.
- g. Discuss the types of access roads or paths that will be used including consideration of:
 - i. temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile underlayment, gravel surface, etc.);
 - ii. permanent installations (e.g., cut and fill earthen road, geotextile under-layment, gravel surface, paved surface, etc.);
 - iii. use of existing roads, driveways, farm lanes, rail beds, etc.; and,
 - iv. other access, e.g., helicopter or barge placement.
- h. For each temporary and permanent access type, provide a typical installation plan view, cross section and side view with appropriate distances and dimension and identification of material. 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).)
- i. 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:

- i. check dam (for erosion control within ditches);
 - ii. water bar (for water diversion across the access road);
 - iii. roadside ditch with turnout and sediment trap;
 - iv. French drain;
 - v. diversion ditch;
 - vi. culvert (including headwalls, aprons, etc.);
 - vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and,
 - viii. silt fencing.
- j. Indicate the type(s) of stream and/or wetland crossing method(s) 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 and wetland crossing methods and design may include, but not be limited to:
 - i. timber mats or other similar measures to prevent soil compaction;
 - ii. culverts including headwalls;
 - iii. bridges (either temporary or permanent); and,
 - iv. fords.
- k. All diagrams and specifications should include material type and size to be placed in streams and/or wetland, as well as on stream or on wetland approaches.
- l. 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.
- m. 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 water bodies; 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 and/or proposed future utilities as of the issuance date of the Certificate, by Project components, the following additional information shall be provided:
 - i. Results of any cathodic protection impact studies;
 - ii. 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);
 - iii. Details of existing utility owner approved crossing plans (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;
 - iv. Details of existing utility owner approved co-location installations (with Project components) showing separation distances of existing utilities and Project components and any required or recommended protection measures; and
 - v. Details and descriptions of existing utility owner approved methods regarding Project construction equipment crossing of existing utilities approved by each existing utility owner.
- n 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 plan³³ - 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. Stormwater Pollution Prevention

The plan drawings shall be consistent with the NYSDEC-acknowledged Stormwater Pollution Prevention Plan (SWPPP) (and approved MS-4 SWPPP plans if applicable), and indicate the locations and details of soil erosion and sediment control 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 (e.g., a 100-year storm) to avoid and minimize the cumulative impacts of multiple proximate disturbed areas.

3. Vegetation Clearing and Disposal Methods

Identify on the plan and profile drawings:

- a. 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;
- b. the specific type and manner of cutting, disposition or disposal method for vegetation (e.g., chip; cut and pile; salvage merchantable timber, etc.);
- c. the disposal locations of all vegetation (including stumps) to be cut or removed from each site;
- d. any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods;

³ Preferably 1" = 50' scale with 2-foot contour lines.

- e. 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;
- f. 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;
- g. areas requiring danger tree removal (i.e., trees with cracks or decay in proximity of a utility right-of-way);
- h. 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
- i. identification of invasive species within/adjacent to the area of clearing, and specific disposal methods required for invasive species pursuant to the Invasive Species Control Plan.

4. Building and Structure Removal

- a. Indicate the locations of any buildings or structures to be acquired, 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.

5. Streams and Other Waterbodies

- a. Indicate the name, water quality classification and location of all rivers and streams (whether perennial and/or intermittent), and other drainages within the construction area or crossed by any proposed Linear or Non-Linear Facility Component or access road constructed, improved or maintained for the Facility. On the plan and profile drawings, indicate:
 - i. stream crossing method and any designated streamside “protective or buffer zone” in which construction activities will be restricted to the extent necessary to minimize impacts on rivers, streams, and/or other drainages;
 - ii. the activities to be restricted in such zones; and,
 - iii. identify any designated floodways or flood hazard areas within the Facility Site, 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.
- b. Show the location of all potable water sources, including springs and wells, within 100 feet of Facility components and 500 feet of HDD locations, indicating on a site-by-site basis, precautionary measures to be taken to protect each water source.

