NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 18-F-0262 - Application of High Bridge Wind, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct an Approximately 100 MW Wind Powered Electric Generating Facility Located in the Town of Guilford, Chenango County.

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

Issued and Effective: March 11, 2021

Table of Contents

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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 March 11, 2021

BOARD MEMBERS PRESENT:

Tammy Mitchell, Alternate for the Chair of the
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

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(Issued and Effective March 11, 2021)

I. INTRODUCTION

By this Order, we grant to High Bridge Wind, LLC (High Bridge Wind or Applicant), a wholly owned subsidiary of Northland Power New York Wind LLC, a Certificate of Environmental Compatibility and Public Need to construct and operate a wind electric energy generating facility (the Facility or Project) in the Town of Guilford, Chenango County, New York (the Town). With the extensive conditions attached to and made part of this Order, we determine the Facility 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 various parties. We base our decision on the evidentiary record, initial and reply briefs of the parties, public comments, and applicable law and policy.

II. BACKGROUND

A. Description of the Project

The Facility will consist of up to 25 wind turbines and associated collection lines and other facilities located on 3,905 acres of private land, either leased or purchased from landowners, in the Town of Guilford, Chenango County. The turbines will have a total tip height of between approximately 655 to 671 feet, generate up to 100.8 megawatts (MWs) of electricity, and be connected to the bulk electric transmission system owned by New York State Electric and Gas Corporation (NYSEG).

An approximately 17-mile long electrical collection system corridor will connect the turbines to a collection

substation. The collection substation, with an optional five-MW battery storage system, and a point of interconnection (POI) substation, will be co-located adjacent to NYSEG's existing Jennison to East Norwich 115-kilovolt (kV) transmission line. Approximately 200 feet of overhead transmission line will connect the collector substation to the POI substation. The Project also will require the construction of two permanent meteorological towers, approximately 13.2 miles of gravel-surfaced access roads, two temporary laydown yards, a temporary concrete batch plant, and an operation and maintenance facility.

The Project will be located approximately 4.7 miles southeast of the City of Norwich, 4.3 miles east of the Village of Oxford, 4.1 miles west of the Village of Gilbertsville, and approximately 5.0 miles north of the Villages of Bainbridge, Sidney, and Unadilla.

B. Procedural History

On April 27, 2018, the Applicant filed a letter with the Secretary of the New York State Board on Electric Generation Siting and the Environment (Siting Board or Board) indicating its intent to apply for an Article 10 Certificate for an approximately 100-MW wind powered electric generated facility located in the Town of Guilford. The April 27, 2018 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 Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR). After DPS reviewed and recommended certain changes to the proposed PIP Plan, the Applicant filed a final PIP Plan on June 28, 2018.

On January 24, 2019, 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 in February and March 2019, and the Applicant responded to the stakeholder comments on March 21, 2019. In addition, the Applicant established a pre-application intervenor fund of $35,000 when the PSS was filed. The Town of Guilford was the only party requesting such funding and, as such, the full amount of the fund was awarded to the Town to pay for eligible legal services and consulting services related to engineering, land use planning, and environmental impacts, among other issues.

Following several discussions to negotiate stipulations concerning the studies necessary to complete its application, the Applicant filed draft stipulations on July 24, 2019. After a public comment period on the draft stipulations, the Applicant filed final, executed stipulations on October 4, 2019.

The Applicant filed its formal application for the

Project on August 12, 2019.[1] On August 14, 2019, the Secretary issued Notices regarding party status requests and the availability of the intervenor funds for the application phase of the proceeding. On September 24, 2019, the Secretary issued a Notice indicating that, with the addition of funds remaining from the pre-application intervenor fund account, a total of $117,787.28 was available for award to eligible municipal and local parties. In October 2019, the Examiners awarded party status to the Town of Guilford, the Guilford Coalition of Non-Participating Residents (GCNR), Jessica Gombach, the Delaware-Otsego Audubon Society, and the Alliance for Clean Energy. The Examiners also awarded intervenor funding in the amounts of $82,787.28 to the Town of Guilford and $35,000 to GCNR, the only two parties that requested such funding.[2]

On October 11, 2019, the Chair of the Siting Board notified the Applicant that its application did not satisfy the filing requirements of PSL §164. The Applicant filed application supplements on January 17, 2020. By letter dated March 16, 2020, the Chair of the Siting Board sent formal notice to the Applicant that, as supplemented, its application complied

[1] At that time, the Applicant was a wholly owned subsidiary of Calpine Corporation (Calpine). On or about May 13, 2020, Calpine transferred the Applicant to Northland Power New York Wind LLC, a Delaware limited liability company and subsidiary of Northland Power, Inc.

[2] Ruling Awarding Intervenor Funding (issued October 28, 2019). On November 13, 2019, the Examiners denied GCNR's motion for reconsideration of the ruling awarding intervenor funding and for a reallocation of the intervenor funds to award more funds to GCNR. Ruling Denying Reconsideration (issued November 13, 2019). We discuss the Examiners' rulings in more detail later in this Order.

with the requirements of PSL §164.[3]

The Examiners scheduled a procedural conference to be held by telephone on April 9, 2020, 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. On April 8, 2020, GCNR moved to postpone the procedural conference until two weeks after the lifting of the ban on all non-essential gatherings that had been put into effect by Governor Andrew Cuomo on March 20, 2020, in response to the COVID-19 pandemic spreading rapidly throughout the State.[4] The Examiners denied GCNR's motion upon the ground that, absent the Siting Board's extension of the applicable 12-month statutory time period, the Siting Board was required to decide this case by March 16, 2021.

By ruling issued April 16, 2020, the Examiners established a procedural schedule requiring the filing of direct testimony and exhibits on July 13, 2020, the filing of rebuttal testimony and exhibits on August 3, 2020, and an evidentiary

[3] By letter dated January 16, 2020, Speaker of the Assembly Carl E. Heastie appointed Jason Fleming as an ad hoc member of the Siting Board. By letter dated January 29, 2020, Governor Cuomo appointed Art Eric Christensen as an ad hoc member of the Siting Board. Mr. Christensen resigned as an ad hoc member on July 13, 2020. Mr. Fleming resigned as an ad hoc member on November 18, 2020.

[4] Executive Order No. 202.8 (9 NYCRR §8.202.8).

hearing to commence on August 17, 2020.[5] On June 8, 2020, the Applicant filed a Notice of Impending Settlement Negotiations, indicating that negotiations would be aimed at resolving issues through proposed certificate conditions. In accordance with the Siting Board's rules, the Examiners' review of the notice was completed and reported to the Siting Board on June 10, 2020.

On July 13, 2020, the Applicant filed a Settlement Proposal, which included: (1) proposed Certificate Conditions; (2) proposed guidance for the development of a Site Engineering and Environmental Plan (SEEP Guide); (3) a revised Noise Complaint Resolution Plan (Appendix 19-B to the Application), and (4) a revised Sound Compliance Testing Protocol (Appendix 19-C to the Application). The Settlement Proposal was separately signed on various dates by the Applicant, DPS Staff, DEC Staff, staff of the Department of Agriculture and Markets (DAM), staff of the Department of Health (DOH), and the Town of Guilford (the Signatory Parties), with DPS Staff taking exception to proposed Certificate Condition 70 as it relates to the Sound Testing Compliance Protocol. GCNR did not join the

[5] On April 27, 2020, the Examiners issued a ruling identifying the issues that are appropriate subject matters for testimony in this proceeding. The Examiners determined that all issues described by the parties were appropriate subject matters for testimony, except for the issue raised by the Town of Guilford and GCNR as to whether the Project will have any impact on local property values and the negotiation and Payments in Lieu of Taxes or Host Community Agreements. GCNR sought interlocutory review of that part of the ruling which stated that evidence of property value impacts would not be included in the record. On June 30, 2020, the Siting Board granted interlocutory review and affirmed the Examiners' Issues Ruling excluding evidence of property value impacts. By letter dated July 13, 2020, ad hoc member Art Eric Christensen resigned from the Siting Board, noting his disagreement with the determination that evidence of property values was appropriately excluded from the record. Hearing Exhibit 132.

Settlement Proposal.

In addition, DEC Staff and GCNR filed direct testimony and exhibits on July 13, 2020. DAM Staff filed direct testimony and exhibits on July 14, 2020, as did DPS Staff, which also filed testimony in support of the Settlement Proposal.[6] On July 28, 2020, the Secretary issued a notice that canceled the in-person evidentiary hearing due to circumstances related to the COVID-19 pandemic. On August 3, 2020, the Applicant and GCNR filed rebuttal testimony and exhibits. On August 11, 2020, the Applicant filed sur-rebuttal testimony with a request that it be accepted for filing. The Applicant asserted that certain of GCNR's rebuttal testimony should have been presented in direct testimony and contained information that the Applicant purported to clarify and correct in its sur-rebuttal testimony.

On August 24, 2020, the Examiners issued a ruling that, among other things, denied motions by GCNR seeking reallocation of intervenor funds from the Town of Guilford to GCNR, administrative notice that the Applicant did not file a revised Preconstruction Noise Impact Analysis (PNIA), and to strike the Applicant's sur-rebuttal testimony or permit GCNR to file sur-rebuttal testimony.[7] Based upon the parties' representations that they did not intend to conduct cross examination of witnesses at an evidentiary hearing, the Examiners found, without objection, that an evidentiary hearing was not required. The Examiners established a briefing schedule, indicating that they would entertain motions to admit the pre-filed direct and rebuttal testimonies and the Proposed Settlement, as well as all associated exhibits, and directed the

[6] The testimony and exhibits filed by DAM Staff and DPS Staff were accepted for late filing without objection.

[7] We discuss certain aspects of those motions and the Examiners' rulings in more detail later in this Order.

parties to submit a stipulated Index to the Record.

On September 4, 2020, the Applicant, DPS Staff, DEC Staff, DAM Staff and GCNR submitted motions to admit their pre-filed testimony and exhibits. On September 11, 2020, the Applicant submitted the Stipulated Exhibit List. On September 16, 2020, the Examiners issued a ruling admitting into evidence the pre-filed testimony as well as 180 exhibits, including the Settlement Proposal documents.

On October 2, 2020, the Applicant, DPS Staff, DEC Staff, the Town of Guilford, and GCNR timely filed initial briefs. DAM Staff filed its initial brief on October 5, 2020, which was accepted for late filing without objection. The Applicant and DPS Staff filed reply briefs on October 16, 2020.

An outstanding procedural matter remains to be addressed. On April 8, 2020, GCNR filed a motion with the Siting Board for an extension of the 12-month statutory time period because of the extraordinary circumstances of COVID-19 and governmental actions taken to reduce the spread, such as closing non-essential businesses and issuing stay at home directives. GCNR argued that these actions necessitated additional time for the Examiners and the parties to develop an adequate record on the issues involved in this matter. Such motion, however, was premature inasmuch as it alleged myriad difficulties in a speculative manner, none of which ultimately materialized in any meaningful manner. Rather, as the Siting Board looks at the record compiled during the last year, it finds no deficiencies and sees no reason now to extend the 12-month time for a Siting Board decision. Further, there is no demonstration that the alternative means employed by the Examiners to continue the review process was inadequate or that it would have produced materially different results had it occurred over the same time period without any restrictions

imposed because of the COVID-19 pandemic. Accordingly, the GCNR motion is denied.

C. Public Involvement and Comments

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 local participation from affected local, State and federal agencies to facilitate communication between developers and interested or affected stakeholders, solicit public comments, provide notice of proposed project milestones and events, and to encourage the public and interested parties to engage in the process and provide input.

The Applicant implemented its public involvement program throughout the pre-application, scoping, and application phases of this proceeding. Among other things, the Applicant attended meetings with the Guilford Town Board to provide Project information and answer questions from officials and the public. The Applicant provided information about the Project to stakeholders and community members through mailings, open house meetings, newspaper postings, telephone conversations, a local Project office, a toll-free number, a Project website, and by establishing local document repositories at the Guilford Town Hall and three local libraries. The Applicant solicited feedback from visual stakeholders as well.

Due to ongoing COVID-19 pandemic restrictions on large in-person gatherings, the Hearing Examiners scheduled two public statement hearings to be held by teleconference in October 2020. To address concerns raised by the Town of Guilford that the public should be provided with the informational presentation on the Project traditionally given by the Applicant at the in-person public statement hearings, the Applicant held a virtual

public information session in September 2020, which included a presentation by the Applicant and a question and answer session.

Public comments have been accepted and posted on the Siting Board's Document and Matter Management System (DMM) since October 2018. Over 170 public comments have been submitted on DMM by various individuals, including Senator Frederick J. Akshar II (52nd District) in opposition to the Project and Assemblyperson Clifford Crouch (22nd District) in support of the Project. In addition, a total of nine people spoke at the public statement hearings in October 2020.

The majority of the comments made at the Public Statement Hearings and submitted on DMM oppose the Project, focusing on environmental, health, financial and community impacts, and asserting that the Project should not be approved over strong local opposition and for the benefit of only the developer and a few large landowners. The concerns raised include the height of the turbines, visual impacts and shadow flicker, turbine noise and infrasound, ice and blade throws, interference with cellphone service and television reception, fire hazards, impacts to airport instrument approaches and departures, transportation delays and noise during construction, changes to the rural character of the community, damage to wells and aquifers, bat and bird fatalities and displacement of wildlife, sufficiency of setbacks, impacts on property values, the temporary and questionable nature of any economic benefits the Project may provide, and decommissioning and site restoration. Commenters also stated that the Applicant and the Town Board did not adequately communicate with Town residents about the Project, that the Town Board passed a local law favoring the Applicant, and that the Town Board did not represent the interests of a majority of its residents throughout this process.

Commenters in support of the Project, which include several members of labor unions, highlight the economic benefits from local construction jobs, maintain that concerns about shadow flicker and bat and bird fatalities are overstated, and note that the Project provides for the development of green, renewable energy. One commenter stated that the economic benefits from the Project would help support education and county and local services.

Concerning the public involvement process, GCNR witness William Pratt testified that the Applicant's public outreach was "grossly ineffective" because it was not until January 2019 that information started getting out to the general public.[8] He also stated that public notices via newspapers are inadequate and that many people do not use the internet and are not involved in social media. However, testimony by both the Applicant and DPS Staff recounts in detail the steps taken to inform the public and solicit their input.[9] As testified to by DPS Staff, the Applicant developed its PIP Plan in the middle of 2018 and has implemented the public involvement program throughout the Article 10 process.[10] Based upon our review of the record, we are satisfied that the Applicant provided appropriate public outreach throughout this process.

In its brief, DPS Staff proposes that we include a certificate condition to "ensure that affected stakeholders and members of the general public are kept informed throughout the duration of any given project."[11] DPS Staff recommends that such certificate condition require the Applicant "to mail notices at

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8 Transcript (Tr.) 6-8.

9 Tr. 27-38, 357-363, 568.

10 Tr. 359.

11 DPS Staff Initial Brief, p. 6.

major milestones to the project mailing list comprised of the updated stakeholder list, including host and adjacent landowners, and additional addresses received through public outreach," and that "documentation of such mailings, including dates of the mailing, a copy of the materials provided, and the mailing list be provided to the Secretary."[12]

DPS Staff's proposed certificate condition is vague to the extent that it proposes notices to be mailed at "major milestones," which is not defined for purposes of the proposed certificate condition. In any event, the proposed Certificate Conditions already contain notice provisions with respect to the commencement of construction and for decommission. In our view, the specific wording for the notice provision now proposed should have been provided to and considered by the parties before the submission of briefs so that we would have the benefit of their input in determining the appropriate wording, scope and effect of such a provision. Accordingly, we do not adopt the certificate condition now proposed by DPS Staff.

D. Proposed Settlement

The Settlement Proposal includes Certificate Conditions, a SEEP Guide, a Sound Testing Compliance Protocol, and a Noise Complaint Resolution Protocol. The Applicant, DEC Staff, DAM Staff, the Town and DOH Staff executed the Settlement Proposal without exception. The Applicant states that, taken together, the Certificate Conditions and SEEP Guide demonstrate that the Applicant has avoided and minimized probable environmental impacts from the proposed Facility to the maximum extent practicable, to the satisfaction of the Signatory

[12] DPS Staff Initial Brief, p. 6.

Parties.[13] DEC Staff states that the Project will comply with applicable environmental statutes and regulations, provided that we adopt the Settlement Proposal.[14] Stating that, through settlement discussions and technical conference, "the Applicant and [DAM] Staff have been able to resolve outstanding issues relating to agricultural lands," DAM Staff requests that we issue a Certificate to the Applicant subject to the Settlement Proposal filed in this case.[15] The Town states that the Applicant "has in good faith addressed or at least attempted to address nearly every issue and concern raised by the Town."[16] DOH Staff has not commented on the Settlement Proposal.

DPS Staff agreed to the Settlement Proposal except to the limited extent that Certificate Condition 70 incorporates the Sound Testing Compliance Protocol. DPS Staff asserts that the Sound Testing Compliance Protocol is inconsistent in certain respects with recent sound testing protocols adopted by the Siting Board and requires modification so that sound testing compliance can be effectively evaluated should the Project be approved and constructed.

Specifically, as discussed in more detail later in this Order, DPS Staff maintains that the Sound Testing Compliance Protocol must be modified to adopt the use of secondary windscreens and a 1.5-dBA correction for two-story residences. In addition, DPS Staff argues against a wind speed limitation that the Applicant advanced in rebuttal testimony and that would discard compliance sound measurements when the windspeed at the ground-level microphones exceeds five meters

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[13] Applicant Initial Brief, p. 16.

[14] DEC Staff Initial Brief, p. 5.

[15] DAM Staff Brief, pp. 7-8.

[16] Town Brief, p. 4.

per second. With its proposed modifications, DPS Staff asserts that the Settlement Proposal, SEEP Guide, Sound Testing Compliance Protocol and Noise Complaint Resolution Protocol will allow the Siting Board to find that the Project is in the public interest and issue a Certificate authorizing its construction and operation pursuant to PSL §168.[17]

GCNR did not support the Proposed Settlement and raises several arguments in support of its position that the Project is not in the public interest and should not be approved. GCNR argues that proposed noise exposure limits are not appropriately protective and that noise is likely to have an adverse impact on public health; that shadow flicker will have negative impacts on the health of two individuals; that the Project will have adverse impacts on groundwater and well water supplies; that the Project's visual impacts will have an adverse impact on the Town's community character; and that the Project is likely to have negative socioeconomic impacts on property values, tax revenues and local businesses. Those arguments are discussed in more detail later in this Order.

GCNR also notes that DPS Settlement Guidelines state that, in determining whether a settlement is in the public interest, weight "shall be given to fact that a settlement reflects agreement by normally adversarial parties."[18] GCNR argues that the Siting Board should weigh GCNR's opposition to the Settlement Proposal in favor of rejecting the Settlement Proposal as not being in the public interest.[19] The signatory

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[17] DPS Staff Initial Brief, pp. 1-2, 48.

[18] Cases 90-M-0255, et al., Procedures for Settlements and Stipulation Agreements, Opinion 92-2 (issued March 24, 1992) (Settlement Guidelines), Appendix B, Procedural Guidelines for Settlements, p. 8.

[19] GCNR Initial Brief, p. 18.

parties to the Settlement Proposal – the Applicant, DEC Staff, DAM Staff, the Town of Guilford and DPS Staff - normally would be considered to be adversarial parties in an Article 10 proceeding. GCNR's arguments in opposition to the Proposed Settlement as not being in the public interest are addressed in the discussion section of this Order.

GCNR also challenges the Settlement Proposal as failing to comply with the Settlement Guidelines because not all signatory parties have provided a statement and testimony in support of the settlement that sets forth each party's rationale for entering into the settlement and how the settlement of issues compares to the likely outcome of litigation. In making this argument, GCNR misquotes the Settlement Guidelines, which require "proponents of a proposed settlement to place into the record the details of an agreement, and a statement or testimony in support, which should contain its underlying rationale and how the settlement of the issues compares to both its litigating position and what it regards as the likely outcome of litigation."[20] Here, the testimony and exhibits and briefs filed by the Signatory Parties address their initial positions and reasons for entering into the Proposed Settlement, and the briefs and evidentiary record as a whole provide us with a sufficient basis to make the findings and determinations required by PSL §168. Accordingly, we reject GCNR's argument.

III. PROCEDURAL DISPUTES

A. GCNR's Challenges to Intervenor Funding Award

GCNR argues that the Examiners' October 28, 2019 ruling awarding intervenor funding was inequitable and circumscribed its participation in this proceeding. Out of the

[20] Settlement Guidelines, Appendix B, p. 6 (emphasis supplied).

$117,787.28 of intervenor funds available for award, the Town requested an award of $100,800 and GCNR requested an award of $58,893.64. The Town argued that it was reasonable for it to be awarded the majority of the funds because the scope of its concerns was broad and its perspective was one that would fairly balance the concerns of all residents of the Town, including those in favor of the Project and those opposing it. GCNR stated that it represented approximately 200 local residents who had various concerns with the Project's potentially negative impacts on the community and its residents, and that the amount of the intervenor funds it requested was necessary for meaningful public participation. The Examiners took those factors into consideration in determining an equitable allocation of funds and awarded $82,787.28 to the Town and $35,000 to GCNR.[21]

On November 13, 2019, the Examiners denied GCNR's request for reconsideration. GCNR had argued that the award of intervenor funds was procedurally defective because it was not made at or after a conference at which GCNR would have had the opportunity to argue against the Town's request and in favor of its own. The Examiners rejected that argument on the ground that the pertinent statutory and regulatory provisions – PSL §165(2) and 16 NYCRR §1001.10(b)(8) – do not require a conference to be held before intervenor funds can be awarded and leave it to the Examiners' discretion to decide whether to hold such a conference. The Examiners also rejected GCNR's argument that the intervenor funding award was inequitable because it awarded more than 50% of available funds to the Town, which, according to GCNR, took a position inconsistent with that of more than 70% of the Town's residents. After determining that

[21] Ruling Awarding Intervenor Funding (issued October 28, 2019).

GCNR did not establish that 70% percent of the Town's residents opposed the Project, the Examiners ruled that it was equitable to allocate a greater share of the intervenor funds to the Town than to GCNR because the Town represented the interests of every resident, whereas GCNR represented only the interests of its membership, which was small in relation to the population of the Town.[22]

In August 2020, GCNR filed a motion seeking the reallocation of $21,440.77 in intervenor funds from the Town to GCNR, arguing that that the Town no longer needed intervenor funding because it had resolved its disputes with the Applicant and, therefore, would no longer contribute to the development of the record. GCNR also stated that it had used essentially all of its $35,000 intervenor funding award and lacked sufficient funding to continue its participation in this case. The Examiners determined that GCNR did not provide a compelling justification to disturb the intervenor funding awarded to the Town, noting that the Town had participated in this proceeding in various ways and that no reason existed to believe that the Town's participation had concluded. The Examiners recognized that further motion practice and briefing would be required and that intervenor funds could be required for the Town to participate in any post-decision motion for rehearing or other relief.[23]

We determine that the Examiners had a reasonable basis to allocate the intervenor funds as they did to ensure an equitable allocation of funds that would foster broad public participation in this proceeding. The Town Board represents all

[22] Ruling Denying Reconsideration (issued November 13, 2019), pp. 2-3.

[23] Ruling on Motions and Establishing Briefing Schedule (issued August 24, 2020), pp. 4-7.

of the Town's residents and it is reasonable to award the Town more intervenor funding than the 50% required to be set aside for eligible municipalities, rather than awarding additional intervenor funds to a local group party that has far fewer members to represent.

We also determine that the Examiners had a reasonable basis not to reallocate intervenor funds after the Town entered into the Settlement Proposal, given that the Town would be expected to participate in further administrative proceedings in this case prior to our decision and possibly thereafter. In responding to GCNR's motion, the Town explicitly stated that it expected to expend its remaining intervenor funds through its participation in the rest of this case, and the Town also would be entitled to seek reimbursement for the costs incurred in responding to GCNR's motion for the reallocation of intervenor funds. Indeed, in a quarterly intervenor report filed on November 5, 2020, and February 10, 2021, the Town states that it seeks reimbursement of an additional $20,376.17 in intervenor funds for services provided by its attorneys and expert environmental engineering consultants during the third and fourth quarters of 2020.

Finally, we note that GCNR filed testimony, exhibits, motions, and a brief in this case. Although GCNR states that intervenor funds were not available to offset the cost of its brief, we do not find that the manner in which intervenor funds were awarded prevented GCNR from meaningfully participating in this proceeding. For all of the reasons stated, we reject GCNR's arguments with respect to the intervenor funding awards made in this case.

B. GCNR's Motion Regarding the Revised PNIA

On August 14, 2020, GCNR filed a motion that, as

relevant here, requested administrative notice that the Applicant filed a PNIA (Application Appendix 19-A) on August 16, 2019, and did not later file a revised PNIA with its Application Supplement. The dispute arose over a revised PNIA that the Applicant filed as a confidential document with its Application Supplement on January 17, 2020. As stated earlier, the Examiners denied the motion in a ruling issued on August 24, 2020.

GCNR argues that the Applicant failed to serve it with the revised PNIA in January 2020 and intentionally or negligently withheld such information until approximately six days before direct testimony was due to be filed on July 13, 2020. GCNR notes that it based its direct testimony on the August 2019 PNIA and maintains that it was prejudiced by being forced to expend its own scarce resources reviewing noise data that was out of date. GCNR asserts that, as a result, it was deprived of an opportunity for meaningful public involvement and that we should deny a Certificate on that basis alone. We disagree.

We recognize, as did the Examiners, that the Applicant did not provide the Application Supplement figures and appendices to the parties via hardcopy, flash drive/CD Rom, or email. Instead, on January 17, 2020, the Applicant served the parties, including counsel for GCNR, by email with PDF versions of the filing cover letter, the application deficiency response letter, the application supplement overview, and a revised Exhibit 31. In that email, the Applicant informed the parties that the revised figures and appendices associated with the Application Supplement were not being transmitted by email due to their size, but that the documents were available on the Siting Board’s DMM system and would be provided directly to any party upon request.

Because Examiners had been assigned to the case at the time that the Application Supplement was filed, the Applicant properly submitted the confidential revised PNIA directly to the DPS Examiners, rather than to the Secretary's office, for filing. The DPS Examiners uploaded the confidential revised PNIA to DMM that same day. However, the public-facing version does not reveal the existence of confidential filings. Moreover, as the Applicant explained in opposition to GCNR's motion, a clerical error in the Secretary's office resulted in the public placeholders for the confidential version of the revised PNIA to be omitted from DMM. Thus, as GCNR asserts, the public-facing version of DMM did not contain an entry in the public documents tab that showed that a revised PNIA had been filed in January 2020. That omission was not corrected until August 19, 2020.

As the Examiners stated in their ruling, while the Applicant's reliance upon DMM as the primary source for parties to access filed documents is not prohibited and was not subject to objection, that practice contributed to the dispute over the filing of the revised PNIA. Nevertheless, counsel for GCNR had notice that a revised PNIA existed as early as January 17, 2020, when it received the email from the Applicant serving the Application Supplement overview, which mentions the revised PNIA on several pages, including in the table of contents.[24] Indeed, the Application Supplement overview specifically states that "the Applicant has updated Appendix 19-A: Preconstruction Noise Impact Assessment" and lists the specific sections of the PNIA that were updated.[25]

In addition, counsel for GCNR was provided with notice

[24] Hearing Exhibit 7, Application Supplement Overview, pp. 2, 19, 20, 21 and 23.

[25] Hearing Exhibit 7, Application Supplement Overview, p. 19.

that the revised PNIA was filed when, on January 21, 2020, an email notification was sent from the Secretary's office to the party list, including GCNR's counsel, informing that a new filing was available in this case and identifying that filing as a three-part, confidential document named "Appendix 19-A Update Preconstruction Noise Impact Analysis." On April 6, 2020, in response to a March 2020 information request by GCNR for all unredacted portions of the August 2019 PNIA, the Applicant stated that "The unredacted Appendix 19-A Update: Preconstruction Noise Impact Assessment (PNIA) revised January 6, 2020, is enclosed herewith."[26] Although the revised PNIA was not enclosed, counsel for GCNR did not follow up immediately to request it.

Moreover, by counsel for GCNR's own admission, GCNR's counsel was in actual possession of the unredacted, confidential version of the revised PNIA no later than July 7, 2020, when it was provided by the Applicant to GCNR's counsel in response to a July 7 email regarding the March 2020 information request. Although that communication was made prior to the July 13, 2020 deadline for submission of direct testimony, counsel for GCNR failed to raise any concern with the Examiners that GCNR's witnesses were prejudiced by any delay in access to that document, nor did they request additional time to submit testimony related to the revised PNIA. Instead, counsel for GCNR opted to proceed with the filing of GCNR's direct testimony based upon the August 2019 PNIA.

In sum, counsel for GCNR had notice of the revised PNIA in January 2020, was in actual possession of the confidential revised PNIA prior to the filing of direct testimony, filed direct testimony based on the August 2019 PNIA,

[26] Applicant's Response to Omnibus Motion, Attachment D.

and only raised the issue in a motion that it filed approximately one month after the filing of GCNR's direct testimony and after the deadline for submission of all testimony had passed. Given the 12-month statutory timeframe applicable to Article 10 proceedings, GCNR's counsel should have raised the issue sooner. Accordingly, under all the circumstances, we reject GCNR's contention that its right to participate in this proceeding was prejudiced because of its nonreceipt of the revised PNIA in January 2020.

IV. STATUTORY AND REGULATORY FRAMEWORK

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.[27]

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

[27] PSL §168(2)(a)–(d).

among other matters, the environment, public health and safety.[28]

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.[29] In issuing a certificate, the Siting Board may impose any terms and conditions it deems necessary and the Department of Public Service or the Public Service Commission (Commission) "shall monitor, enforce and administer compliance with any terms and conditions" set forth in the Siting Board's Certificate and Order.[30]

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.[31] When factual matters are involved, the applicant must sustain that burden by a preponderance of the evidence, unless a higher standard has been established by statute or regulation.[32]

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28 PSL §168(3)(a)–(e).

29 PSL §168(4)(a)–(g).

30 PSL §168(5).

31 16 NYCRR §1000.12(b).

32 16 NYCRR §1000.12(c).

V. FINDINGS UNDER PSL §168

A. Disputed Issues

Those issues that have been resolved by the Signatory Parties or are not otherwise contested are addressed in section V.B. of this Order. Although disputed, the economic benefits provided by the Project also are discussed in section V.B. in connection with our consideration whether the Project is in the public interest. Otherwise, the issues that are the subject of dispute are discussed immediately below.

1. Public Health, Safety and Security: Noise and Vibration – PSL §168(2)(b) and §168(3)(c)

The Application materials contain evaluations of potential noise and vibration impacts (pre-construction noise impact assessment or PNIA) that may be associated with the construction and operation of the Facility.[33] The Settling Parties agreed upon proposed noise limits that they claim reasonably avoid and minimize potential noise impacts, are protective of human health and the environment, and are consistent with Siting Board precedent.[34]

DPS Staff and the Town generally agree with the Applicant on noise issues but DPS Staff takes exception to the Sound Testing Compliance Protocol (STCP) proposed by the Applicant in Certificate Condition 70, and the Town raises concerns with respect to the updated Noise Complaint Resolution Protocol (NCRP) proposed by the Applicant.[35] For its part, GCNR opposes the sound level standards agreed upon by the other parties, and argues for stricter sound standards.

