NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 16-F-0559 - Application of Bluestone Wind, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 for Construction of the Bluestone Wind Farm Project Located in the Towns of Windsor and Sanford, Broome County.

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

Issued and Effective: December 16, 2019

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NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

At a session of the New York State
Board on Electric Generation Siting
and the Environment held in the
City of Albany on December 16, 2019

BOARD MEMBERS PRESENT:

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

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

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

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

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

Barbara Mirch, Ad Hoc Member, dissenting

CASE 16-F-0559 - Application of Bluestone Wind, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 for Construction of the Bluestone Wind Farm Project Located in the Towns of Windsor and Sanford, Broome County.

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(Issued and Effective December 16, 2019)

BY THE BOARD:

## I. INTRODUCTION

By this order, we grant to Bluestone Wind, LLC (Bluestone or the Applicant) a Certificate of Environmental Compatibility and Public Need to construct and operate a 124-megawatt wind electric generating facility in the Towns of Sanford and Windsor in Broome County, New York (the Project). The Project consists of the construction and operation of a commercial-scale wind power project, including the installation and operation of up to 27 wind turbines (23 in the Town of Sanford and 4 in the Town of Windsor), together with associated underground collection lines, access roads, two permanent meteorological towers, and an operation and maintenance building in the Town of Sanford. A collection substation will be located in Sanford at the end of the Project's 34.5-kilovolt collection system and will include a 10-megawatt battery storage system. A second substation will be located at the point of interconnection, adjacent to an existing New York State Electric and Gas transmission line. The two substations will be connected by a 200-foot long span of overhead 115-kilovolt transmission line. With the conditions attached to and made a part of this order, we determine the Project will meet all statutory requirements for certification under Article 10 of the Public Service Law (PSL). Our decision is supported by the extensive evidentiary record compiled through hearings before the Presiding Examiner appointed by the Department of Public Service (DPS) and the Associate Examiner appointed by the Department of Environmental Conservation (DEC), who summarized the record and made proposed factual findings and determinations in a Recommended Decision (RD) issued previously in this case. We base our decision on the evidentiary record, post-hearing briefs, RD, briefs of the parties on exception to the RD and

briefs of the parties opposing exceptions, public comments, and applicable law and policy.

## II. BACKGROUND

A description of the Project proposed by Bluestone is set forth in the RD that was issued by the Secretary on October 1, 2019. The RD also provides a summary of the procedural background, including a description of the public involvement and comment procedures conducted by both Bluestone and the Department of Public Service during the pre-application and application stages of the Article 10 review of the Project.

Briefs on Exception to the RD were filed on October 21, 2019, by Bluestone, DPS Staff, Broome County Concerned Residents (BCCR), Heather DeHaan (DeHaan), Delaware Otsego Audubon Society, Inc. (DOAS), and the Town of Windsor (Windsor).[1] Briefs opposing exceptions were filed on November 5, 2019, by Bluestone, DPS Staff, DEC Staff, BCCR. In addition, a brief opposing exceptions was filed after the filing deadline by Alliance for Clean Energy New York, Inc. (ACE) on November 6, 2019.[2]

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[1] BCCR filed a letter addressed to Siting Board Chair on October 23, 2019, asserting incorrectly that the RD mischaracterized the public comments filed in this case. That letter did not raise any valid exceptions. In addition, on or about October 24, 2019, BCCR served the Presiding Examiner with signed petitions opposing the Project. An email ruling issued the same day rejected BCCR's submission on the ground that it was an improper ex parte communication. SAPA §307(2).

[2] On November 8, 2019, BCCR moved to strike ACE's brief on the ground that it was untimely. Because ACE's brief addresses a purely legal issue, and BCCR has shown no prejudice from the filing, we deny BCCR's motion.

A. Procedural Matters

1. Public Comment

Since the issuance of the RD, approximately 92 public comments have been filed. Most public comments oppose the Project; one comment was filed in support.

Comments opposing the Project asserted variously that the Project is not needed, is uneconomic, and will not provide Bluestone's claimed energy and environmental benefits. They describe it as a "money grab" by a big corporation seeking publicly funded tax subsidies based on false claims. Opponents allege the Project will negatively impact their businesses, eliminate tourism, and economically destroy their communities and their quality of life. They claim the Project will deprive them of the ability and right to develop their lands. They assert the Project will also harm the environment, destroying bald and golden eagle populations, contaminating surface and groundwater resources, blighting the landscape and eliminate forests.

They assert that shadow flicker and noise from the Project will harm public health, by disturbing their sleep and thereby increasing their cortisol levels, and risks of depression, chronic hypertension, and heart disease. Opponents ask that the State Department of Health more carefully study these health risks.

Opponents allege the Project will cause a precipitous decline in property values and leave residents of the poor and economically neglected local communities trapped and unable to sell their homes. They charge the State has ignored their concerns, noting that even while seven out of 10 local citizens oppose the Project the State's review has proceeded unabated. They characterize Article 10 itself as a "sham" and say the

government's failure to protect the local citizens is a gross injustice.

Opponents allege corruption on the part of local government officials and describe politicians blindly accepting Bluestone's assertions based only on the "green" movement. They claim local landowners have been "duped" into signing leases. Opponents view the Siting Board as their last hope before the destruction of their communities, health and way of life.

The single comment filed in support asserted the Project will advance the State's renewable energy goals, will address climate change, and is consistent with Broome County's support of increased renewable energy. This commenter asserted that New York State is the fifth most windy State in the Nation and claimed the State's wind resources can potentially meet more than one-half of New York's existing electricity needs. This commenter charged there is a need for a dramatic increase in renewable energy and claimed that wind turbines emit no air pollution. Finally, this commenter asserted that the Project will provide a long-term, steady, and reliable revenue stream for participating landowners. This, in turn, will support local farmers, and lead to significant economic development including increased jobs.

2. Burden of Proof

The applicant in each 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 Board.[3] When factual matters are involved, the applicant must sustain that burden by a preponderance of the evidence,

[3] 16 NYCRR §1000.12(b).

unless a higher standard has been established by statute or regulation.[4]

In the RD, the Examiners found that, subject to the Certificate Conditions and Site Engineering and Environmental Plan (SEEP) Specifications, the record is sufficient to support the findings the Siting Board must make before issuing a Certificate under Article 10. In her Brief on Exceptions, Intervenor DeHaan takes issue with this determination. She points out that the Applicant has conceded that many decisions about the Project have not been made and that additional studies are needed before construction can begin. DeHaan argues these circumstances are inconsistent with PSL §168, which requires the Siting Board to determine whether all potential environmental impacts of the proposed Facility will be minimized or avoided to the maximum extent practicable. DeHaan argues that the Applicant has failed to meet the requisite burden of proof given that its analysis of potential environmental impacts from the construction and operation of the proposed Facility has yet to be completed.[5]

In its Brief Opposing Exceptions, the Applicant asks us to reject this argument, noting that the information in its application supports the statutory findings the Siting Board must make. Bluestone asserts that DeHaan's brief on exceptions is conclusory and fails to point to evidence in the record that supports her assertions and arguments.[6]

We agree with Bluestone, for two reasons. First, the fact that certain details concerning the final assessment of project impacts and the mitigation measures to be imposed are

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[4] 16 NYCRR §1000.12(c).

[5] DeHaan Br. on Exceptions, pp. 4-5, 6, 8-9, 10-11, 17-23, 25-29, 34-36, 36-37, and 41-43.

[6] Bluestone Brief Opposing Exceptions, p. 36-37.

left to the compliance phase does not, in itself, invalidate the Examiners' determination that the record is sufficient to support the statutory findings. We do not read Section 168 to require the level of certainty at the certification stage that DeHaan appears to suggest is necessary.