6. Wetlands

- a. All federal and state jurisdictional wetlands and state-regulated 100-foot adjacent areas (“adjacent areas”) located within the Facility Site, or those that will be 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 a project identification number and by appropriate New York State Department of Environmental Conservation (DEC) Freshwater Wetland designations, when applicable (i.e., for state jurisdictional wetlands).
- b. Indicate the community type (e.g., emergent, scrub-shrub, forested), location, and identification code(s) of any federal or state regulated wetland within or adjoining the Facility and its components, as determined by site investigation and delineation.

7. Land Uses

- a. Agricultural Areas:
 - i. Indicate the locations of sites under cultivation or in active or recently active agricultural use including pastureland, hayfields, and cropland. Designations and descriptions will be those in current use by the NYS Department of Agriculture and Markets (DAM.).
 - ii. 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.
 - iii. 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.
 - iv. Indicate the location of all known land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies.
 - v. Designate the site-specific techniques (in accordance with DAM Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands [Revision 10/18/2019]) to be implemented to minimize or avoid construction-related impacts to agricultural resources.
- b. Sensitive Land Uses and Resources:
 - i. 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).
- c. Geologic, Historic, and Scenic or Park Resources:
 - i. 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).
- d. Recreational Areas:
 - i. 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.

8. Access Roads and Workpads

- a. Indicate the locations of temporary and permanent access roads, laydown areas, and workpads.
- b. Provide construction type, material, and dimensions and their associated limits of disturbances.
- c. Indicate provisions for upgrading any existing access roads.
- d. Where 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.

9. Noise Sensitive Sites

- a. Show the locations of sound sensitive receptors. Identify locations and specifications of measures to mitigate construction noise as required by the Certificate.

10. Ecologically and Environmentally Sensitive Areas

- a. Indicate the general locations of any known ecologically and/or environmentally sensitive sites (e.g., rare, threatened, and endangered species habitat areas; agricultural districts; special flood hazard areas; archaeological sites) that are adjacent to the Facility and/or within 100 feet of any facility component 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 stating “Sensitive Environmental Areas, No Access”).
- b. Measures for avoidance of archaeological sites identified within the Facility Site 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.

11. Invasive Species

- a. Identify the location(s) of prohibited invasive species pursuant to 6 NYCRR Part 575 and identified in the Invasive Species Control Plan and the results of pre-construction invasive species surveys as required by the Certificate, and the prescribed method(s) to control the spread of the identified species on the site during construction. The need for post-construction control of on-site invasive species will be determined based on the results of post-construction monitoring as described in the annual monitoring report and determined in consultation with DEC.

12. Vegetation Controls and Herbicides

- a. Areas where no herbicide is 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.

13. Visual Mitigation Landscaping and Buffers

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

Section B – Description and Statement of Objectives, Techniques, Procedures, and Requirements

The narrative portion of the SEEP and referenced Compliance filings for the Facility shall include, but need not be limited to, all of the following information, and shall address the requirements of 16 NYCRR §1002.3. Chapters or sections of the document shall identify whether it is addressing a specific certificate condition.

1. Facility Location and Description

This section of the SEEP should contain:

- a. A brief description of the final Facility location and Facility Site;
- b. A description of the construction hours and schedule as presented in the Certificate Conditions;
- c. A description of the PV panels and associated infrastructure selected for the Facility including any manufacturer provided information regarding the design, safety and testing information for the panels, substation, transformer, and battery storage equipment to be installed during construction;

2. Environmental Compliance and Monitoring Plan.

The SEEP shall include copies of the final *Environmental Compliance and Monitoring Plan*. The *Environmental Compliance and Monitoring Plan* shall include the names, titles, qualifications and contact information of all individuals responsible for ensuring minimization of environmental impact by the Project and for enforcing compliance with environmental protection provisions of the Certificate and the compliance filings, including but not limited to:

- a. Full-time (when appropriate)⁴ environmental monitor;
- b. Full-time construction supervisor;
- c. Part-time or full-time agricultural environmental monitor, if separate from environmental monitor; and
- d. Part-time health and safety inspector.