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[33] Hearing Exhibit 7; Application Exhibit 19 and Appendix 19-A.

[34] Applicant Initial Brief, p. 21; DPS Staff Initial Brief, p. 11; Town Brief, p. 6; Hearing Exhibit 2; Tr. 329-338, 505-507.

[35] Town Brief, pp. 6-8.

2. Sound Level Standards

Proposed Certificate Condition 73, which was agreed upon by all parties except GCNR, proposes sound level standards that are consistent with prior Siting Board decisions: 45 dB(A) Leq (8hr) at nonparticipating residences; 55 dbA Leq (8hr) at participating residences. In opposing the proposed sound level standards, GCNR advocates that the Siting Board adopt sound level standards in compliance with the "conditional recommendation" made by the World Health Organization in 2018 of 45 dBA Lden outside a receptor residence (WHO 2018 recommendation).[36]

The sound levels proposed by the Settling Parties are the same noise limits that we consistently have deemed appropriate to be protective of health and minimize potential annoyance for other recently approved projects, including Deer River Wind (16-F-0267), Bluestone Wind (16-F-0559) and Alle-Catt Wind (17-F-0282). As we previously have indicated, we expect to apply these sound level standards in future cases unless and until new scientific evidence develops that suggests the approach is not adequately protective of human health. We specifically considered the use of the WHO 2018 recommendation that is proposed by GCNR, including in the Baron Winds and Number Three Wind Orders, but rejected use of that recommendation because of its reliance on low quality data and the lack of strong evidence of health impacts.[37] GCNR has

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[36] GCNR Initial Brief, p. 23; Tr. 203-205.

[37] Case 15-F-0122, Application of Baron Winds LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued September 12, 2019) (Baron Winds Order), p. 114; Case 16-F-0328, Application of Number Three Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued November 12, 2019) (Number Three Wind Order), pp. 71-72.

provided no compelling evidence to justify a departure from our prior precedent or the application of stricter sound level limits than have been proposed by the Settling Parties.

With respect to GCNR's claims regarding sound level impacts on one individual resident who is alleged to suffer from migraines, the record demonstrates that the projected sound levels at that individual's residence are below the sound levels proposed by the Settling Parties. In addition, we reject GCNR's claim that it is incumbent upon the Applicant to demonstrate that it is unlikely that the operation of the Project will exacerbate this specific individual's alleged medical condition. The PSL does not require an individualized impact analysis for residents in areas impacted by Article 10 projects. Nor are applicants required to eliminate all probable environmental impacts; rather, they are required to demonstrate that those impacts have been "avoided and minimized to the maximum extent practicable."[38] The Applicant here has satisfied that requirement.

3. Sound Testing Compliance Protocol

The Applicant proposed a STCP to determine compliance with sound limits for the Facility.[39] The Applicant and DPS Staff have three disputes remaining regarding the proposed STCP: (1) the validity of sound level data collected when ground-level wind speeds are greater than five meters per second (m/s); (2) the use of secondary windscreens; and (3) whether it is necessary to add a 1.5 dBA correction to actual sound measurements for residences that have two or more stories.

a. Sound levels when ground-level wind speed is greater than 5 m/s.

In its rebuttal testimony and its initial brief, the

[38] PSL §168(3)(c).

[39] Hearing Exhibits 58 and 59.

Applicant suggests a modification to the proposed STCP: the adoption of language in Section 5(c) specifying that sound data collected when winds speeds at the microphone are greater than 5 m/s will be excluded when testing for compliance with regulatory noise standards.[40] The Applicant claims that including this data would violate standards established by the American National Standards Institute (ANSI) for accurately measuring wind turbine noise because, at higher wind speeds, the data collected would by contaminated by noise from the wind itself.[41] Moreover, the Applicant urges, the exclusion of such data would be consistent with the STCP for the Bluestone Wind Project, which, like the instant Project, is owned by Northland. The Applicant argues that it is both fair and cost-effective for Northland that both its New York projects be subject to the same STCP.[42]

DPS Staff counters that excluding such data is inconsistent with most of the recent Siting Board precedent and is not, in fact, required to comply with ANSI standards.[43]

The Applicant's reliance on Bluestone Wind as precedent for the data exclusion it advocates here is misplaced. As we noted in the Deer River Rehearing Order, the issue of data collection at wind speeds greater than 5 m/s was not specifically addressed in the Bluestone Wind Order. Rather, we adopted the conclusion of the Recommended Decision that Bluestone Wind's STCP was sufficient to verify compliance with the regulatory limits, a conclusion to which no Exceptions were

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40 Applicant Initial Brief, pp. 22-23, Tr. 539-544; see also Hearing Exhibits 58 and 59.

41 Applicant Initial Brief, p. 24; Tr. 539-544.

42 Applicant Initial Brief, p. 23.

43 DPS Staff Initial Brief, p. 11.

taken by the parties.[44] Thus, we did not take any substantive position with respect to this specific issue in the Bluestone Wind Order. However, the substantive position that the Applicant takes was specifically addressed and rejected in the recent Deer River Wind Rehearing Order.

As we stated in the Deer River Wind case, the dispute between DPS Staff and the Applicant here boils down to the choice between two positions: (1) the Applicant's position that including data collected when ground-level wind speeds are greater than 5 m/s would contaminate the data due to noise caused by the wind itself rather than by the turbines; and (2) DPS Staff's position that discarding data collected when wind speeds are greater than 5 m/s is unnecessary if a windscreen is used and that discarding that data would make it extremely difficult, if not impossible, to obtain the desired "worst case" measurement when turbines are producing their maximum sound levels. Faced with essentially the same two options in this case, we agree with DPS Staff that the proper use of wind screening avoids the need to discard sound data collected when ground-level wind speeds are greater than 5 m/s.

As we previously found, if all measurements associated with wind speeds greater than 5 m/s were excluded, it would be difficult to obtain any valid sound level measurements when the turbines were operating at maximum capacity.[45]

b. Use of secondary wind screen

DPS Staff takes issue with the fact that the

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[44] Case 16-F-0267, Application of Atlantic Wind LLC, Order on Rehearing (issued September 25, 2020) (Deer River Wind Rehearing Order), p. 8. See Case 16-F-0559, Application of Bluestone Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued December 16, 2019) (Bluestone Wind Order), p. 60.

[45] Deer River Wind Rehearing Order, p. 27.

Applicant's proposed STCP does not require the use of secondary wind screens in addition to the use of 7-inch diameter windscreen.[46] Specifically, DPS Staff recommends the use of a secondary windscreen when a 7-inch foam windscreen, which is proposed by the Applicant, is used.[47] According to Staff, while this aspect of Applicant's proposed STCP is similar to the protocol used in Bluestone Wind, as the Applicant points out, it is inconsistent with the protocols adopted by the Siting Board in three recently certified wind energy projects. In each of those projects, we required the use of a wider secondary windscreen in addition to the 7-inch windscreen.[48] According to Staff, use of a secondary windscreen would reduce the influence of noise created by wind on the sound testing microphones and improve the accuracy of measurements taken of low frequency sounds at the full octave bands of 16, 31.5 and 63 Hz.[49]

This issue is not expressly addressed by the Applicant in its initial or reply briefs. Rather, the Applicant reiterates its position that to impose requirements for sound testing for this Project that differ in any way from those requirements established for its sister project – Bluestone Wind – would unnecessarily create confusion and hardship for its consultant.[50]

We again agree with DPS Staff's position that the use of a secondary windscreen, which is commercially available, will reduce interference of wind noise for low frequency

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46 DPS Staff Initial Brief, pp. 12-15; Tr. 260-262.

47 Tr. 260-262.

48 Tr. 261; See e.g. Canisteo Wind (Case 16-F-0205), Alle-Catt Wind (Case 17-F-0282) and Deer River Wind (Case 16-F-0204).

49 Tr. 260-262; DPS Staff Initial Brief, pp. 12-13.

50 Applicant Reply Brief, pp. 4-5.

measurements.[51] We recognize that this is inconsistent with the Bluestone Wind STCP, but we conclude that, where it is supported by the record, consistency with our most recent decisions on similar Article 10 issues will be helpful for all parties in future cases to understand our policies. Further, we are not persuaded that the minor inconsistency presented between this case and the Bluestone Wind case will present an unreasonable burden or create undue confusion for the Applicant's expert consultants to navigate when taking measurements at these two project sites. For these reasons, we adopt DPS Staff's proposal with respect to this aspect of the STCP.

c. 1.5 dBA addition to actual sound measurements

DPS Staff asserts that it is appropriate to apply a 1.5 dBA correction to actual sound measurements taken at residences that have two or more stories and, here, eight non-participating residences are multi-story, warranting application of the correction in this case.[52] According to DPS Staff, the correction is required to account for differences in sound levels from the ground as observed from a two-story or higher level.

The Applicant requests that the 1.5 dBA correction not be applied so as to be consistent with the STCP adopted in the Bluestone Wind Order.[53] According to the Applicant, because it used a conservative modeling approach in its PNIA, the 1.5 dBA correction is unnecessary.[54] The Applicant argues that requiring such a correction would present an unnecessary burden to the Project and would create inconsistencies between projects owned

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51 See Deer River Wind Rehearing Order, p. 11.

52 DPS Staff Initial Brief, pp. 15-16; Tr. 265.

53 Applicant Initial Brief, pp. 25-27; Applicant Reply Brief, pp. 4-5. See Bluestone Wind Order, p. 60.

54 Applicant Initial Brief, p. 25; Tr. 542; Hearing Exhibit 7.

by Northland, which could create confusion and complexity for Northland's sound consultants.[55]

In the cases decided since the Bluestone Wind Order was issued in December 2019, we have consistently adopted a 1.5 dBA correction to actual noise level measurements for residences that have two or more stories.[56] As we recently stated in the Deer River Order, "[t]his adjustment recognizes that wind turbine noise levels are likely to be higher in the upper stories of a multi-story residence."[57] Because there are several non-participating residences in the Project Area that have two or more stories, the 1.5 dBA correction is necessary in this case. While other Orders have not included the correction, as the Applicant points out,[58] those cases presented different circumstances, primarily related to the use of more conservative computer noise modeling than proposed by the Applicant in this case.[59]

In the most recent cases, we have consistently applied the correction advanced by DPS Staff. While we appreciate the Applicant's desire for consistency among its own projects, as we stated above, we strive to ensure consistency among all of the

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55 Applicant Reply Brief, pp. 4-5.

56 Case 16-F-0205, Application of Canisteo Wind Energy LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued March 13, 2020) (Canisteo Wind Order), pp. 45-46; Case 17-F-0282, Application of Alle-Catt Wind Energy LLC , Order Granting a Certificate of Environmental Compatibility and Public Need, With Conditions, Appendix B (issued June 3, 2020) (Alle-Catt Wind Order); Case 16-F-0267, supra, Order Granting a Certificate of Environmental Compatibility and Public Need, with Conditions (issued June 30, 2020) (Deer River Wind Order), p. 28.

57 Deer River Wind Order, p. 28.

58 Applicant Initial Brief, pp 24-26; Tr. 264-266, 542-543.

59 See Tr. 543-544.

Article 10 projects sited in New York whenever possible and adopting and following a consistent line of precedent is an efficient way to accomplish that goal. The Applicant has not presented compelling evidence that the circumstances presented here warrant a departure from our most recent precedent. Therefore, we adopt DPS Staff's recommendations and the version of the STCP contained in Hearing Exhibit 136 and reject the STCP offered by the Applicant.

Notwithstanding the above, however, we also reiterate our recognition that DPS Staff's STCP adopted here has continued to be refined as additional wind facilities have been approved under Article 10, and that issues of practicability may arise in the field in the course of post-construction sound monitoring. As we have required in prior matters, during the compliance phase of this Project, DPS Staff and High Bridge Wind are directed to work together to implement the STCP and pragmatically address in the field issues of impracticability, should any arise.[60]

4. Noise Complaint Resolution Protocol

The Applicant filed the updated proposed NCRP in July 2020. As the Town points out, and the Applicant confirms, the NCRP is not part of the Settlement Proposal agreed upon by the parties, nor is it a proposed Certificate Condition. In its brief, the Town offers various comments and suggestions with respect to the updated proposed NCRP and requests that any final NCRP include clarifications to address its comments.[61] In its reply brief, the Applicant explains that it was not aware that

[60] Deer River Wind Rehearing Order, p. 10; Case 16-F-0205, Application of Canisteo Wind Energy LLC, Order on Rehearing (issued June 30, 2020) (Canisteo Wind Rehearing Order), p. 9, fn. 22.

[61] Town Initial Brief, pp. 6-8.

the Town continued to have concerns with respect to the proposed updated NCRP and indicates that it is willing to work with the Town to address those concerns before a final NCRP is submitted as part of its compliance filings.[62] The Applicant and the Town both request that the Siting Board permit them to resolve these issues and submit a final NCRP as part of the Applicant's compliance filing.[63] In light of this agreement, we amend proposed Certificate Condition 70 to require the Applicant to develop a final NCRP in consultation with the Town and submit such protocol as a compliance filing.

5. Public Health, Safety and Security: Shadow Flicker

The Siting Board must make explicit findings regarding the nature of the probable environmental impacts of the construction and operation of the Facility on public health and safety.[64] The Siting Board cannot grant a Certificate without first making certain findings, including a finding that the construction and operation of the Facility will serve the public interest, and that the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable.[65]

The regulations, 16 NYCRR §§1001.15(e) and

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[62] Applicant Reply Brief, pp. 3-4. See also Proposed Certificate Condition 74.

[63] Town Brief, p. 7; Applicant Reply Brief, p. 4.

[64] PSL §168(2)(b).

[65] PSL §168(3)(b) and (c). If the Siting Board makes a finding that the facility results in or contributes to a significant and adverse disproportionate environmental impact in the community in which the facility would be located, the Siting Board must also make a finding that the applicant will avoid, offset or minimize the impacts caused by the facility upon the local community for the duration that the Certificate is issued to the maximum extent practicable using verifiable measures. PSL §168(3)(d).

1001.24(a)(9), require an applicant to address impacts due to shadow flicker and to provide an analysis and description of related operational effects of the facility such as visible plumes, shading, glare and shadow flicker. Shadow flicker refers to intermittent changes in light intensity in a given location due to a wind turbine's interaction with the sun.[66] Shadow flicker typically occurs for a limited number of hours a year at a home due to the fact that the sun must be in a particular location in the sky, the sun and the turbine must be aligned relative to the home, there must be sufficient wind for the turbine blades to be spinning, and clouds must not obscure the sun at the relevant times.[67]

As agreed during the pre-application Stipulations phase of this proceeding, the Applicant's shadow flicker analysis identified all receptors located within a 10-rotor diameter distance of all proposed turbine locations, using the maximum rotor diameter of turbine models considered (10 times 158 meters or 5,183 feet).[68] The 818 receptor points included participating and non-participating residential structures, schools, office buildings, storefronts and known public recreation areas.[69] The Applicant assessed the shadow flicker impacts of the four wind turbine models that it is considering for the Project.[70] The Applicant used a "greenhouse model," under which each receptor point was assumed to have a window

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66 Hearing Exhibit 3, Application Exhibit 15, p. 8.

67 Hearing Exhibit 3, Application Exhibit 15, p. 8.

68 See, Hearing Exhibit 7, Updated Application Appendix 15-A, p. 6-2.

69 Hearing Exhibit 7, Updated Application Appendix 15-A, p. 1-1.

70 The four wind turbine models are the General Electric GE5.5-158, Siemens Gamesa SG4.5-145, Nordex N149/4.8, and Vestas V150-5.6. Hearing Exhibit 7, Updated Application Appendix 15-A, Table 3-1.

facing all directions, and it modeled receptors without vegetation or structures that could block shadow flicker, thereby overstating the potential amount of shadow flicker that actually will be experienced.[71]

Under the Applicant's shadow flicker analysis, the number of non-participating residences expected to have over 30 hours of shadow flicker annually varied from a low of three to a high of nine, depending on the wind turbine used for modeling.[72] The Signatory Parties have agreed to a standard of no more than 30 hours of shadow flicker annually at non-participating locations.[73] To ensure that the Facility meets the 30-hour per year shadow flicker standard, the Applicant must submit a Final Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan that includes an updated shadow flicker modeling based on final facility design and turbine specifications, monitoring provisions and detection and prevention technology or similar measures, turbine shutdown during flicker events, shielding or blocking measures for exposures resulting in complaints, and additional protocols for responding to shadow flicker complaints.[74]

GCNR argues that shadow flicker from two turbines is likely to have an adverse health impact on two individuals living in a specific non-participating residence that could be exposed to shadow flicker close to the 30-hour annual maximum.[75] In lay testimony, GCNR raised concerns that shadow flicker from

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71 Hearing Exhibit 7, Updated Application Appendix 15-A, p. 6-2.

72 Hearing Exhibit 7, Updated Application Appendix 15-A, pp. 6-7 – 6-14.

73 Hearing Exhibit 2, Proposed Certificate Condition 59.

74 Hearing Exhibit 2, Proposed Certificate Condition 59 and SEEP Guide §B(14).

75 GCNR Confidential Brief, pp. 25-26; Tr. 416.

the turbines would lead to an increase in the number of migraines one such individual has and would lead to an increase in the number of photosensitive epileptic seizures that the second individual experiences.[76] GCNR states that the Applicant has not conducted an independent medical examination to refute those claims and that the Siting Board therefore cannot determine that the Project will result in no adverse health impacts to those two individuals. GCNR requests that we require the Applicant to modify the Facility layout to eliminate noise and shadow flicker impacts at the subject residence.

Referencing the Community Noise and Health Study conducted by Health Canada in 2016, the Applicant's environmental health expert testified that there "is no evidence that shadow flicker would have a negative impact on migraines for those living in proximity to wind turbines."[77] The Health Canada Study stated that self-reported prevalence of health effects such as migraines/headaches, chronic pain, dizziness, and tinnitus were all found to be equally distributed across" different shadow flicker categories of exposure.[78]

The Applicant's expert witness also testified that "there is nothing in the literature that suggests that shadow flicker should be limited to protect" photosensitive epileptics.[79] The Applicant's expert witness cited two studies that investigated the relationship between photosensitive epilepsy and shadow flicker, which reached findings suggesting that turbine shadow flicker at frequencies greater than 3 Hertz (Hz) pose "a potential risk of inducing photosensitive seizures

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76 Confidential Tr. 166-167.

77 Confidential Tr. 494.

78 Hearing Exhibit 82, pp. 4-5.

79 Confidential Tr. 493.

in 1.7 people per 100,000 of the photosensitive population."[80] The expert witness stated that, for turbines with three blades, this translates to a maximum speed of rotation of 60 revolutions per minute (rpm), that modern turbines -- including those proposed to be used on the Project -- spin at rates well below that threshold (typically below 20 rpm), and therefore that shadow flicker from the Project would not be at a flash frequency that could trigger seizures.[81] In addition, the expert witness cited a 2011 report issued by the Department of Energy and Climate Change (United Kingdom), which concluded that the frequency of shadow flicker from wind turbines "should not cause a significant risk to health." The expert witness concluded that, in his opinion, the limitation of shadow flicker to 30 hours annually at non-participating residences is "suitable to protect the health, welfare and well-being of local residents."[82]

The Applicant argues that the record contains no evidence supporting GCNR's assertion that shadow flicker poses any additional impacts to people with migraines or photosensitive epilepsy. The Applicant also asserts that Article 10 does not require it to perform an independent medical evaluation or perform a separate impact assessment for particular individuals residing in the Project area.

As we stated earlier, the PSL does not require an individualized impact analysis for residents impacted by Article 10 projects and applicants are not required to eliminate all

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[80] Confidential Tr. 493, citing Hearing Exhibit 78, Harding et al. (2008); Hearing Exhibit 79, Smedley et al.

[81] Confidential Tr. 493. The Applicant states that the maximum rotational speed for the wind turbines under consideration for the Facility is 13.6 rpm and that, as a result, "the triggering of epileptic seizures is not a concern with this Facility." Hearing Exhibit 3, Application Exhibit 15, p. 11.

[82] Tr. 535.

probable environmental impacts; rather, they are required to demonstrate that those impacts have been "avoided and minimized to the maximum extent practicable."[83] The 30-hour maximum shadow flicker exposure limit and mitigation measures proposed in this case are consistent with standard Siting Board requirements in prior cases and with the requirements of the Town's Renewable Energy Systems Local Law (RESL), Local Law No. 3 of 2019.[84] In view of the proposed certificate conditions, and in light of the Applicant's scientific evidence and expert testimony on shadow flicker health impacts, as well as the lack of any competing scientific evidence supporting GCNR's position, we find that any adverse environmental effects from shadow flicker will be minimized or avoided to the maximum extent practicable.

6. Cultural, Historic and Recreational Resources: Visual Impacts – PSL §168(2)(c) and §168(3)(c)

The proposed Facility would impact the viewshed in and around the Facility site, including changes to the visual character of existing and proposed historical and recreational resources. The probable visual impacts are detailed in Application Exhibit 24, Appendix 24-A and updated Appendix 24-A. The nature and extent of visual impacts are represented in the visual impact assessment (VIA).

The VIA evaluated the potential visibility of the proposed Facility, provided an assessment of the character and

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83 PSL §168(3)(c).

84 See, Deer River Wind Order, p. 4, and Recommended Decision (issued March 20, 2020), p. 93; Case 16-F-0062, Application of Eight Point Wind, LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued August 20, 2019) (Eight Point Wind Order), pp. 46-47; Baron Winds Order, pp. 98-103; Case 14-F-0490, Application of Cassadaga Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued January 17, 2018) (Cassadaga Wind Order), pp. 56-57; RESL §5(B)(10).

visual quality of the existing landscape and identified visually sensitive resources, and included viewshed mapping, confirmatory visual assessment fieldwork, visual simulations (photographic overlays), and potential visual mitigation. These analyses were performed within a 10-mile radius of the Facility, referred to as the visual study area, and included the varying topography of the Facility site and vicinity.[85] A separate inventory of locally significant visually sensitive areas within five miles of the Project was also prepared.

The viewshed analysis, including the screening effects of topography, vegetation, and structures, identifies the locations within the study area from which it may be possible to view wind turbines from ground level. The viewshed analysis indicates that 90.4% of the 10-mile visual study area will not include views of Project turbines during the day and that potential areas of nighttime visibility are limited to approximately 7.4% of the study area.[86] The Applicant also assessed the potential visibility of the collection substations and point of interconnection, using a 1-mile visual study area. Existing topography and vegetation screened views of the proposed substations from 82.5% of the 1-mile visual study area.[87] In the short term, temporary impacts to visual resources would be primarily related to construction activities, which may include temporary increase in truck traffic, temporary widening of some public roads, construction and operation of laydown yards and access roads, construction of turbine foundations, and installation of turbines using a large erector crane.[88]

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85 Hearing Exhibit 3, Application Exhibit 24, p. 1.

86 Hearing Exhibit 3, Application Exhibit 24, p. 19; Hearing Exhibit 7, Updated Application Appendix 24-A, p. 2.

87 Hearing Exhibit 3, Application Appendix 24-A, p. 52.

88 Hearing Exhibit 3, Application Appendix 24-A, pp. 116-119.

After input from various stakeholders and DPS Staff, the Applicant provided visual simulations of the Project to a panel of five professionals to assess the type of extent of visual impacts from the Project.[89] Based on the panel's total average contrast rating scores, the Facility's overall contrast with visual/aesthetic character of the area generally will be minimal to moderate.[90] According to the Applicant, based "on the variability in the rating panel results and analysis provided in the VIA, it is expected that the built Facility will generally result in minimal impacts to the enjoyment of public and private resources, with some individual variability."[91]

In DPS Staff's view, visual resource impacts will be avoided or minimized to the maximum extent practicable, provided that we adopt certain proposed Certificate Conditions related to facility design, construction and operation.[92] The Signatory Parties have agreed to the following Certificate Conditions: Certificate Condition 45(a) - prohibiting advertisements, conspicuous lettering, or logos identifying the Facility owners, turbine manufacturer or other entity; Certificate Condition 45(b) - requiring turbines, towers and blades to be in Federal Aviation Administration (FAA) approved white or off-white colors and non-reflective finishes; Certificate Condition 45(c) - requiring turbine lighting to be kept to the minimum allowed by the FAA; and Certificate Condition 45(d) - requiring non-turbine lighting, such as at the O&M building, substations, and turbine access doors, to be limited to the extent necessary for security, using low-intensity lighting angled downward, unless

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89 Hearing Exhibit 3, Application Exhibit 24, pp. 25-34; Application Appendix 24-A, pp. 37-40.

90 Hearing Exhibit 3, Application Exhibit 24, p. 29.

91 Hearing Exhibit 3, Application Exhibit 24, p. 34.

92 Tr. 372-373.

otherwise required by NYSEG. In addition, under proposed Certificate Condition 60, the Applicant must file a Final Landscaping Plan that will address any visual mitigation through landscaping that may be needed for the substation, POI switchyard, battery storage facility and O&M building. Finally, under proposed Certificate Condition 61(d), the Applicant must file a final Cultural Resources Mitigation and Offset Plan to address adverse visual impacts on historic resources. Within two years after commencement of Facility construction, the Applicant will provide proof that mitigation funding awards required under that Plan have been made.[93]

GCNR argues that the Project will negatively impact the rural and natural environment of the Town and that the Applicant has presented no plan to mitigate what, in GCNR's view, will be a fundamental change to existing community character.[94] In support of its argument, GCNR cites testimony from GCNR members describing the "rural aesthetics of the surrounding hills," the small farming community with rolling hills and beautiful views, and the "tranquil land … unspoiled by industry and commercialism."[95] The Applicant responds that all land development has some environmental and visual impact on surrounding communities, that GCNR's arguments of harm to community character are based on "bare and generalized" allegations of harm, and that the record supports a determination that the visual impacts from the Facility have been avoided or minimized to the maximum extent practicable.[96]

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93 Hearing Exhibit 2, Proposed Certificate Condition 61.

94 GCNR Brief, pp. 31-32.

95 GCNR Brief, pp. 31-32, citing Tr. 179, 195 and 388.

96 Applicant Reply Brief, p. 23.

We recognize that the addition of the proposed wind turbines will impact the community character of the Town with respect to those areas of the Town that are within the viewshed of the turbines. That is not an unusual situation when wind farms are sited in rural areas of the State. We also recognize that measures to mitigate and minimize visual impacts from wind turbines are limited given their height and size. Here, as stated earlier, the Signatory Parties have agreed to various proposed certificate conditions to avoid, minimize and mitigate visual impacts to the maximum extent practicable, including a requirement that the Applicant file a final Cultural Resources Mitigation and Offset Plan to address adverse visual impacts on historic resources.[97] GCNR does not suggest different or additional mitigation efforts to those proposed by the Signatory Parties. In other cases, the Siting Board has found that visual impacts from wind turbines had been appropriately minimized or mitigated to the extent practicable with the adoption of similar certificate conditions.[98] After considering impacts on community character, we find that, with our adoption of the certificate conditions proposed in this case, the Applicant has avoided, minimized or mitigated visual impacts to cultural, historic and

[97] As stated by DPS Staff, the provision of historic resource offset measures will provide for support of local preservation initiatives in the affected Project area. Tr. 324-325.

[98] See, Case 16-F-0267, supra, Deer River Wind Order, p. 4, and Recommended Decision, pp. 109-111; Case 16-F-0062, supra, Eight Point Wind Order, pp. 55-56, and Recommended Decision (issued May 23, 2019), pp. 106-107; Baron Wind Order, pp. 135-139.

recreational resources to the maximum extent practicable.

7. Probable Environmental Impacts: PSL §168(2)(a) and §168(3)(c) and (e)

a. Ground Water Resources, Wells, and Blasting During Construction

Before granting an Article 10 Certificate, PSL §168(2) requires the Siting Board to make findings regarding the nature of the probable environmental impacts associated with constructing and operating a facility on ground 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 water pollution control laws and regulations, and State water quality standards.

The application materials detail the nature of the probable impacts from constructing and operating the Facility on ground water, including drinking water resources.[99] A review of primary aquifers mapped by DEC Division of Water Resources Management demonstrates that no primary aquifers are located within 24 miles of the Facility Site.[100] The U.S. Geological Survey (USGS) and DEC define primary aquifers as those that are highly productive and utilized by major municipal water supply

[99] Hearing Exhibit 3, Application Exhibit 23, pp. 2-9, Figures 23-1 (Groundwater Aquifers and Recharge Areas), and 23-2 (Mapped Wetlands and Surface Waters), as well as Appendices 21-D (Preliminary Stormwater Pollution Prevention Plan) and 23-A (Preliminary Spill Prevention, Control and Countermeasure Plan); Hearing Exhibit 7, Application Supplement Overview, p. 32.

[100] Hearing Exhibit 3, Application Exhibit 23, p. 23. The basis for Mr. Prosser's uncorroborated testimony to the contrary is not known (Tr. 235).

systems.[101]

The U.S. Environmental Protection Agency (USEPA) maintains authority over sole source aquifers (SSAs), which are those aquifers that supply at least 50% of the drinking water in a given area.[102] Based on a review of SSAs mapped by the USEPA, none is located within 13 miles of the Facility Site. Therefore, no adverse impacts to SSAs are anticipated.[103] The Facility Site overlays a 0.2-acre portion of an unconsolidated aquifer mapped by DEC. However, construction activities will be located more than a quarter mile from this aquifer.[104]

To identify existing water wells, the Applicant sent out 394 surveys to private landowners with unique tax parcels located within 500 feet of the Facility Site or a half mile of anticipated blasting locations (i.e., potential wind turbine locations). In addition, the Applicant requested information from DOH pertaining to public water supplies. The Applicant received 95 responses to the surveys, which identified a total of 62 private wells. Only three wells will be located within a quarter mile of anticipated blasting locations, with the closest approximately 800 feet from the nearest anticipated blasting location. The depth of the private wells ranged from 5 feet to 406 feet below grade with an average depth of approximately 200 feet below grade. Most of the wells reported are installed in bedrock and are primarily used as residential potable water

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101 See DEC Division of Water Technical and Operational Guidance Series (TOGS) 2.1.3, Oct. 23, 1990, at 2.

102 Under provision of the federal Safe Drinking Water Act, sole source aquifers are designated by the USEPA as the sole or main source of drinking water for a community (see 42 USC §300h-3[e]).

103 Hearing Exhibit 3, Application Exhibit 23, p. 2.

104 Hearing Exhibit 3, Application Exhibit 23, p. 2, and Figure 23-1.

sources.[105]

No known public water supply wells occur within 2,600 feet of the location for the nearest proposed wind turbine. The nearest public drinking water well is associated with Camp Mesorah. That well is located about 0.5 miles from the nearest proposed wind turbine location. The nearest community water system is associated with the Mt. Upton Water District, and is located 0.31 miles east of the Facility Site and 0.62 miles from the nearest proposed wind turbine location.[106]

With the application materials, High Bridge Wind provided the required documentation outlined in 16 NYCRR 1001.21(i), including a preliminary blasting plan.[107] A purpose of the plan is to outline procedures for blasting that may be required to construct the Facility. It is anticipated that most blasting will be associated with constructing wind turbine foundations. Before construction commences, the Certificate Holder will prepare a site-specific final blasting plan, which will include surveys, and monitoring requirements, among other things. In addition, the Certificate Holder will prepare a final geotechnical report.[108]

To ensure that any blasting activities do not adversely impact well water resources, the stipulated agreement includes Certificate Condition 87. The terms of this condition require the Applicant to verify that no wind turbine would be located within 100 feet of an existing water supply well or

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105 Hearing Exhibit 3, Application Exhibit 23, pp. 2-3.