Second, the exceptions process requires a party to do more than raise conclusory objections. The purpose of the process is to focus on specific errors that the party offering the exception identifies in the RD. If the alleged error is one of fact, the proponent's brief must include citations to the factual record and explain how the record supports the exception. If the alleged error is one of law, the brief must show how the relevant authorities, on the record presented by the case, dictate another conclusion. This view is consistent with Rule 4.10, which cautions that an exception should not simply reiterate the party's position, but should explain why the party believes the RD is in error.[7]

In this case, the Examiners found that, subject to the Certificate Conditions and SEEP Specifications described in the RD, the record contained sufficient information for the Siting Board to make the required statutory findings. Because DeHaan's exception raises only conclusory assertions, we do not find any basis to overturn the Examiners' conclusion that the Applicant has met its burden of proof.

3. Waiver of Exceptions

In its Brief on Exceptions, BCCR attempts to assert a generic exception to the Examiners' conclusions with respect to the proposed Certificate Conditions and SEEP Specifications. However, rather than stating the specific nature of its exceptions, BCCR states in its brief that its "decision to not

[7] 16 NYCRR §4.10(c)(2).

address this issue . . . should not be construed as agreement with any portion of the RD."[8] BCCR then repeats this generic reservation with respect to portions of the RD relating to multiple issues, including impacts of the proposed Facility on ecology, air, groundwater, surface water, streams, wetlands, bats, archeological resources, cultural and historic resources, and infrastructure.[9]

In opposition, Bluestone asserts the Siting Board should disregard BCCR's "generic" exceptions, pointing in support to Rule 4.10(c)(2), which requires any party asserting an exception to provide both the grounds for the exception and the arguments in support of the exception.[10] We agree with Bluestone. The Article 10 process does not recognize "generic exceptions." Instead, Rule 4.10 provides BCCR a fair opportunity to raise specific, record-based concerns related to the Examiners' determinations. Indeed, the Secretary's October 1, 2019, Notice of Schedule for Filing Exceptions with the Examiners' Recommended Decision specifically cited the requirements of 16 NYCRR §4.10.[11] By failing to state any specific grounds for any errors in the RD, BCCR has foregone the opportunity to raise its concerns in this forum. Therefore, we find that BCCR has waived its right to raise arguments with respect to all of the issues on which it asserted a "generic exception," including matters relating to ecology, air, groundwater, surface water, streams, wetlands, bats, archeological resources, cultural and historic resources, and infrastructure.

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8 BCCR Brief on Exceptions, p. 7.

9 BCCR Brief on Exceptions, pp. 7-8, 14-16, 24.

10 Bluestone Brief Opposing Exceptions, p. 24.

11 The applicable hearing procedures are outlined at 16 NYCRR Part 4 (Hearings).

4. New Issues Raised on Exceptions

In its brief opposing exceptions, Bluestone argues that all of Intervenor DeHaan's exceptions, except those relating to eagles and environmental justice, are improperly being raised for the first time in her brief on exceptions contrary to the procedures established under Article 10. Citing 16 NYCRR §1000.12(a)(1), Bluestone argues that parties are required to identify issues for adjudication prior to the hearing. As stated by Bluestone, "this issue identification requirement serves three purposes: (1) it 'reduces from infinite to manageable' that which must be litigated; (2) 'helps shape the record to be produced, ensuring that only relevant and material issues will be considered'; and (3) serves to identify gaps in information provided by the applicant 'where prudence dictates that such gaps might be better cured early to help ensure an adequate record and a timely final decision'".[12] Bluestone argues that delaying the introduction of issues until the briefs on exceptions prejudices the applicant by depriving it of the opportunity to introduce evidence in response to newly raised issues.

We agree with Bluestone. Allowing parties to raise issues that could and should have been raised at the hearing for the first time in briefs on exceptions is inconsistent with the efficient and orderly adjudication of issues in an Article 10 proceeding. As noted by Bluestone, allowing such a practice after the close of the hearing record potentially prejudices an applicant and other parties. It is also inconsistent with Article 10's preference for the early identification of issues

[12] Bluestone Brief Opposing Exceptions, pp. 35-36 (quoting Case No. 00-F-1356, Kings Park, LLC, Examiner Ruling Identifying Article X Issues and Establishing Schedule Milestones [issued June 12, 2002]).

for adjudication, a preference we have previously recognized in the Cassadaga Wind matter.[13]

In addition, a party that attempts to raise issues not previously litigated before the Examiners may be unable to satisfy the requirements of Rule 4.10 which, as noted above, requires exceptions to be directed to the Examiners' conclusions and recommendations in the RD the party believes to be in error (see Rule 4.10[c][2][iv]). If an issue was not litigated before the Examiners and, accordingly, not reviewed by the Examiners and subject to the Examiners' analysis in the RD, the newly raised issue will not be directed to an error in the RD, as required by Rule 4.10(c)(2)(iv). Moreover, a party attempting to raise a new fact issue for the first time in a brief on exceptions will be unable to reference the hearing record in support of the exception as also required by Rule 4.10(c)(2)(iv).

In sum, as a general proposition, we view issues sought to be raised for the first time in briefs on exceptions that could have been raised before the Examiners as untimely and not properly before the Siting Board for review and decision. Accordingly, we encourage the parties in Article 10 proceedings to raise all issues regarding the application to the Examiners during the hearing phase of the proceeding. We recognize, however, that circumstances may arise that potentially justify raising a new issue after the hearing record closes. In these circumstances, however, we would expect the proponent of such an issue to provide a justification for why the issue was not raised earlier in the proceeding. A party that fails to do so,

[13] Case No. 14-F-0490, Cassadaga Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued January 17, 2018), pp. 105-106.

risks the possibility that we may reject the issue as untimely raised.

Here, the newly-raised issues in DeHaan's brief on exceptions could have been raised before the Examiners, but were not. Moreover, DeHaan provides no good cause for raising the issues at this stage. Accordingly, by failing to present her late-raised issues to the Examiners during the hearing phase of this proceeding, DeHaan has waived her objections on those grounds.

## III. FINDINGS AND CONCLUSIONS

### A. Certificate Conditions and Site Engineering and Environmental Plan

For the reasons established in the RD, we adopt the Certificate Conditions set forth in Attachment A to the RD,[14] as well as "Appendix A" to the Conditions – the SEEP Specifications negotiated by certain parties.[15] This Order otherwise discusses only those aspects of the Certificate Conditions and the SEEP Specifications necessary to address exceptions the parties sought to raise in their briefs on or opposing exceptions. To be clear, where we adopt the recommendations of the Examiners, we incorporate by reference the Examiners' discussion and reasoning as set out in the RD.

### B. Electric Generation Capacity – PSL § 168(3)(a)

We agree with the Examiners' findings that the Facility will promote the State's energy policy goals, will help improve fuel diversity and grid reliability, will decrease the production of greenhouse gasses, will support modernization of

[14] The Certificate Conditions as proposed by Bluestone are found at Hearing (Hrg.) Exhibit (Exh.) 10.

[15] Hrg. Exh. 11.

grid infrastructure, will provide air emissions reduction benefits including benefits of carbon dioxide emissions reductions through the Regional Greenhouse Gas Initiative. Therefore, pursuant to PSL §168(3)(a), we find that construction and operation of the Facility is consistent with the State's energy plan and policies and will be a beneficial addition to the generation capacity of the State.[16]

C. Environmental Impacts – PSL § 168(2) & §168(3)(c) and (e)

Pursuant to PSL §168(2), the Siting Board must make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility, including impacts to (a) ecology, air, ground and surface water, wildlife, and habitat; (b) public health and safety; (c) cultural, historic, and recreational resources, including aesthetics and scenic values; and (d) transportation, communication, utilities and other infrastructure. Before an Article 10 Certificate may be issued, PSL §168(3)(c) requires the Siting Board to determine that any adverse environmental impacts resulting from the construction and operation of the facility will be minimized or avoided to the maximum extent practicable. PSL §168(3)(e) requires the Siting Board to find that the Facility is designed to operate in compliance with applicable State environmental, public health, and safety laws. In making its findings, the Siting Board may impose, and monitor compliance with, any terms and conditions it deems necessary.