The Certificate Holder may utilize one or more qualified individuals to satisfy the Project oversight responsibilities associated with the environmental monitor and the agricultural environmental monitor.

The *Environmental Compliance and Monitoring Plan* shall also include:

⁴ The Plan will identify any times when a part-time monitor may be used.

- a. 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.
- b. Specify responsibilities for personnel monitoring all construction activities, such as clearing, sensitive resource protection, site compliance, change notices, etc.
- c. 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.
- d. Describe the procedures to “stop work” in the event of a Certificate violation.
- e. The company’s designated contact including 24/7 emergency phone number, for assuring overall compliance with Certificate conditions.
- f. Ensure that required safety procedures and worksite hazards are communicated to site inspectors in a documented meeting prior to entry onto the site of work on such Certificate Holder’s Project Components.
- g. Include a procedure for providing DPS Staff, DAM, DEC, and the Towns with construction schedules indicating construction activities and location schedules, including a procedure for providing scheduling updates.

3. Facility Communication and Complaint Resolution Plan

The SEEP shall include a copy of the final *Facility Communication and Complaint Resolution Plan*, which shall include protocols for:

- a. Communication between parties, including a flowchart of proper communications;
- b. 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.
- c. Notifying the Towns and the public of the complaint procedures;
- d. Registering a complaint;
- e. Identifying and including procedures that may be unique to each phase of the project (eg. tree clearing, construction, operation, decommissioning) or type of complaint;
- f. Responding to complaints in a consistent and respectful manner;
- g. Logging and tracking of all complaints received, and resolutions achieved;

- h. Actions the Certificate Holder will take if a complaint remains unresolved, including reporting to the Towns and DPS Staff any complaints not resolved within 30 days of receipt;
- i. Mediating complaints not resolved within 60 days, assuming the complainant and nature of complaint are amenable to resolution; and
- j. Providing annual reports of complaint resolution tracking to DPS Staff that shall also be filed with the Secretary.

4. **Health and Safety Plans**

The SEEP shall include copies of the following final plans for construction:

- a. 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.
- b. 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:
 - i. posting signs at the edges of the ROW in those locations where the collection lines intersect public roads; and
 - ii. 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* (QA/QC Plan), to be developed in coordination with the selected Balance of Plant (BOP) contractor.

5. **General Construction**

- a. Provide a copy of the SWPPP, which will include 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* (NYSDEC, 2016a). The Erosion and Sediment Control Plan will also contain trenching details including:

- i. 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 will also be addressed.
- ii. The following measures to address in-trench erosion will be implemented, as necessary:

1. Trench Plugs:

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

After cable installation, permanent sandbag or alternative trench breakers will 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”) will 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 will occur. For animal and vehicle crossings of the trenchline area, a plug 25 to 30 feet in length should suffice.

2. Trench Breakers:

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 will be determined in the field based on locations identified in the construction plan documents. Trench breakers should also be installed at the top of bank of each wetland, stream, or waterbody crossing.

3. Backfill:

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

- (a) Only on-site, native material should be used in backfill operations unless the native material does not meet specifications, or ledge rock (i.e. bedrock) 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.
- b. The SEEP shall attach a final *Spill Prevention, Control 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:
- i. 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 DEC and/or federal regulations.
 - ii. 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.
 - iii. Avoiding spills and improper storage or application.
 - iv. 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.
 - v. Providing of SPCC Plan to the Towns and local emergency responders; notifying the Towns and local emergency responders of locations of hazardous substance storage.