106 Hearing Exhibit 3, Application Exhibit 23, pp. 3-4.

107 Hearing Exhibit 3, Appendix 21-A.

108 Hearing Exhibit 3, Application Exhibit 21, p. 9; see also Hearing Exhibit 2, Certificate Conditions 58 and 87, and SEEP Guide §B(11) (Final Geotechnical Engineering Report) and §B(13) (Final Blasting Plan).

intake. In addition, the Applicant will not conduct blasting activities within 500 feet of any known, active water supply well or intake on any non-participating parcel. Furthermore, High Bridge Wind will investigate the locations of active water supply wells on non-participating properties within 1,000 feet of any blasting activities. These investigations will include collecting water sample from these sources pre- and post-blasting. All water samples will be sent to a laboratory certified by DOH for potability analysis. Should the results of the analyses show that the water provided 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, the Certificate Holder will drill a new water well in consultation with the property owner.[109]

GCNR's witnesses testified about the Facility's potential adverse impacts to ground water and wells from blasting and other construction activities. Karen Losak-Steigerwald said that she was concerned that blasting will impact her well, and the foundation of her home. As part of her testimony, Ms. Losak-Steigerwald noted that her well is not included on Applicant's well survey map even though she notified the Applicant about her well.[110]

However, Ms. Losak-Steigerwald's property is located 1,690 feet from the proposed location of the nearest wind turbine. This separation is greater than the 100-foot setback for turbines from private drinking water wells, the 500-foot setback required for blasting activities from private drinking

[109] Hearing Exhibit 2, Certificate Condition 87, and SEEP Guide §B(13) (Final Blasting Plan). See also, Hearing Exhibit 3, Application Exhibit 21, pp. 9-12 and Application Exhibit 23, p. 6.

[110] Tr. 174.

water wells, and the 1,000-foot distance for the required pre- and post-construction well testing requirements.[111]

William M. Pratt is a resident of the Town of Guilford.[112] His potable water source is Guilford Lake. Mr. Pratt is concerned that constructing the Facility will adversely impact Guilford Lake via contamination with either polluted runoff, or methane or arsenic from blasting activities. Mr. Pratt also expressed concern that blasting activities will disturb the water table and, thereby, impact the water level of Guilford Lake.[113]

Jennifer B. Caci owns property in the Town of Guilford, and holds a Master of Science degree in Entomology and Applied Ecology from the University of Delaware. Ms. Caci serves in the United States Army as a Deputy Surgeon with the XVIII Airborne Corps. Ms. Caci is concerned that the Facility will significantly impact the water table.[114]

Construction of the proposed Facility will not likely impact the potable water resources used by Mr. Pratt and Ms. Caci for the following reasons. First, Mr. Pratt's residence is located 2.2 miles from the nearest proposed Facility turbine, and Ms. Caci's residence is located 1.8 miles from the nearest proposed Facility turbine.[115] Second, these general concerns about potential impacts to surface and ground water resources are thoroughly addressed in the application materials, and in

[111] Tr. 409-410.

[112] Tr. 183.

[113] Tr. 185-186.

[114] Tr. 193-194.

[115] Tr. 412-413. See Hearing Exhibit 40.

the testimony proffered by the Applicant's expert witnesses.[116]

Rod Prosser holds a Bachelor of Science in Civil Engineering from the University of Michigan, and is a Professional Engineer. He is the president of Lakeside Engineering, P.C. (Rochester, New York).[117] Mr. Prosser said that water wells near the Project site could be damaged or disturbed by blasting and surface water runoff.[118] For example, blasting could open seams in the rock that could allow sulfur and methane, which are known contaminants of local water wells, to enter the wells. Also, surface water runoff could be contaminated with oil and fuel used by construction vehicles, as well as oils and chemical used in electrical transformers.[119]

To address potential impacts to ground water resources, Mr. Prosser recommended the following modifications to the terms of proposed Certificate Condition 87:

1. Access roads, and transmission or collection lines should be located at least 50 feet from all water wells located on both participating and non-participating properties;[120]

2. The setback from blasting locations should be at least 500 feet from water wells located on both participating or non-participating properties;[121] and

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[116] Hearing Exhibit 3, Application Exhibit 23, Figures 23-1 (Groundwater Aquifers and Recharge Areas), 23-2 (Mapped Wetlands and Surface Waters), and Appendices 21-D (Preliminary Stormwater Pollution Prevention Plan), and 23-A (Preliminary Spill Prevention, Control and Countermeasure Plan); Hearing Exhibit 7, Application Supplement Overview, p. 32. Tr. 410-411. See also, DPS Staff Initial Brief, p. 26.

[117] Tr. 234.

[118] Tr. 236.

[119] Tr. 236-237.

[120] Tr. 240.

[121] Tr. 240.

3. The Certificate Holder should minimize blasting, and use hoe rams or other similar equipment to breakup and remove rock.[122]

In its initial brief, GCNR argues that the Applicant rejected all of these recommendations. GCNR notes that the terms of Certificate Condition 87 do not apply to potable water wells on participating parcels, and contends that the proposed certificate condition should include them. GCNR notes further that the terms of proposed Certificate Condition 87 do not require the Certificate Holder to identify all potable water wells in the vicinity of Project components. GCNR argues that the Applicant should identify all well locations before construction commences. Finally, GCNR objects to the Applicant's obligation to conduct a "reasonable investigation" of active water supply wells on non-participating parcels,[123] and argues that the requirement is not sufficient. Rather, GCNR asserts that the Applicant should identify all active water supply wells or intakes within 1,000 feet of any blasting, on both participating and non-participating parcels.[124]

According to DPS Staff, Mr. Prosser does not provide a basis to support his recommended setbacks of 50 feet for collection lines and access roads, and 500 feet for turbine locations. DPS Staff notes further that Mr. Prosser's testimony does not explain how the proposed terms of Certificate Condition 87 are inadequate.[125] DPS Staff observes that the proposed setbacks and potable water quality testing requirements are

[122] Tr. 238.

[123] Hearing Exhibit 2, Certificate Condition 87(b).

[124] GCNR Brief, p. 28.

[125] DPS Staff Initial Brief, p. 24.

consistent with our previous determinations in related cases.[126]

DPS Staff argues further that Mr. Prosser's concerns about contamination of surface water runoff and ground water resources with oil and fuel from construction vehicles and equipment are obviated by the specific avoidance, minimization, and mitigation measures outlined in the Spill Control and Countermeasures (SPCC) Plan.[127] In addition, proposed Certificate Conditions 88 and 113, and SEEP Guide §B(5)(b), would require the Certificate Holder to implement standard practices designed to avoid or otherwise minimize potential adverse impacts related to the unintended release of petroleum and other hazardous chemicals during the construction and operation of the Facility. For example, Certificate Conditions 88 and 113 address the following: (1) construction-related spills and potential contamination by requiring all construction vehicles to be equipped with a spill kit; (2) leaks to be stopped and cleaned up immediately; and (3) reporting spillage of any fuels, waste oils, petroleum products, and hazardous materials to the DEC Spill Hotline in accordance with the DEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. In addition, SEEP Guide §B(5)(b) requires a final SPCC Plan that applies to all relevant construction activities and details procedures for storing, handling, transporting, and disposing of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances. The SPCC Plan will specify spill reporting, response, and

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[126] Tr. 404. This testimony references the New York State Department of Health requirements outlined in Table 1 of 10 NYCRR Part 5, Subpart 5-1 Standards for Water Wells – Appendix 5B. See DPS Staff Initial Brief, pp. 24-25, and note 20, as well as Applicant Reply Brief, p. 20, and note 30.

[127] DPS Staff Initial Brief, pp. 25-26.

remediation procedures that are compliant with applicable State and Federal regulations.[128]

High Bridge Wind contends that GCNR's objections to the terms of Condition 87 are unfounded for the following reasons. First, the Applicant has never stated that it would refuse to test wells on participating parcels where appropriate, or that it would not replace a well on a participating landowner's property should it incur damage from constructing or operating the Facility. Rather, a contractual relationship with the Applicant provides participating landowners with the opportunity to address issues of this nature. High Bridge Wind contends that the Siting Board should not attempt to regulate further.[129] We agree.

Second, High Bridge Wind observes that because it is not a government agency, it lacks eminent domain powers. The Applicant concludes that it cannot trespass onto private property to determine the location and other details of private landowners' drinking water sources. The Applicant contends that the only lawful method to obtain this information from private landowners, after requests have been made to the DOH and DEC, is to ask the landowners for it. As noted above, the Applicant requested information from landowners with its private well survey. The Applicant contends that the "reasonable investigation" language in Certificate Condition 87 provides for the possibility that some non-participating landowners will not provide information about their respective wells, as is the case here. High Bridge Wind contends that the Siting Board has no legal authority to modify Certificate Condition 87 in the manner

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[128] Hearing Exhibit 2.

[129] Applicant Reply Brief, p. 21. See also DPS Staff Reply Brief, pp. 9-10.

proposed by GCNR.[130] We conclude the same, and deny GCNR's request to modify the proposed terms of Certificate Condition 87.

The Facility is not anticipated to result in any significant impacts to ground water quality or quantity, drinking water supplies, aquifer protection zones, or ground water aquifers. The construction of most Facility components, including the installation of buried electrical collection lines, will generally require shallow excavations that would not intercept, or otherwise, impact ground water supplies.[131] DPS Staff witnesses testified that the Facility will avoid, minimize, and mitigate potential impacts to ground water resources to the maximum extent practicable.[132]

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

B. Issues not Disputed or Resolved by Settlement

1. Probable Environmental Impacts - PSL §168(2)(a), and §168(3)(c) and (e)

PSL §168(2)(a) requires the Siting Board to make explicit findings regarding the potential environmental impacts of a project on ecology. To grant a Certificate, the Siting Board must determine that the adverse environmental effects of the construction and operation of the facility will be minimized

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[130] Applicant Reply Brief, pp. 21-22. See also DPS Staff Reply Brief, p. 10.

[131] Hearing Exhibit 3, Application Exhibit 23, pp. 6-8.

[132] Tr. 319-321.

or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State environmental law.[133] The State environmental law applicable to ecology generally is the State invasive species control law.[134]

a. 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.[135]

High Bridge Wind's application materials include field studies conducted during the 2019 growing season documenting the presence and extent of invasive species in the Project area, as well as a proposed Invasive Species Control Plan (ISCP). The ISCP details the procedures to prevent and, when necessary, manage the spread of invasive species. The field studies found ten invasive plant species, but not invasive insect species.[136] Nevertheless, the Applicant will include Emerald Ash Borer, Hemlock Wooly Adelgid, and Oak Wilt in its invasive species surveys because these insect species may require specific management and control measures.[137]

Prior to construction, the Applicant will conduct a baseline survey. The baseline survey will establish the location and distribution of invasive species within

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133 PSL §168(3)(c) and (e).

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

135 ECL §§9-1701, 9-1709(2)(b)(iv).

136 Hearing Exhibit 3, Application Exhibit 22, pp. 5-6, and Appendix 22-B (Invasive Species Control Plan [ISCP]).

137 Hearing Exhibit 1, Stipulations 23(b)(e).

construction areas.[138] To prevent invasive species from becoming established in the Facility area during construction, the Settlement Agreement includes Certificate Conditions 96-97 and 124.[139]

Monitoring will also take place after the Facility becomes operational.[140] As noted above, the Applicant will fund an independent third-party Environmental Monitor to oversee compliance with environmental commitments, including those related to invasive species control during construction.[141]

The terms of Certificate Condition 68 require the Certificate Holder to undertake a post-construction monitoring program (MP) in year 1, year 3, and year 5 following construction. The purpose of the MP is to evaluate the effectiveness of the ISCP. Subsequently, the Certificate Holder will a file a report (MP report) with the Secretary, as well as with Staff from DPS, DEC, and DAM, that assesses whether the goal of no net increase of invasive species has been achieved. If the MP report concludes that goals of the ISCP were not met, the Certificate Holder, and Staff from DPS, DEC, and DAM will review treatment measures to achieve the goal of no net increase of invasive species, and develop a plan to implement remedial

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138 Hearing Exhibit 3, Application Appendix 22-B (ISCP), pp. 2-3.

139 Hearing Exhibit 2, Certificate Condition 96 (Take reasonable efforts to use fill that is visually free of invasive species), Certificate Condition 97 (Train work crews to identify invasive insects), and Certificate Condition 124 (Use seed mix of native plants or crops; prepare a Wetland Planting Remedial Plan, if necessary).

140 Hearing Exhibit 2, Certificate Condition 68, and SEEP Guide §B(18) (Invasive Species Control Plan).

141 Hearing Exhibit. 2, Certificate Conditions 47, 80-81, and SEEP Guide §A(11) (Prohibited and Regulated Invasive Species), and §B(18) (Invasive Species Control Plan).

actions.[142]

DEC and DPS Staff concluded that if we adopt Certificate Condition 68, and related proposed Certificate Conditions in conjunction with the requirements in the SEEP Guide that require the Certificate Holder to prepare and implement a Final ISCP,[143] potential impacts from invasive species would be minimized to the maximum extent possible.[144]

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

b. Impacts to Terrestrial Ecology

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. High Bridge Wind 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).[145] 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

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142 Hearing Exhibit 2, Certificate Condition 68.

143 See Hearing Exhibit 2, SEEP Guide §B(18) (Invasive Species Control Plan).

144 DEC Staff Brief, p. 4; DPS Staff Initial Brief, p. 22.

145 Hearing Exhibit 3, Application Exhibits 22 and 23; Hearing Exhibit 5.

maximum extent practicable.[146]

The Applicant verified land use types in the Facility area during field surveys conducted in 2018 and 2019. The Facility Site consists of about 3,921 acres. In general, it is heavily forested. The non-forested areas consist primarily of active and inactive agricultural land.[147]

The Facility area is approximately 72% mixed deciduous and coniferous forestland.[148] Tree species vary based on topography and hydrology across the Facility site and include, among others, sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), and American beech (*Fagus grandifolia*). Other typical species include eastern hemlock (*Tsuga canadensis*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), birches (*Betula spp.*), eastern hophornbeam (*Ostrya virginiana*), white pine (*Pinus strobus*) and quaking aspen (*Populus tremuloides*). Species such as striped maple (*Acer pensylvanicum*), dogwoods (*Cornus spp.*), hawthorns (*Crataegus spp.*), witch hazel (*Hamamelis virginiana*), and numerous saplings comprise the understory trees and shrubs. Herbaceous plants include woodland ferns such as marginal wood fern (*Dryopteris magrinalis*), New York fern (*Thelypteris noveboracensis*), and interrupted fern (*Osmunda claytonia*), as well as a variety of flowering plants such as Canada mayflower (*Maianthemum canadense*) and Trillium species.[149]

The Facility area consists of about 20% agricultural land, which includes cropland/row crops, cropland/field crops, and pastureland. Vegetative cover types vary based on the

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146 PSL §168(3)(c).

147 Hearing Exhibit 3, Application Exhibit 22, p. 1; see also Table 22-1.

148 Hearing Exhibit 3, Application Exhibit 22, p. 1.

149 Hearing Exhibit 3, Application Exhibit 22, p. 2.

intensity of agricultural operations (tillage, seeding, harvesting, etc.) and overall land use. Vegetation species found on croplands include either planted crops such as corn, soybeans, and other row crops, or pasture crops, such as timothy, rye, or other perennial grasses. Pastureland is similar to successional old field (see below), but will vary depending on whether it is in use for grazing or silage purposes as opposed to a fallow or abandoned agricultural field.[150]

The Facility area consists of about 6% successional old field.[151] This community consists of meadows dominated by forbs and grasses that occur on sites that have been plowed for farming or cleared for development, and then abandoned. Within the Facility, this community is located primarily along roadsides, in abandoned agricultural fields, or adjacent to active agricultural fields. Plant species include orchard grass (*Dactylis glomerata*) and timothy (*Phleum pretense*), flowering plants such as goldenrods (*Solidago spp.*), clovers (*Trifolium spp*.) and milkweed (*Asclepias syriaca*), and weeds such as burdock (*Arctium spp*.). Shrubs such as bush honeysuckles (*Lonicera spp*.) and brambles (*Rubus spp.*) represent less than 50% of total vegetative cover in the successional old field cover type areas.[152]

Approximately 0.7% of the Facility site is characterized as disturbed or developed. These lands occur throughout the Facility area, and are characterized by the presence of buildings, parking lots, paved and unpaved roads, lawns, quarries, as well as transmission line and pipeline rights-of-way. Vegetation in these areas is generally either

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[150] Hearing Exhibit 3, Application Exhibit 22, pp. 1, 3.

[151] Hearing Exhibit 3, Application Exhibit 22, p. 1.

[152] Hearing Exhibit 3, Application Exhibit 22, p. 2.

lacking or highly managed (i.e., mowed lawns or routinely maintained rights-of-way). The application materials note that disturbed lands in the Facility site provide ideal conditions for invasive species to establish and outcompete native species.[153]

The construction and operation of the Facility will result in temporary impacts to plant communities, as well as the permanent loss, or the permanent conversion of plant communities. Most impacts will be temporary, and are associated with installing collection lines, and constructing access roads, turbine workspaces, and staging areas. Permanent conversion will occur where communities are cleared and then maintained by the Applicant as successional communities for the life of the Facility, for example, areas within collection line rights-of-way. Permanent impacts will be primarily associated with built facilities, and include turbine foundations and pads, access roads, the operation and maintenance (O&M) facility, meteorological tower foundations, the battery storage facility, as well as the collection and point of interconnection (POI) substations.[154]

In forested areas that are temporarily impacted, the Applicant will only remove stumps where necessary to install underground components. The Applicant will not use herbicides, and will not remove trees as part of routine vegetation management during Facility operation. Following post-construction stabilization of soils, ecological succession will restore the forested condition of these areas with time.[155]

Approximately 799 acres of agricultural land are

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[153] Hearing Exhibit 3, Application Exhibit 22, pp. 1-2.

[154] Hearing Exhibit 3, Application Exhibit 22, pp. 1, 3.

[155] Hearing Exhibit 3, Application Exhibit 22, p. 4.

located within the Facility site. Constructing the Facility will temporarily impact about 102.2 acres, and permanently impact about 36.3 acres of this land type. The Applicant will implement several minimization and mitigation measures to offset these impacts. The Applicant will consult with DAM Staff during construction if deviation from the *Guidelines for Agricultural Mitigation for Wind Power Projects* becomes necessary. Specific to agricultural land impacted by the Facility, the Applicant will provide a monitoring and remediation period of no less than two years immediately following the completion of initial restoration. The two-year period will allow for the effects of seasonal cycles such as frost action, precipitation, and growing seasons to occur, from which various monitoring determinations can be made. The data collected during this monitoring phase will be used to identify any remaining agricultural impacts associated with construction that need mitigation. As needed, the Applicant will implement restoration.[156]

With careful site planning, the Applicant will avoid, minimize, and mitigate potential impacts to vegetation by avoiding large areas of undisturbed forest and wetlands, co-locating access roads on existing roads, farm lanes and logging roads wherever possible, and limiting disturbances to the smallest feasible areas.[157] In addition, the Applicant will implement a stormwater pollution prevention plan (SWPPP) and other measures to avoid, minimize and mitigate impacts to vegetation associated with erosion and sediment.[158]

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[156] Hearing Exhibit 3, Application Exhibit 22, p. 60.

[157] Hearing Exhibit 3, Application Exhibits 4, p. 25, and 22(c), pp. 6-7.

[158] Hearing Exhibit 3, Application Exhibit 22, pp. 6-7, and Appendix 21-D (Preliminary Stormwater Pollution Prevention Plan).

In the long term, vegetation will be managed in accordance with a Vegetation Management and Herbicide Plan.[159] During construction, an environmental monitor will conduct inspections of all areas requiring environmental compliance, particular when construction activities would be occurring in sensitive areas.[160] These measures will ensure that Facility construction and operation does not adversely impact protected plants, significant ecological communities, or vegetation generally.

In addition, High Bridge Wind studied the Facility's potential impacts on geology, seismology, and soils, as required by 16 NYCRR §1001.21.[161] In the January 2020 Application Supplement, High Bridge Wind outlined several modifications to the proposed Facility layout to minimize impacts in areas identified to have slopes of 25% or more.[162] Table 21-2 provides best management practices to avoid, minimize, or mitigate potential impacts from construction activities to downgrade water and wetland resources.[163] The Applicant also provided an

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159 Hearing Exhibit 2, Certificate Condition 67, and SEEP Guide §A(12) (Vegetation Controls and Herbicides) and §B(8) (Vegetation Clearing and Disposal Methods).

160 Hearing Exhibit 3, Application Exhibit 22, p. 6; Hearing Exhibit 2, Certificate Conditions 47, 79 and 81, and SEEP Guide §B(2) (Environmental Compliance and Monitoring Plan).

161 Hearing Exhibit 3, Application Exhibit 21, Figures 21-1 through 21-3, and Appendices 21-A (Preliminary Blasting Plan), 21-B (Preliminary Geotechnical Report), 21-C (Expected Geotechnical Conditions); Hearing Exhibit 7, Application Supplement Overview, Figure 21-4 (Steep Slopes), and Appendix 21-E (Inadvertent Return Risk Analysis). See also Certificate Conditions 41, 58, and 87.

162 Hearing Exhibit 7, Application Supplement Overview, pp. 25-26.

163 Hearing Exhibit 7, Application Supplement Overview, pp. 26-27.

additional risk analysis related to inadvertent returns, which can occur during the installation of underground utility lines using trenchless technologies, such as horizontal directional drilling (HDD).[164] DPS Staff testified that the Applicant has appropriately addressed the potential for the Facility to result in adverse impacts to topography, geology and soils sufficient to allow the Siting Board to make its required findings.[165]

No parties dispute the effectiveness of the planned avoidance and minimization measures outlined in the application materials. In addition, the parties have agreed to proposed Certificate Conditions related to the protection of terrestrial ecology, including a Condition for an independent third-party environmental manager to inspect all areas and to assure compliance with applicable environmental requirements during construction activities.[166]

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

c. Agricultural Land Uses

Section 1001.22(q) requires an Applicant to provide an analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources, including the acres

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[164] Hearing Exhibit 7, Application Supplement Overview, p. 28 and Appendix 21-E (Inadvertent Return Risk Analysis).

[165] Tr. 306-307.

[166] Hearing Exhibit 2, Certificate Condition 79.

of agricultural land temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impacts.

The Application materials include information to characterize and assess potential impacts to agricultural resources within the Facility site.[167] Here, approximately 390 acres are characterized as agricultural, which is about 10% of the Facility site. Of the total amount about 15 acres will be temporarily impacted during the construction of the Facility, and about 3 acres will be permanently impacted.[168]

The settlement includes Certificate Conditions and SEEP Guide provisions that are consistent with DAM's *2018 Guidelines for Agricultural Mitigation for Wind Power Projects* (DAM Wind Guidelines) to ensure protection of agricultural resources.[169] In addition, an agricultural monitor will be present during construction to oversee work in agricultural lands.[170] Following construction, site restoration will include replanting vegetation or crops in consultation with farmers and landowners.[171] We find that these Certificate Conditions and SEEP Guide requirements, which we adopt, will ensure that the Facility's impacts to agricultural resources are minimized to

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[167] Hearing Exhibit 3, Application Exhibit 4, and Figure 4-2 (Land Use Programs and Specially Designated Areas); Application Exhibit 21, and Figure 21-2 (Soil Types); and Application Exhibit 22, pp. 4, 60.

[168] Hearing Exhibit 3, Application Exhibit 4, p. 14, see also Table 4-9 (Land Use Impact).

[169] Hearing Exhibit 2, Certificate Condition 98, and SEEP Guide §A(7) (Land Uses), §B(2) (Environmental Compliance and Monitoring Plan), and §D(6) (Land Uses). See also DAM Staff Brief, p. 7.

[170] Hearing Exhibit 2, Certificate Condition 79.

[171] Hearing Exhibit 2, Certificate Conditions 115 and 124.

the extent practicable.

d. Threatened and Endangered Species

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.[172] The State environmental law protecting wildlife applicable to the Project is the State Endangered Species Act,[173] and its implementing regulations at 6 NYCRR Part 182.

i. Eagles

The bald eagle (*Haliaeetus leucocephalus*) is a State-listed threatened species under 6 NYCRR Part 182 and is also federally protected under the Bald and Golden Eagle Protection Act.[174] The Application materials detail the nature of the probable impacts associated with the construction and operation of the Facility on avian species, including bald eagles. Bald eagles use the Facility area in all seasons.[175]

Pursuant to the regulations, an applicant must first avoid all impacts to listed species to the extent practicable.[176] The construction of the Facility is not anticipated to impact

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[172] PSL §168(3)(c), (e).

[173] See ECL §11-0535.

[174] See 16 U.S.C. §668 – 668d.

[175] Hearing Exhibits 3 and 5, Application Exhibit 22, p. 34, and Appendices 22-D (Site Specific Surveys), 22-H (Avian Risk Assessment), and 22-I (Cumulative Impact Assessment); Hearing Exhibit 50 (Eagle Use Study); Tr. 77-78, 442-444.

[176] See 6 NYCRR §182.11.

bald eagles given the distance between the nearest nest and components of the Facility.[177] Therefore, avoidance will preclude the taking of any bald eagle from occurring during construction activities. Nevertheless, the Certificate Holder has agreed to notify Staff from DEC and DPS if a nest or communal roost is discovered, and to establish a buffer area.[178]

Where an applicant proposes to engage in any activity that is “likely to result in the take or taking of any species listed as endangered or threatened,” the applicant must satisfy the requirements to obtain an incidental take permit in accordance with 6 NYCRR §182.11. A "take" or "taking" is broadly defined under 6 NYCRR §182.2(x) to include not only the "killing," or "capturing," of any species listed as endangered or threatened, but also "all lesser acts such as disturbing, harrying or worrying." “Lesser acts” are defined to include any “adverse modification of habitat” of any species listed as endangered or threatened.[179] 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.[180]

Operation of any wind energy facility in New York

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[177] Tr. 73, 79. GCNR’s lay witness identified general concerns about potential impacts from the Facility on eagles (see Tr. 179-180).

[178] Hearing Exhibit 2, Certificate Condition 102(b).

[179] 6 NYCRR §182.2(l).

[180] 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).

State, including the Facility, may cause mortality for bald eagles that fly within the Facility area.[181] To account for the possible unavoidable take of bald eagles resulting from the operation of the Facility, the Stipulated Agreement includes Certificate Condition 63. The terms of Certificate Condition 63 provide for an adaptive management approach with respect to the development and implementation of a Net Conservation Benefit Plan (NCBP) for bald eagles.[182] DEC Staff concludes that, as proposed, Certificate Condition 63 assures that any incidental take of bald eagles due to the operation of the Facility will comply with the requirements of 6 NYCRR Part 182.[183]

Therefore, we conclude that with respect to bald eagles, the Facility is designed to operate in compliance with the State Endangered Species Act and regulations, and that potential impacts to bald eagles have been avoided or minimized to the maximum extent practicable consistent with PSL §168(2)(a) and (3)(c).

ii. Bats

Nine species of bats are present in New York for at least some portion of the year. They are: (1) the hoary bat (*Lasiurus cinereus*); (2) silver-haired bat (*Lasionycteris noctivagans*); (3) eastern red bat (*Lasiurus borealis*); (4) little brown bat (*Myotis lucifugus*); (5) big brown bat (*Eptesicus fuscus*); (6) tri-colored bat (*Permyotis subflavus*); (7) northern long-eared bat (NLEB) (*Myotis septrenionalis*); (8) Indiana bat (*Myotis sodalis*); and (9) eastern small-footed bat (*Myotis leibii*).[184] All New York resident bat species, except

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[181] Tr. 76.

[182] Hearing Exhibit 2, Certificate Condition 63.

[183] Tr. 81. See also DEC Staff Brief, pp. 8-9, and DPS Staff Initial Brief, pp. 20-21.

[184] Tr. 132-133.

for the big brown bat, are designated as species of conservation concern, and the Indiana bat and NLEB are protected pursuant to ECL §11-0535.[185]

Bats roost in trees during their development. In addition, bats rely on roost trees to serve as a home base for their nightly foraging.[186] The construction of wind projects in occupied bat habitat poses a threat to the trees where bats breed, roost, and feed outside the hibernation period.[187]

The Application materials detail the nature of the probable impacts from constructing and operating the Facility on bats, including the protected NLEB.[188] The locations of the nearest known summer maternity roost is 42 miles, and the closest known hibernaculum is 46 miles from the Facility site.[189]

The Settlement Agreement includes Certificate Conditions that outline a mutually acceptable curtailment regime to avoid and minimize risks to NLEB. The terms of the Certificate Conditions also include requirements for a final NCBP to mitigate for unavoidable impacts to NLEB. In addition, the Certificate Conditions require post-construction monitoring and adaptive management plans.[190] Noting that implementing the terms of Certificate Conditions will avoid, minimize, and

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185 See 6 NYCRR §182.2(y)(2); Tr. 133.

186 Tr. 134.

187 Tr. 149.

188 Hearing Exhibits 3-5, Application Exhibit 22, pp. 7-8, and Application Appendices 22-C (Preliminary Environmental Compliance and Monitoring Plan), 22-D, (Site Specific Surveys), 22-F (Net Conservation Benefit Plan), 22-G (Habitat Fragmentation Analysis), and 22-I, (Cumulative Impact Assessment).

189 Hearing Exhibit 3-5, Application Exhibit 22, p. 36, and Application Appendix 22-F at Section 3.0; Tr. 327.

190 Hearing Exhibit 2, Certificate Conditions 62, 64-65, and SEEP Guide §B(16) (Avian and Bat Impacts).

mitigate impacts to all bats, including NLEB and migratory tree bats (i.e., eastern red bat, hoary bat, and silver-haired bat), DEC Staff recommends that we adopt them.[191] The Applicant observes that the curtailment regime for this project is similar to those adopted in previously decided Siting Board cases, including the *Application of Eight Point Wind* (Case No. 16-F-0062), issued August 20, 2019; *Application of Number Three Wind* (Case No. 16-F-0328), issued November 12, 2019; *Application of Bluestone Wind* (Case No. 16-F-0559), issued December 16, 2019; and *Application of Deer River Wind* (Case No. 16-F-0267), issued June 30, 2020.[192]

Therefore, we conclude that with respect to bats, the Facility is designed to operate in compliance with the State Endangered Species Act and regulations, and that impacts to all bat species have been avoided or minimized to the maximum extent practicable.

e. Wildlife Other Than Threatened and Endangered Eagle and Bat Species and Habitat Other Than Occupied Habitat

With respect to impacts to wildlife generally, High Bridge Wind argues in its initial brief that construction-related impacts to wildlife will be limited to incidental injury or mortality due to construction activities, habitat disturbance or loss, and displacement associated with clearing and earth-moving activities, as well as displacement of wildlife due to noise and human activities.[193] Potential impacts from habitat loss or conversion, fragmentation, and disturbance or displacement are not expected to significantly affect wildlife

[191] DEC Staff Brief, pp. 7-8. See also DPS Staff Initial Brief, pp. 20-21.