The following sections summarize the probable environmental impacts associated with the proposed Facility, as identified by the Examiners. In addition, these sections include the Examiners' recommendations regarding the Siting

[16] RD, pp. 28-30.

Board's required findings, the exceptions, if any, to the Examiners' recommendations, and our findings and determinations with respect to the environmental impacts that have been identified.

1. Ecology

The predominant ecological community within the Project area is mixed deciduous/coniferous forestland, which includes the beech-maple mesic forest and the hemlock-northern hardwood forest communities. Other land cover classes include successional old field, agricultural land, and disturbed/developed community types.[17]

Impacts to plant communities from construction and operation of the Facility include vegetation clearing disturbance from construction and permanent loss of vegetated habitats by conversion to built facilities. A total of up to 390.5 acres of vegetation would be disturbed by construction activities (6.9% of the Facility site). Of this area, 335 acres of vegetation (86%) would be temporarily disturbed, including areas where collection lines are buried underground, areas for construction staging, areas for the margins of access roads, and areas for turbine construction. About 54.6 acres of vegetation will be permanently converted to built facilities amounting to 1% of the Facility site.[18]

The temporary and permanent impacts to vegetation communities associated with the construction and operation of the Facility would not result in extirpation or the significant reduction in any ecological community type. In addition, no

[17] RD, p. 32.

[18] RD, p. 33.

State-listed plant species or significant ecological communities were identified as being located within the Facility site.[19]

Based on the foregoing, the Examiners recommended that the Siting Board conclude that adverse environmental impacts to ecology from Project-related construction and operation would be avoided or minimized to the maximum extent practicable in accordance with PSL §168(2)(a) and (3)(c).[20]

In its Brief on Exceptions, BCCR raises only a general exception to the Examiners' conclusions with respect to ecology.[21] As noted above, BCCR has waived any exception to the Recommended Decision's section on ecology.[22]

In her Brief on Exceptions, Intervenor DeHaan contends the Applicant failed to meet its burden to show that the adverse environmental impacts to ecology from the Project have been minimized or avoided to the maximum extent practicable. According to Intervenor DeHaan, because the application materials do not explain how any adverse environmental impacts would be minimized, the Siting Board is precluded from issuing the Certificate.[23]

In its Brief Opposing Exceptions, the Applicant notes that Intervenor DeHaan did not raise any issue related to ecology prior to filing her Brief on Exceptions. According to the Applicant, introducing issues for the first time in the Briefs on Exceptions prejudices the Applicant by depriving it

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19 RD, p. 33.

20 RD, pp. 33-34.

21 BCCR Brief on Exceptions, p. 8.

22 16 NYCRR §4.10(d)(2).

23 DeHaan Brief on Exceptions, p. 6.

the opportunity to introduce evidence in response to the newly raised issue.[24]

Referring to Application Exhibit 22, the Applicant contends that it demonstrated throughout the development of the Project how it would minimize impacts to sensitive resources and reduce land disturbance. To support these contentions, the Applicant compares the original application to the April 2019 Update. The April 2019 Update shows that the Applicant reduced the total land disturbance by 11.5% by eliminating six turbines.[25] In contrast, the Applicant notes that Intervenor DeHaan, in her Brief on Exceptions, did not identify any evidence to rebut the Examiners' conclusions in the RD[26] other than to note the expected area of vegetation that would be disturbed. The Applicant argues that the RD should be accepted.[27]

Intervenor DeHaan's exceptions are denied. As an initial matter, Intervenor DeHaan's objections raised for the first time in her Brief on Exception are untimely and not properly before us. In any event, DeHaan's assertion that Bluestone failed to carry its burden of proof is belied by the record. To the contrary, the weight of record evidence supports the Examiners' conclusions and recommendations. Accordingly, we adopt the Examiners' recommendation and conclude that adverse environmental impacts to ecology from Project-related construction and operation will be avoided or minimized to the maximum extent practicable.[28]

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[24] Bluestone Brief Opposing Exceptions, pp. 36, 39.

[25] Hrg. Exh. 2, App. Exh. 22(b)(1), Table 22-3; Hrg. Exh. 7, App. Update, p. 11, Table 22-3.

[26] RD, pp. 33-34.

[27] Bluestone Brief Opposing Exceptions, p. 39.

[28] PSL §§168(2)(a) and (3)(c).

a. Invasive Species

Environmental Conservation Law (ECL) Article 9, Title 17, 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.[29]

Bluestone's application contained reports documenting the presence and extent of invasive species in the Project area, and a proposed Invasive Species Control Plan (ISCP) that provided for further surveys conducted before construction.[30] Bluestone agreed to various Certificate Conditions to address invasive species control including finalizing and implementing the ISCP for the Facility, and funding an independent third-party Environmental Monitor (EM) to oversee compliance with environmental commitments, including those related to invasive species control during construction. Pursuant to Certificate Condition 73, Bluestone would conduct a post-construction monitoring program in year 1, year 3, and year 5 following completion of construction and restoration to collect information about the effectiveness of the ISCP. At the conclusion of the monitoring program, the Applicant would submit a report assessing whether no net increase of invasive species was achieved. If the report concludes that the goals of the ISCP were not being met, the Certificate Holder, DPS, DEC and DAM would confer to review treatment measures to achieve the goal of no net increase of invasive species, and to develop a

[29] ECL §§9-1701, 9-1709(2)(b)(iv).

[30] RD, pp. 34-35.

plan for implementing remedial actions that treat and control invasive species, if appropriate.[31]

In the RD, the Examiners recommended that the Siting Board determine that the impacts related to invasive species have been avoided or mitigated to the maximum extent practicable.[32] The Examiners also recommended that the Siting Board conclude that the Applicant, to the extent practicable, will prohibit and actively eliminate invasive species at the Facility, in compliance with State environmental law.[33] The Examiners recommended that the Board impose the agreed-upon Certificate Conditions related to invasive species.[34]

Intervenor DeHaan contends in her Brief on Exceptions that the Applicant has not provided sufficient information for the Siting Board to determine whether the potential adverse environmental impacts associated with invasive species would be minimized or avoided to the maximum extent practicable. Rather, Intervenor DeHaan observes that the Applicant agreed to implement an ISCP that has not yet been finalized. Intervenor DeHaan recommends that the Applicant provide the ISCP for public review and approval before the Siting Board makes a final determination. Intervenor DeHaan recommends further that the Applicant should be required to establish a fund to assure the implementation of the ISCP.[35]

In response to Intervenor DeHaan's exceptions related to invasive species, the Applicant refers to the baseline survey

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[31] RD, p. 35.

[32] RD, p. 36.

[33] RD, p. 36.

[34] RD, p. 36.

[35] DeHaan Brief on Exceptions, pp. 7-8.

of invasive species[36] and the preliminary ISCP.[37] The Applicant argues that, collectively, these documents provide information about the current state of invasive species at the Facility site and the Applicant's plans to address invasive species before, during, and after construction.[38]

In addition, the Applicant notes that it has accepted proposed Certificate Condition 73 and SEEP Specification §B.18, which would require the Applicant to conduct a second invasive species survey prior to construction to provide up-to-date baseline information about precisely where invasive species are located within the Facility site. Depending on the results of that survey, the Applicant would develop a final ISCP, and assess its effectiveness 1, 3, and 5 years after completion of construction. As appropriate, the Applicant would work with members of Staff from DPS, DEC and DAM to remedy any problems identified,[39] as well as hire a third-party environmental monitor (EM).[40] Finally, the Applicant argues there is no reason to establish a fund to implement a remedial action plan.[41]

According to the Applicant, Intervenor DeHaan did not identify any evidence from the record that refutes the Examiners' recommendation that the Siting Board determine the impacts related to invasive species have been avoided or mitigated to the maximum extent practicable.[42] The Applicant

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36 Hrg. Exh. 2, Appendix MM.