6. Clean up and Restoration

The Certificate Holder's program for clean-up and restoration following construction will be described in the Site Restoration Plan, and will include, at a minimum:

- a. the removal and restoration of any temporary roads 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; and
- b. plans, standards and a schedule for the restoration of vegetative cover, including but not limited to, specifications indicating:
 - i. design standards for ground cover, including:
 1. species mixes and application rates by site;
 2. site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures); and
 3. acceptable final cover % by cover type.
 - ii. planting installation specifications and follow-up responsibilities if needed;
 - iii. a schedule or projected dates of any seeding and/or planting if needed.
- c. To address temporary impacts to wetlands, the Certificate Holder will restore wetland and adjacent area using native seed mixes.; and
- d. If subject to continued agricultural use, restoration seeding will be consistent with pre-existing crop species or as requested by landowner.

7. **Transportation**

- a. The SEEP shall include copies of the Road Use Agreements with any County and local municipalities. The SEEP will include copies of any crossing agreements with utility companies.
- b. The SEEP shall attach a *Route Evaluation Study* that demonstrate that all municipalities within the Route Evaluation Study Area including the NYS Department of Transportation, NYS State Police Barracks, County Department of Public Works, local school districts, County Sheriffs and local Police department have been contacted or when they will be contacted. The plan shall identify weight limited bridges in the area to be avoided. The plan shall include constraints on use of heavy equipment and vehicles used for construction.
- c. The SEEP shall attach a *Traffic Control Plan* that identifies:
 - i. The delivery route(s) in the Town of Minden and the Town and Village of Canajoharie, for oversize or over length equipment or materials and the route(s) for delivery of earthen materials and concrete.
 - ii. The plan shall describe the delivery of materials to the facilities site and shall indicate mitigation measures to manage traffic during construction and operation.
 - iii. Copies of all permits associated with the delivery of such equipment and materials

shall be provided prior to using a route to haul equipment or materials requiring a permit.

- iv. The Certificate Holder shall not permit construction vehicles or construction equipment to park or idle at public roadside locations for extended periods of time.

8. Construction Vegetation Clearing and Disposal Methods

For vegetation clearing during construction the SEEP shall:

- a. Describe the specific methods for the type and manner of cutting and disposition or disposal methods for cut vegetation.
- b. Indicate specifications and standards applicable to salvage, stockpiling or removal of material.
- c. Identify ownership of cleared vegetation based on landowner agreements (as applicable).
- d. Specify 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.
- e. Describe the procedures that will be followed during chemical application to protect non-target vegetation, streams, wetlands, sources of potable water supply (i.e. wells and reservoirs) and other water bodies, and residential areas and recreational users on or within 100 feet of the ROW.

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.

10. Land Uses

- a. The SEEP shall attach the New York State Department of Agricultural and Markets, Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands (Revision 10/18/2019) which shall describe the programs, policies, and procedures to mitigate agricultural impacts.
- b. If required by the issued Certificate, a description of avoidance, minimization or mitigation for impacts to any other sensitive land uses not covered by other sections of the SEEP.

11. Final Geotechnical Engineering Report

- a. The SEEP shall attach a final Geotechnical Engineering Report.

12. Inadvertent Return Plan

- a. The SEEP shall attach an *Inadvertent Return Plan* showing all locations where horizontal directional drilling (HDD) or other trenchless method(s) are proposed. 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:
 - i. Prior to conducting HDD or other trenchless method typical material safety data sheets will be provided to DPS and DEC staff, and the Towns.
 - ii. Drilling fluid circulation shall be maintained to the extent practical.
 - iii. If inadvertent returns occur in upland areas, the fluids shall be immediately contained and collected.
 - iv. 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.
 - v. 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.
 - vi. 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.
 - vii. Drilling operations must be suspended if the surface returns may result in a violation of water quality standards or Certificate Conditions.
 - viii. 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 DPS and DEC staff will be notified and consulted.
 - ix. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area DPS and DEC 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.
 - x. The plan shall establish protocols for recovery of inadvertent releases, handling and disposal.
 - xi. Any drilling fluid inadvertently discharged must be removed from agricultural areas.