[192] Hearing Exhibit 2, Conditions 62, 64 and 65; Tr. 147-148, 158-159, 327-329. See also Applicant Initial Brief, p. 75.

[193] Applicant Initial Brief, pp. 77-78.

populations.[194] Based on settlement discussions, High Bridge Wind notes that the parties developed Certificate Conditions that include measures designed to mitigate impacts to the maximum extent practicable.[195]

No parties dispute High Bridge Wind'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.

f. Surface Water Impacts

Before granting an Article 10 Certificate, PSL §168(2) requires the Siting Board to make findings regarding the nature of the probable environmental impacts associated with constructing and operating a facility on 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 destruction of freshwater wetlands, and to regulate use and

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[194] Hearing Exhibit 3, Application Exhibit 22, p. 19.

[195] Applicant Initial Brief, p. 78; Tr. 319-321. See Hearing Exhibit 2, Certificate Conditions 65, 100-102.

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.[196] 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.[197] 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 consultants delineated 103.3 acres of wetlands within the Wetland Study Area. High Bridge Wind assessed the functions and values of the delineated wetlands, and evaluated the potential impacts from the proposed Facility on those wetlands and regulated adjacent areas.[198]

In September 2019, DEC Staff conducted a field survey. The survey confirmed that the High Bridge Wind Project, as proposed, avoids all State-regulated freshwater wetlands and adjacent areas. As a result, the Facility will not adversely

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196 See ECL §24-0103.

197 See 6 NYCRR §663.2(b).

198 Hearing Exhibit 3, Application Exhibit 22, pp. 51-59, Figures 22-2 and 22-3, and Appendix 22-J (Wetland Delineation Report); Hearing Exhibit 7, Application Supplement Overview, pp. 5-9, Figures (Update) 22-2 and 23-2, and Appendices 22-J (Addendum to Wetland Delineation Report) and 22-K (Update to Wetland and Stream Impact Drawings).

impact any State-regulated wetlands and adjacent areas.[199]

Nevertheless, the Settlement Agreement includes Certificate Conditions and guidance outlined in the SEEP Guide that will require the Certificate Holder to comply with regulatory requirements, in the event that the Facility layout is altered, or State-regulated wetlands or adjacent areas are otherwise impacted during the life of the Facility.[200]

With respect to delineated wetlands not subject to ECL Article 24 (non-jurisdictional wetlands), High Bridge Wind will employ best management practices and other measures to ensure that potential impacts to this group of wetlands are avoided or minimized.[201] In its initial brief, High Bridge Wind states that it will be submitting a Joint Application for Permit to the U.S. Army Corps of Engineers (USACE) for its Clean Water Act (CWA) Section 404 permit, concomitantly with a request to the Siting Board for the Section 401 Water Quality Certification (WQC). High Bridge Wind notes that the Joint Application for Permit will summarize and quantify all proposed impacts to wetlands and streams regulated by USACE under CWA Section 404 resulting from the construction and operation of the Facility. The Joint Application for Permit will also describe the avoidance and minimization measures reflected in the Facility plans, and will

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[199] Hearing Exhibit 3, Application Exhibit 22, p. 52; Hearing Exhibit 7, Appendix 22-J (Addendum to Wetland Delineation Report); Tr. 91, 93.

[200] Hearing Exhibit 2, Certificate Condition 125, among others, and SEEP Guide §A(6) (Wetlands), §B(17) (Wetlands and Waterbodies), and §D(17) (Wetlands and Waterbodies). See also Applicant Initial Brief, p. 80.

[201] Hearing Exhibit 3, Application Exhibit 22, p.53, and Appendix 22-J; Hearing Exhibit 7, Appendix 22-J (Addendum to Wetland Delineation Report).

detail restoration and mitigation measures.[202]

Based on the record, as well as the proposed Certificate Conditions and SEEP Guide negotiated by the parties, we conclude that the Facility is designed to operate in compliance with all applicable State freshwater wetland protection laws and regulations,[203] 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 the regulations at 6 NYCRR Part 608 establish the State's environmental laws regarding the disturbance of protected streams. Pursuant to ECL Article 15, State approval is required for disturbances of streams classified as C(T) or higher in the DEC's stream classification system.[204] In addition, High Bridge Wind must comply with State water pollution control law by obtaining coverage under DEC's General SPDES Permit for Stormwater Discharges from Construction Activity (GP-0-20-00) (General Permit), which requires, among other things, preparation of a Stormwater Pollution Prevention Plan (SWPPP).[205] As noted above, the Facility also requires a WQC pursuant to Section 401 of the federal CWA and, accordingly, High Bridge Wind must demonstrate compliance with State water quality standards provided at 6 NYCRR §608.9. Finally, the

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[202] Applicant Initial Brief, p. 80; Hearing Exhibit 7, Application Supplement Overview, pp. 32-35.

[203] See ECL Article 24, and 6 NYCRR Parts 633 and 664.

[204] ECL §15-0501; 6 NYCRR §608.2.

[205] 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).

adverse impacts to streams and surface waters from the construction and operation of the Facility must be minimized or avoided to the maximum extent practicable.[206]

The Applicant's consultants also delineated streams and water bodies, and characterized potential impacts to these resources in the Facility site.[207] The survey identified 35 delineated streams in the Facility area.[208] Of these, seven are classified by New York State as Class C or better, including one Class C(T) stream.[209]

The construction of the Facility will include seven crossings of delineated streams, including one Class C(T) stream, Kent Brook.[210] However, the Applicant will use trenchless construction methods for three crossings, which will result in no direct impacts to streams classified as Class C(T) or higher.[211] The crossings of the other tributaries for the installation of collection lines or the construction of access roads will be conducted using best management practices, consistent with applicable regulations,[212] and the agreed-upon

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206 PSL §168(3)(c).

207 Hearing Exhibit 3, Application Exhibit 23, pp. 9-16, Figure 23-2, Appendix 22-J (Wetland Delineation Report); Hearing Exhibit 7, Application Supplement Overview, Figures Update 22-2 and 22-3, Appendix 22-J (Addendum to Wetland Delineation Report) and 22-K (Wetland and Stream Impact Drawings).

208 Hearing Exhibit 7, Application Supplement Overview, Appendix 22-J (Addendum to Wetland Delineation Report).

209 Hearing Exhibit 7, Application Supplement Overview, pp.33-35.

210 Hearing Exhibit 7, Application Supplement Overview, pp. 33-35, Figures Update 22-2 and 23-2, and Appendix 22-K.

211 Hearing Exhibit 7, Application Supplement Overview p. 34-35.

212 Hearing Exhibit 7, Application Supplement Overview, p. 34.

Certificate Conditions and guidance outline in the SEEP Guide.[213]

According to DEC Staff, the terms of the Certificate Conditions will avoid and minimize potential impacts to stream resources, and will be consistent with the requirements outlined in ECL Article 15 and implementing regulations.[214]

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

g. 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 from the 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 from constructing and operating the facility on air quality will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State air

[213] Hearing Exhibit 2, Certificate Conditions 92, 94-95, 103-124, and SEEP Guide §A(5) (Waterbodies), §B(17) (Wetlands and Waterbodies), and §D(11) (Wetlands and Waterbodies).

[214] Tr. 91-94. DPS Staff determined the same. See Tr. 306, 321-322, 344-345, and DPS Staff Initial Brief, p. 28.

pollution control laws.[215]

During construction, the Facility may result in minor, temporary adverse air impacts associated with vehicle emissions, dust from earthmoving activities, and emissions from a concrete batch plant. To minimize localized air impacts, the Applicant will 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.[216]

After construction, the Facility would generate electricity without combusting fuel or releasing pollutants into the atmosphere.[217] 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.[218]

As noted by DPS Staff, the Facility does not require any federal, State, or local air emissions permits, although temporary, minor adverse impacts to air quality are anticipated during the construction of the Facility. DPS Staff recommends that we find that the impacts associated with air emissions during construction of the Facility will be avoided, minimized, or mitigated to the maximum extent practicable.[219] No party

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[215] An applicant is required under 16 NYCRR §1001.17 to provide a demonstration that the proposed facility will comply with applicable federal, State, and local regulatory air emissions requirements. These include anticipated emissions from construction and operational activities, as well as temporary emissions sources such as on-site concrete batch plants and fuel-fired generators.

[216] Hearing Exhibit 3, Application Exhibit 17, pp. 1, 3-4.

[217] Hearing Exhibit 3, Application Exhibit 17, p. 4.

[218] Applicant Initial Brief, p. 93.

[219] DPS Staff Initial Brief, pp. 29.

raised concerns related to potential impacts to air quality.

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

2. 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.[220] 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.[221]

The Applicant did not identify any reasonable alternative sites owned by it or under option to it or its affiliates, stating that it "is not practicable to procure land contracts, perform environmental and engineering studies, enter and progress through multiple interconnection permit processes, and conduct community outreach for alternative locations."[222] The Applicant also states that a "no action alternative" would deprive the State and region of a major source of clean, renewable energy and would not be best suited to promote public health and welfare.

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[220] 16 NYCRR §1001.9(a),(b).

[221] 16 NYCRR §1001.9(a).

[222] Hearing Exhibit 3, Application Exhibit 9, p. 2.

With respect to the Facility site, 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 an Application Supplement that proposed an alternative collection line placement.[223] During the design phase, prior to submitting its application, the Applicant studied existing conditions at the Facility Site and shifted components away from identified resources of concern identified during the layout design and through consultations with stakeholders. 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.[224] The goal was to ensure that the proposed Facility layout avoided and minimized probable environmental impacts to the maximum extent practicable.[225]

DPS Staff testified that, among other things, the proposed Facility site avoids and minimizes impacts to wetlands, threatened and endangered species habitat, and agricultural resources to the maximum extent practicable."[226] Moreover, except for GCNR, which argues that the Facility should not be built, all parties agree that the proposed Facility site is appropriate.

With the appropriate Certificate Conditions in place, we find that the Applicant has established that its proposed Facility site promotes the public health and welfare. The alternatives analysis presented in Application Exhibit 9 and

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223 Applicant Initial Brief, pp. 87-88.

224 Hearing Exhibit 3, Application Exhibit 9; Hearing Exhibit 7, Application Supplement Overview, pp. 15-17.

225 Applicant Initial Brief, p. 88.

226 Tr. 321-322.

Application Supplement meets the requirements of Article 10 and enables us to find that the 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 wind energy generation in comparison to other alternatives.

3. Public Health, Safety and Security - PSL §168(2)(b) and §168(3)(c)

a. Tower Collapse, Blade Throw

While extremely rare, it is possible for a turbine tower to collapse or for a rotor blade to drop or be thrown from the nacelle.[227] The Applicant acknowledges that these types of incidents have occurred, but states that it is unaware of any injury ever occurring to a member of the public as a result, likely due in part to local setback requirements, which also would protect homes and public roads for such incidents.[228] The reasons for tower collapse or blade throw vary depending on conditions and tower type. The main causes of blade and tower failure are control system failures, leading to an over-speed situation; lightning strikes; and manufacturing defects in the blade. However, technological improvements and mandatory safety standards during turbine design, manufacturing, and installation, as well as wind turbine design certification, have significantly reduced the likelihood of blade throw and tower collapse.[229]

The Applicant states that the wind turbines under

[227] The nacelle is the outer housing for the engine components of the turbine, parts of which connect to the blades to allow them to spin.

[228] Hearing Exhibit 3, Application Exhibit 15, p. 3.

[229] Hearing Exhibit 3, Application Exhibit 15, p. 3.

consideration for this Project will meet all applicable engineering standards, will be rated for withstanding hurricane-strength winds, and will be equipped with state-of-the-art braking systems, pitch controls, sensors, and speed controls.[230] The Applicant also anticipates that the turbines will be equipped with two fully independent breaking systems that allow the rotor to be halted under all foreseeable conditions, that the turbines will automatically shut down at wind speeds over the manufacturer's threshold, and that the turbines will cease operation if significant vibrations or rotor blade stress is sensed by the monitoring systems.[231]

The Applicant has agreed to file informational submissions with the Secretary regarding any manufacturer provided information regarding the design, safety and testing information for the turbines.[232] The Applicant also will submit third-party type certifications proving that the wind turbines used for the Project meet international design standards and a manufacturer's report showing that the turbines are compatible with site-specific conditions.[233] Additionally, the Applicant has agreed to proposed Certificate Condition 137, which requires it to maintain an inspection program for turbine blades and other components, with a report to be filed annually with the Secretary that identifies any major damage, defects or other problems, if any, with the turbine blades and that summarizes maintenance and inspection activities. The Applicant will site turbines in conformance with all local law and otherwise applicable setbacks, which include setbacks of 1.25 times the

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230 Hearing Exhibit 3, Application Exhibit 15, p. 3; see also, Applicant's Initial Brief, p. 91.

231 Hearing Exhibit 3, Application Exhibit 15, pp.

232 Hearing Exhibit 2, Proposed Certificate Condition 34.

233 Hearing Exhibit 2, Proposed Certificate Condition 35.

height of the wind turbines from any non-participating property boundary line.[234]

The Applicant states that it will have procedures in place in the unlikely event of a blade throw or tower collapse, including emergency shutdown procedures, post-event site security measures, the immediate notification of State and local officials, and the implementation of any turbine manufacturer-specific blade throw/tower collapse safety procedures.[235] The Applicant also states that it will conduct annual training for operating staff as well as local first responders on the procedures to be implemented in the event of a blade throw or tower collapse.[236]

None of the parties has raised any issue with respect to tower collapse or blade failure. Based on the information in the record, as well as the proposed Certificate Conditions, which we adopt, we find that any risk of tower collapse or blade throw has been avoided or minimized to the maximum extent practicable.

b. Ice Throw/Shedding

Another potential risk to public safety is ice shedding or ice throw, which can occur when ice accumulates on rotor blades, breaks free and falls to the ground. The record demonstrates, however, that no injuries have been reported because of ice thrown from a turbine blade.[237] Moreover, while acknowledging that ice shedding is a potential public safety hazard, the Applicant states that the "effects of ice accumulation can be sensed by the turbine's computer controls

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[234] Tr. 567; see also, Proposed Certificate Condition 57(a); Town of Guilford's RESL, Section 5(C)(1).

[235] Hearing Exhibit 3, Application Exhibit 15, p. 4.

[236] Hearing Exhibit 3, Application Exhibit 15, p. 4.

[237] Hearing Exhibit 3, Application Exhibit 15, pp. 7-8.

and would typically result in the turbine being shut down until the ice melts."[238] The Applicant agrees to use a turbine "with technology capable of directly or indirectly detecting blade ice formation" and allowing "for the shutdown or slowdown of a turbine."[239]

In addition, the Applicant cites a "Wind Turbine Health Impact Study," prepared by an independent expert panel for the Massachusetts Department of Public Health, which concluded that "ice is unlikely to land farther from the turbine than its maximum vertical extent."[240] The Applicant therefore maintains that "[p]ublic health and safety impacts related to ice shedding are unlikely because any ice is likely to fall within established setbacks."[241]

None of the parties raise any issue with respect to ice throw or shedding. We agree with the Applicant that modern turbine technology controls, the implementation of appropriate setback limits, and restrictions on public access to turbine sites protect the public from the risk of falling ice. As stated earlier, the Applicant will submit third-party type certifications proving that the wind turbines used for the Project meet international design standards and a manufacturer's report showing that the turbines are compatible with site-specific conditions.[242] Accordingly, we conclude that any risk of ice throw or shedding has been avoided or minimized to the maximum extent practicable.

c. Safety, Security and Emergency Response

The regulations impose requirements related to the

[238] Hearing Exhibit 3, Application Exhibit 15, p. 7.

[239] Hearing Exhibit 2, Proposed Certificate Condition 52.

[240] Hearing Exhibit 3, Application Exhibit 15, p. 8.

[241] Hearing Exhibit 3, Application Exhibit 15, p. 8.

[242] Hearing Exhibit 2, Proposed Certificate Condition 35.

cybersecurity requirements of a proposed facility.[243] Among other things, Exhibit 18 to the Application 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 addition, an Applicant must include a Safety Response Plan, a Health and Safety Plan, and an Emergency Action Plan to ensure the safety and security of the local community and on-site personnel. These documents must identify contingencies constituting a safety and security emergency and describe emergency response measures for each identified contingency.[244]

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.

The Applicant has developed and will implement plans for site security, worker safety, and emergencies.[245] The Applicant submitted the Preliminary Site Security Plan, Preliminary Emergency Action Plan, and Preliminary Health and Safety Plan to the New York State Division of Homeland Security and Emergency Services, in fulfillment of requirements, and to local emergency responders.[246] Proposed Certificate Conditions require the Applicant to file and implement a final Emergency

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[243] 16 NYCRR §§1001.2, 1001.5, and 1001.40.

[244] 16 NYCRR §1001.18(d).

[245] Hearing Exhibit 3, Application Appendices 18-A, 18-B, 18-C.

[246] Hearing Exhibit 3, Application Exhibit 18, p. 8-9.

Action Plan, final Site Security Plan, and final Health and Safety Plan.[247]

Site access will be restricted to ensure public safety.[248] The Applicant has consulted, and will continue to coordinate with, local emergency responders during both construction and operation.[249] In the Proposed Certificate Conditions, the Applicant made specific commitments related to coordination with and notification of local emergency departments during construction and operations of the Facility.[250]

Based on the above, both the Applicant and DPS Staff concluded that the Facility will be constructed and operated safely and securely. No other party has raised any issues on this topic. We therefore determine that adequate safety and security plans will be in place to ensure that the Facility will be constructed and operated in a safe and secure manner.

4. Cultural, Historic and Recreational Resources – PSL §168 (2)(c) and §168(3)(c): Non-Visual Impacts

a. Archeological Resources

The Applicant submitted a Phase 1A Archaeological Survey Report, Phase 1B Archaeological Survey Summary Report, Phase 1B Archeological Survey Report, and Phase 1B Archeological Update Memorandum.[251] As stated in the Applicant's initial

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[247] Hearing Exhibit 2, Proposed Certificate Conditions 50, 51 and 52.

[248] Hearing Exhibit 3, Application Exhibit 18, pp. 1, 3.

[249] Hearing Exhibit 3, Application Exhibit 18, p. 9; Hearing Exhibit 2, Proposed Certificate Conditions 50, 51. Applicant Initial Brief, p. 93.

[250] Hearing Exhibit 2, Proposed Certificate Conditions 22(b), 50, 51 and 56(c).

[251] Hearing Exhibit 3, Application Exhibit 20 and Appendices 20-A, 20-B; Hearing Exhibit 7, Application Supplement Overview and Appendices 20-F and 20-G.

brief, the Phase 1A Archaeological Resources Survey and a Phase 1B Fieldwork Plan was developed to define the Facility's Area of Potential Effect (APE) with respect to archaeological resources, determine whether previously identified resources are located in the APE, and propose a methodology to identify additional resources.[252] The Applicant's subsequent Phase 1B Archaeological Study consisted of a site walkover and shovel testing in areas where proposed Facility components are located near structures depicted on historic maps and areas identified as having sensitivity for pre-contact Native American archaeological material, including potential Native American stone features and rock shelters.

Proposed Certificate Condition 61(a) provides that Facility construction activities are not allowed in any areas that have not been reviewed and approved for the presence of cultural resources, that the Applicant will indicate in the final SEEP specific measures to avoid archaeological sites, and that mapped locations of archaeological sites within 100 feet of proposed Facility-related impacts will be identified on construction drawings and marked in the field by fencing with signs restricting access. Under proposed Certificate Condition 61(b), if unanticipated archaeological resources are discovered during Facility construction, the Applicant will implement an Unanticipated Discovery Plan, which will include a provision for immediate work stoppage and, if warranted, evaluation by a professional archaeologist. Work would not resume in the area until the Applicant receives written permission from the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

DPS Staff testified that, after review of the

[252] Applicant Initial Brief, p. 94.

information filed by the Applicant, OPRHP concluded that the Facility layout, as updated and revised, would have no impact on archeological resources or stone features.[253] Noting that the updated Facility layout avoided or addressed concerns with archeological resources, DPS Staff testified that, with the adoption of the Settlement documents, we could find that the construction and operation of the Facility avoids adverse impacts to archeological resources to the maximum extent practicable.[254] The Applicant asserts that the information included in the Application with respect to archeological resources, permits us to find that the Facility avoids, minimizes and mitigates potential impacts on archeological resources to the maximum extent practicable.[255]

With our adoption of the proposed Certificate Conditions discussed above, we agree with the Applicant and DPS Staff and find that the Project has avoided, minimized, and mitigated impacts to archeological resources to the maximum extent practicable.

b. 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 visual or auditory setting, resulting from the introduction of wind turbines.[256]

After consultation with OPRHP and DPS, the Applicant conducted a historic resources survey for the Facility in

[253] Tr. 323-324; DPS Staff Initial Brief, p. 31.

[254] Tr. 321-322; DPS Staff Initial Brief, p. 31.

[255] Applicant Initial Brief, p. 95.

[256] Hearing Exhibit 3, Application Exhibit 20(b)(1). The

accordance with the Phase IA Historic Architectural Resources Survey Work Plan, which included the City of Norwich in Chenango County and the Village of Sidney in Delaware County in the assessment of potential visual impacts.[257] The Applicant identified 20 State/National Register of Historic Places (S/NRHP) in the APE and recommended 242 properties, including five historic districts, as S/NRHP-eligible. After considering the Applicant's Historic Survey Report, OPRHP identified five historic districts and expansion areas containing 248 contributing historic resources as well as an additional 71 S/NRHP-eligible properties.[258] After also reviewing Application Exhibit 24, Visual Impacts, OPRHP stated that the Project "will have a demonstrable and long lasting adverse effect upon the historic resources with the project's APE" and that a reasonable next step would be to progress to the development of appropriate mitigation to offset such impacts.[259]

OPRHP recommended that the Applicant contact and work with local historians, historical groups, societies and museums to establish meaningful mitigation projects with associated costs and that, based on that process, the Applicant submit a mitigation proposal to the Army Corp. of Engineers pursuant to Section 106 of the National Historic Preservation Act.[260] The next step in the review of impacts to cultural and historical

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[257] Hearing Exhibit 3, Application Exhibit 20(b)(1); Application Appendices 20-D and Appendix 20-E.

[258] Hearing Exhibit 134, pp. 1-2.

[259] Hearing Exhibit 134, p. 2. The Applicant states that potential noise and/or vibration caused by operation of the proposed Facility are not expected to significantly alter the character or setting of S/NRHP-listed or eligible properties within the APE, but that auditory impacts will be further addressed during the Section 106 review process. Applicant Initial Brief, p. 97.

[260] Hearing Exhibit 134, p. 2.

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, OPRHP will finalize its review and provide the involved agency with its recommendations on effects and possible mitigation measures.

As stated earlier, under proposed Certificate Condition 61, Facility construction activities are not allowed in any areas that have not been reviewed and approved for the presence of cultural resources. In addition, the Applicant must file a final Cultural Resources Mitigation and Offset Plan to address adverse visual impacts on historic resources.[261] Based on the information contained in the record, the Applicant and DPS Staff state that the Siting Board can find 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.

Upon our review of the record, we find that the Project has avoided, minimized, and mitigated impacts to cultural and historic resources to the maximum extent practicable.

5. Impacts on Infrastructure – PSL §168(2)(d) and §168 (3)(c)

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. The parties have not raised any

[261] Hearing Exhibit 2, Proposed Certificate Condition 61.

disputes with respect to these issues.

a. Construction and Transportation

Application Exhibit 12 provides an overview of the Facility construction process and the measures to be taken to avoid, minimize and mitigate impacts during construction.[262] As stated in Application Exhibit 12, the Applicant submitted a preliminary Quality Assurance and Quality Control Plan (QA/QC Plan) setting forth how the Applicant will monitor and assure that Facility construction conforms with all applicable design, engineering and installation standards and criteria.[263] Pursuant to proposed Certificate Condition 53, the Applicant will develop a final site-specific construction QA/QC in coordination with the selected Balance of Plant contractor.

The proposed Certificate conditions provide that the Applicant will comply with all applicable local laws regulating construction noise, maintain functioning mufflers on all transportation and construction machinery, and will investigate and respond to noise complaints according to the protocols established in the Complaint Resolution Plan required by Certificate Condition 49.[264] In consultation with the Town, the Applicant will submit a Final Complaint Resolution Plan addressing complaint reporting and resolution procedures for all

[262] Hearing Exhibit 3, Application Exhibit 12.

[263] Hearing Exhibit 3, Application Exhibit 12, Appendix 12-A.

[264] See, Hearing Exhibit 2, Proposed Certificate Conditions 49, 74(e), 76; see also, Hearing Exhibit 2, Proposed Noise Complaint Resolution Protocol.

construction issues.[265] A copy of the Final Complaint Resolution Plan will be submitted to the Town and filed at the Facility document repositories.

In addition, the Applicant has agreed to provide construction notices to affected municipalities, host and adjacent landowners, emergency responders, the public at large, and, in certain instances, DPS Staff.[266] Under proposed Certificate Condition 29, prior to commencement of construction, the Applicant will submit a SEEP in accordance with the proposed SEEP Guide, which shall describe in detail the final Facility design and the environmental protection measures to be implemented during construction of the Facility.[267]

With respect to transportation impacts, the Application includes, 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 in the vicinity of the facility; and a discussion of potential

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[265] Proposed Certificate Condition 49. We agree with the Town's recommendations with respect to the contents of the final Complaint Resolution Protocol regarding construction noise complaints. The Town states that the final Complaint Resolution Protocol should be "easy for the public to follow," include construction related traffic and tree-clearing activity as "construction activity," and require investigation and potential corrective action for violations of local laws applicable to construction noise as well as for non-compliance with applicable Certificate Conditions. Town's Brief, pp. 7-8. However, we note that the Applicant and the Town are free to arrive at specific terms that differ from those just mentioned as long as the Final Complaint Resolution Protocol appropriately addresses the Town's concerns.

[266] Hearing Exhibit 2, Proposed Certificate Conditions 22-28, 83(b).

[267] Proposed Certificate Condition 29.

impacts to air traffic control and air navigation, which involves consultation with the Federal Aviation Administration, Department of Defense, the National Telecommunications and Information Administration, and nearby airports and heliports.[268] The Applicant reported that the probable impacts to transportation are expected to be minimal and primarily limited to temporary construction disturbances.[269]

The Applicant has agreed to several Certificate Conditions to mitigate potential transportation impacts. The Applicant will hold a pre-construction meeting with DPS Staff, DEC Staff, DAM Staff, the New York State Department of Transportation, Town Supervisors and Highway Departments, and the Chenango County Highway Department to and, as relevant here, must provide in advance maps showing designated travel routes and access road locations.[270] The Applicant will coordinate with State, County and local municipalities to respond to any locations that may experience traffic flow or capacity issues.[271] The Applicant will consult the Town when developing final construction haul routes, will finalize haul routes in coordination with the turbine manufacturer, and will use final haul routes in preparing final construction drawings.[272] With its SEEP, the Applicant will file copies of all necessary transportation permits, copies of all necessary agreements with utility companies for raising overhead wires where necessary to accommodate oversize/overweight vehicles, an updated Route

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[268] Hearing Exhibit 3, Application Exhibit 25, Application Appendix 25-A.

[269] Hearing Exhibit 2, Application Exhibit 25, p. 11, 15; see also DPS Staff Initial Brief, p. 33.

[270] Hearing Exhibit 2, Proposed Certificate Condition 82.

[271] Hearing Exhibit 2, Proposed Certificate Condition 55.

[272] Hearing Exhibit 2, Proposed Certificate Condition 56.

Evaluation Study, and an updated Traffic Control Plan that will include copies of any Host Community Agreements and/or Road Use Agreements with State, County and local municipal entities.[273] The Traffic Control Plan will include mitigation measures to manage traffic during construction and operation, protocols to ensure that emergency services and school transportation are not prevented from traveling on public roads. The Applicant also will provide notifications in the event of a temporary road closure, route restriction or detour, as specified in Road Use Agreements.

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 Town of Guilford 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

[273] Hearing Exhibit 2, Proposed Certificate Condition 56. The Town states that it has entered into a Road Use Agreement with the Applicant that should address many of the issues relating to the Town's roads during construction, maintenance and decommissioning of the Facility, including "establishment of and adherence to a specific travel route for the Applicant's heavy vehicles, responsibility for repairing damage to the roads, financial security for the Applicant's road repair performance obligations and reimbursement for reasonable Town expenses." Town Brief, pp. 3-4.

systems. According to the information provided by the Applicant, the Facility is not expected to have any material impact on microwave transmission, land mobile and emergency service communications, mobile phone service, amateur radio, commercial doppler weather radar systems, government radar systems, the New York Mesonet system, AM/FM broadcast radio, cable television and direct broadcast satellite television service.[274]

Due to signal scattering as television signals are reflected by rotating wind turbine blades and mast, the Project could result in degraded reception from fourteen off-air television stations. However, modern television receivers typically are capable of mitigating the effects of signal scattering. In any event, any person in the vicinity experiencing impacts to existing off-air television coverage can file a complaint. The Applicant will be required to address such complaint in accordance with the Final Complaint Resolution Plan, which shall contain complaint reporting and resolution procedures for all construction and operation issues. Under proposed Certificate Condition 49, if it is determined that the Facility has resulted in impacts to existing off-air television coverage, the Applicant must address each individual problem by investigating methods of improving the television reception system.

No party has disputed or otherwise challenged the information provided in the application. With the proposed Certificate Conditions, which we adopt, such information is sufficient for us to find that potential adverse impacts on communications have been avoided or minimized to the maximum

[274] Hearing Exhibit 3, Application Exhibit 26, Application Appendices 26-A through and 26-I; see also, DPS Staff Initial Brief, pp. 35-36.

extent practicable and will be mitigated in accordance with the Final Complaint Resolution Plan.

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. The Applicant has agreed to several proposed certificate conditions to ensure that the Project does not interfere with existing utility systems. Proposed Certificate Condition 77 requires the Applicant to comply with the requirements of the regulations of the New York State Public Service Commission (PSC) regarding the protection of underground facilities[275] and, prior to the commencement of operations, to become a member of Dig Safely New York.[276] Proposed Certificate Condition 78 requires the Applicant to comply with all of the PSC's regulations regarding identification and numbering of aboveground utility poles.[277] 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.[278]

The information in the application, along with the proposed Certificate Conditions and SEEP Guide, provide adequate support in the record for us to find that any potential adverse impacts on utilities will be avoided or minimized to the maximum

[275] 16 NYCRR Part 753.

[276] Hearing Exhibit 13, Appendix A.

[277] See, 16 NYCRR Part 217.

[278] Hearing Exhibit 2; SEEP Guide §A(1)(a), (l), (u).

extent practicable.