37 Hrg. Exh. 2, Appendix NN. See also Hrg. Exh. 2, App. Exh. 22(b)(2)-(3), which discusses invasive species issues.

38 Bluestone Brief Opposing Exceptions, p. 40.

39 See also proposed Certificate Conditions 101, 102, 120 and 130, and SEEP Specification §§A.11 and B.18.

40 See proposed Certificate Condition 85.

41 Bluestone Brief Opposing Exceptions, p. 40-41.

42 RD, p. 36.

recommended that the Siting Board accept the Examiners' findings and recommendations in the RD.[43]

Intervenor DeHaan's exceptions are denied. We agree with the Applicant that Intervenor DeHaan's issue is untimely raised for the first time on exceptions to the RD. We also agree that DeHaan provides no evidentiary basis for rejecting the Examiners' conclusions and recommendations. Accordingly, we adopt the Examiners' conclusion that the Project will comply with State invasive species control law and will otherwise avoid or minimize impacts from invasive species to the maximum extent practicable.

b. Forests and Tree Clearing

As noted by the Examiners, forest fragmentation occurs when large blocks of contiguous forest are divided or broken into smaller patches as a result of clearing or canopy removal. Fragmentation may affect the movement, breeding, roosting, or nesting behavior of birds and bats, and degrade overall habitat suitability.[44]

To address the potential impacts of Facility construction on forest fragmentation, Bluestone agreed to several Certificate Conditions and SEEP Specifications.[45] Based upon these Certificate Conditions and SEEP Specifications, the Examiners recommended that the Siting Board conclude that impacts to forest land have been minimized to the maximum extent practicable.[46]

Intervenor DeHaan asserts that the Applicant did not show that the proposed Facility consists of the fewest number of

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[43] Bluestone Brief Opposing Exceptions, p. 41.

[44] RD, p. 36.

[45] RD, pp. 36-37.

[46] RD, p. 38.

wind turbines to minimize forest fragmentation. DeHaan contends that the Applicant should be required to identify alternative plans that, for example, consist of fewer turbines to minimize forest disturbance. If such alternatives are not feasible, DeHaan contends, the Applicant has the burden to show why the alternatives would not be practicable.[47]

To address Intervenor DeHaan's assertions, the Applicant references various hearing exhibits to demonstrate that the construction and operation of the proposed Facility would minimize impacts to forest lands to the maximum extent practicable. In addition, the Applicant notes that DeHaan did not identify any authority that would require Bluestone to develop alternative plans, other than those already presented in the hearing record. The Applicant argues that the Siting Board should reject Intervenor DeHaan's exceptions.[48]

DeHaan's exceptions are denied. Intervenor DeHaan's exceptions are untimely raised, and DeHaan offers no evidentiary basis for rejecting the Examiners' recommendations. Accordingly, the Examiners' recommendations regarding impacts to forest lands are adopted.

c. Agricultural Lands

Approximately 250 acres (4.4%) of the Facility site are active agricultural land. Of this amount, about 34.4 acres would be temporarily disturbed, and 8.0 acres would be permanently disturbed with built facilities.[49]

To minimize and mitigate potential impacts to active agricultural land and farming operations, the Applicant has agreed to comply with the most recent version of New York State

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47 DeHaan Brief on Exceptions, p. 9.

48 Bluestone Brief Opposing Exceptions, pp. 41-42.

49 RD, p. 38.

Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Wind Power Projects ("DAM Wind Guidelines"). The Applicant also agreed to several Certificate Conditions designed to ensure the protection of agricultural lands, including Certificate Conditions requiring the appointment of a third-party EM and a third-party agricultural monitor, unless DAM determines that the EM is qualified to address agricultural issues.[50]

The Examiners recommended that the Siting Board adopt the parties' agreed upon Certificate Conditions and conclude that impacts to agricultural lands have been avoided or minimized to the maximum extent practicable.[51]

Intervenor DeHaan takes exception, arguing the Applicant should be required to finalize an agricultural area plan for review and approval before the Siting Board decides whether to grant the requested Certificate.[52]

The Applicant opposes DeHaan's exceptions, maintaining they are without merit. The Applicant asserts that DAM Staff reviewed the application materials and did not identify concern with respect to agricultural lands.[53]

Intervenor DeHaan's exceptions are denied. DeHaan's exceptions are untimely raised. Furthermore, as noted in the Recommended Decision, DAM Staff and the Applicant have agreed to proposed Certificate Conditions 47, 63, and 85-87.[54] Pursuant to Condition 63, a final agricultural area plan will be submitted as a Compliance Filing and subject to comment by the parties,

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50 RD, pp. 38-39.

51 RD, p. 39.

52 DeHaan Brief on Exceptions, p. 10.

53 Bluestone Brief Opposing Exceptions, p. 42; see also RD, p. 38.

54 RD, p. 39.

among other things. Given this process, it is not necessary to have the final plan before approving the Certificate. Accordingly, the Examiners' recommendations regarding impacts to agricultural lands are adopted.

2. Air

ECL Article 19 and Parts 200 et seq. of 6 NYCRR establish the State's air pollution control program. This includes the recently enacted program targeting reductions in carbon dioxide emissions from new major electric generating facilities (ECL §19-0312), and the federally-approved air permit program under the federal Clean Air Act (CAA). 42 USC §§7401, et seq.

The Examiners noted that during construction, the Facility may result in minor, temporary adverse air impacts associated with vehicle emissions, dust from earthmoving activities and travel on unpaved roads, and emissions from a concrete batch plant, if used, and fossil fuel-fired generators. After construction, the wind turbines would generate electricity without combusting fuel or releasing pollutants into the atmosphere. Because the Facility will generate electricity without any regulated emissions, the Facility does not require any federal, State, or local air emissions permits.[55]

The Examiners noted that no party raised concerns related to potential impacts to air quality. Based upon the record, the Examiners recommended that the Siting Board 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

[55] RD, p. 41.

all applicable State air pollution control laws and regulations.[56]

In her Brief on Exceptions, Intervenor DeHaan argues that BCCR's post-hearing submissions make clear that the Applicant will employ a concrete batch plant for the Project. Intervenor DeHaan further asserts that the Applicant completely failed to examine or even identify the environmental impacts from a concrete batch plant and, therefore, the Application is incomplete. Intervenor DeHaan asserts that the Examiners therefore erred in making recommendations to the Siting Board.[57]

In its Brief Opposing Exceptions, Bluestone notes that no party identified issues relating to air quality generally, or to the batch plant specifically at the hearing.[58] In any event, Bluestone identifies those portions of the Application in which the air and water impacts of a concrete batch are addressed, if one is needed during Project construction.[59] Bluestone also identified the recommended Certification Condition and SEEP Specification that would be applied to avoid and minimize any impacts from the use of a batch plant.[60] Bluestone further notes that State air regulations specifically exempt concrete batch plants from air permitting requirements provided they are equipped with specific air pollution controls.[61] Bluestone argues that the fact that DEC exempts batch plants from air

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56 RD, p. 41.