13. Visual Mitigation

- a. The SEEP shall attach a final Visual Mitigation Planting Plan (VMPP), based on the mitigation section presented in the VIA that meets or exceeds the certificate conditions. The VMPP shall include:
 - i. Details showing the location and specific vegetation type to be planted at each designated visual mitigation area in accordance with the specifications and planting layout depicted in the Final Visual Mitigation Planting Plan as prepared by the Applicant's Landscape Architect. A distinct, site-specific module will be developed and implemented at each designated visual impact area.
 - ii. A construction timeline and schedule including

- a) Installation guidelines &
 - b) Field assessment
 - iii. Maintenance/replacement program.
- b. The final VMPP will be implemented (i.e. planting will occur) prior to or in conjunction with the installation of the solar panel arrays, to the extent practicable. All plantings should occur during the spring or fall planting season.

14. Cultural Resources

- a. The SEEP shall attach a *Final Unanticipated Discovery Plan*, establishing procedures to be implemented in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction.
- b. If complete avoidance of archaeological sites is not possible, the Certificate Holder shall consult with the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and DPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be discussed with the Towns and included in the plans.

15. Avian and Bat Impacts

- a. The SEEP shall attach the final “Net Conservation Benefit Plan” (NCBP). The final NCBP shall identify which sections of the NCBP have been updated or changed from any preliminary NCBP filed prior to Certification the Facility. DEC’s review and acceptance of the final NCBP shall be limited to any updated or changed sections and Sections 4.0 and 5.0 of the NCBP.

At a minimum, the final NCBP shall address the Siting Board’s Order and Certificate and contain the following information if not already included:

- a) A detailed description of measures identified by NYSDEC and those considered by the Certificate Holder to fully avoid impacts to Northern Harrier, Short-eared Owl and Upland Sandpiper (Affected Species), and a demonstration that measures to fully avoid impacts are impracticable;
- b) A detailed description of measures identified by NYSDEC and those considered by the Certificate Holder to minimize, to the greatest extent practicable, unavoidable impacts to the Affected Species, and a discussion of the minimization actions to be implemented at the Project;
- c) A detailed description of measures and sites identified by NYSDEC and those considered by the Certificate Holder to mitigate for unavoidable impacts to the Affected Species;

- d) An identification of the mitigation actions to be undertaken by the Certificate Holder that will result in a net conservation benefit to the Affected Species and not solely an offset for the potential take of individuals. To achieve a net conservation benefit for unavoidable impacts to the Affected Species, mitigation actions will be implemented to compensate for the loss of Northern Harrier breeding habitat, Short-eared Owl wintering habitat, and Upland Sandpiper breeding habitat as described in the Certificate;
- e) A detailed discussion of the net benefit calculations based on the actual location and type of minimization and mitigation measures to be taken for each of the Affected Species;
- f) Full source information used as inputs to the net benefit calculations for each of the Affected Species;
- g) An identification of the location(s) and size of mitigation parcel(s);
- h) A discussion of the management and maintenance actions required to achieve a net conservation benefit for impacts to the Affected Species;
- i) An appropriate monitoring program to determine compliance with mitigation requirements and its effectiveness;
- j) A proposed method for monitoring the effectiveness of the plan;
- k) Identify a timeline for implementation of measures required by the plan;
- l) Proof of access to and right to perform land management activities on the mitigation site(s);
- m) Identification of all persons that will be involved in implementing the NCBP, with individuals responsible for funding and implementing the plan clearly identified, and;
- n) A letter or other indication of the Certificate Holder's financial and technical capability and commitment to fund and execute such management, maintenance, monitoring, and adaptive management for the 30-year life of the Project.