VI. COMPLIANCE WITH STATE LAWS 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.[279] With certain limited exceptions, State and local procedural requirements for wind facilities are preempted, including any local approval, consent, permit, certificate, or other condition for construction and operation of a facility.[280]

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.[281] 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

[279] PSL §168(3)(e).

[280] PSL §172(1); 16 NYCRR §1001.31(a).

[281] PSL §172(1); 16 NYCRR §1001.31(a).

request are mitigated to the maximum extent practicable."[282] 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.[283]

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.

B. Local Law

With the exception of local law provisions for which the Applicant seeks a waiver and the Applicant's requested delegation of permitting authority, which are discussed below, we find that the construction and operation of the Facility would comply with applicable local laws and regulations. Among other things, the Facility will comply with applicable setback and turbine noise level limit standards established by the Town.[284]

a. Prevention of Unnecessary Noise

The Applicant requests a waiver of construction hour limitations set forth in section 2(E) of Town of Guilford Local Law No. 2 of 1992, which prohibits the building or erection of structures or the operation of equipment between the hours of 11:00 p.m. and 7:00 a.m. "in such a manner as to produce a continuous noise so that it results in harassment and undue

[282] 16 NYCRR §1001.31(e).

[283] PSL §168(3)(e).

[284] Hearing Exhibit 7, Revised Application Exhibit 31, Table 31-1, p. 11; Tr. 566-567.

disturbing of the peace and quiet enjoyment of the neighborhood." The Applicant maintains that strict imposition of this local law requirement could interfere with the construction process, imposing an undue burden on both the Applicant and the surrounding community.

The Applicant asserts that the limited waiver it seeks would allow for time-sensitive deliveries and maintenance activities; certain construction activities that may require the Applicant to continue work beyond the designated hours, such as a continuous concrete pour for a turbine foundation; and/or inclement weather conditions, such as high winds that make erection of turbines using cranes safer or more practicable to conduct during nighttime hours. The Applicant states that such activities occurring during prohibited hours generally would be limited to individual turbine sites or delivery activities.[285] In addition, the Applicant agrees to provide the Town with advance notice of such proposed construction activities, wherever possible.

The Town does not object to the waiver, provided that the waiver is as limited as possible.[286] The Town notes that the Applicant's waiver request would allow turbine construction during prohibited hours only on an as-needed basis, such as a time-sensitive construction stage that might be affected by inclement weather, and that it would not apply to any other construction activities beyond turbine construction. The Town requests that the Applicant provide it with notice whenever construction activities are to occur between the hours of 11:00 p.m. and 7:00 a.m.

DPS Staff also supports a limited waiver that permits

[285] Applicant Initial Brief, p. 103.

[286] Town Brief, p. 13.

certain noise-producing activities on a limited basis, such as by allowing turbine construction activities during extended hours on an as-needed basis to address unusual circumstances, or accommodating a time-sensitive construction stage that may be affected by inclement weather. DPS Staff states that, in practice, such a waiver would not apply to ordinary construction activities such as delivery and maintenance, except as they are directly tied to the unusual circumstances.

The Signatory Parties have agreed to proposed Certificate Condition 83, which limits construction and routine maintenance activities on the Project from 7:00 a.m. to 8:00 p.m., Monday through Saturday, and 8:00 a.m. through 8:00 p.m. on Sunday and national holidays, "with the exception of wind turbine construction limited to the immediate turbine site and delivery activities (as described in section (a) below) which may need to occur during extended hours beyond this schedule on an as-needed basis." Certificate Condition 83 also requires the Certificate Holder to provide notice of such after-hour construction activities to DPS Staff, affected landowners, and the Town 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 which case as much advance notice as is practical shall be provided.

The Siting Board granted a similar waiver in the Cassadaga Wind Article 10 Proceeding on the ground that the construction time limits would be unreasonably burdensome if they prevented "construction activities during extended hours on an as-needed basis to address unusual circumstances, such as a time-sensitive construction stage that may be affected by

inclement weather."[287] We grant the limited waiver requested here for the same reasons. However, to ensure that Certificate Condition 83 appropriately reflects the limited nature of the waiver requested and granted, we modify the last clause of the first sentence of Certificate Condition 83 to read: "with the exception of wind turbine construction limited to the immediate turbine site and delivery activities (as described in section (a) below) which may need to occur during extended hours beyond this schedule on an as-needed basis to address unusual circumstances."

b. Renewable Energy Systems Local Law

The Applicant seeks a waiver of two sections of the Town's Renewable Energy Systems Law (RESL) as they relate to decommissioning.

RESL §6(A)(1)(a) requires removal of turbine foundations to a depth of four feet below ground surface in both agricultural and non-agricultural lands. The Applicant has agreed to remove turbine foundations to a depth of four feet in agricultural lands "to adhere to the New York State Department of Agriculture and Markets guidelines in areas which would be plowed and tilled in the future."[288] The Applicant seeks a waiver of the four-feet depth requirement with respect to non-agricultural land, stating that industry standard practice is removal to a depth of three feet below ground surface in such areas.[289]

The Applicant asserts that the application of section 6(A)(1)(a) to turbine foundations in non-agricultural lands

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[287] Cassadaga Wind Order, p. 92. See also, Eight Point Wind Order, p. 59 and Certificate Condition 120; Baron Winds Order, p. 148 and Certificate Condition 83.

[288] Hearing Exhibit 7, Revised Application Exhibit 31, pp 6-7.

[289] Hearing Exhibit 7, Revised Application Exhibit 31, p. 7.

"will add unreasonably burdensome costs to decommissioning and removal of the project, as well as unnecessary impact to the community during the removal process, which are out of balance with the benefits to be gained in requiring removal."[290] The Applicant maintains that decommissioning costs would be increased for excavation of concrete foundations through blasting, drilling or other noise-intensive activities that otherwise would be unnecessary because foundations in non-agricultural lands can be buried and left in place without negatively impacting the surrounding lands.

The Town does not object to the requested waiver, stating that it and its consultants "determined removal to 3 feet in non-agricultural lands to be acceptable based on more recent Siting Board decisions and the guidelines of the New York State Department of Agriculture and Markets."[291] DPS Staff recommended in testimony that the waiver be granted.[292] DPS Staff testified that it "has consistently recommended wind turbine foundation removals down to four feet below grade in agricultural land and down to three feet below grade in non-agricultural land."[293]

Certificate Condition 48, as proposed by the Signatory Parties, provides for the removal of all turbine installations and foundations to a depth of four feet below grade in agriculture lands and three feet below grade in non-agriculture lands. In addition, the Applicant states that, at the time of the required five-year review of the decommissioning estimate, the Applicant will check with landowners to determine whether

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290 Hearing Exhibit 7, Revised Application Exhibit 31, p. 8.

291 Town Brief, p. 9.

292 Tr. 343.

293 Tr. 343.

the agricultural use of the lands around each turbine has changed and will excavate turbine foundations to the depth requirements of the underlying land's agricultural status as updated. The Applicant indicates that this commitment will be reflected in its final Decommissioning Plan.

Weighing the costs involved and the lack of benefits to be achieved, and given the absence of any objection to the requested waiver, we agree that application of section (A)(1)(a)'s excavation depth requirements to turbine foundations in non-agricultural lands would be unduly burdensome. This result is consistent with the order in Alle-Catt Wind Energy LLC, which imposed a depth removal of four feet below grade for turbine foundations in agricultural land while allowing three feet below grade for turbine foundations in non-agricultural land.[294] Accordingly, we adopt the language proposed by the Signatory Parties in Certificate Condition 48 with respect to the applicable removal depths for turbine foundations.

The Applicant also seeks a waiver of the requirement in RESL §6(A) that it post a letter of credit "in a face amount of not less than 120% of the estimated cost of complete decommissioning and removal." The Town agrees with the Applicant that a letter of credit in the amount of 110% of the decommissioning and site restoration costs, updated every five years and without an offset for salvage value, appropriately protects the Town's interests.[295] As set forth in Proposed Certificate Condition 48(a), the Signatory Parties have agreed to that revised security amount. DPS Staff testified that the requirements included in proposed Certificate Condition 48 are consistent with its recommendations in past Article 10 cases and

[294] Alle-Catt Wind Order, pp. 85-88.

[295] Tr. 399-402; Town Brief, pp. 13-14.

with prior Siting Board orders.[296] Absent a need for the posting of additional security and any objection to the requested waiver in this case, we find that RESL §6(A)'s 120% financial security requirement is unreasonably burdensome and grant the Applicant's waiver request.

c. Delegation of Permitting Authority

The Applicant requests delegation of permitting authority for three purposes. First, the Applicant requests that we authorize the Town of Guilford and Chenango County to retain their authority to issue local permits for septic and water systems for the O&M building. The Applicant explains that it will not have the level of detailed final design information needed to demonstrate compliance with the substantive permitting requirements until the final location for the O&M building is identified prior to commencement of construction.[297] The Applicant states that it will work with the Town and County to follow all of their respective procedural and substantive requirements for the permitting of septic and water. The Applicant asserts that it is more appropriate for the Town and County to issue local sewer and water permits as needed because regulation of septic and well systems is primarily an issue of local concern involving routine matters.

Second, the Applicant requests that, with respect to county- and town-owned roadways, the Town and County be authorized to apply existing local regulations related to highway work permits, driveway permits, special haul permits for oversized/overweight vehicles, maintenance and road preservation laws, local road construction standards, and other local laws applicable to the use of, and construction in or near, such

[296] Tr. 343-344.

[297] Exhibit 7, Revised Application Exhibit 31.

roadways during construction and/or operation of the Facility. The Applicant states that such authorization would allow the Town and/or the County to either impose existing permitting requirements and local ordinances or enter into Road Use Agreements for the Facility. The Applicant asserts that the timing of issuance of highway work and special haul permits are such that the Applicant could not provide the information as part of its Application.

Finally, to the extent temporary meteorological wind measurement towers are needed in the future, the Applicant requests the Siting Board to authorize the Town to issue the permits for such towers. The Applicant states that temporary meteorological wind measurement towers may be needed to obtain more location-specific data, but that such need is unknown at this time.

DPS Staff recommends that we grant all three requests for local permit delegations to the requisite municipality, with the understanding that the Town of Guilford will apply consideration of setback and location criteria as applicable in the local code requirements for temporary meteorological tower installation, operation and removal. We adopt that recommendation and grant the Applicant's requests.

VII. DECOMMISSIONING AND SITE 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 included 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.[298] The decommissioning plan describes steps for removal of Facility components and restoration of the Facility Site, including measures for reseeding and revegetation, grading and backfilling, cleanup of the site, and monitoring.[299]

As a result of settlement negotiations, the Applicant has agreed to proposed Certificate Condition 48, which requires the Applicant to file a final decommissioning plan prior to commencement of construction. Among other things, the final decommissioning plan will provide procedures and timeframes for providing advance written notice to the Town and landowners of planned decommissioning and site restoration activities and will include a final estimate for removal of all Facility components and site restoration. The estimate will be based on the final design of the Project, will include a 10% contingency and will not include any offset for projected salvage value. The estimate also would be based on the removal of all turbine installations and foundations to a depth of four feet below grade in agriculture lands and three feet below grade in non-agriculture lands. After one year of Project operation and every fifth year thereafter, the Applicant will file with the Secretary an update to the estimate that will reflect inflation and any other changes in pricing and be prepared by a qualified independent engineer licensed to practice in the State of New

[298] Hearing Exhibit 2, Application Exhibit 29, Appendix 29-A.

[299] Hearing Exhibit 2, Application Exhibit 29, Appendix 29-A.

York.

In addition, proposed Certificate Condition 48 requires that, prior to commencement of the turbine foundation pours, the Applicant will establish a letter of credit in the amount of the total final decommissioning and site restoration estimate, plus a 10% contingency. The letter of credit will be in a form approved by the Town, will be held by and solely for the Town's benefit, and will protect the Town's rights regardless of the transfer or assignment of the Facility or Certificate or the insolvency or bankruptcy of the Certificate Holder. The Letter of Credit will remain in force until the Facility is fully decommissioned and the site is restored. The Certificate Holder will file an affirmation with the Secretary that the required letter of credit has been obtained and copies of agreements between the Certificate Holder and the Town, establishing a right for to Town to draw on the letter of credit until the Facility is fully decommissioned and the site restored.

The agreed-upon requirements of Proposed Certificate Condition 48 are generally consistent with the decommissioning and site restoration certificate conditions approved in prior proceedings for wind generating facilities under Article 10. However, to ensure that the Final Decommissioning Plan reflects the Applicant's commitment to excavate turbine foundations to the depth requirements of the underlying land's agricultural status as updated (discussed in the prior section), we modify the language of Certificate Condition 48(e) to add a second sentence stating: "The decommissioning and site restoration estimates provided 'every fifth year thereafter' shall reflect costs to excavate turbine foundations to the depth requirements

of the underlying land's agricultural status as updated."[300] Based upon the Application materials, as well as Certificate Condition 48, which we hereby adopt as modified, we find that the probable environmental impacts resulting from decommissioning and site restoration have been satisfied.

VIII. 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 NYCRR Part 487.[301] 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."[302]

Based upon data obtained from DEC's Geospatial Information System (GIS) Tools for Environmental Justice, High Bridge Wind determined that no potential environmental justice areas exist within a 0.5-mile radius of the Facility area. Rather, High Bridge Wind determined that the nearest potential environmental justice area is located approximately 5.2 miles

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[300] The Town states that we should consider clarifying that parcels will be considered "agricultural land" if they are used or intended for agriculture or if they are within a New York State agricultural district at the time decommissioning actually occurs. Town Brief, p. 10. Other than as described in the text above, the record does not contain any information for us to provide such a definition in the Certificate Conditions.

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

[302] 6 NYCRR §487.3(l); see also 6 NYCRR §487.4.

from the Facility site in the City of Norwich.[303]

Due to the distance between the proposed Facility and the potential environmental justice area in Norwich, High Bridge Wind 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.[304]

Based on its review of Exhibit 28 of the Application, DPS Staff concludes that the construction and operation of the Facility is not expected to have any environmental justice impacts and that the Siting Board should find that High Bridge Wind met its burden pursuant to PSL §168.[305] Based upon our review of the record, we agree and adopt DPS Staff's recommendation.

IX. BENEFICIAL ADDITION TO NY ELECTRIC GENERATION CAPACITY AND THE PUBLIC INTEREST – PSL §168(3)

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.[306] 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.[307]

The Application included the New York Independent

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303 Hearing Exhibit 3, Application Exhibit 28, p. 1.

304 Hearing Exhibit 3, Application Exhibit 28, pp. 1-2.

305 DPS Staff Initial Brief, p. 45.

306 PSL §168(3)(a), (b).

307 PSL §168(4).

System Operator's System Reliability Impact Study, which found that the Facility would cause minimal impacts on New York's electrical system.[308] DPS Staff raised a concern with the use of power inverters for improved wind turbine frequency synchronization and to release integrated battery storage energy into the interconnected system, stating that inverters may introduce unwanted harmonic energy onto the electric system that, if not addressed, could give rise to power quality and other reliability issues.[309] In response to a discovery request from DPS Staff, the Applicant set forth its confidential harmonic mitigation strategy, which DPS Staff testified adequately addressed its concerns that harmonics would have the potential to create system reliability issues.[310]

Consistent with DPS Staff's production modeling analysis, the Applicant's production cost modeling indicated that the Facility would have no adverse impact on the dispatch of must-run zero emissions electric generation in the State.[311] In addition, the Applicant's forecast showed a decline in wholesale energy prices for New York State with the Project in service.[312] Finally, the addition of this Facility will improve fuel diversity in the State and increase the State's renewable energy generation capacity, thus reducing the State's reliance on non-renewable resources, such as natural gas, coal, and oil.

The Project will supply approximately 100.8 MW of clean, renewable energy to the electric grid in New York. The

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[308] Hearing Exhibit 3, Application Exhibit 5; Application Exhibit 10, p. 12; Confidential Application Appendix 5-A.

[309] Tr. 308-310.

[310] Tr. 310-311.

[311] Tr. 312; DPS Staff Initial Brief, p. 45.

[312] Hearing Exhibit 3, Confidential Application Exhibit 8; Tr. 211.

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 has demonstrated that the Facility addresses 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.[313] Notably, no party disputes the Applicant's simulations showing a decrease in carbon dioxide(CO_2) and nitrogen oxides (NOx) emissions because of the Project, which is consistent with DPS Staff's production modeling analysis.[314] Moreover, the Facility will contribute to the goals of the Climate Leadership and Community Protection Act, signed into law by Governor Cuomo on June 18, 2019, which establishes a clean energy mandate of 70 percent renewable electricity by 2030 and 100 percent renewable electricity by 2040.

The Applicant argues that the Facility also will provide economic benefits locally and Statewide, including increased construction and operational jobs, increased revenues to local municipalities, and the purchase of products and services in the local communities.[315] The Applicant estimates that, in addition to other job impacts, the Project will result

[313] Hearing Exhibit 3, Application Exhibit 10; Tr. 211-212.

[314] Hearing Exhibit 3, Confidential Application Exhibit 8; Tr. 311, 316; DPS Staff Initial Brief, p. 45.

[315] Applicant Initial Brief, p. 66; Hearing Exhibits 3, Application Exhibit 27 and Appendix 27-A.

in approximately 67 project development and on-site construction jobs and seven operational jobs.[316]

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 wind generation projects.[317] Because the job impact numbers are estimates, which may change according to Project timelines, budgets and other factors, proposed Certificate Condition 40 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.

The Applicant also asserts that local governments will "receive significant payments in lieu of taxes (PILOTs) over 25 years that will be distributed to the Town of Guilford, Chenango County, the Bainbridge-Guilford Central School District, the Gilbertsville-Mt. Upton Central School District, the Guilford Fire District and the Mt. Upton Fire District."[318] The Applicant stated in testimony that the "Facility's anticipated contributions through PILOT and/or Host Community Agreement (HCA) payments to the Town could be used to offset a significant portion of the Town's total real property tax levy it must otherwise obtain from landowners each year."[319]

With the exception of GCNR, no party disputes that the Facility will create direct jobs, generate revenues for local government entities through PILOT agreements, and will generate

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316 Hearing Exhibit 3, Application Exhibit 27, p. 6.

317 Hearing Exhibit 3, Application Exhibit 27; Hearing Exhibit 133, Confidential Response to DPS IR-04; Tr. 318.

318 Applicant Initial Brief, p. 67, citing Confidential Application Appendix 27-A, p. 25 and Table 16.

319 Tr. 414.

revenues for participating landowners through lease and other agreements. GCNR argues that "the socioeconomic benefits promised by the Applicant are generic in nature and not supported by evidence" in the record.[320] GCNR notes that the record does not contain a Host Community Agreement or PILOT agreement to substantiate the economic benefits cited by the Applicant.

We do not find GCNR's arguments compelling. Article 10 and its implementing regulations do not require developers to include Host Community Agreements or PILOT agreements in the record to establish that the Project will have an economic benefit. In this case, as in others, the Applicant has provided estimated PILOT payments and has stated that it plans to execute PILOT agreements with the relevant taxing jurisdictions, that payment amounts are based on the Project's planned improvements and projected capacity, and that payment amounts would increase or decrease in direct proportion to changes in the Project's final installed capacity.[321] No one has presented evidence to refute those estimates and we believe the taxing jurisdictions involved will adequately protect their economic interests. Moreover, under proposed Certificate Condition 40, the Applicant is required to report on the payments made to local jurisdictions during the construction and operational phases of the Project.

GCNR also asserts that the Applicant has not established a nexus between regional economic benefits and local economic benefits to the "host community that will bear the brunt of negative impacts."[322] Although socioeconomic impacts

[320] GCNR Brief, p. 32-33.

[321] Hearing Exhibit 3, Application Exhibit 27-A, p. 25.

[322] GCNR Brief, p. 33.

from a Project are considered in determining whether a Project is in the public interest, Article 10 does not require a finding that the Project creates socio-economic benefits. Nor does Article 10 require any nexus between regional and local economic benefits. In any event, we conclude that local jobs, PILOT payments to the Town of Guilford and other local institutions, as well as payments to host landowners, will result in direct local economic benefits.

We also reject GCNR's argument that the record on socioeconomic impacts is incomplete because it does not include the potential loss of local property values and tax revenues that could result from the Project.[323] GCNR's argument, which relies heavily on administrative decisions issued under the State Environmental Quality Review Act, and cites a recent article referencing a study of the impacts from tall wind turbines and solar farms on residential property values in the Netherlands,[324] does not persuade us to depart from our recent determination that "neither Article 10 nor the implementing regulations require or even mention the impact of property values as an issue to be examined" in an Article 10 proceeding.[325]

Based upon the information presented in the Application and supplemental materials, and with our adoption of proposed Certificate Condition 40, we agree that the construction and operation of the Facility will result in socioeconomic benefits, which will contribute to the Facility's ability to serve the public interest. In addition, for reasons discussed above, we find that the Facility will be consistent

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[323] GCNR Brief, p. 32.

[324] GCNR Brief, pp. 29, 32-33.

[325] Order Granting Interlocutory Review and Affirming Issues Ruling (issued June 30, 2020), p. 7.

with the State's 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 in the public interest.

Contrary to GCNR's position that the public interest must be determined without reference to energy policy considerations, the Public Service Law specifically requires us to consider energy policy, as well as various other factors, in determining whether a project is in the public interest. Specifically, pursuant to PSL §168(4), in making the public interest determination, we must consider, among other things, environmental impacts; the nature and economics of reasonable alternatives; the consistency of the construction and operation of the facility with the energy policies and long-range energy planning objectives and strategies contained in the most recent state energy plan; the impact on community character and whether the facility would affect communities that are disproportionately impacted by cumulative levels of pollutants; and such additional social, economic, visual or other aesthetic, environmental and other considerations deemed pertinent by the Siting Board.

We have properly considered such factors in determining that, with appropriate Certificate Conditions in place, the construction and operation of the Project will be in the public interest. Although we are aware of the various concerns expressed by local residents about the impacts from the Project, we have found that probable adverse impacts have been avoided, minimized or mitigated to the maximum extent

practicable. Given the demonstrated benefits of the Project and recognizing that the area is well-suited to wind generation, and considering all of the factors required by Article 10, we conclude that the Project is in the public interest.

X. 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 High Bridge Wind LLC 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. 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 High Bridge Wind LLC (the Applicant) for the construction and operation of a wind facility with a capacity of 100.8 megawatts, consisting of up to 25 turbines and associated Facility components to be located in Town of Guilford, Chenango County, and to be connected to the bulk electric transmission system owned by New York State Electric and Gas Corporation, doing business as National Grid, provided that the Applicant files a written acceptance 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.

2. Upon acceptance of the Certificate granted in this Order or at any time thereafter, the Applicant 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.

3. Prior to the commencement of construction, the Certificate Holder 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.

4. If the Certificate Holder 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.

5. 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 one day prior to the affected deadline.

6. 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

Case No. 18-F-0262

High Bridge Wind LLC

APPENDIX A

I. Project Authorization

1. The Certificate Holder is authorized to construct and operate the Facility (or the Project), as described in the Application by High Bridge Wind, LLC (High Bridge Wind) 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 New York State Board on Electric Generation Siting and the Environment (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 Public Service 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 up to 25 wind turbines in the Town of Guilford ("Town"), Chenango County, together with the following: temporary or permanent access roads, 34.5 kilovolt (kV) collection system, collection and interconnection substation, overhead 115 kV transmission line, 5 MW battery storage system, two permanent meteorological towers, one operations and maintenance (O&M) facility temporary concrete batch plant (if necessary) and temporary laydown yard/staging area. The total nameplate capacity of the wind Facility shall not exceed 100.8 megawatts (MWs).

6. If the Certificate Holder decides not to commence construction of any portion of the Project (not including turbine deletions as a result of final facility design as long as turbine deletions do not result in substantial re-routing of proposed Facility components including access roads, interconnection and collection lines), 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 decisions 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 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 one day prior to the affected deadline.

9. 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 NYSDPS 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, NYSDPS Staff will notify the Certificate Holder within 30 days of submission of the filing and inform the Applicant of the information needed to place the filing on the next available session.

10. 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 authorizing such granted by the Siting Board.

11. 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.

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 Chief of the Environmental Certification and Compliance Section of the NYSDPS 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 as applicable 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 site clearing not related to testing or surveying, site preparation or grading activity, or other construction-related activities that disturb soils (e.g., demolition, stockpiling of fill material, and the initial installation for erosion and sediment control practices required in the SWPPP). "Commencement of construction" of the Facility does not include staging (unless such staging would require implementation of elements of the SWPPP), tree-cutting activities related to testing or surveying (such as geotechnical drilling and meteorological testing), together with such testing, surveying, drilling, and similar preconstruction activities to determine the adequacy of the site for construction and the preparation of filings pursuant to these conditions.

14. 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 and commissioning of the Project.

15. The Secretary or the Chief of the Environmental Certification and Compliance Section of the NYSDPS Office of Electric, Gas & Water will issue a conditional "Notice to Proceed with Site Preparation" for the removal of trees, stumps, shrubs and vegetation from the site to clear the site for construction, prior to the submission of all pre-construction compliance and informational filings, provided that the Certificate Holder shall submit to the Siting Board, and the Siting Board and/or the Public Service Commission subsequently grants its approval on, a Tree Clearing Plan consistent with the attached "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the High Bridge Wind Project" (SEEP Guide) Section D.

16. The Certificate Holder shall implement the impacts avoidance, minimization, and mitigation measures, as described in this Order Granting Certificate.

17. The Certificate Holder shall construct and operate the Facility in accordance with the substantive provisions of the applicable local laws as identified in Exhibit 31 of the Application, except for those local laws the Siting Board waives as unreasonably burdensome, as stated in this Order Granting Certificate.

18. The Certificate Holder shall construct and operate the Facility in a manner that conforms to all substantive State requirements.

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, 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 New York State Electric and Gas Corporation (NYSEG), 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 NYSEG), the system will have power system relay protection and appropriate communication capabilities to ensure that operation of the NYSEG 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 NYSEG, and any successor Transmission Owner (as defined in the NYISO Agreement). Certificate Holder shall 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 NYSEG 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):

c) The Certificate Holder shall regard the Department of Public Service Staff (Staff or NYSDPS 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 Public Service Commission's (Commission) representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate, or may violate, the terms of the Certificate, Compliance Filings, or any other order in this proceeding, such NYSDPS Staff may issue a stop work order for that location or activity. Any stop work orders shall be limited to affected areas of the Project.

d) 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. NYSDPS Staff shall give the Certificate Holder notice by electronic mail of any application to the Siting Board or Commissioner to have a stop work order confirmed. If a stop work order is confirmed, 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 NYSDPS Staff, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.

e) Stop work authority shall be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, NYSDPS Staff will consult wherever practicable with the Certificate Holder's representative(s) possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holder's Project Managers and the Director of the NYSDPS Office of Electric, Gas and Water. If NYSDPS 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 NYSDPS Staff during these discussions.

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

g) If NYSDPS 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, NYSDPS Staff may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with NYSDPS Staff, refuse to take appropriate action, direct the Certificate Holder or the relevant Contractors to implement the corrective measures identified in the approved Certificate or Compliance Filings. However, all directives must follow the protocol established for communication between parties as required by the final approved *Project Communications Plan*. The field crews shall immediately comply with NYSDPS Staff's directive as provided through the communication protocol. NYSDPS Staff will immediately thereafter inform Certificate Holder's Construction Inspector(s) and/or environmental monitor(s) of the action taken.

III. Notifications

22. 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 5,000 feet of parcels upon which Project components will be located;

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

c) Publish notice in the local 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 document repositories and post office of the host community the Facility website, and the Facility construction trailers/offices; and

e) File notice with the Secretary for posting on the NYSDPS Document Matter Management (DMM) website.

23. The Certificate Holder shall write the notice(s) required in Condition 21 in language reasonably understandable to the average person and shall ensure that the notice(s) contain(s):

a) A map of the Project;

b) A brief description of the Project;

c) The construction schedule and transportation routes;

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

e) Instructions on how to register a complaint (e.g. in writing, by telephone, in-person and online) and where to find a copy of the Complaint Resolution Plan and other project documents; and

f) Contact information for the Siting Board and Commission.

24. Upon distribution of Notice, and prior to commencement of construction, the Certificate Holder shall notify the Town Boards of all areas where information regarding the Project, Project activities, and Project contact information have been posted.

25. 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 on Notifications and include a copy of the notice(s) under this Section as well as a distribution list.

26. Prior to the end of construction, the Certificate Holder shall notify the entities identified in Condition 22(a)-(e) with the contact name, telephone number, email, and mailing address of the Facility Operations Manager.

27. The Certificate Holder shall file a written notice with the Secretary within 14 days of the completion of construction and provide an anticipated date of commencement of commercial operation of the Facility.

28. Within 14 days of the completion of 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.

IV. SEEP, Information Reports and Compliance Filings Requirements

A. Site Engineering and Environmental Plan (SEEP)

29. 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 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 attached SEEP Guide 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.

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

B. Information Reports

The following written information reports and other documents shall be filed with 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

30. Documentation demonstrating that all necessary agreements are in place for use of the Facility Site for construction and operation (e.g., landowner agreements, easements, setback waivers, or Good Neighbor Agreements). Proofs of any consent(s) shall be provided to NYSDPS Staff and redacted to protect confidential information.

31. Interconnection:

    a) Provide a copy of the Interconnection Agreement (IA) between the NYISO, NYSEG, 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 different characteristics then 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 NYSEG 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.

32. All Facilities Studies issued by NYSEG and the NYISO related to the Facility and any updated facilities agreements will be filed throughout the life of the Facility.

33. Certificate Holder shall submit any System Reliability Impact Study (SRIS) performed in accordance with the NYISO Open Access Transmission Tariff (OATT) approved by the

Federal Energy Regulatory Commission, and all appendices thereto, reflecting the interconnection of the Facility shall be filed with the Secretary.

34. Certificate Holder shall make informational submissions regarding any manufacturer provided information regarding the design, safety and testing information for the turbines, substation, transformer, and battery storage equipment to be installed during construction, or as related to any equipment installed during Facility operation as a replacement of failed or outdated equipment, to the Siting Board, or to the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary throughout the life of the Facility.

35. The following shall be submitted regarding wind turbine model certification(s):

    a) Third-party type certification in accordance with International Electrotechnical Commission (IEC) 61400, proving that wind turbine model(s) meet international design standards; and

    b) Site suitability report from the Original Equipment Manufacturer (OEM) showing that turbine model(s) are compatible with existing Project conditions (i.e., site specific conditions).

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

37. Prior to commercial operation date, the Certificate Holder shall file with the Secretary, **Operation and Maintenance Plan(s)** for the Facility. The plan shall demonstrate conformance with manufacturer's required maintenance schedules.

38. Prior to Certificate Holder providing final design plans and profile drawings of the interconnection facilities, the Certificate Holder shall work with NYSEG to ensure such documents are in accordance with the Facility Study Report and NYSEG's Electric System Bulletins, as well as the New York State High Voltage Proximity Act.

39. A Relay Coordination Study that has been reviewed and accepted by NYSEG shall be filed at least four months prior to the projected date for commencement of commercial operation of the Facility.

40. 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.