57 DeHaan Brief on Exceptions, pp. 37-38.

58 Bluestone Brief Opposing Exceptions, p. 51.

59 Bluestone Brief Opposing Exceptions, p. 51, citing Hrg. Exh. 2, App. Exh. 17(a) and (d); Appendix KK; Figure 2-2.

60 Bluestone Brief Opposing Exceptions, p. 51, citing proposed Certificate Condition 124 and SEEP Specification §A.1.

61 Bluestone Brief Opposing Exceptions, p. 51, citing 6 NYCRR §201-3.2(c)(37).

permitting regulations is proof that such plants do not raise environmental concerns provided they are properly equipped, which Bluestone has committed to do.[62]

Intervenor DeHaan's exceptions are denied. As an initial matter, DeHaan's late-raised issue is not properly before us. Moreover, contrary to Intervenor DeHaan's assertions, the Application addressed any potential environmental impacts from the operation of a concrete batch plant in the event one is needed for Project construction. The Application, together with the proposed Certificate Condition and SEEP Specification, provide a record basis for the conclusion that the Applicant's operation of a concrete batch plant will comply with applicable State air pollution control laws, and that the environmental impacts associated with its use will be avoided or minimized to the maximum extent practicable.

In its Brief on Exceptions, BCCR again takes only a general exception to the Examiners' conclusion with respect to potential adverse air impacts.[63] As concluded above, by raising only a general exception, BCCR waived any exception to the Recommended Decision's conclusions and recommendations on air impacts.[64] No other parties raised exceptions to the Examiners' analysis. Accordingly, we adopt the Examiner's recommendations.

3. Groundwater and Water Supply Wells

Pursuant to PSL §168(2), the Siting Board is required to make explicit findings regarding the probable impact of a project's construction and operation on groundwater resources. The Siting Board must conclude that impacts to groundwater will be avoided or minimized to the maximum extent practicable. PSL

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62 Bluestone Brief Opposing Exceptions, p. 51.

63 BCCR Brief on Exceptions, p. 8.

64 16 NYCRR §4.10(d)(2).

§168(3)(c). In addition, a project must meet all applicable water quality standards for groundwater. PSL §168(3)(e).[65]

Bluestone identified groundwater aquifers in the Facility site and conducted a survey of existing water wells within a 2,000-foot radius of the proposed Facility area. Approximately 291 acres located in the far western portion of the Facility site would be located over the Clinton Street-Ballpark Valley sole source aquifer, and the Facility site overlays a part of an unconsolidated aquifer mapped by DEC. No primary aquifers, which are considered highly productive sources of potable water for major municipal water supply systems, are located in the Facility site.[66]

Impacts to groundwater are expected to be minimal due to the placement of a majority of the turbines on hilltops located above and outside the aquifer footprints. In addition, excavations for foundations, roadways, and underground collection lines would be relatively shallow and, therefore, would not intercept groundwater.[67]

Bluestone agreed to several Certificate Condition to further avoid potential impacts to groundwater and protect drinking water resources. These include Conditions (1) requiring the Applicant to file a notice confirming that no wind turbines would be located within 100 feet of an existing water supply well or water supply intake; (2) prohibiting blasting within 500 feet of any known existing, active water supply well or water supply intake on a non-participating parcel; (3) requiring pre- and post-construction well monitoring on non-participating parcels within 1,000 feet of any blasting for

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[65] See 6 NYCRR Part 703.

[66] RD, pp. 42-43, 45.

[67] RD, p. 43.

which access is granted or if engineering constraints require collection lines or access roads within 100 feet of a known existing active water supply well on a non-participating parcel, and the drilling of a new well if testing indicates the well has been impacted by the Facility; and (4) requiring the mapping of the location of water wells, and the coordination with the owners of those wells. DPS Staff testified that setbacks included in the proposed Certificate Conditions are consistent with DOH's requirements for water well protection.[68]

The Examiners noted that no dispute existed between the Applicant and DPS Staff concerning drinking water issues. The Examiners rejected concerns raised by BCCR on the ground that the three wells at issue are safely located outside the setbacks established by DOH and under the terms of the proposed Certificate Conditions. Based upon the record and the proposed Certificate Conditions, the Examiners recommended that the Siting Board conclude that the potential adverse environmental effects to groundwater quality or quantity, or drinking water supplies from the Facility's construction and operation have been minimized or avoided to the maximum extent practicable. In addition, the Examiners recommended that the Siting Board determine that the Project will be constructed and operated in compliance with State water pollution control laws.[69]

In its Brief on Exceptions, BCCR takes only a general exception to the Examiners' conclusions with respect to the topic of groundwater and water supply wells.[70] As concluded above, BCCR thereby waived any exception to the Recommended

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[68] RD, pp. 43-45.

[69] RD, pp. 45-46.

[70] BCCR Brief on Exceptions, p. 8.

Decision's section on groundwater.[71] No other parties raised exceptions to the Examiners' analysis and recommendations regarding groundwater impacts. Accordingly, we adopt the Examiners' recommendations.

4. Surface Water, Streams, and Wetlands

State laws governing the disturbance of protected streams are found in ECL Article 15 and DEC's regulations at 6 NYCRR Part 608. ECL Article 24 and DEC's regulations at 6 NYCRR Parts 663 and 664 govern the disturbance of freshwater wetlands and their adjacent areas. In general, State-protected streams, and protected wetlands and adjacent areas may not be disturbed without approval from the State.[72] Further, the Applicant is required to obtain coverage under DEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (General Permit) to protect surface waters and groundwaters from the discharge of pollutants. In addition, the Siting Board must conclude that impacts to all surface water resources will be avoided or minimized to the maximum extent practicable.[73]

In its Brief on Exceptions, BCCR takes only a general exception to the Examiners' conclusions related to surface water, streams, and wetlands.[74] As concluded above, by raising only a general exception, BCCR waived any exception to the Recommended Decision's section on surface water resources.[75]

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71 16 NYCRR §4.10(d)(2).

72 ECL §15-0501; ECL §15-0505; ECL §24-0701.

73 PSL §168(3)(c).

74 BCCR Brief on Exceptions, p. 8.

75 16 NYCRR §4.10(d)(2).

a. Streams

Protected streams identified within the Facility site are classified as Class A, Class B(T) and Class C(T) and include Fly Creek, Marsh Creek and tributaries, Oquaga Creek Upper tributaries, and Big Hollow Brook. Construction of the Facility would result in an estimated total of 1,418 linear feet of permanent stream impacts and 1,653 linear feet of temporary stream impacts. Direct stream impacts include: (1) the direct placement of fill in surface waters to accommodate road crossings, causing suspension of sediments and turbidity; (2) disturbance of stream banks or substrates resulting from buried cable installation; (3) an increase in water temperature and conversion of vegetative cover types due to clearing of vegetation; and (4) siltation and sedimentation due to earthwork, such as excavating and grading activities.[76]

A regulated navigable water of the State potentially impacted by the Facility includes a wetland area associated with Oquaga Creek. The Applicant, DPS Staff, and DEC Staff have agreed to proposed Certificate Conditions and SEEP Specifications to address the disturbance of the regulated wetland and other impacts to streams. In addition, DEC Staff proposed, and the Examiners accepted, additional modifications to the Conditions and SEEP Specifications to address stream crossings and post-construction monitoring.[77]

Based upon the proposed Certificate Conditions and SEEP Specifications modified as proposed by DEC Staff, the Examiners recommended that the Siting Board conclude that the Applicant has demonstrated that the Facility would comply with

[76] RD, pp. 47-48.