16. Wetlands, Streams, and Other Waterbodies

- a. The SEEP shall include a table listing all delineated federal and state jurisdictional wetlands, streams, vernal pools and other waterbodies located on or adjacent to the Facility site, along with the following information for each resource: Town name, centroid coordinates of the resource, location within/relative to the Facility site (i.e., associated site plan and profile drawing sheet number and reference location); stream name (as applicable), delineated feature identification code, community type, DEC Stream Classification (as applicable), DEC Freshwater Wetland designation (as applicable), DEC Water Index Number (for streams), specific construction activities or crossing method affecting the resource (if any; specify the crossing distance across the resource or to the associated Facility construction

area).

- b. A description of construction activities within delineated federal and state jurisdictional wetlands, streams,⁵ and/or other waterbodies outlining the following requirements, where applicable:
 - i. Where any access roads in wetlands are to be constructed through wetlands
 - a) Temporary access roads shall use construction matting or similar material; and
 - b) Permanent access roads shall use a layer of geotextile fabric and at least six inches of gravel shall be placed in the location of the wetland crossing after vegetation and topsoil is removed.
 - c) Permanent access roads in wetlands shall be designed to maintain hydrological connectivity of the wetland and be designed to the minimum size needed for operational and maintenance activities, including emergency access requirements.
 - ii. The Certificate Holder shall utilize free span temporary equipment bridges or temporary culverts designed to DEC and/or U.S. Army Corps of Engineers standards where applicable to cross all delineated streams with flow at the time of the proposed crossing. This will outline how:
 - a) Bridges or culverts may not be dragged through the stream and must be suitably anchored to prevent downstream transport during a flood.
 - b) Fill may not be placed within the stream channel below bankfull elevation and placement of abutments or fill is authorized only above and outside bankfull boundaries.
 - c) 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 stream.
 - iii. 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 DPS and DEC staff are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved by DPS and DEC;
 - iv. Low weight to surface area equipment shall be used and/or equipment shall be placed on temporary matting as needed to minimize soil compaction and erosion;
 - v. 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.)

⁵ Delineated streams refer to the nine (9) streams identified and delineated by Mohawk Solar (AA, AB, 3C, FF, 3K, 3M, OO, P, and PP).

and associated fill shall be completely removed, and the disturbed area shall be regraded and restored immediately following the completion of work;