41. **Final Geotechnical Engineering Report** verifying subsurface conditions at each turbine location. The report shall identify appropriate mitigation measures required in locations with highly corrosive soils, soils with a high frost risk, and soils with high shrink/swell potential. The report shall characterize subsurface conditions where HDD is proposed and identify all locations where blasting operations will be required.

Permits and Approvals

42. 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.

43. The following shall be filed regarding Federal Aviation Administration (FAA) permits and required approval documentation:

    a) Mitigation Agreements, Final Determinations or Determinations with conditions resulting from aeronautical studies;

    b) If any Determinations of No Hazard to Air Navigation for the Project's wind turbines are extended, revised, or terminated by the issuing office, documentation or verification detailing the actions shall be filed with the Secretary within 10 days of issuance;

    c) All material related to the FAA approval of lighting systems to be installed on wind turbines (and any associated equipment), shall be filed with the Secretary prior to commencement of construction.

    d) Certificate Holder shall provide any updated Compliance Filings, such as modified site plans and other drawings or details, in accordance with the requirements set forth in the attached SEEP Guide and detailed in Condition 57, if relevant Project plans require modifications due to results of FAA studies and Determinations; and

    e) A copy (or verification of filing to the FAA) of the FAA Form 7460-2, Notice of Actual Construction or Alteration shall be filed with the Secretary within sixty (60) days after completion of construction of the Project.

44. 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 (i.e. town/county permits for sewage and water; local certificates of completion and temporary certificates of completion issued by a qualified

independent engineering firm; NYSDOT, county or local highway permits; Town Met Tower Permits), 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 Detail Drawings

45. Prior to installation of wind turbines, the Certificate Holder shall file an attestation affirming that the final Facility design incorporates the following measures for visual impact minimization:

    a) Advertisements, conspicuous lettering, or logos identifying the Facility owner, turbine manufacturer, or any other entity on the turbines shall not be allowed;

    b) Wind turbines, towers and blades shall be FAA approved colors to avoid the need for daytime aviation hazard lighting; and non-reflective finishes used on wind turbines to minimize reflected glare;

    c) Turbine aviation hazard lighting will be minimized to the extent allowable by the FAA; if stroboscopic lighting is required by FAA, medium-intensity red strobe lights will be used; and

    d) Lighting plan features and controls at substations, turbine access doors and turbine sites shall be installed, operated, and maintained; nighttime lighting will be limited to the minimum extent necessary for security, using low-intensity lighting that is angled downward, unless otherwise required by NYSEG specifications for the substation.

46. As-Built Plans in both hard and electronic copies shall be filed within nine months of the commencement of commercial operation of the Facility and shall include the following:

    a) Maps or plans (and GIS shapefiles) showing all components of the Project (wind turbine locations, electrical collection system, substation, buildings, access roads, met towers, point of interconnection (POI), battery storage facilities, etc.) in relation to existing roads, property boundaries, municipal boundaries, and local geographic features;

    b) Collection circuit layout map; and

    c) As-Built Plans and details for all Project component crossings of, and co-located installations of Project components with, existing pipelines: showing cover, separation distances, any protection measures installed, and locations of such crossings and collocated installations.

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 construction of component facilities directly related to the filing, unless otherwise noted.

General

47. The Certificate Holder shall submit an **Environmental Compliance and Monitoring Plan** including a **Project Communications Plan** identifying the Certificate Holder's construction organizational structure, contact list, and protocol for communication between parties. The Certificate Holder shall provide to NYSDPS Staff and the Town the names and contact information of all 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 inspector.

48. For purposes of decommissioning and site restoration, a Letter of Credit will be established by the Certificate Holder to be held by the Town, solely for the benefit of the Town, which shall remain active until the Facility is fully decommissioned and the Facility site is restored, with terms protecting the Town's right to the letter of credit irrespective of the Certificate Holder's transfer or assignment of the Facility or the Certificate, or the insolvency or bankruptcy of the Certificate Holder. The total amount of the Letter of Credit created for the Town will represent the total final decommissioning and site restoration estimate for all components of the Facility, plus a 10% contingency, as outlined below. Prior to the commencement of construction, a **Final Decommissioning Plan** shall be submitted which will include the following:

    a A final decommissioning and site restoration estimate for removal of all Facility components, based on the final Project layout, and site restoration, with no offset for projected salvage value permitted in the calculation of the estimate, and including a 10% contingency. The Final Decommissioning Plan will provide the decommissioning and site restoration cost on a per turbine basis and will include the cost for removal and site restoration of turbines and other Facility components, such as the collection substation, access roads, and MET towers.

    b The estimate shall include removal of each access road constructed for the Facility unless the Certificate Holder provides written agreement by the landowner requesting that the access road remain after decommissioning and agreeing to properly maintain such road and any appurtenant stormwater management, runoff and erosion controls.

c The estimate shall include all disposal costs for waste materials, crushed rock, and similar materials, including landfill fees. If the Plan indicates that a recipient (such as a municipality) is willing to accept usable materials without cost, a written agreement shall be provided to justify removal of applicable costs from the estimate. At each review of the decommissioning estimate at the intervals outlined in Condition 48(e), the Certificate Holder shall verify in writing that the agreements with the aforementioned landowners and donees are still in place.

d The estimate shall include removal of all turbine installations and foundations to a depth of four (4.0) feet below grade in agricultural lands, and three (3.0) feet below grade in non-agricultural soils.

e After one year of Project operation and every fifth year thereafter, the decommissioning and site restoration estimates shall be (i) updated by a qualified independent engineer licensed to practice in the State of New York and shall reflect inflation and any other changes in pricing and (ii) filed with the Secretary. The decommissioning and site restoration estimates provided "every fifth year thereafter" shall reflect costs to excavate turbine foundations to the depth requirements of the underlying land's status as updated;

f Affirmation that, prior to commencement of turbine foundation pours, (i) the letter of credit will be obtained in the final decommissioning and site restoration estimate amount, as calculated pursuant to subsection (1) of this Condition, (ii) the Town's approval of the letter of credit form will be obtained, and (iii) copies of agreements between the Certificate Holder and the Town, establishing a right for the Town to draw on the letters of credit until the Facility is fully decommissioned and the Facility site restored, shall be filed with the Secretary.

g Procedures and timeframes for providing written notice to the Towns and landowners of planned decommissioning and site restoration activities prior to commencement of those activities.

49. The Certificate Holder shall submit a **Final Complaint Resolution Plan** for both construction and operation phases of the Project, which shall be developed in consultation with the Town. A copy of the Final Complaint Resolution Plan shall be submitted to the Town and filed at the Facility document repositories. The plan shall address complaint reporting and resolution procedures for all construction and operation issues. The plan shall include protocols as indicated in Section B of the attached SEEP Guide.

If the Complaint Resolution process determines that Facility operation has resulted in impacts to existing off-air television coverage, the Certificate Holder shall address each individual problem by investigating methods of improving the television reception system.

Health and Safety

50. A **Final Emergency Action Plan** that shall be implemented during Facility construction, and operation. It shall address, amongst other potential contingencies, provisions for the notification of pipeline operators/owners in the event of damage to an existing pipeline. Copies of the final plan shall be provided to NYSDPS Staff, the NYS Division of Homeland Security and Emergency Services, the Town, and local emergency responders that serve the Facility. The Certificate Holder may submit separate emergency procedures for construction and operation. 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.

51. A final **Site Security Plan** for Facility construction and operations. Copies of the final plan shall be provided to NYSDPS Staff, the NYS Division of Homeland Security and Emergency Services, 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.

52. A final **Health and Safety Plan** that shall be implemented during Facility operation and construction. 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. The Certificate Holder shall choose a turbine with technology capable of directly or indirectly detecting blade ice formation. Such sensor(s) or technology shall allow for the shutdown or slowdown of a turbine per the operation of the system.

53. 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.

54. Prior to the installation of exterior lighting on facility components a **Facility Exterior Lighting Plan** shall be submitted for review and approval by the Siting Board. The Plan shall address the lighting elements of Condition 45 and:

    a) security lighting needs at wind turbine sites, substation and switchyard sites, battery storage, 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, battery storage, the Facility Operations and Maintenance building site, any exterior equipment storage yards;

    c) plan, elevation, and details for lighting and associated components for wind turbines (including any FAA approved equipment required for Aircraft Detection Lighting Systems);

d) lighting should be designed to provide safe working conditions at appropriate locations;

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

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

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

iii) manufacturer's cut sheets of all proposed lighting fixtures shall be provided.

Transportation

55. The Certificate Holder shall coordinate with the State, County, and local municipalities to respond to any locations that may experience any traffic flow or capacity issues.

56. The Certificate Holder will develop final haul routes in consultation with the Town of Guilford, will finalize haul routes in coordination with the turbine manufacturer, and will use the final haul routes in preparing the final construction drawings. The Certificate Holder shall file the following regarding potential transportation impacts in accordance with applicable requirements in Section B of the attached SEEP Guide:

a) Pursuant to 16 NYCRR 1002.4, prior to using a route to haul equipment or materials requiring a permit, and upon receipt, copies of all necessary transportation permits from the affected State, County, and Town agencies for such equipment and/or materials on such route. Such permits shall include but not be limited to: Highway Work Permits to work within the Right-of-Way (ROW), permits to exceed posted weight limits, Highway Utility Permits to work within ROW, Traffic Signal Permits to work within ROW, Special Haul Permits for oversize/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 *Host Community Agreements* and/or *Road Use Agreements* with the County and any affected towns where the local roads will be utilized for delivery or construction vehicle transportation. The Traffic Control Plan shall include protocols to ensure that emergency services and school transportation are not prevented from traveling on public roads and will provide notifications in the event of a temporary road closure, route restriction, or detour, as specified in the *Road Use Agreement*;

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 oversize/overweight delivery vehicles, if applicable.

Plans, Profiles, and Detail Drawings

57. The Certificate Holder shall provide all information required pursuant to Section A of the attached 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 High Bridge Wind.

a) Final design drawings, site plans, and construction details shall be filed as compliance filings, shall include the informational requirements stated in the attached SEEP Guide, and will show Facility setback dimensions that meet or exceed the setback requirements in the Town's applicable local law.

b) Shapefile data shall be provided to NYSDPS Staff, NYSDEC Staff, the Town and GCNR, where permitted by law, upon submittal of the SEEP document for the final locations of turbines, collection lines, substation, POI and related interconnection facilities, construction and laydown areas, access ways, battery storage facilities, other Project facilities, and the limits of clearing and disturbances.

Environmental

58. A site-specific **Final Blasting Plan** designed to protect surrounding structures, including groundwater wells and other water supplies, and incorporate the requirements of Condition 87. The Blasting Plan shall be developed in consultation with NYSDEC and NYSDPS Staff and submitted for approval by the Siting Board prior to construction. The Blasting Plan shall include procedures and timeframes for notifying host communities and property owners (and persons who reside on such properties (if different than the landowners) within one-half mile radius of the blasting site. The notification provided shall include information regarding filing a complaint.

Blasting shall be designed and controlled to meet the limits for ground vibration set forth in United States Bureau of Mines Report of Investigation 8507 Figure B-115(i) and air overpressure shall be under the limits set forth in the Conclusion Section in United States Bureau of Mines Report of Investigation 8485 (USBM RI 8507 and USBM RI 8485)15(ii) to protect structures from damage.

59. **Final Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan**. Shadow flicker caused by wind turbine operations shall be limited to a maximum of 30 hours annually at any nonparticipating residence, school, business, or other occupied building, subject to verification using shadow prediction and operational controls at appropriate wind turbines. The Shadow Flicker Impacts Minimization and Mitigation Plan shall include details as outlined in Section B of the attached SEEP Guide.

60. Upon completion of construction of the Facility, the Certificate Holder shall conduct an assessment, which shall include consultation with the Town, of the need for landscape improvements. At a minimum, this assessment will consider, vegetation plantings, earthwork, and installed features to screen or landscape the O&M Building and the POI site, which includes the collection substation, battery storage facility, if applicable, and the POI substation. All such landscaped areas shall be maintained in a reasonably healthy growing condition. Based on the results of the assessment, the Certificate Holder shall develop the following in consultation with NYSDPS Staff and the Town and submit for approval:

    a) Plans for any visual mitigation found necessary, and, in connection therewith, plans for removal, rearrangement and supplementation of existing landscape improvements or plantings, as appropriate; and

    b) Landscaping plan specifications and materials list (details shall include measures for third party or wildlife damage to any landscape and vegetation plantings);

    c) All plant material selected for mitigation plantings will be native, tolerant to herbivorous grazing, and adaptable to site and roadside conditions. To the extent practicable, the selected plants shall be of an appropriate size in accordance with the American Nursery Stock Standards (Z-60.1) to ensure adequate height is achieved 5-7 years following planting; and

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

61. 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 that have not been reviewed and approved for the presence of cultural resources. The Certificate Holder shall indicate on final Site Engineering and Environmental Plans measures for avoidance of archaeological sites identified within the Facility site. The mapped locations of all identified archaeological sites (including but not limited to Stone Features) within 100 feet of proposed Facility-related impacts shall be identified as "Environmentally Sensitive Areas" or similar on the final Facility construction drawings, and marked in the field by construction fencing with signs that restrict access.

    b) **Final Unanticipated Discovery Plan**, establishing procedures in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan will include a provision for immediate work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a professional archaeologist, qualified according to New York Archaeological Council Standards. Work shall not resume in the area of such remains until written permission is received from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) State Historic Preservation Office (SHPO).

c) If complete avoidance of archaeological sites is not possible, the Certificate Holder shall consult with the NYSOPRHP, SHPO, and NYSDPS Staff to determine if mitigation is warranted. The 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 and as revised in further consultation with NYSOPRHP 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 that mitigation funding awards required under the Plan have been made shall be provided within two years of the commencement of construction of the Facility pursuant to 16 NYCRR 1002.4.

62. **Curtailment Plan** which shall be provided prior to the commencement of commercial operation for minimization of impacts to all bat species including Northern Long-Eared Bat (NLEB) and migratory tree bats, which shall include:

a) description and implementation of a curtailment regime implemented at all turbines for the life of the Project during the period July 1 through October 1 requiring a minimum curtailment of 5.5 m/s, 30 minutes prior to sunset through 30 minutes after sunrise, when temperatures are greater than 10 degrees Celsius.

b) The Certificate Holder shall submit to NYSDEC and NYSDPS a detailed review of curtailment operations and bat fatality rates and species composition every five (5) years. The review shall assess if changes in technology or knowledge of impacts to bats, including NLEB and migratory tree bats, suggests that modification of the Curtailment Plan is warranted. Any proposed or adopted modifications to the Curtailment Plan must provide the same or additional benefit to NLEB (i.e., no change in or a further decrease the fatality of NLEB), which is based on the estimated take of 14 NLEB as well as migratory tree bats. The curtailment plan may only be modified with the consent of NYSDPS, NYSDEC, the Certificate Holder, and/or USFWS if such consent is applicable under federal law.

63. In the event a bald eagle fatality is identified at the Facility Site through implementation of the Avian and Bat Monitoring Plan or by any other verified data, during the lifetime of the project, at any time of year, the Certificate Holder will coordinate with NYSDPS and NYSDEC to evaluate applicable data and information to determine whether the fatality is attributable to the Facility. For each fatality that is attributable to the Facility, as determined by NYSDEC, the Certificate Holder will undertake the mitigation actions to be described in a Net Conservation Benefit Plan for bald eagles that is to be submitted to and accepted by NYSDEC and NYSDPS. In the event that the bald eagle has been de-listed under the ECL at the time of the fatality, NYSDEC and the Certificate Holder shall evaluate any applicable State law or regulations and determine if mitigation is required.

64. A final **Net Conservation Benefit Plan (NCBP),** for the take of NLEB , shall address measures to achieve a net conservation benefit for the unavoidable impacts to NLEB from

Facility operation. The final NCBP shall be prepared in consultation with and accepted by NYSDEC and NYSDPS, such acceptance may not be unreasonably withheld, and consultations must take place in a timely manner. The final, NYSDEC-accepted NCPB shall be filed prior to implementation and Project operation. Requirements for the NCBP's contents are addressed in Section B of the attached SEEP Guide.

65. **A Post Construction Avian and Bat Monitoring and Adaptive Management Plan** (Avian and Bat Monitoring Plan) shall be filed prior to the commencement of commercial operation of the Facility. The Avian and Bat Monitoring Plan will include direct impact fatality studies and habituation/avoidance studies. The details of the post-construction studies (i.e., the start date, number and frequency of turbine searches, search area, bat monitoring and species composition, further monitoring beyond the second year, duration and scope of monitoring, methods for observational surveys, reporting requirements etc.), will be described based in part on NYSDEC's June 2016 *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects*, and will be adapted as needed to design an appropriate monitoring program to determine the effectiveness of the curtailment regime or other minimization measures for the affected species covered by the Net Conservation Benefit Plan. A final plan will be developed through consultation between the certificate holder, USFWS, and NYSDEC, and accepted by NYSDEC prior to filing. The Avian and Bat Monitoring Plan shall be properly designed to evaluate mortality and displacement impacts that will occur over the life of the Project for bald eagle and the affected species covered by the Net Conservation Benefit Plan. The plan will also include notification requirements, adaptive management options and next steps to be implemented if a bald eagle is taken or the permitted level of take is exceeded for the affected species covered by the NCBP, or reasonably expected to be exceeded within the terms of the permit.

66. An **Inadvertent Return Plan** showing all locations where HDD is proposed. The plan shall assess the potential impacts from frac-outs at the proposed drilling locations and contain details as outlined in Section B of the attached SEEP Guide.

67. A long-range **Facility Vegetation Management and Herbicide Use Plan** shall be filed within one year after the commercial operation date. The plan shall address specific standards, protocols, procedures, and specifications for:

a) Vegetation management recommendations, based on on-site surveys of vegetation cover types and growth habits of undesirable vegetation species;

b) All proposed chemical and mechanical techniques for managing undesirable vegetation. Herbicide use and limitations, specifications, and control measures will be included, if proposed;

c) Substation Fence-line Clearances, and Overhead Wire Security Clearance Zone specifications, indicating applicable safety, reliability, and operational criteria;

d) Inspection and target treatment schedules and exceptions;

e) Standards and practices for inspection of facilities easements for erosion hazard, failure of drainage facilities, hazardous conditions after storm events or other incidents;

f) Review and response procedures to avoid conflicts with future use encroachment or infrastructure development;

g) Wetland and stream protection areas, principles, and practices; and

h) Host landowner notification procedures.

68. A final **Invasive Species Control Plan** (ISCP). Control measures shall include construction materials inspection and sanitation, invasive species treatment and removal, and site restoration in accordance with the Facility's final approved Stormwater 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 NYSDPS Staff, NYSDEC, the Town, and New York State Department of Agriculture and Markets (NYSAGM), and filed with the Secretary, that assesses whether the goal discussed in the ISCP of no net increase of invasive species, due to construction of the Facility, has been 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, NYSDEC and NYSAGM will meet to consider why initial control measures were ineffective and the probability of successful additional treatment measures without the need for perpetual treatments.

V. Noise and Vibration

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

a) Final drawings and details of the Facility, as well as final construction drawings incorporating any appropriate changes to the design and details, including:

i) Location of the turbines identified with Geographic Information System (GIS) coordinates and GIS files.

ii) Turbine dimensions to include hub height and diameter of tip blades rotation.

b) Proposed grading and turbine ground elevations. Site plan and elevation details, of substations as related to the location of all relevant noise sources (transformers, emergency generator, reactors, if any), any identified mitigations, specifications, and appropriate clearances for sound walls, barriers, mufflers, silencers, and enclosures, if any. Sound information from the manufacturers for all relevant noise sources shall also be presented.

c) Sound Power levels from the turbines by following these provisions:

Sound Power levels from the turbines selected for the project shall be documented with information from the manufacturers based on tests that determined sound power levels following the International Electrotechnical Commission (IEC) 61400-11 standard and Technical Specification IEC TS 61400-14 (2005-1st edition), if available. Sound Power Information will be reported associated with wind speed magnitudes, angular speed of the rotor, and rated power to the extent this information is available. The Sound Power Information will include specifications for Noise Reduced Operations and Low-Noise Trailing Edges if these are available or required to meet the noise conditions of this Certificate.

d) Revised sound modeling with the specifications of the wind turbine model selected for construction to demonstrate that the Project is modeled to meet the regulatory limits of Condition 73, and the following design goals:

i) 40 dBA L(night-outside), annual equivalent continuous average sound level, from the Facility outside any existing permanent or seasonal nonparticipating residence.

ii) 50 dBA L(night-outside), annual equivalent continuous average nighttime sound level from the Facility outside any existing participating residence.

iii) 55 dBA Leq (8- hour), equivalent continuous average sound level from the Facility across any portion of a non-participating property except for portions delineated as wetlands. This shall be done by rendering sound contour drawings for the final design including all boundary lines within the Project Area, participating status, and wetland delineations. Statements indicating whether the final design complies with this Condition will also be included.

iv) If noise reduction operations (NRO's) are used to demonstrate conformance with any Certificate Condition on noise in a compliance filing:
   a. Those NRO's shall be implemented at the start date of operations; and
   b. A compliance filing shall use less than half of the maximum NRO available for each turbine model.

v) Sound levels shall be evaluated at either 4.0 meters with no uncertainty added, or at 1.5 meters with a 2 dBA correction for uncertainty added.

70. Compliance with noise-related Certificate Conditions for the Facility shall be evaluated by the Certificate Holder by following a Sound Testing Compliance Protocol and a Noise Complaint Resolution Protocol. The Noise Complaint Resolution Protocol shall be developed by the Certificate Holder in consultation with the Town of Guilford and shall be submitted to the Siting Board as a compliance filing.

71. At least two Sound Compliance Tests conforming to the compliance protocol required by the Certificate Conditions shall be performed by the Certificate Holders after the commercial operations date of the Facility: One during the "leaf-off" season and one during the "leaf-on" season.

    a) Within seven months after the commercial operations date of the Facility but no later than eight (8) months after the commencement of operations of the Facility, the Certificate Holders shall perform and complete the first Sound Compliance Test and the results shall be submitted to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary a report from an independent acoustical or noise consultant specifying whether or not the Facility is found in compliance with all Certificate Conditions on noise of this Certificate during the "leaf-on" or "leaf-off" season as applicable.

    b) The second Sound Compliance Test shall be performed and results shall be submitted to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary subject to the same conditions contained in Condition 71(a), but no later than thirteen (13) months after the commencement of operations of the Facility.

72. If the results of the first or the second Sound Compliance Tests, or any subsequent Sound Compliance Test performed by the Certificate Holder or any Violation Tests performed by DPS, or any test performed in response to complaints, indicate that the Facility, related facilities and ancillary equipment do not comply with all Certificate Conditions on noise contained in this Certificate, the Certificate Holders shall:

    a) Present minimization options to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary within 60 days after the filing of a noncompliance test result or the finding of a noncompliance or violation of Certificate Conditions on noise of this Certificate:

        i) Operational minimization options related to noise or vibrations caused by the wind turbines that shall be considered, including, at a minimum, modifying or reducing time of turbine operation, incorporating noise reduced operations, shutting down relevant turbines, and modifying operational conditions of the turbines.

        ii) Physical minimization options related to noise or vibration caused by the wind turbines that shall be considered, including installation of serrated edge trails on the turbine blades, replacement or maintenance of noisy components of the equipment, and any other measures as feasible and appropriate.

        iii) If applicable, any minimization measures related to noise from transformers (such as walls or barriers) and emergency generators (such as installation of noise walls or barriers, adding or replacing enclosures or silencers to the emergency generator) if any, or any other mitigation measures as appropriate.

b) Implement any operational noise mitigation measures within 90 calendar days after the finding of a noncompliance or violation situation, as necessary to achieve compliance.

c) Implement any physical noise mitigation measures within 150 days after the finding of a non-compliance or violation situation, as necessary to achieve compliance.

d) Not operate the turbines of the Facility that caused the violation if the minimization measures are not implemented within the schedules specified in this Certificate Condition, and not operate the turbines without the operational or physical minimization measures that are presented and approved by the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased after they are implemented as specified in these Certificate Conditions.

e) Test, document and present to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary results of any minimization measures and compliance with all Conditions on noise in this Certificate, no later than 90 days after the minimization measures are implemented.

73. Noise levels from all noise sources from the Wind Generating Facility, related facilities and ancillary equipment shall:

a) Be equal to or less than/comply with a limit of 45 dBA Leq (8-hour), at any existing permanent or seasonal non-participating residence, and 55 dBA Leq (8-hour) at any participating residence existing at the date of this Certificate;

b) Be equal to or less than/comply with a limit of 65 dBZ L(1-hour), maximum 1-hour equivalent continuous average sound level from the Facility at the 16 Hz, 31.5 Hz, and 63 Hz full octave bands outside any existing non-participating residence.

c) Not produce any audible prominent tones, as defined under ANSI Sl2 .9 Part 4-2005 Annex C at any non-participant residences existing as of the date of this Certificate. Should a prominent tone occur, the broadband overall (dBA) noise level at the evaluated position shall be increased by 5 dBA for evaluation of compliance with Condition 73(a).

d) Not produce human perceptible vibrations inside any non-participant residence existing as of the issuance date of this Certificate. that exceed the limits for residential use recommended in ANSI Standard S2.71-1983 (August 6, 2012) "Guide to evaluation of human exposure to vibration in Buildings."

e) Comply with a limit of 40 dBA Leq (l-hour) at the outside of any non-participating residence from the collector substation equipment, and subject to the tonal penalties of Condition 73(c).

Emergency situations are exempt from any of these limits.

74. The Certificate Holder shall adhere to the following condition regarding complaints:

a) The Certificate Holder is required to maintain a log of complaints received relating to noise and vibrations caused by the operation of the Facility, related facilities and ancillary equipment. The log shall include name and contact information of the person that lodges the complaint, name of the property owner(s), address of the residence where the complaint was originated, the date and time of the day underlying the event complained of, and a summary of the complaint. The Certificate Holder will provide the Town with a copy of the Complaint Log Sheet at regular intervals and will copy the Town on all notices to NYSDPS of complaints not resolved within 60 days.

b) The Certificate Holder shall provide the Town of Guilford with a phone number, email address and mailing address where complaints can be notified, along with a form to report complaints designed according to the details required in subsection (a) of this condition.

c) All complaints received shall be reported to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, monthly during construction and the first year of commercial operations and quarterly thereafter, by filing with the Secretary during the first 10 calendar days of each month (or the first 10 days of each quarter after the first year). Reports shall include copies of the complaints and, if available, a description of the probable cause (e.g., outdoor or indoor noise, tones, low frequency noise, amplitude modulation, vibrations, rumbles, rattles, etc., if known); the status of the investigation, summary of findings and whether the Facility has been tested and found in compliance with applicable noise Certificate Conditions or minimization measures have been implement. If no noise or vibration complaints are received, the Certificate Holder shall submit a letter to the Secretary indicating that no complaints were received during the reporting period.

d) Should complaints related to excessive and persistent amplitude modulation occur at any non-participant residence existing as of the issuance date of this Certificate with measured or modeled sound levels exceeding 40 dBA Leq-1-hour, the Certificate Holder shall investigate and measure amplitude modulation at the affected receptors during the time frame when the worst conditions are known, or, if not known, expected, to occur. If the L90-10 minute noise levels (dBA), including any amplitude modulation and prominent tone penalties exceed a noise level of 45 dBA and amplitude modulation is in excess of a 5 dB modulation depth at the evaluated receptor(s) for more than 5% of the time during the identified time frame of evaluation (which will not exceed eight consecutive hours), the Certificate Holder shall continue with the investigation, identify frequency of occurrence and the conditions that may be favorable for its occurrence, and propose minimization measures to avoid, mitigate, or minimize the impacts. Minimization measures that avoid, minimize, resolve or mitigate the amplitude modulation impacts shall be identified and reported to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary and implemented after review and approval. Compliance with this Certificate Condition shall be finally demonstrated by conducting a test that shows that the L90-10-minute sound levels (dBA), including a 5-dBA penalty for amplitude modulation (if amplitude modulation depth is in excess of 5 dB for more than 5% of the time in any eight consecutive hours) at that particular location

and any additional prominent tone penalties, are lower than or equal to 45 dBA. For any complaints that do not exceed the limits established in the foregoing, the Certificate Holder should handle those complaints under the Complaint Resolution Protocol.

e) The Certificate Holder shall investigate all other noise and vibration complaints by following the Complaint Protocol in, and consistent with the limits imposed by, these Certificate Conditions.

75. The Certificate Holder is required to maintain a log of operational conditions of all the turbines with a 10-minute time interval to include at a minimum wind velocity and wind direction at the hub heights, angular speed of the rotors and generated power and notes indicating operational conditions that could affect the noise levels (e.g. maintenance, shutdown, etc.). A schedule and log of Noise Reduced Operations for individual turbines shall also be kept and updated, as necessary.

76. The Certificate Holder shall comply with the following conditions regarding construction noise:

a) Comply with all applicable local laws regulating construction noise;

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

c) Respond to noise and vibration complaints according to the protocols established in the Certificate Conditions.

VI. Facility Construction and Maintenance

General

77. 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.

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

79. 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 daily inspections of construction work sites and, in consultation with NYSDPS Staff, issue regular reporting and compliance audits. Copies of the reporting and compliance audits will be provided to the Town, or as otherwise set forth in a separate agreement with the Town. The Certificate Holder shall identify and provide qualifications and contact information for the independent, third-party monitor for

environmental compliance monitoring; there shall be an independent, third party agricultural monitor. If NYSAGM agrees that the independent third-party monitor is qualified on agricultural issues, one monitor can act as both environmental and agricultural monitor.

80. 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.

81. The Certificate Holder shall ensure that its environmental monitor and construction supervisor 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.

82. At least 14 days before the commencement of construction, the Certificate Holder shall hold a pre-construction meeting with NYSDPS Staff, NYSAGM, New York State Department of Transportation (NYSDOT), Town Supervisors and Highway Departments, County Highway Department, and NYSDEC. The Balance of Plant (BOP) construction contractor and the environmental compliance monitor shall be required to attend the preconstruction meeting.

    a) An agenda, the location, and an attendee list shall be agreed upon between NYSDPS 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.

83. Construction and routine maintenance activities on the Project shall be limited to 7:00 a.m. to 8:00 p.m. Monday through Saturday and 8 a.m. to 8:00 p.m. on Sunday and national holidays with the exception of wind turbine construction limited to the immediate turbine site and delivery activities (as described in section (a) below) which may need to occur during extended hours beyond this schedule on an as-needed basis to address unusual circumstances.

    a) Construction work hour limits apply to Facility construction, maintenance, 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 delivery activities for a limited number of vehicles used for the purpose of transporting construction or maintenance workers, small equipment, and tools to the site to prepare for construction or maintenance activities. This condition shall also not apply to activities that do not generate noise.

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 NYSDPS Staff, affected landowners and the 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 practical shall be provided.

84. At least two weeks, unless a shorter time is agreed to with NYSDPS Staff, before commencement of construction begins in any project component area the Certificate Holder shall stake and/or flag the following:

a) The limits of clearing;

b) The limits of disturbance;

c) All on or off ROW access roads;

d) Other areas needed for construction such as, but not limited to, turbine work areas, laydowns, and storage areas;

e) All wetlands, streams, and waterbodies;

f) Designated restrictive areas and sensitive environmental resources; and

g) Structure locations.