[77] RD, pp. 48-50.

the applicable statutory and regulatory standards described above under ECL Article 15 and 6 NYCRR Part 608.[78]

In her Brief on Exceptions, Intervenor DeHaan notes that the Applicant agreed to prepare a Stream Crossing Plan (SCP) that would include an analysis of the proposed collection line crossing in Oquaga Creek. DeHaan argues that, without a SCP, the identification of avoidance measures to prevent stream contamination, and public review and comment on such measures, the application is incomplete. Therefore, DeHaan argues, Siting Board review would be premature.[79]

Intervenor DeHaan takes exception to proposed Certificate Conditions 110-113, 123 and 125-129, which apply to the installation of underground collection lines and stream crossings. With respect to proposed Certificate Condition 110, DeHaan notes that the terms "dry conditions" and "appropriate water handling measures" are not defined, and recommends that they be clarified. Proposed Certificate Condition 111 would require the use of trenchless methods to bury utility cables. DeHaan inquires who would determine whether using trenchless installation methods would be practicable. Proposed Certificate Condition 113 would require the installation of bridges when a new permanent crossing is required, but would permit a culvert crossing if a bridge is not "practicable." DeHaan asserts that it is the Siting Board that must determine if Facility impacts have been mitigated to the maximum extent practicable. She

[78] RD, pp. 50-51.

[79] DeHaan Brief on Exceptions, p. 12.

asserts that it would be inappropriate for the Siting Board to delegate its authority to the Applicant.[80]

In the Applicant's Brief on Exceptions, Bluestone takes exception to the Examiners' recommendations to adopt DEC Staff's proposed modifications to Certificate Conditions 113 and 129. As recommended, the Applicant argues that proposed Certificate Condition 113 would mandate the use of bridges for all new permanent stream crossings of any stream or waterbody, regardless of the size of the stream or its protected status. The Applicant recommends that the condition should apply only to streams regulated pursuant to ECL Article 15.[81]

According to the Applicant, the installation of bridges may require more clearing and excavation than the use of culverts. As a result, installing bridges could result in greater temporary and permanent adverse impacts. The Applicant notes that DEC's stream crossing guidelines and best management practices identify other acceptable methods for crossings.[82] For the foregoing reasons, the Applicant contends that the proposed revision to Certificate Condition 113 should be rejected.[83]

With respect to proposed Certificate Condition 129, the Applicant states that it is not proposing to install any in-stream habitat structures. Therefore, the Applicant argues that

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80 DeHaan Brief on Exceptions, pp. 13-14. Other than a general reference to the findings the Siting Board must make before issuing a Certificate, DeHaan did not cite any legal authority in support of this legal proposition. Intervenor DeHaan offered nothing specific in her exceptions to proposed Certificate Conditions 123, and 125-129.

81 Bluestone Brief on Exceptions, pp. 9-10.

82 See https://www.dec.ny.gov/permits/49066.html.

83 Bluestone Brief on Exceptions, p. 10, see also Tr. 2037.

the proposed revision to Certificate Condition 129 is not applicable to the Project, and should be rejected.[84]

DPS Staff recommends the following additional language (in italics) to clarify proposed Certificate Condition 113:

> Bridges shall be installed *where practicable* wherever a new permanent crossing is required. If a bridge is not practicable for temporary or permanent stream crossings, a culvert crossing will be utilized for stream crossings and shall meet the NYSDEC and/or US Army Corps of Engineers requirements as outlined in Section B of Appendix A, "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project." *For all proposed culvert crossings of new permanent stream crossings, the Certificate Holder shall include in the SEEP written justification demonstrating that installation of a bridge is not practicable.*[85]

With respect to DeHaan's exceptions, the Applicant notes in its Brief Opposing Exceptions that the Recommended Decision, proposed Certificate Conditions, and SEEP Specifications include detailed provisions directed toward avoiding, minimizing, and mitigating surface water impacts.[86] Bluestone asserts that the responsibility for overseeing compliance with the terms and conditions of the Certificate rests with agency Staff who have the expertise to oversee design and construction of wind projects, including compliance with those certificate conditions designed to minimize and avoid surface water impacts. The Applicant argues that it would not

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[84] Bluestone Brief on Exceptions, pp. 10-11; see also Tr. 2038.

[85] DPS Staff Brief on Exceptions, pp. 10-11.

[86] Bluestone Brief Opposing Exceptions, p. 43; see, e.g., proposed Certificate Conditions 107-118 and 123-129, and SEEP Specifications Guidance §§ A(5), B(17), D(11).

be reasonable to define every term, such as "dry conditions," prior to Certificate issuance.[87]

DEC Staff argues in DEC's Brief Opposing Exceptions that the Siting Board should adopt the Examiners' recommendation related to proposed Certificate Condition 113.[88] Contrary to Bluestone's assertion, DEC Staff contends that proposed Certificate Condition 113, as outlined in the Recommended Decision,[89] does not conflict with any requirements in ECL Article 15, Title 5, and implementing regulations at 6 NYCRR part 608. Referring to DEC's stream-crossing guidelines, DEC Staff contends that "bridges and bottomless arches are preferred and should be used whenever possible."[90] Based on the foregoing, DEC Staff maintains that for each new permanent stream crossing associated with the Facility, the Applicant should first consider a bridge.[91]

DEC Staff disagrees with the Applicant's assertion that a bridge crossing would have greater impacts in the long run. A bridge may have more short-term construction-related impacts than a culvert, DEC argues, but bridges are preferred to minimize impacts to upstream and downstream resources.[92] DEC Staff also contends that poorly designed or under-sized stream-

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87 Bluestone Brief Opposing Exceptions, pp. 43-44.

88 DEC Staff Brief Opposing Exceptions, p. 2; see also RD, pp. 49-51.

89 RD, pp. 49-50; see also, Final Proposed Conditions as Modified by the Examiners per the RD, p. 48.

90 http://www.dec.ny.gov/permits/49060.html; see also http://www.dec.ny.gov/permits/49066.html.

91 DEC Staff Brief Opposing Exceptions, p. 2.

92 DEC Staff Brief Opposing Exceptions, p. 2.

crossings may increase flood damage, given increased threats associated with climate change.[93]

With respect to proposed Certificate Condition 129, DEC Staff proposed the addition of the word "habitat" to be consistent with the stipulated language in §B.17(f)(iii) of the SEEP Specifications.[94] DEC Staff notes that a 6-inch drop height refers to a maximum drop height only for in-stream habitat structures, and not for other types of in-stream structures. For other in-stream structures, such as a culvert, DEC Staff notes further that any drop-height would not be appropriate or acceptable. DEC Staff references SEEP Specifications §B.17(e)(ii), which states that any culverts must be embedded at least 20% of the culvert height beneath the existing grade of the stream channel.[95] Even though the Applicant is not currently proposing to install in-stream habitat structures for the Project, DEC Staff contends that such habitat structures may ultimately be required, and argues that for clarity and consistency with the stipulated SEEP Specifications, the Siting Board should adopt the Examiners' recommendation to include the word "habitat" in proposed Certificate Condition 129.[96]

Intervenor DeHaan's exceptions are denied. The Siting Board may lawfully rely on the post-Certificate Compliance Filing process, undertaken in consultation with agency Staff, to assure that the Project will comply with applicable State law and will otherwise avoid or minimize impacts to streams to the

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93 DEC Staff Brief Opposing Exceptions, pp. 3-4; see also Climate Leadership and Community Protection Act (L. 2019, ch. 106, § 9), modifying Community Risk Resiliency Act (L. 2014, ch. 355).

94 App. A to RD (SEEP Specifications), §B.17(f)(iii), p. 26.

95 App. A to RD, SEEP Specifications §B.17(e)(ii), p. 25.

96 DEC Staff Brief Opposing Exceptions, pp. 4-5.

maximum extent practicable.[97] We reject the notion that the Compliance Filing process amounts to an improper delegation of authority by the Siting Board. All Compliance Filings remain subject to the Siting Board's final approval.[98] The Siting Board fully retains its authority to ensure the Project complies with the applicable Certificate Conditions.