- vi. All fish trapped within cofferdams shall be netted and returned, alive and unharmed, to the water outside the confines of the cofferdams, in the same stream; and
 - vii. All excess materials shall be completely removed to upland areas more than 100 feet from state-regulated wetlands and streams and shall be suitably stabilized.
 - viii. 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.
- c. Description of construction activities to facilitate utility crossings that will temporarily impact delineated federal and state jurisdictional wetlands, streams, and other waterbodies, including a site-specific assessment of constructability for all utility crossings that cannot use trenchless methods; specific plans with the alignment for each wetland crossing; the extent of clearing and ground disturbance; description of methods used to minimize soil disturbance and compaction; and adherence to the following requirements:
- i. Excavation, installation, and backfilling must be done in one continuous operation;
 - ii. Work within wetlands should be conducted during dry conditions without standing water or when the ground is frozen, where practicable;
 - iii. Before trenching occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of turbid trench water from entering wetlands, streams, or waterbodies;
 - iv. 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);
 - v. Only excavated wetland topsoil, hydric soils, and subsoil shall be utilized as backfill at wetland restoration areas;
 - vi. Wetland topsoil shall be removed and stored separately from wetland subsoil and temporarily placed onto a geo-textile blankets;
 - vii. The length of the trench to be opened shall not exceed the length that can be completed in one day. This length of trench generally should not exceed 1,500 feet in a wetland; and
 - viii. 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.
- d. Description of wetland restoration measures, including:
- i. Contours shall be restored to pre-construction conditions within 48 hours of final backfilling of the trench within wetlands and state-regulated adjacent areas;
 - ii. Immediately upon completion of grading, wetland and adjacent areas shall be seeded and/or replanted with native shrubs and herbaceous plants at pre-construction densities. Seeding 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) shall be completed to help stabilize the soils;
- iii. Wetland restoration areas shall be monitored for a minimum of 5 years or until an 80% cover of plants with the appropriate wetland indicator status has been reestablished over all portions of the restored area. At the end of the first year of monitoring, the Certificate Holder shall replace lost wetland and/or wetland adjacent area plantings if the survival rate of the initial plantings is less than 80%; and
 - iv. If at the end of the second year of monitoring, the criteria for restoration plantings (80% cover, 80% survival of plantings) are not met, then the Certificate Holder must evaluate the reasons for these results and submit an approvable Wetland Planting Remedial Plan (WPRP) for DEC and DPS approval. The WPRP must include the following:
 - a) Analysis of poor survival;
 - b) Corrective actions to ensure a successful restoration; and
 - c) Schedule for conducting the remedial work. Once approved, the WPRP will be implemented according to the approved schedule.
- e. A site-specific Stream Crossing Plan shall be developed for each permanent delineated stream crossing and shall include detailed plan, profile and cross-sectional view plans. There are no state-protected streams at the Facility Site. Bridges or culverts can be utilized at each permanent delineated stream crossing and culverts shall be designed as follows:
- i. Sized per DEC and/or U.S. Army Corps of Engineers culvert sizing criteria;
 - ii. To safely pass the 1% annual (100-year return) chance storm event;
 - iii. To contain native streambed substrate or equivalent using an open bottom arch, three-sided box culvert, or round/elliptical culvert with at least 20% of the culvert height embedded beneath the existing grade of the stream channel at the downstream invert;
 - iv. Shall be a minimum width of 1.25 times (1.25X) the bankfull width of stream channel;
 - v. The slope shall remain consistent with the slope of the adjacent stream channel. For slopes greater than 3%, an open bottom culvert, where practicable;
 - vi. Shall facilitate downstream and upstream passage of aquatic organisms; and
 - vii. Water handling plan describing the measures to direct stream flow around the work area and measures to dewater the isolated work area.
- f. A description of stream restoration demonstrating adherence with the following:
- i. 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 project area. The planform of any stream shall not be changed;
 - ii. Any in-stream work or restoration shall not result in an impediment to passage of

action for any areas that do not meet the above referenced performance standards to increase the likelihood of meeting the performance standards after five years. If, after five years, monitoring demonstrates that the wetland mitigation is still not meeting the established performance standards, the Certificate Holder must submit a Wetland Mitigation Remedial Plan (WMRP). The WMRP must include the following:

- a) Evaluation for why performance standards are not being achieved;
- b) Corrective actions to ensure a successful mitigation; and
- c) Schedule for conducting the remedial work. Once approved, the WMRP will be implemented according to the approved schedule.

17. Invasive Species Control Plan

- c. The SEEP shall attach a final Invasive Species Control Plan (ISCP), based on the pre-construction invasive species survey of invasive species conducted within the Project Area during the previous growing season. The ISCP shall include:
 - i. Measures that will be implemented to minimize the introduction of Prohibited invasive species pursuant to 6 NYCRR Part 575 and control the spread of existing invasive species during construction (i.e., as a result of soil disturbance, vegetation clearing, transportation of materials and equipment, and/or landscaping/re-vegetation). Control measures may include construction materials inspection and sanitation, mechanical/chemical treatment, and site restoration, among others.
 - ii. 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 ISCP effectiveness and inform potential remedial action.