85. 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.

86. The Certificate Holder shall organize and conduct monthly site-compliance inspections for NYSDPS Staff as needed during construction through final completion of the Facility site. A designated official or representative from the Town shall also be invited to attend.

a) The monthly inspections shall include a review of the status of compliance with all conditions contained in the Certificate and any other Order issued in this proceeding, other

legal requirements and commitments, as well as a field review of the Project site, if necessary. The inspection also may include:

i) Review of all complaints received, and their proposed or actual resolutions;

ii) Review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies and indicate how the Certificate Holder has responded to the public, local governments, or other agencies;

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

iv) Other items the Certificate Holder or NYSDPS Staff consider appropriate.

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

Environmental

87. Water Supply Protection:

a) The Certificate Holder shall file with the Secretary a notice confirming that no wind turbine will be located within 100 feet of an existing water supply well or water supply intake.

b) Applicant will conduct reasonable investigation of active water supply wells or water supply intakes on non-participating parcels that exist within 1,000 feet of any blasting. Blasting shall be prohibited within 500 feet of any known existing, active water supply well or water supply intake on a non-participating parcel.

c) If environmental or engineering constraints require blasting within 1,000 feet of a known existing, active water supply well on a non-participating parcel, the Certificate Holder shall engage a qualified third party to collect pre- and post-blasting water samples at all water wells within the above specified distances of blasting, provided the Certificate Holder is granted access by the property owner. These water samples will be sent to a New York State Department of Health (NYSDOH) certified laboratory for potability testing. The results of such tests and reports shall be made available to the property owner(s) and the Town within 14 days of Certificate Holder's receipt of results.

d) If environmental or engineering constraints require siting of collection lines or access roads within 100 feet of a known existing, active water supply well, or horizontal directional drilling (HDD) within 500 feet of a known, existing, active water supply well on a non-participating parcel, the Certificate Holder shall perform the pre- and post-construction water potability testing described in Condition 87(c) provided the Certificate Holder is granted access by the property owner. The results of such tests and reports shall be made

available to the property owner(s) and the Town upon request within 14 days of Applicant's receipt of results.

e) Should the NYSDOH-certified laboratory testing described in Conditions 87(c) and 87(d) 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, 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 1,000 feet from wind turbines, as practicable given siting constraints and landowner preferences.

88. All construction vehicles must be equipped with a spill kit. Any leaks must be stopped and cleaned up immediately.

89. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials will be allowed.

90. Cleared vegetation and slash will not be buried or burned.

91. Tree and vegetation clearing shall be limited to the minimum necessary for Facility construction and operation. Surrounding trees and vegetation will not be cut down on any property solely to reduce turbulence or increase wind flow to the Facility.

92. 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; and

c) coordinate with landowners to salvage merchantable logs and fuelwood. Where merchantable logs and fuelwood will not be removed from the site during clearing activities, SEEP Construction plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery.

93. Use of hay for erosion control or mulching or other uses project construction is prohibited.

94. 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.

95. The Certificate Holder shall restore disturbed areas, ruts, and rills to original 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.

96. All fill shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, fly ash, broken concrete, demolition debris, garbage, household refuse, tires, woody materials including tree or landscape debris, and metal objects. Reasonable efforts will be made use fill materials that are visually free of invasive species.

97. To control the spread of invasive insects, the Certificate Holder shall provide training for clearing and construction crews to identify the Asian Longhorned Beetle and the Emerald Ash Borer and other invasive insects of concern listed per 66 NYCRR 575 Regulations as a potential problem at the project site. If these insects are found, they must be reported to the NYSDEC as soon as practicable.

98. The Certificate Holder shall agree to follow the AGM Guidelines for Agricultural Mitigation for Wind Power Projects to the maximum extent practicable, which will be applicable to all lands identified to return to agricultural production immediately post construction as well as upon potential decommissioning of the proposed project. The Certificate holder shall consult with AGM concerning any deviations from the AGM guidelines.

Threatened and Endangered (T&E) Species

99. All tree clearing activities shall be allowed between November 1 to March 31 without restrictions. From April 1 to October 31, in areas within 5 miles of a known hibernation site or 1.5 miles of a documented summer occurrence the following restrictions will be implemented, unless otherwise agreed to with NYSDEC and NYSDPS staff:

    d) The Certificate Holder shall leave uncut all snag and cavity trees, as defined under 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 cleared by an Environmental Monitor 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;

    e) 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 of NLEB and a 0.25-mile radius of documented winter occurrence of NLEB, and no Project components shall be sited within such areas;

    f) 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 and NYSDEC Wildlife Staff shall

be notified as soon as possible. The Certificate Holder shall have an Environmental Monitor present on site during all tree clearing activities. If any bat activity is noted, a stop work order shall immediately be issued and 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, NYSDEC will be notified within twenty-four (24) hours of discovery, and an area at least one hundred fifty (150) feet in radius around the roost tree shall be marked and avoided until notice to continue work at that site is granted by NYSDEC.

100. **Grassland Bird Protection Measures -** All temporary disturbance or modification of grassland bird habitat that occurs as a result of construction activities will be restored to preexisting grassland habitat conditions by re-grading and re-seeding with an appropriate native seed mix after construction activities are completed. These areas will include, but are not limited to temporary roads, material and equipment staging and storage areas, crane and turbine pads, and electric line rights of way.

101. **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 environmental compliance manager identified in the SEEP will be responsible for recording all occurrences of all T&E species. All occurrences will be reported in the biweekly monitoring report submitted to NYSDPS and NYSDEC and will include the information described below under Reporting Requirements. If a T&E avian species is demonstrating breeding behavior it will be reported to the NYSDEC and NYSDPS Staff within twenty-four (24) hours.

b) **Post-construction:** During post-construction wildlife monitoring inspections, the environmental contractor will be responsible for recording all occurrences of T&E species. Occurrences of T&E species during wildlife surveys will be reported as required in the Post Construction Avian and Bat Monitoring and Adaptive Management Plan.

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 bird species: bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), short-eared owl (*Asio flammeus*), northern harrier (*Circus hudsonius*), and upland sandpiper (*Bartramia longicauda*). The Certificate Holder will report all occurrences of these species to NYSDEC and NYSDPS within one week of the event.

d) **Reporting Requirements:** All reports of T&E species will include the following information: species; number of individuals; age and sex of individuals (if known); observation date(s) and time(s); GPS coordinates of each individual observed (if operation

and maintenance staff do not have GPS available the report must include the nearest turbine number 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.

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

a) Excluding bald eagles and golden eagles, if a nest or roost of a federally- or State-listed T&E bird species is 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, or if any T&E species are observed exhibiting breeding or roosting behavior, the following actions shall be taken:

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

ii) An area at least five hundred (500) feet in radius around the nest or roost will be posted and avoided until notice to continue construction, ground clearing, grading, maintenance, or restoration activities are granted by NYSDPS in concurrence with NYSDEC ; and

iii) the nest(s), nest tree(s), or roost(s) will not be approached under any circumstances unless authorized by NYSDPS in concurrence with NYSDEC.

b) If a nest or communal roost (defined as a tree with 4 more eagles observed perched) of a bald eagle or golden eagle is 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, or if either of these species are observed in the Facility area exhibiting breeding or roosting behavior, the following actions shall be taken:

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

ii) An area of at least a ¼ mile (1320 feet) if there is no visual buffer or if there is a visual buffer an area of at least six hundred and sixty feet (660) feet in radius around the nest or communal roost will be posted and avoided until notice to continue construction, ground clearing, grading, maintenance or restoration activities are granted by NYSDPS in concurrence with NYSDEC ; and

iii) the nest(s), nest tree(s), or communal roost will not be approached under any circumstances unless authorized by NYSDPS in concurrence with NYSDEC.

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 twenty-four (24) hours) contact NYSDEC (and United States Fish and Wildlife Service (USFWS), if federally listed species) to arrange for recovery and transfer of the specimen(s). The following information pertaining to the find shall be recorded:

i. species;
ii. age and sex of the individual(s), if known;
iii. date of discovery of the animal or nest;
iv. condition of the carcass, or state of the nest or live animal;
v. GPS coordinates of the location(s) of discovery;
vi. name(s) and contact information of the person(s) involved with the incident(s) and find(s);
vii. weather conditions at the site for the previous forty-eight (48) hours;
viii. photographs, including scale and of sufficient quality to allow for later identification of the animal or nest; and
ix. an explanation of how the mortality/injury/damage occurred, if known.

Electronic copies of each record, including photographs, will be provided to NYSDEC and USFWS within 24 hours of identification. Each hard-copy record will be kept with the container holding the specimen(s) and given to NYSDEC or USFWS at the time of transfer. If the discovery is followed by a non-business day, the Certificate Holder will ensure all the information listed above is properly documented and stored for transfer. Unless otherwise directed by NYSDEC 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. NYSDPS shall also be notified if any dead, injured, or damaged federally- or State-listed T&E species, or their eggs or nests thereof are discovered.

Wetlands and Streams, Vegetation, and Invasive Species

103. The Certificate Holder shall perform all construction, operation and maintenance in a manner that avoids then minimizes adverse impacts to waterbodies and wetlands. The Certificate Holder shall ensure the provisions to protect wetlands and waterbodies are in accordance with the details contained in the attached SEEP Guide.

104. The Certificate Holder shall notify NYSDPS and NYSDEC within two (2) hours of discovery if there is a discharge to a wetland or waterbody resulting in a violation of New York Water Quality Standards.

105. The Certificate Holder shall consult with appropriate NYSDEC Region 7 staff during development of the SEEP to verify cold water and warm water fisheries that may be affected by the Project.

106. All in-stream work in Federal and State-Regulated streams is prohibited from October 1 through May 31 in cold water fisheries and from March 1 through July 31 in warm water fisheries.

    a) The Certificate Holder shall conduct all work in Federal and State-Regulated 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 well-vegetated 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.

    e) Any in-stream 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.

107. To the extent practicable, buried utilities shall be installed using trenchless methods when traversing regulated wetlands 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 Section B of the attached SEEP Guide.

108. Open cut trenching for the installation of underground utilities in Federal and State-Regulated wetlands and streams shall be conducted in one continuous operation and shall not exceed the length that can be completed in one day.

109. Culverts will be utilized for temporary or permanent regulated stream crossings and shall meet the applicable NYSDEC and/or USACE sizing and design requirements as outlined in Section B of the attached SEEP Guide.

110. All equipment and machinery shall be stored and safely contained more than 100 feet from wetlands and waterbodies at the end of each workday unless moving the equipment will cause additional environmental impact.

111. Fuel tanks or other chemical storage tanks shall be appropriately contained and located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, storage shall be in according with Section B of the attached SEEP Guide.

112. All mobile equipment, excluding dewatering pumps, must be fueled, repaired, or maintained in a location at least 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 100 feet from the stream bank, wetland, or waterbody, must be within a secondary containment large enough to hold the pump and accommodate refueling.

113. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to NYSDEC's Spill Hotline (1-800-457-7362) within two hours, in accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. NYSDPS Staff shall also be notified of all reported spills.

114. 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.

115. All disturbed soils within regulated freshwater wetlands must be seeded with a native seed mix or crops consistent with existing agricultural uses. Mulch shall be maintained until the disturbed area is permanently stabilized. Additional seeding shall be completed as necessary to achieve an 80% vegetative cover across all disturbed areas.

116. Cut vegetation in regulated wetlands may be left in place (i.e., drop and lop or piled in dry or seasonally saturated portions of freshwater wetlands to create wildlife brush piles).

117. Installation of underground collection lines in wetlands shall be performed using the methods indicated in Section B of the attached SEEP Guide.

118. Installation of access roads through regulated streams and wetlands shall be performed using the methods, indicated in Section B of the attached SEEP Guide.

119. Concrete batch plant operations and concrete washout areas shall be located a minimum of 300 feet away from any regulated 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.

120. Disturbed Federal and State-Regulated streams shall be restored to equal width, depth, gradient, length and character as the pre-existing stream channel and tie into the profile of the stream channel upstream and downstream of the disturbance. All disturbed stream banks shall be mulched within (2) days of final grading, stabilized with 100% natural/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, and/or tree plantings as site conditions and facility design allow, as appropriate for consistency with existing land uses.

121. Trees shall not be felled into any Federal or State-Regulated stream.

122. 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.

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

124. Following installation of underground facilities, wetlands shall be stabilized within 48 hours of final backfilling of the trench and restored to preconstruction contours as soon as practicable, but no later than 14 days after 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 or crops consistent with existing agricultural uses, as 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 for a minimum of 5 years. The proportion of invasive species in the wetlands 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 NYSDEC and prepare a Wetland Planting Remedial Plan (WPRP) in accordance with the attached SEEP Guide and shall submit the WPRP to NYSDEC and NYSDPS for acceptance prior to implementation.

125. The Certificate Holder shall work with NYSDPS, USACE, and NYSDEC to develop a Wetland Mitigation Plan in accordance with the attached SEEP Guide and shall submit the Wetland Mitigation Plan for acceptance within six months of the start of construction. If mitigation is provided through an approved in-lieu fee program, a final letter of credit availability from an approved wetland mitigation bank, along with document of payment, will be provided, pursuant to 16 NYCRR § 1002.4.

VII. Facility Operation

126. The Certificate Holder shall operate the Facility in accordance with the Interconnection Agreement, approved tariffs and applicable rules and protocols of NYSEG, NYISO, NYSRC, NPCC, NERC and successor organizations.

127. The Certificate Holder shall operate the Facility in full compliance with the applicable reliability criteria of NYSEG, NYISO, NPCC, NYSRC, NERC and successors. If it fails to meet the reliability criteria at any time, the Certificate Holder shall notify the NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the Board, or the Commission after the Board's jurisdiction has ceased, by filing with the Secretary and NYSEG a copy of the NYISO notice.

128. 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 System Operator encounters communication difficulties, the Certificate Holder shall obey dispatch instructions issued by the NYSEG Control Center, or its successor, in order to maintain the reliability of the transmission system.

129. 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 shall mean 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.

130. The Certificate Holder shall work with NYSEG engineers and safety personnel on testing and energizing equipment in the authorized interconnection and collection substations. If NYSEG's testing protocol is not used, a testing protocol shall be developed and provided to NYSEG for review and acceptance. The Certificate Holder shall file with the Secretary a copy of the final testing design protocol within 30 days of NYSEG's acceptance.

131. The Certificate Holder shall notify NYSDPS Staff of meetings related to the electrical interconnection of the project to the NYSEG transmission system and provide the opportunity for NYSDPS Staff to attend those meetings.

132. Transmission Related Incidents:

    a) The Certificate Holder shall call the NYSDPS Bulk Electric System Section within one hour 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 NYSEG. 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 NYSEG, NYISO, NYSRC, NERC and the NPCC to prevent any future occurrences.

133. If NYSEG 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 NYSEG find such facilities are causing, or have caused, reliability problems to the New York State Transmission System.

134. 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.

135. 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 NYSEG 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 NYSEG 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. Wind turbines shall be decommissioned if they are non-operational for a period of 12 months. However, if the Certificate Holder is expecting delays due to a part manufacturer or complications regarding the repair of non-operational turbine(s), it shall petition the Secretary for an extended amount of time if it is expected

that certain turbine(s) will not be in operation for more than one year. The petition shall include an explanation of the circumstance and an estimation of the amount of time it will take to repair or upgrade the turbine(s).

136. In the event of a blade failure, fire or other catastrophic event involving a wind turbine and its associated equipment, the NYSDPS Chief of Bulk Electric Systems shall be notified no later than 12 hours following such an event.

137. The Certificate Holder shall have an inspection program for the wind turbine blades and other turbine components. Reports shall be filed annually with the Secretary identifying any major damage, defects or any other problems with the wind turbine blades, or indicating that no such damage, defect or problem was found. The annual report shall summarize maintenance and inspection activities performed and include any photographs of the area in question, the repairs undertaken and a diagram of the wind turbine blade.

GUIDANCE FOR THE DEVELOPMENT OF SITE ENGINEERING AND ENVIRONMENTAL PLAN FOR THE CONSTRUCTION OF THE HIGH BRIDGE WIND PROJECT

The High Bridge Wind Certificate Conditions require 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 High Bridge Wind 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 regulated streams and wetlands, and protected habitats, identification of sensitive receptors, agricultural lands, and protocols to protect previously unknown cultural resource sites during construction.

The Certificate Holder may commence construction in phases, such as a "tree clearing" phase. Applicable filings needed for each phase will be provided in accordance with this Guidance for the Development of a SEEP for the Construction of the High Bridge Wind Project ("SEEP Guide"). 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 Final SEEP will include a table outlining the specific Certificate Conditions incorporated into the Final SEEP with references to the section of the Final SEEP where those conditions may be found.

Table of Contents

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.

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

Non-Linear Facility Components: wind turbines, collection and interconnection substation, battery storage system, permanent meteorological towers, operations and maintenance (O&M) building, temporary concrete batch plant and temporary laydown yard/staging area(s).

Facility or Facility Site: The parcels hosting Facility components.

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

Section A – Plans, Profiles and Detail Drawings

Section A addresses the requirements for development of final facility engineering details; site plans for construction, restoration, and environmental control measures; plan and profile drawings of the development site and facility components; and maps of the facility site and the overall facility setting as appropriate to demonstrate compliance with the Certificate of Environmental Compatibility and Public Need for the High Bridge Wind 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, fuel gas lines if proposed, water and wastewater or sewer interconnection line if needed; and all temporary and permanent access roads. Plans shall also indicate the location and size of all major structures, features and buildings, wind turbines, permanent meteorological towers, substations, switchyards and point-of-interconnection locations, including associated access roads 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

Wind Turbines and Related Non-Linear Components:

For all proposed wind turbine 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. A copy of the American Land Title Association (ALTA) survey showing locations of existing utility infrastructure.

b. Details and specifications of the selected turbine model(s) (including cut sheets and blade details such as length and thickness).

c. Foundation drawings including plan, elevation, and section details for each foundation type proposed; if multiple foundation designs will be utilized for the Facility, the foundation type at each turbine location shall be specified on site plans; applicable criteria regarding foundation design shall be listed and described in the drawings and details.

d. Description of the wind turbine blade installation process will be included as a general note on the site plans, identifying the anticipated installation method for each wind turbine and indicating which wind turbine site locations will require the use of the entire rotor laydown area.

e. Details showing limits of clearing, temporary and permanent grading, and laydown space required for wind turbine installation; details of Stormwater Pollution Prevention Plan

[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.

(SWPPP) should be indicated.

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; concrete batch plant 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 and local requirements.

g. If an on-site concrete batch plant will be utilized during construction, the Certificate Holder shall provide the following: (information required per subpart "iv" below shall be provided for any concrete that will be used for the Project, regardless of whether a concrete batch plant is proposed):

i. final details and site plan of the concrete batch plant location, size, access, and layout, at a reasonable scale to show all components (including conveyor layout, equipment, tanks, drainage system, settlement, catchment pits, flush systems, and stockpile areas) and proximity of its location to other Facility components and existing features;

ii. final layouts showing all proposed components of the concrete batch plant drainage system, including arrows representing potential water flow to any proposed catchment pits, etc.;

iii. temporary lighting that avoids offsite light trespass; and

iv. general concrete testing procedures, including a plan outlining the Certificate Holder's monitoring and testing of concrete procedures and references to conformance with specific specifications of standards such as Building Code of New York State, American Concrete Institute (ACI), American Society for Testing and Materials (ASTM).

h. The locations or description of locations for concrete chute washout and any other cleaning activities (e.g., equipment cleaning for control of invasive species).

i. Maps showing the location for the selected operations and maintenance (O&M) facility. If an existing building is not utilized, prior to construction of the O&M facility, the Certificate Holder shall provide the final O&M facility details and construction drawings. Plans for the O&M facility 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; and related site development information. This information may be submitted after commencement of construction of other components of the Facility, in which case a plan for the timing of the submission of the O&M facility details and construction drawings will be provided.

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 Line[2] Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet) showing:

j. *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.

k. Typical overhead structure details and 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 typical plan view showing clearing and ROW widths needed for accommodating circuit installations.

l. 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.

m. 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.

n. 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 and berms.

o. 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 underlayment, gravel surface, paved surface, etc.);
   iii. use of existing roads, driveways, farm lanes, rail beds, etc.; and,
   iv. other access, e.g., helicopter placement.

p. For each temporary and permanent access type, provide a typical installation plan view,

[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 ISO. 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.

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.).

q. 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 ditches or stabilization of topsoil);
ii. broad-based dip or berm (for water diversion across the access road);
iii. roadside ditch with turnout and sediment trap;
iv. French drain;
v. diversion ditch (water bar);
vi. culvert (including headwalls, aprons, etc.);
vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and
viii. silt fencing.

r. Indicate the type(s) of stream or wetland crossing method to be used in conjunction with temporary and permanent access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions, alignment, extent of clearing) for each crossing device and rationale for their use. Stream crossing methods and design may include but not be limited to:

i. timber mat or other measures to prevent soil compaction;
ii. culverts including headwalls and outlet aprons;
iii. bridges (either temporary or permanent); and,
iv. fords.

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

t. 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.

u. Existing underground utility or non-utility structures including but not limited to gas, water, telecommunication or electric cable or pipeline. The relationship of the Facility to adjacent fence lines; roads; railways; airfields; property lines; hedgerows; fresh surface waters; wetlands; other water bodies; significant habitats; associated facilities; water springs; adjacent buildings; water wells; or structures; major antennas; oil or gas wells, pipeline facilities, and compressor and pressure-limiting and regulating stations. Regarding co-location and crossing of existing utilities by Project components, the following additional information shall be provided, if applicable:

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.

v. The location, design details, and site plan of any proposed Facility components, generator sites, collection station, control building, new or expanded switching station, substation, or other terminal or associated utility or non-utility structure (attach plan[3] - plot, grading, drainage, and electrical - and elevation views with architectural details at appropriate scales). Indicate the type of outdoor lighting, including design features to avoid off-site illumination and minimize glare; the color and finish of all structures; the locations of temporary or permanent access roads, parking areas, construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, relocated structures, and details of any plans for water service and sewage and waste disposal.

2. Stormwater Pollution Prevention

The Compliance Filing plan drawings will include the acknowledged SWPPP, including all plans and drawings, 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 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;

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

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;

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. invasive species within/adjacent to the area of clearing, and specific disposal methods for invasive species pursuant to the Invasive Species Control Plan.

4. <u>Building and Structure Removal</u>

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. <u>Waterbodies</u>

a. Indicate the name, water quality classification, and location of all rivers, streams (whether perennial and/or intermittent), and other drainages, where relevant, 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 delineate any designated streamside "protective or
   ii. buffer zone" in which construction activities will be restricted to the extent necessary to minimize impacts on rivers, streams, and/or other drainages;
   iii. the activities to be restricted in such zones; and,
   iv. identify any designated floodways or flood hazard areas within the Facility, or otherwise used for Facility construction or the site of associated facilities. Provide topographic and flood hazard area elevations (if determined by engineering study);

and specifications for facilities to be located within designated flood hazard or floodway zones; and design engineering and construction measures to demonstrate conformance with local ordinances, avoid damage to facilities, or avoid increasing flood elevation at any other location due to Facility installation and operation.

b. Show the location of all known potable water sources, including springs and wells within 100 feet of Facility Components, within 500 feet of horizontal direction drilling (HDD), and within 1,000 feet of blasting 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 regulated wetlands and state regulated 100-foot adjacent areas ("adjacent areas") located within the Facility or crossed by or adjacent to any access road to be constructed, improved, used or maintained for the Facility shall be depicted on plan drawings. Each wetland will be identified by a project identification number and by the New York State Department of Environmental Conservation (NYSDEC) designation as appropriate.

b. Indicate the community type (e.g., emergent marsh, meadow, bog, scrub-shrub, forested swamp, or vernal pool, if applicable), location, and identification code(s) of any federal or State-regulated wetlands within or adjoining Facility 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 agricultural use including rotational pasture, pasture, hayland, and cropland. Designations and descriptions will be those in current use by the NYS Department of Agriculture and Markets (NYSAGM).
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 to be implemented to minimize or avoid construction-related impacts to agricultural resources.

b. Sensitive Land Uses and Resources:

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:

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:

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, Laydown Areas and Work pads

a. Indicate the locations of temporary and permanent access roads, laydown areas and work pads.

b. Provide construction type, material, dimensions, and limits of disturbances for each proposed access road type, laydown area, and work pad.

c. Indicate provisions for upgrading any existing access roads.

9. Noise Sensitive Sites

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 environmentally sensitive sites (e.g., archaeological sites; rare, threatened, and endangered species or habitats; agricultural districts; and special flood hazard areas.), adjacent to the Facility or within 100 feet of any access roads to be constructed, improved or maintained for the Facility; and appropriate T&E Species buffers (500 feet for T&E species except eagles; 660 feet for eagles, or 0.25 miles if no visual buffer). Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs "Sensitive Environmental Areas, No Access").

b. Measures for avoidance of archaeological sites identified within the Facility shall be indicated on the final site plans. The mapped locations of all identified archaeological sites within 100 feet of proposed Facility-related impacts shall be identified as "Environmentally Sensitive Areas" or similar on the final Facility construction drawings and marked in the field by construction fencing with signs that restrict access.

11. Prohibited and Regulated Invasive Species

Identify the location(s) of Prohibited and Regulated Invasive Species pursuant to Part 575. and the prescribed method to control the spread of the identified species on the site during construction.

12. Vegetation Controls and Herbicides

Areas where no herbicide is allowed (wetlands, 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 applicator(s) in accordance with all label restrictions and notification requirements.

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

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

The narrative portion of the SEEP and referenced Compliance filings for the Facility shall include, but need not be limited to, all of the following information:

1. <u>Facility Location and Description</u>

This section of the SEEP should contain:

a. A brief description of the final Facility location;

b. A description of the construction hours and schedule;

c. A description of the turbine and associated infrastructure selected for the Facility including any manufacturer provided information regarding the design, safety and testing information for the turbines, substation, transformer, and battery storage equipment to be installed during construction;

d. Wind turbine model certification(s) as described in the Certificate Conditions;

e. For each turbine, indicate the GSA—595A Federal standard color designation or manufacturer's color specification to be used for painted structures;

f. State any unresolved objections raised by Federal, State or local transportation (highways or aviation) officials to the final location or manner of installation of, or access to, the approved Facility.

2. <u>Environmental Compliance and Monitoring Plan.</u>

The SEEP shall include copies of the final and *Environmental Compliance and Monitoring Plan* including a project communications 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;

[4] An environmental monitor may not be required on a full-time basis during certain periods, such as tree clearing.

c. Part-time or full-time agricultural inspector, 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 inspector.

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

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 tailboard meeting prior to entry onto the site of work on such Certificate Holder's Project Components.

Include a procedure for providing DPS Staff, NYSAGM, and NYSDEC with construction look ahead schedules indicating construction activities and location schedules for the next two to three weeks.

3. Complaint Resolution Plan

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

a. Notifying the public of the complaint procedures;

b. Registering a complaint;

c. Responding to and resolving complaints in a consistent and respectful manner;

d. Logging and tracking of all complaints received, and resolutions achieved;

e. Reporting to DPS Staff and the Town any complaints not resolved within 30 days of receipt;

f. Mediating complaints not resolved within 60 days, assuming the complainant and nature of complaint are amenable to resolution; and

g. Providing quarterly 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, and local emergency responders that serve the Facility. The plan will also address follow-up inspections for wind turbines 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 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 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 Provide an Erosion and Sediment Control Plan and will specify appropriate measures that will be used to minimize fugitive dust and airborne debris from construction activity as outlined in the *New York State Standards and Specifications for Erosion and Sediment Controls* (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 livestock or wild 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 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 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, Containment and Countermeasures (SPCC) Plan* for construction to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Facility construction and operation. The SPCC Plan shall be applied to all relevant construction activities and address the following:

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 State 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 local emergency responders; notifying local emergency responders of locations of hazardous substance storage.

6. Clean up and Restoration

Describe the Certificate Holder's program for clean-up and restoration, including:

a. The removal and restoration of any temporary roads, lay-down or staging areas; the finish grading of any scarified or rutted areas; the removal of waste (e.g., excess concrete), scrap metals, surplus or extraneous materials or equipment used; 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. The SEEP shall attach a copy of the final Decommissioning Plan.

7. Transportation

a. The SEEP shall include copies of Road Use Agreements with the New York State Department of Transportation (NYSDOT) (if 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 demonstrates that all municipalities within the Route Evaluation Study Area including the NYSDOT, 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 Guilford 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.

8. Vegetation Clearing and Disposal Methods

The SEEP shall attach a *Facility Vegetation Management and Herbicide Use Plan* that shall include:

a. Descriptions of the specific methods for the type and manner of cutting and disposition or disposal methods for cut vegetation.

b. Indication of specifications and standards applicable to salvage, stockpiling or removal

of material.

c. Identification of ownership of cleared vegetation based on landowner agreements (as applicable).

d. Specification of the locations where herbicides are proposed 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, landowner consent) and the choice of herbicide, formulation, application method and timing. Provide lists of desirable and undesirable vegetation species.

e. Description of the procedures that will be followed during chemical application to protect non- target vegetation, streams, wetlands, sources of potable water supplies (i.e. wells and reservoirs) and other water bodies, and residential areas and recreational users on or within 100 feet of the ROW.

f. Specification that herbicide application will be conducted by NYSDEC-certified pesticide applicators in accordance with all label restrictions and notification requirements.

9. Plans, Profiles, and Detail Drawings

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

10. Land Uses

a. The SEEP shall attach an *Agricultural Area Plan* 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

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 HDD is 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, Material Safety Data Sheets (SDS) will be provided to DPS and DEC staff.
   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 fresh water 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 are in a stream or wetland or pose a threat to public health and safety.

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.

13. <u>Final Blasting Plan</u>

The SEEP shall attach a site-specific final Blasting Plan designed to protect surrounding structures, including groundwater wells. The Blasting Plan shall include:

a. Setbacks;
b. Blasting safety protocols;
c. Notification procedures for the Town, the public, and emergency responders;
d. Water well survey protocols; and
e. Seismic monitoring protocols.

14. <u>Visual Mitigation</u>

a. If required by the issued Certificate or landowner agreements, provide details of screening or landscape plans prescribed at roadsides, storage areas, or other specified locations, and for participating and adjacent property owners. Discuss existing or proposed landscape planting, earthwork, or installed features to screen or landscape substations and other Facility components.

b. The SEEP shall attach a *Final Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan* which shall include:

i. updated analysis of realistic and receptor-specific predicted flicker based on final

proposed design and turbine(s) specifications;

ii. a protocol for testing operational conditions and potential flicker exposure at the wind turbine locations identified in the analysis, based on meteorological conditions;

iii. details of any shadow prediction and/or prevention technology proposed for real-time meteorological monitoring and operational control of turbines;

iv. protocols for additional information gathering and investigation follow the receipt of a complaint;

v. if necessary, reasonable shielding or blocking measures (such as landscape plantings and window treatments) for receptor locations not modeled over the 30-hour annual limit, but which are the subject of submitted complaints; and

vi. temporary turbine shutdowns during periods that produce flicker over 30 hours/year at nonparticipating residences.