Bluestone's exceptions are granted in part and otherwise denied. DEC Staff's testimony regarding the preference for bridges for stream crossings was presented in the context of State-protected streams.[99] Neither DEC nor DPS Staff provided evidence that the preference for bridges is required to avoid or minimize impacts to streams not otherwise regulated by ECL Article 15 and, therefore, necessary to enable the Siting Board to make the required findings pursuant to PSL §168 for those streams. Accordingly, Bluestone's exceptions are granted to the extent of applying the preference for bridges to State-protected streams. However, Bluestone's other exceptions are denied because the modifications to the Certificate Conditions proposed by DEC and DPS Staffs are necessary to ensure that the Project complies with applicable State law governing protected streams. Accordingly, we otherwise adopt the recommendations of the Examiners.

b. Freshwater Wetlands

The Examiners noted that no wetlands regulated pursuant to ECL Article 24, or their associated 100-foot adjacent area, are located within the Facility's boundary. Consequently, the Facility as currently proposed would not involve activities regulated by Article 24. Accordingly, the

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97 16 NYCRR Part 1002.

98 16 NYCRR §1002.2[f], [g]

99 Tr. 1331.

Examiners recommended that the Siting Board conclude that the construction and operation of the proposed Facility would be in compliance with ECL Article 24 and its associated regulations in 6 NYCRR Parts 663 and 664.[100] No party raised exceptions to the Examiners' findings and recommendations regarding impacts to freshwater wetlands, and therefore we adopt those findings and recommendations.

c. General State Pollutant Discharge Elimination System (SPDES) Permit

As noted above, before commencing any construction activity, the owner or operator of a construction project that potentially involves the disturbance of one or more acres must obtain coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) (General Permit).[101] Coverage under the General Permit is also required for disturbances of less than one acre "that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility."[102]

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100 RD, pp. 51-52.

101 Effective date January 29, 2015 and as corrected July 14, 2015; see 6 NYCRR §750-1.21(b)(2). The General Permit is issued pursuant to DEC's authority under Article 17, Titles 7 and 8 and Article 70 of the ECL. The General Permit was updated on November 23, 2016 to require the use of the New York State Standards and Specifications for Erosion and Sediment Control (November 2016). 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).

102 General Permit, Part I(a)(1) (Permit Coverage and Limitations).

To obtain coverage, the owner or operator must prepare a Stormwater Pollution Prevention Plan (SWPPP), detailing the erosion and sediment management practices that will be used to reduce pollutants in stormwater discharges after construction is complete. The final SWPPP is filed with DEC, together with a Notice of Intent (NOI) to seek coverage under the General Permit for DEC's review. The Applicant submitted a preliminary SWPPP with its Application, indicating that Bluestone will finalize the SWPPP and submit it with an NOI to DEC for review.[103]

Intervenor DeHaan argues that the lack of a final SWPPP renders the application incomplete and premature. DeHaan excepts to allowing the Applicant to develop its final SWPPP, as well as numerous other plans not related to the general SPDES permit, after the Siting Board decides whether to grant the requested Certificate.[104]

The Applicant argues that DeHaan's exception concerning the SWPPP is baseless and reflects a lack of understanding about the rules governing SPDES permits pursuant to PSL Article 10. The Applicant notes that the SPDES General Permit for stormwater discharges from construction activities is a federally delegated permit implemented by DEC Staff. Pursuant to 16 NYCRR §1001.32(a), the Siting Board is not authorized to issue such permits. Rather, DEC Staff issue such permits. When projects, such as the Bluestone Wind Energy Facility, seek coverage under the SPDES General permit, the project sponsor must prepare a SWPPP prior to construction and submit a Notice of Intent to DEC Staff. Subsequently, DEC Staff will decide whether to grant coverage under the General Permit or require the Applicant to obtain an individual SPDES Permit. Bluestone

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[103] RD, pp. 52-53.

[104] DeHaan Brief on Exceptions, p. 15.

further notes that it cannot prepare a final SWPPP until the layout of the proposed Facility has been finalized consistent with the established procedures for implementing this federally delegated program.[105]

Intervenor DeHaan's exceptions are denied. Intervenor DeHaan's exceptions provide no justification for deviating from the regular permit review procedures applicable to DEC's SPDES General Permit. Accordingly, we conclude that the record supports the conclusion that the Project as conditioned will comply with the State SPDES water pollution control program.

d. Section 401 Water Quality Certification

The Examiners noted that the Facility will require a water quality certification (WQC) pursuant to Section 401 of the federal Clean Water Act. Section 1000.8 of 16 NYCRR governs the issuance of WQCs for Article 10 projects. To obtain a WQC, an applicant must demonstrate compliance with New York State effluent limits and standards, State water quality standards and thermal discharge criteria, State prohibited discharges, and other New York State regulations and criteria, as applicable.

Bluestone agreed to Certificate Condition 7, which requires it to file an application for a Section 401 Water Quality Certification with the Siting Board prior to construction of the Facility, concurrent with the permit application filed with the U.S. Army Corps of Engineers for wetlands impacts.[106]

In her Brief on Exceptions, Intervenor DeHaan argues that the Siting Board cannot grant the Certificate based on the expectation that the Applicant will file a WQC application prior to the start of construction activities. In addition,

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[105] Bluestone Brief Opposing Exceptions, pp. 44-45.

[106] RD, p. 53.

Intervenor DeHaan states that the regulations provide the public with the opportunity to comment on the WQC application. DeHaan also notes that the Applicant has not yet prepared and filed its WQC application. As a result, the public cannot exercise its right to comment on the WQC application.[107]

In its Brief Opposing Exceptions, the Applicant notes that 16 NYCRR §1000.8 allows Bluestone to submit its WQC application either with the PSL Article 10 application, or in conjunction with applications for federal permits where the WQC is also required. Here, the Applicant explains that the proposed Facility would require a federal wetlands permit from U.S. Army Corps of Engineers. The Applicant notes that 16 NYCRR §1000.8(a)(8) requires Bluestone to provide public notice of its request for a WQC when the Applicant files its applications for the required federal permits.[108]

Intervenor DeHaan's exceptions are denied. Consistent with the requirements under 16 NYCRR §1000.8, Certificate Condition 7 requires Bluestone to file an application for and obtain a WQC before it commences construction. Intervenor DeHaan provides no justification for diverging in this case from the standard regulatory procedures for issuance of a WQC for Article 10 projects. For these reasons, DeHaan's exception to this aspect of the Recommended Decision is denied.

5. Wildlife and Habitat

a. Wildlife Other than Bats and Eagles; Habitat

Construction and operation of the Facility could have minor adverse impacts on wildlife habitat, including temporary disturbance to habitat during construction, and the permanent conversion of a small percentage of the site to built

[107] DeHaan Brief on Exceptions, p. 15.

[108] Bluestone Brief Opposing Exceptions, p. 45.

facilities. None of the potential impacts described in the Application, however, is expected to significantly affect wildlife populations other than eagle or bat species. Impact minimization measures proposed by Bluestone include locating Facility access roads and collection lines along existing logging roads, the edges of agricultural fields, and pipeline rights-of-way, and allowing cleared forest land along access roads and at the periphery of turbine sites to regenerate to the extent practicable.[109]

The Examiners recommended that the Siting Board conclude that impacts to wildlife other than eagles and bats, and to wildlife habitat have been avoided or minimized to the maximum extent practicable. In addition, based upon proposed Certificate Conditions establishing procedures in the event threatened or endangered species are encountered during Facility construction or operation, the Examiners recommended that the Siting Board conclude that with respect to threatened or endangered species other than eagles or bats, the State endangered species laws and regulations will be complied with during Facility construction and operation.

In her Brief on Exceptions, Intervenor DeHaan contends that the Applicant did not meet its burden of proof with respect to potential adverse impacts to wildlife and wildlife habitat. In addition to locating access roads and collection lines along existing logging roads, edges of agricultural fields, as well as pipeline rights of way, and to allow cleared forest land to regenerate, Intervenor DeHaan inquires whether the Applicant could take additional steps to further minimize these adverse environmental effects.[110]

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[109] RD, pp. 39-40.