18. Sound

- a. A statement that the Certificate Holder will comply with the following conditions regarding construction noise:
 - i. Comply with all local laws regulating construction noise;
 - ii. Maintain functioning mufflers on all transportation and construction machinery;
 - iii. Respond to noise and vibration complaints according to the protocols established in the Complaint Resolution Plan.
- b. 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.
- c. Final computer noise modeling shall be conducted by using:

- i. The ISO-9613-2 Sound Propagation Standard with no meteorological correction (Cmet);
 - ii. All noise sources operating at maximum sound power levels, as applicable to the daytime and nighttime periods;
 - iii. A maximum ground factor of $G=0.5$;
 - iv. A factor of $G=0$ for water bodies, if any;
 - v. A height of evaluation of 1.5 meters for all receptors; and
 - vi. A temperature of 10 degrees Celsius and 70% Relative Humidity.
- d. Sound modeling results shall include sound results in tabular and graphical format and conform to the following:
- i. Results shall be included in a report that shall include among others, sound results in tabular and graphical format.
 - ii. Sound contours shall be 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.
 - iii. Sound contours shall be rendered at a minimum, until the 30 dBA noise contour is reached, in 1 dBA steps.
 - iv. Full-size, hard copy maps (22" x 34") in 1:12,000 scale shall be submitted to DPS Staff.
 - v. Only properties that have a signed contract with the Certificate Holder prior to the date of filing shall be identified as "participating."
 - vi. 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.
 - vii. Final computer noise modeling files shall be delivered to DPS Staff.
- e. 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 Leq as modeled above, a prominent tone analysis will be presented subject to the following requirements:

- i. 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).
- ii. The analysis will use one-third octave band information from the manufacturers (from 10 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 (inverters/transformer package), depending on available sound power level information.
- iii. 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:
 - a) Attenuation due to geometrical divergence (Adiv),⁶
 - b) atmospheric absorption for a temperature of 10 degrees Celsius and 70% Relative Humidity (Aatm),⁷
 - c) Attenuation to the ground effect (Agr^{8,9}),
 - d) Attenuation due to a barrier (Abar) if any.¹⁰
 - e) No miscellaneous attenuations (Amisc) will be included.
- iv. If no manufacturers information or 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 with sub-condition 60 (b) (ii).

19. Operations Plans/Reports, Schedule and Timing

- a. This section of the SEEP should include a discussion of Pre-Operational and Post-Operational Filings and Expected Timing of Submissions.

⁶ Adiv can be assumed to be the same at all 1/3-octave bands and be omitted from analysis.

⁷ The same full-octave band atmospheric attenuation coefficients indicate in Table 2 of ANSI S12.62, can be used for the three adjacent one-third octave bands corresponding to each full-octave band.

⁸ 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.

⁹ Calculations will use the maximum height of the equipment as the height of the noise source.

¹⁰ Should the analysis show that a barrier will be needed, the barrier will be implemented before the start date of operations.

- b. The Facility Operations & Maintenance Plan (O&M) will include, at a minimum, a flowchart of proper communications and proper protocol for communications among parties, as relevant to the operations and maintenance of the Facility.
- c. A long-range Facility and Corridors Management Plan shall be filed within one year after the commencement of operation. The plan shall address specific standards, protocols, procedures and specifications including:
 - i. Vegetation management recommendations, based on on-site surveys of vegetation cover types and growth habits of undesirable vegetation species;
 - ii. All proposed chemical and mechanical techniques for managing undesirable vegetation;
 - iii. Where feasible, to limit the introduction and spread of invasive species, the New York Utility Company Best Management Practices for Invasive Species Transportation Prevention (Environmental Energy Alliance of New York [Jan. 2015]) will be employed;
 - iv. Herbicide use and limitations, specifications, and notification requirements will be included. 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;
 - v. Substation Fence-line Clearances, and Overhead Wire Security Clearance Zone specifications, indicating applicable safety, reliability and operational criteria;
 - vi. Review and response procedures to avoid conflicts with future use encroachment or infrastructure development;
 - vii. Host landowner notification procedures;
 - viii. Inspection and target treatment schedules and exceptions;
 - ix. Standards and practices for inspection of facilities easements for erosion hazard, failure of drainage facilities, hazardous conditions after storm events or other incidents; and
 - x. Wetland and stream protection areas, principles and practices.

Appendix 1 - Trench Breaker Spacing