15. <u>Cultural Resources</u>

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. The plan will include a provision for immediate work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a professional archaeologist, qualified according to New York Archaeological Council Standards. Work shall not resume in the area of such remains until written permission is received from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP).

b. If complete avoidance of archaeological sites or Stone Features (per SHPO correspondence of 2/10/2020) is not possible, the Certificate Holder shall consult with the NYSOPRHP and DPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be included in the plans.

16. <u>Avian and Bat Impacts</u>

a. The SEEP shall attach an Avian and Bat Construction Impact Plan describing measures to be implemented during construction to avoid and minimize impacts to bird and bat species.

b. The SEEP shall attach one or more final Net Conservation Benefit Plan(s) (NCBP) to address unavoidable impacts to northern long-eared bat (NLEB) . The final NCBP(s) shall identify which sections of the NCBP have been updated or changed from any preliminary NCBP filed prior to Certification of the Facility. At a minimum, the final NCBP(s) shall address the Siting Board's Order and Certificate and contain the following information:

i. A detailed description of measures identified by NYSDEC and those considered by the Certificate Holder to fully avoid impacts to NLEB (Affected Species), and a demonstration that measures to fully avoid impacts are impracticable;

ii. 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;

iii. A detailed description of measures to mitigate unavoidable impacts to Affected Species;

iv. 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 NLEB as described in the Certificate;

v. 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;

vi. Full source information used as inputs to the net benefit calculations for each of the Affected Species;

vii. A discussion of the management and maintenance actions required to achieve a net conservation benefit for impacts to the Affected Species;

viii. An appropriate monitoring program to determine compliance with mitigation requirements and its effectiveness;

ix. Identify a timeline for implementation of measures required by the plan;

x. Proof of access to and right to perform land management activities on the mitigation site(s);

xi. Identification of all persons that will be involved in implementing the NCBP(s), with individuals responsible for funding and implementing the plan(s) identified and;

xii. 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.

17. Wetlands and Waterbodies

a. Provide a table listing all waterbodies located within the Facility site and include: Town (location), facility site location (site plan and profile drawing sheet number and reference location); Stream Name, Field/Map Identification Name, Perennial or Intermittent, New York Stream Classification, Water Index Number, Fishery Type, specific construction activities or crossing method specifying the distance of crossing across or to the facility construction area; also provide GPS survey coordinates.

b. A description of construction activities within wetlands and waterbodies outlining the following requirements:

i. In vernal pool areas identified in the project plans per Section A, work should not

occur during the peak amphibian breeding season (April 1 to June 15);

ii. Where any temporary or permanent access roads are to be constructed through wetlands, a layer of geotextile fabric shall be placed across the wetland after removal of vegetation and before placement of fill occurs;

iii. 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.

iv. The Certificate Holder shall utilize free span temporary equipment bridges or culverts designed to NYSDEC and/or US Army Corps of Engineers standards to install access roads across all streams with discernable flow at the time of the proposed crossing. This will outline how:

   a) All structures must be able to safely withstand a 2% annual (50-year return) chance storm event without causing damage to the stream bed or banks.
   b) Bridges or culverts may not be dragged through the stream and must be suitably anchored to prevent downstream transport during a flood.
   c) 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.
   d) Geotextile fabric must be placed below and extending onto the bank and suitable side rails built into the bridges to prevent sediment from entering the waterbody.

v. If there is an inadvertent puncturing of a hydrologic control for a wetland, then the puncture shall be immediately sealed and NYSDPS and NYSDEC staff will be notified and a remediation plan to restore the wetland and prevent inadvertent drainage of the wetland will be developed and approved by NYSDPS and NYSDEC;

vi. 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;

vii. Work areas shall be isolated from flowing streams by diversion of streamflow using sandbags, cofferdam, piping or pumping around the work area. Pump intakes shall be suitably installed and screened to prevent entrainment and impingement of fish. Discharge locations from pumps or pipes must be suitable protected from outlet erosion with rock or other energy dissipating device. Waters accumulated in the isolated work area shall be discharged to a silt bag, upland settling basin, or upland area with a well-vegetated flow path to provide for settling and filtering of solids and sediments before water is returned to the stream. Discharge must be monitored for turbidity and to ensure that it is not causing erosion of soils. Return waters shall be as clear as the flowing water upstream from the work area. Temporary dewatering structures (i.e., cofferdams, diversion pipes, etc.) and associated fill shall be completely removed, and the disturbed area shall be regraded and restored immediately following the completion of work, but only when the contrast between the clarity of the water within cofferdams and that of the stream water upstream of the work area are not significantly different;

viii. All fish inadvertently trapped within cofferdams shall be netted and returned, alive and unharmed, to the water outside the confines of the cofferdam, in the same stream; and

ix. All excess materials shall be completely removed to upland areas more than 100 feet from State-regulated wetlands and waterbodies and shall be suitably stabilized.

c. Description of construction activities that will temporarily impact wetlands and waterbodies, including a site-specific assessment of constructability for all cable crossings of these features that cannot use trenchless methods; and specific plans showing: the alignment for each regulated wetland and protected stream crossing; the extent of clearing and ground disturbance; proposed locations of temporary access roads and any bridges, culverts or other crossing equipment; description of methods used to minimize soil compaction; and adherence to the following requirements:

i. Excavation, installation, and backfilling of cable(s) 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, when 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 or waterbodies;
iv. Trench breakers or 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 have excavation, cable installation, backfill and temporary stabilization 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), or seeding with crop species mix consistent with pre-existing, continued agricultural use, 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 NYSDEC and DPS approval. The WPRP must including 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 stream crossing. For any permanent stream crossing by an access road, the Stream crossing Plan shall include detailed plan, profile and cross-sectional view plans; drainage area and flow calculations; and location, quantity and type of fill. Bridges that span the stream bed and banks should be utilized where practicable. If a bridge is not practicable, culverts can be utilized and shall be designed as follows:

i. Shall be a minimum width of 1.25 times (1.25X) the width of stream channel at the mean high-water level;
ii. To safely pass a 1% annual (100-year return) chance storm event without causing damage to the stream bed or banks;
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. The slope shall remain consistent with immediately adjoining streambed slopes. For slopes greater than 3%, an open bottom culvert is recommended, where practicable;
v. Installation design shall facilitate downstream and upstream passage of aquatic organisms; and
vi. Water handling plan describing the measures to divert stream flow around the work area and indicating measures to de-water the isolated work area.

Stream Crossing Plan will also include the following with respect to any stream crossing by a collection line:

vii. Plan view and cross-sectional view drawings which depict the extent of clearing and disturbance;
viii. An analysis of vertical and lateral profiles at the locations of any such crossing which shows that the stream bed is sufficient to prevent exposure of the collection line from stream erosion both vertically and horizontally during the life of the project.
ix. A description of access location, types and restoration practices; and
x. A 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 conform with the width, depth, gradient, length and character of the pre-existing stream channel and the planform of any stream shall not be changed;
ii. Any instream work or restoration shall not result in an impediment to passage of aquatic organisms;
iii. Any in-stream work (excluding dewatering practices associated with dry trench crossings) and restoration shall be constructed in a manner which maintains low flow conditions and preserves water depths and velocities similar to undisturbed upstream and downstream reaches necessary to sustain the movement of native aquatic organisms;
iv. All disturbed stream banks below the mean high-water elevation must be graded no steeper than 1 vertical to 2 horizontal slope, or to the original grade as appropriate, and adequately stabilized;
v. All other areas of soil disturbance above the mean high-water elevation, or elsewhere, shall be stabilized with natural fiber matting, seeded with an appropriate perennial native conservation seed mix, and mulched with straw within two (2) days of final grading. Mulch shall be maintained until suitable vegetation cover is established, as described in the SWPPP; and
vi. Destroyed bank vegetation shall be replaced with appropriate native shrubs, live stakes, and/or tree plantings, as appropriate.

g. If wetland mitigation is provided through an approved in-lieu fee program, a final letter of credit availability from an approved wetland mitigation bank, along with document of payment, will be provided, pursuant to an information report per 16 NYCRR §1002.4. If on-site wetland mitigation is required, the SEEP shall attach a copy of the final *Wetlands Mitigation Plan*, developed in coordination with NYSDEC, DPS Staff, and the Army Corps of Engineers, addressing permanent impacts to federal and State-regulated wetlands. The Wetlands Mitigation Plan shall:

i. Describe all activities that will occur within §404 wetland and State-regulated wetlands.
ii. For each State-regulated wetland or associated adjacent areas, indicate the type of activity (e.g., construction, filling, grading, vegetation clearing, and excavation) and summarize how the activity is consistent with the weighing standards set forth in 6 NYCRR 663.5(e) and (f).
iii. Describe how impacts to wetlands, adjacent areas, associated drainage patterns and wetland functions will be avoided, and how impacts will be minimized.
iv. Describe the precautions or measures to be taken to protect all other wetlands (e.g., town or federal wetlands) associated drainage patterns, and wetland functions, including describing the measures to be taken to protect stream bank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; timing restrictions for in-stream work; stream bed and bank restoration measures; vegetation restoration measures; and other site-specific measures to minimize impacts, protect resources, and manage Facility construction.
v. Include the creation of compensatory wetlands at a ratio that is consistent with State and federal regulations;

vi. Provide a project construction timeline;
vii. Describe construction details for meeting all requirements contained in this SEEP Guide;
viii. Describe performance standards that meet state and federal requirements for determining wetland mitigation success;
ix. Include specifications for post-construction monitoring for at least 5 years after completion of the wetland mitigation. After each monitoring period the Certificate Holder shall take corrective action for any areas that do not meet the above referenced performance standards to increase the likelihood of meeting the performance standards after 5 years. If, after 5 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.

18. Invasive Species Control Plan

The SEEP shall attach a Final Invasive Species Control Plan (ISCP), based on the pre- construction invasive species survey of Prohibited and Regulated Invasive S pecies defined in Part 575 conducted within the Project Area during the previous growing season. Invasive Species of Special Concern (ISSC) and Invasive Species of High Concern (ISHC) will be identified by NYS DEC following the results of baseline surveys. Post-construction monitoring will track the potential expansion or introduction of ISSC and ISHC. The ISCP shall set a goal of no net increase of either ISSC or ISHC.

The ISCP shall include:

a. Measures that will be implemented to minimize the introduction of all Part 575 invasive species and control the spread of existing invasive species during construction (e.g., soil disturbance, vegetation clearing, transportation of materials and equipment, and landscaping/re-vegetation).
b. Control measures shall include construction materials inspection and sanitation, invasive species treatment and removal, and site restoration.
c. 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.

19. Sound

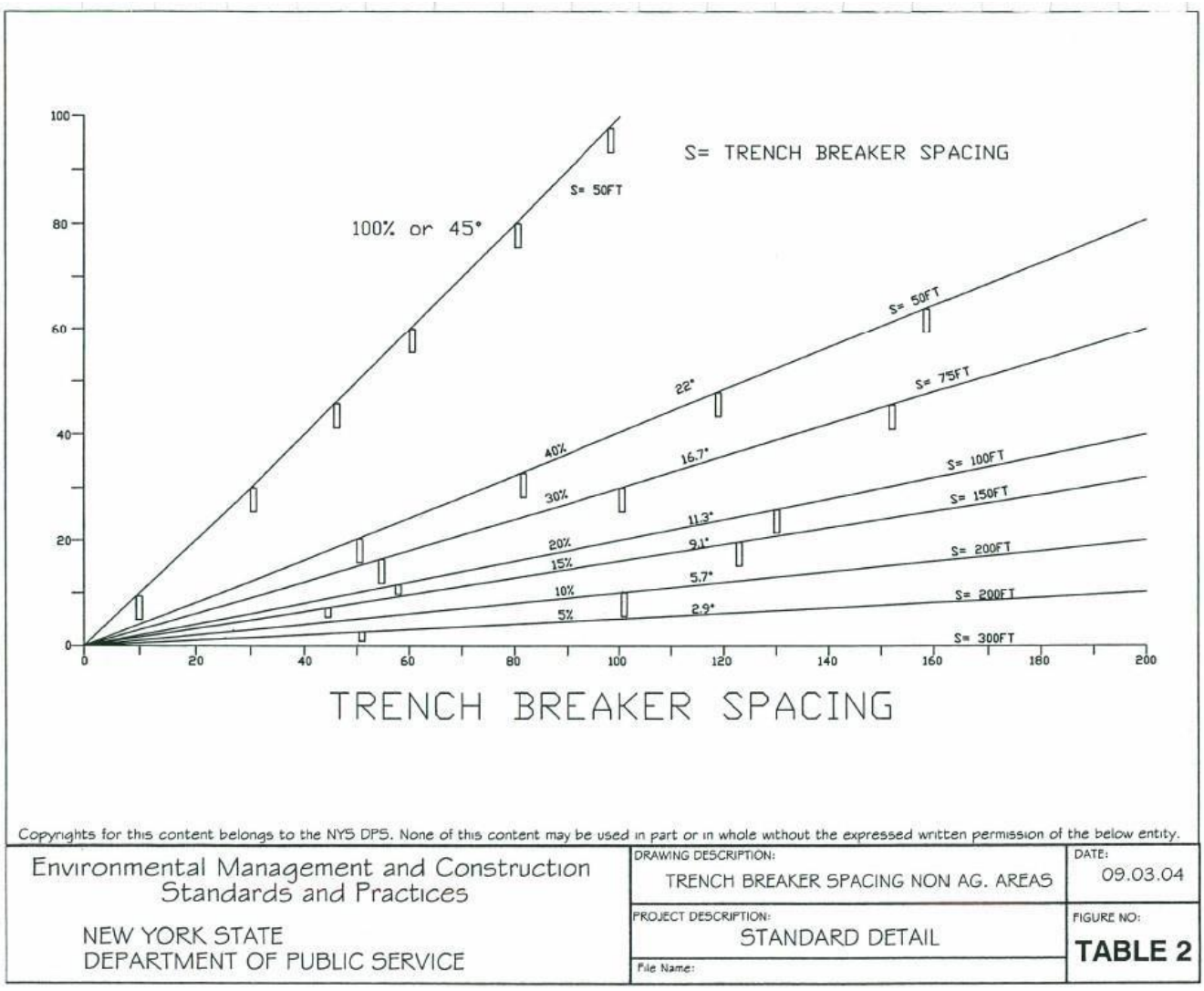
Specify procedures to be followed to minimize noise impacts related to facility site clearing and construction of the Facility. Indicate the types of major equipment to be used in construction and Facility operation; sound levels at which that equipment operates; days of the week and hours of the day 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.

20. Operations Schedule and Timing

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

Appendix 1 - Trench Breaker Spacing



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

Section C – Proposed Outline of Construction SEEP

The proposed outline below summarizes the format of the SEEP filing and the anticipated contents of the SEEP. This outline will work as the final Table of Contents for the SEEP filing and the numbered sections follow the numbers in Section B above.

1. Introduction
    - 1.1 SEEP Purpose
    - 1.2 Facility Location and Description
    - 1.3 Construction Schedule and Hours
    - 1.4 Status of Other Permits and Approvals Needed for Construction
        - 1.4.1 Federal
        - 1.4.2 FAA
        - 1.4.3 Local or State Permits
        - 1.4.4 Pipeline Agreements
2. Project Communications Plan
    - 2.1 Environmental Compliance and Monitoring Plan
3. Complaint Resolution Plan For Construction
4. Health and Safety Plans For Construction
    - 4.1 Emergency Action Plan
    - 4.2 Site Security Plan
    - 4.3 Health and Safety Plan
    - 4.4 Quality Assurance and Quality Control Plan
5. General Construction
    - 5.1 Fugitive Dust Control Measures
    - 5.2 Spill Prevention, Containment and Counter Measures (SPCC) Plan
6. Clean up and Restoration
    - 6.1 Decommissioning Plan
7. Transportation
    - 7.1 Status of coordination with State, County and local municipalities
        - 7.1.1. Road Use Agreements
        - 7.1.2. Utility Agreements
    - 7.2 Route Evaluation Study
    - 7.3 Traffic Control Plans
8. Vegetation Clearing and Disposal Methods
    - 8.1 Vegetation Management and Herbicide Plan
9. Plans, Profiles and Detail Drawings (see Section A)
    - 9.1 Turbines
        - 9.1.1 Details of Selected Turbine Model
        - 9.1.2 Details of Wind Turbine Blade Installation Process
        - 9.1.3 Foundations
    - 9.2 Linear Components
        - 9.2.1 Collection
        - 9.2.2 Access Roads
        - 9.2.3 Intersection Improvements
    - 9.3 Non-Linear Components
        - 9.3.1 POI and Collection Substation

- 9.3.2 Battery Storage
- 9.3.3 Laydown Areas
- 9.3.4 O&M facility
- 9.3.5 Concrete Batch Plant
- 9.3.6 Permanent Met Towers

10. Land Uses
    - 10.1 Agricultural Areas
    - 10.2 Sensitive Land Uses
    - 10.3 Geologic, Historic, and Scenic or Park resources
11. Final Geotechnical Engineering Report
12. Inadvertent Return Plan
13. Final Blasting Plan
14. Visual Mitigation
    - 14.1 Updated Shadow Flicker Analysis
    - 14.2 Shadow Flicker Control, Minimization and Mitigation Plan
    - 14.3 Other Visual Impact Mitigation
15. Cultural Resources
    - 15.1 Cultural Resources Protection Measures
    - 15.2 Unanticipated Discovery Plan
16. Avian and Bat Impacts
    - 16.1 Description of construction restrictions
17. Wetlands and Waterbodies
    - 17.1 Wetland Delineation Report
    - 17.2 Wetland and Stream Impact Drawings
    - 17.3 Final Wetland Mitigation Plan
    - 17.4 Storm Water Pollution and Prevention Plan (SWPPP)
18. Invasive Species Control Plan
19. Sound
    - 19.1 Construction Noise
20. Operations
    - 20.1 Projected Schedule
    - 20.2 Discussion of Pre-Operational and Post-Operational Filings and Expected Timing of Submission

Section D – Tree Clearing Plan

Section D addresses the requirements for development of a Tree Clearing Plan if the Certificate Holder separates the tree clearing phase of construction from other phases of construction.

OUTLINE OF TREE CLEARING PLAN FOR HIGH BRIDGE FACILITY

1. Introduction
    - 1.1 Facility Location and Description
    - 1.2 Tree Clearing Schedule and Hours
2. Tree Clearing Communications and Monitoring Plan
3. Complaint Resolution Plan for Tree Clearing
4. Health and Safety Plan for Tree Clearing
5. General Tree Clearing
    - 5.3 Fugitive Dust Control Measures
    - 5.4 Spill Prevention, Containment and Counter Measures (SPCC) Plan
6. Transportation
    - 6.1 Route Evaluation Study
    - 6.2 Traffic Control Plans
7. Vegetation Clearing and Disposal Methods
    - 7.1 Vegetation Management and Herbicide Plan
8. Plans, Profiles and Detail Drawings (See Details Below)
9. Cultural Resources
    - 9.1 Cultural Resources Protection Measures
    - 9.2 Unanticipated Discovery Plan
10. Avian and Bat Impacts
    - 10.1 Description of tree clearing restrictions if any
11. Wetlands and Waterbodies
    - 11.1 Storm Water Pollution and Prevention Plan (SWPPP)
12. Invasive Species Control Plan
13. Sound
    - 13.1 Procedures to be followed to minimize noise impacts related to facility site clearing.

1. Introduction

The Tree Clearing Plan will include a description of the tree clearing to be conducted and a schedule of tree clearing activities. This section will also include a reference to all applicable Certificate Conditions addressed in or by the Plan including conditions 92, 93, 97, 99, et al. This section will also demonstrate that access and property rights have been acquired for parcels needing clearing or for clearing access.

2. Tree Clearing Communications and Monitoring Plan

The *Tree Clearing Communications and Monitoring Plan* shall include the names, titles, qualifications and contact information of all individuals responsible for ensuring minimization of environmental impact by clearing and for enforcing compliance with environmental protection provisions of the Certificate and the compliance filings during tree clearing, including but not limited to:

a. Full-time (when appropriate)[5] environmental monitor;
b. Full-time tree clearing supervisor;
c. Part-time or full-time agricultural inspector, if different from the environmental monitor; and
d. Part-time health and safety inspector.

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

The *Tree Clearing Communications and Monitoring Plan* shall also include:

a. Protocols for supervising, 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 tree clearing 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 Certificate and Tree Clearing Plan an obligation of its contractors and has provided a copy to those employees and contractors engaged in clearing.
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. Provide notice to municipal officials and property owners that Facility Site tree clearing activities are due to start prior to the full start of construction.

3. Complaint Resolution Plan For Tree Clearing

The Tree Clearing Plan shall include a copy of a *Complaint Resolution Plan*, which shall include protocols for:

a. Notifying the public of the complaint procedures;
b. Registering a complaint;
c. Responding to and resolving complaints in a consistent and respectful manner;

[5] An environmental monitor may not be required on a full-time basis during certain periods, such as tree clearing.

d. Logging and tracking of all complaints received and resolutions achieved;
e. Reporting to DPS Staff any complaints not resolved within 30 days of receipt;
f. Arbitrating complaints not resolved within 60 days; and
g. Providing quarterly reports of complaint resolution tracking to DPS Staff that shall also be filed with the Secretary.

4. Health and Safety Plans For Tree Clearing

The Tree Clearing Plan shall include copies of the following plans for tree clearing:

a. An *Emergency Action Plan* that shall be implemented during Facility clearing. Copies of the plan also shall be provided to DPS Staff and local emergency responders that serve the Facility.
b. The *Final Health and Safety Plan* that shall be implemented during Facility clearing.

5. General Tree Clearing

Provide an Erosion and Sediment Control Plan which specifies appropriate measures that will be used to minimize fugitive dust and airborne debris from clearing activity as outlined in the *New York State Standards and Specifications for Erosion and Sediment Controls* (NYSDEC, 2016a). Provide a SPCC Plan for tree clearing. Areas to be cleared will be staked and/or flagged as relevant in accordance with Condition 84 (a), (b), (e) and (f).

6. Transportation

The Tree Clearing Plan shall attach a *Traffic Control Plan* that identifies the truck route(s) in the Town of Guilford, for oversize or over length equipment.

7. Vegetation Clearing and Disposal Methods

The Tree Clearing Plan shall attach a *Clearing Vegetation Management and Herbicide Use Plan* that describes:

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, if any, during initial site clearing. 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 for facilities operational considerations.
e) Describes the procedures that will be followed during chemical application to protect non-target vegetation, streams, wetlands, potable waters and other water bodies, and residential areas and recreational users on or within 100 feet of the ROW.

8. Plans and Profile Drawings (See Details Below)

9. Cultural Resources

a) The Tree Clearing Plan 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 clearing. The plan will include a provision for immediate work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, shall be conducted by a professional archaeologist, qualified according to New York Archaeological Council Standards. Work shall not resume in the area of such remains until written permission is received from the NYSOPRHP.

b) If complete avoidance of archaeological sites and Stone Features is not possible, the Certificate Holder shall consult with the NYSOPRHP and NYSDPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be included in the plans.

10. Avian and Bat Impacts

The Tree Clearing Plan shall attach an Avian and Bat Clearing Impact Plan describing measures to be implemented during clearing to reduce impacts to birds and bat species.

11. Wetlands and Waterbodies

a) If needed, the Tree Clearing Plan shall attach a copy of the *Wetlands Mitigation Plan*, developed in coordination with NYSDEC, NYSDPS Staff, and the Army Corps of Engineers, addressing permanent impacts to federal and State-regulated wetlands. The Wetlands Mitigation Plan shall:

   i. Describe all activities that will occur within §404 wetland, tidal wetland and State wetlands.

   ii. For each State-regulated wetland or associated adjacent areas, indicate the type of activity (e.g., construction, filling, grading, vegetation clearing, and excavation) and summarize how the activity is consistent with the weighing standards set forth in 6 NYCRR 663.5(e) and (f).

   iii. Describe how impacts to wetlands, adjacent areas, associated drainage patterns and wetland functions will be avoided, and how impacts will be minimized.

   iv. Describe the precautions or measures to be taken to protect all other wetlands (e.g., town or federal wetlands) associated drainage patterns, and wetland functions, including describing the measures to be taken to protect stream bank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; timing restrictions for in-stream work; stream bed and bank restoration measures; vegetation restoration measures;

   and other site-specific measures to minimize impacts, protect resources, and manage Facility construction.

   v. Describe the installation of underground collection lines in wetlands using the following methods:

      1. Topsoil shall be segregated from subsoil and temporarily placed onto a geotextile blanket.

2. The Certificate Holder shall implement best management practices to minimize soil compaction.
3. The length of the trench exposed shall not exceed 1,500 feet in a wetland to the maximum extent practicable.
4. All reasonable efforts shall be made to backfill open trenches within the same work day.
5. All excess materials shall be completely removed from wetlands to upland areas more than 100 feet from State wetlands and suitably stabilized.

vi. Describe the installation of access roads through wetlands using the following methods
   1. vegetation and topsoil shall be removed;
   2. a layer of geotextile fabric shall be placed in the location of the wetland crossing;
   3. at least six inches of gravel shall be placed over geotextile fabric in the location of the wetland crossing.

b) For §404 wetlands, the Tree Clearing Plan shall attach copies of individual or nationwide permits.
c) The Tree Clearing Plan shall attach a copy of the SWPPP.

12. Invasive Species Control Plan

The Tree Clearing Plan shall attach an *Invasive Species Control Plan (ISCP),* based on the pre-construction invasive species survey of invasive species within the Project Area. The ISCP shall include:

a) measures that will be implemented to minimize the introduction and spread control of Prohibited and Regulated Invasive Species
b) Control measures shall include materials inspection and sanitation, invasive species treatment and removal, and site restoration.
c) 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.

13. Sound

Specify procedures to be followed to minimize noise impacts related to facility site clearing. Indicate the types of major equipment to be used in clearing; 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 tree clearing.

Plans, Profiles and Detail Drawings Details for Tree Clearing Plan

1. Plan and Profile Detail

For all proposed wind turbine locations and other Non-Linear Facility components, the Certificate Holder shall provide site plans, profiles, and detail drawings (scale minimum 1 inch = 200 feet)[6] showing:

a) Details showing limits of clearing, temporary and permanent grading, and laydown space required for wind turbine installation;
b) Details of SWPPP should be indicated.

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 Line Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet) showing:

c) Details showing limits of clearing, temporary and permanent grading, required for linear components;
d) Details of SWPPP should be indicated;
e) 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.
f) 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 ditches or stabilization of topsoil);
    ii. broad-based dip or berm (for water diversion across the access road);
    iii. roadside ditch with turnout and sediment trap;
    iv. French drain;
    v. diversion ditch (water bar);
    vi. culvert (including headwalls, aprons, etc.);
    vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and,
    viii. silt fencing.
g) Indicate the type(s) of stream crossing method to be used in conjunction with temporary and permanent access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions alignment, extent of clearing) for each crossing device and rationale for their use. Stream crossing methods and design may include but not be limited to:

[6] 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.

i. timber mat or other measures to prevent soil compaction;

ii. culverts including headwalls;

iii. bridges (either temporary or permanent); and,

iv. fords.

h) All diagrams and specifications should include material type and size to be placed in streams and on stream approaches.

i) Existing underground utility or non-utility structures including but not limited to gas, water, telecommunication or electric cable or pipeline. The relationship of the Facility to adjacent fence lines; roads; railways; airfields; property lines; hedgerows; fresh surface waters; wetlands; other water bodies; significant habitats; associated facilities; water springs; adjacent buildings; water wells; or structures; major antennas; oil or gas wells, pipeline facilities, and compressor and pressure-limiting and regulating stations.

2. Stormwater Pollution Prevention

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

3. Vegetation Clearing and Disposal Methods

Identify on the Tree Clearing 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;

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); and

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.

4. Waterbodies

a) Indicate the name, water quality classification and location of all rivers and streams, (whether perennial and intermittent) and drainages within the construction area or crossed by any proposed Linear Facility Component or access road constructed, improved, or maintained for the Facility. On the plan and profile drawings, indicate:
   i. stream crossing method and delineate any designated streamside "protective or buffer zone" in which construction activities will be restricted to the extent necessary to minimize impacts on rivers and streams;
   ii. the activities to be restricted in such zones; and,
   iii. identify any designated floodways or flood hazard areas within the Facility, or otherwise used for Facility construction or the site of associated facilities. Provide topographic and flood hazard area elevations (if determined by engineering study); and specifications for facilities to be located within designated flood hazard or floodway zones; and design engineering and construction measures to demonstrate conformance with local ordinances, avoid damage to facilities, or avoid increasing flood elevation at any other location due to Facility installation.

b) Show the location of all known potable water sources, including springs and wells within 100 feet of Facility Components, within 500 feet of HDD, and within 1,000 feet of blasting locations, indicating on a site-by-site basis, precautionary measures to be taken to protect each water source.

5. Wetlands

a) All Federal and State regulated wetlands and state regulated 100-foot adjacent areas ("adjacent areas") located within the Facility or crossed by or adjacent to any access road to be constructed, improved, used or maintained for the Facility shall be depicted on plan drawings. Each wetland will be identified by a project identification number and by the NYSDEC designation as appropriate.

b) Indicate the location and type (i.e., identification code for regulated town, state, or federal wetlands) of any wetland (e.g., marsh, meadow, bog, or scrub-shrub or forested swamp) within or adjoining the Facility or any temporary access road, as determined by site investigation and delineation.

c) For non-jurisdictional wetlands, indicate type and location of measures (e.g., mats) to be taken to protect all wetlands, associated drainage patterns and wetland functions.

6. Land Uses

a) Agricultural Areas:
   i. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland. Designations and descriptions will be those in current use by NYSAGM.
   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 to be implemented to minimize or avoid construction-related impacts to agricultural resources.

b) Sensitive Land Uses and Resources:

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:

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:

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.

7. Noise Sensitive Sites

Show the locations of sound sensitive receptors. Identify locations and specifications of measures to mitigate tree clearing noise as required by the Certificate.

8. Ecologically and Environmentally Sensitive Areas

a) Indicate the general locations of any known ecologically and environmentally sensitive sites (e.g., archaeological sites [including but not limited to Stone Features]; rare, threatened, and endangered species or habitats; agricultural districts; and special flood hazard areas.), adjacent to the Facility or within 100 feet of any access roads to be cleared. Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs "Sensitive Environmental Areas, No Access").
b) Measures for avoidance of archaeological sites identified within the Facility shall be indicated on the tree clearing 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.

9. Prohibited and Regulated Invasive Species

Identify the location(s) of Prohibited and Regulated Invasive Species pursuant to Part 575. and the prescribed method to control the spread of the identified species on the site during construction. Invasive Species of Special Concern (ISSC) and Invasive Species of High Concern (ISHC) will be identified by NYS DEC following the results of baseline surveys. Post-construction monitoring will track the potential expansion or introduction of ISSC and ISHC. The ISCP shall set a goal of no net increase of either ISSC or ISHC.

10. Vegetation Controls and Herbicides

Indicate areas where herbicides will be used, and prescribed treatment methods for specific vegetation control, on the tree clearing plans and drawings.