[110] DeHaan Brief on Exceptions, p. 11.

According to the Applicant, Intervenor DeHaan's allegation that Bluestone did not meet its burden of proof concerning wildlife impacts other than eagles and bats is a general objection that does not identify anything from the record to show that the Applicant's wildlife assessment was inadequate. In its Brief Opposing Exceptions, the Applicant notes the application materials that support the Examiners' recommendations.[111]

Intervenor DeHaan's exceptions are denied. DeHaan's exceptions, raised for the first time in her Brief on Exceptions, is untimely. Moreover, the weight of record evidence supports the Examiners' conclusions with regard to impacts to wildlife other than eagles and bats, and to wildlife habitat. Intervenor DeHaan identifies no record evidence that rebuts the Applicant's showing. Accordingly, we adopt the Examiners' recommendations.

b. Bats

Section 1001.22(h) of 16 NYCRR requires an applicant to identify and evaluate a project's expected impacts on bat species and habitats. The application must include a plan to avoid such impacts, or if unavoidable, to minimize and mitigate impacts during construction and operation of the project, based upon existing information. Before granting an Article 10 Certificate, the Siting Board must determine that any adverse environmental effects of the construction and operation of the facility on bats and their habitat will be minimized or avoided to the maximum extent practicable (PSL §168[3][c]).

[111] Bluestone Brief Opposing Exceptions, p. 42.

In addition, if a project is likely to result in the take[112] of any bat species listed as endangered or threatened, the Siting Board must also determine that the project is designed to operate in compliance with applicable State law protecting threatened or endangered bat species, namely the State Endangered Species Act (ECL §11-0535) and its implementing regulations at 6 NYCRR Part 182 (PSL §168[3][e]). Under Part 182, an incidental take permit is required for the take of listed species. For Article 10 projects, the incidental take permit is issued in the form of Certificate Conditions.

Here, Bluestone agreed to Certificate Conditions addressing the potential take of the Northern Long-Eared Bat (NLEB), a bat species that is listed as threatened under Part 182.[113] Those Conditions include a curtailment regime whereby turbine blades will be prevented from turning until wind speeds are 5.5 meters per second (m/s) or greater during the period from July 1 through October 1, 30 minutes prior to sunset through 30 minutes after sunrise, when temperatures are greater than 10 degrees Celsius (Certificate Condition 67). In

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[112] "Taking" wildlife is defined to include killing or capturing wildlife, as well as all lesser acts such as disturbing, harrying, or worrying. See ECL §11-0103(13); 6 NYCRR §182.2(x).

[113] A threatened species is "any species that (1) are native species likely to become an endangered species within the foreseeable future in New York based upon the criteria for listing in section 182.3(b) of this Part and that are listed as threatened in section 182.5(b) of this Part; or (2) are species listed as threatened by the United States Department of the Interior in the Code of Federal Regulations (50 CFR Part 17)." 6 NYCRR §182.2(y).

The NLEB is a federally listed threatened species by the United States Department of the Interior in 50 CFR §17.11(h) and §17.40(o). Accordingly, the NLEB is also a State-listed threatened species pursuant to 6 NYCRR §182.2(y)(2) and §182.5(b).

addition, among other measures, Bluestone will develop, in consultation with and as accepted by DEC and DPS Staffs, a net conservation benefit plan (NCBP) to achieve a net conservation benefit for unavoidable impacts to NLEB to compensate for the loss of 16 NLEBs over the life of the Facility (Certificate Condition 69) and, in consultation with DEC and DPS Staffs and the United State Fish and Wildlife Service, a post-construction avian and bat monitoring and adaptive management plan (Certificate Condition 70).

The Examiners recommended that the Siting Board adopt the proposed Certificate Conditions related to bats. Based upon those Certificate Conditions, the Examiners recommended that the Siting Board conclude that the Facility would comply with the State Endangered Species Act and Part 182 with respect to the NLEB. The Examiners also recommended that the Board conclude that adverse impacts to all bat species, including the migratory tree bats, will be avoided or minimized to the maximum extent practicable.[114]

Intervenor DeHaan takes exception to proposed Certificate Condition 69, which would require the Applicant to prepare the NCBP for NLEB in consultation with Staff members from DEC and DPS prior to the construction and operation of the Facility. Intervenor DeHaan maintains that no reason exists why the Applicant cannot prepare the NCBP to provide the public with the opportunity to comment about it before the Siting Board grants a Certificate. Intervenor DeHaan repeats the assertion that the Siting Board is improperly delegating its statutory responsibilities to DEC Staff to approve a NCBP without any public involvement.[115]

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[114] RD, p. 57.

[115] DeHaan Brief on Exceptions, pp. 16-17.

In its Brief on Exceptions, BCCR again raises its general exception to the Recommended Decision's section on bats.[116] As concluded above, however, by only raising a general exception, BCCR has waived any objection to the Examiners' recommendations regarding bats.[117]

In response to Intervenor DeHaan's exception, the Applicant notes that it prepared a Net Conservation Benefit Plan for the NLEB and filed it with the application.[118] The Applicant notes further that it would prepare a final plan as a Compliance Filing, and that the final plan would incorporate any of the Siting Board's recommendations. The Applicant argued that the Siting Board should reject Intervenor DeHaan's exception because it is based on an incorrect premise.[119]

Intervenor DeHaan's exceptions are denied. As noted by the Applicant, Bluestone will develop an NCBP for bats in consultation with DPS and DEC Staffs. The final plan will be submitted as a Compliance Filing, at which time any interested person or party may file comments regarding the filing.[120] This procedure, which is permitted under the regulations, provides us with adequate assurance at this time that the Project will comply with applicable State Endangered Species law and regulations, and will otherwise avoid and minimize impacts to all bat species to the maximum extent practicable. It is not necessary to have the final NCBP before us to make the required findings. Accordingly, we adopt the Examiners' recommendations regarding impacts to bats.

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116 BCCR Brief on Exceptions, p. 8.

117 16 NYCRR §4.10(d)(2).

118 See Hrg. Exh. 2, App. Exh. 22, Appendix TT.

119 Bluestone Brief Opposing Exceptions, p. 46.

120 16 NYCRR §1002.2(d).

c. Bald Eagles and Golden Eagles

In addition to requiring information regarding impacts to bat species and habitat, section 1001.22(h) of 16 NYCRR requires an applicant to identify and evaluate a project's expected impacts on avian species and habitats. The application must include a plan to avoid such impacts or, if unavoidable, to minimize and mitigate impacts during construction and operation of the project, based upon existing information. Before granting an Article 10 Certificate, the Siting Board must determine that any adverse environmental effects of the construction and operation of the facility on birds and their habitat will be minimized or avoided to the maximum extent practicable (PSL §168[3][c]). In addition, if a project is likely to result in the take of any bird species listed as endangered or threatened, the Siting Board must also determine that the project is designed to operate in compliance with the State Endangered Species Act and 6 NYCRR Part 182 (PSL §168[3][e]).

The parties documented the presence of both the threatened bald eagle[121] and the endangered golden eagle[122] in the area of the proposed Facility. The Facility area includes habitat suitable for wintering and migrating golden eagles. The area also includes habitat for resident and wintering bald

[121] In 1967, the bald eagle was listed as endangered in the lower 48 states on the federal endangered and threatened species list. In 1971, New York State also listed the bald eagle as endangered. As a result of the State's restoration efforts, the bald eagle has been listed as threatened since 1999. RD, p. 58.

[122] The golden eagle has been listed as an endangered species in New York since 1981. RD, p. 58.

eagles, including nests located approximately 5 kilometers from the Facility site.[123]

Due to the documented use of the Facility area by bald and golden eagles, and the potential for those species to collide with wind turbines during migration, or while hunting or roosting, DEC Staff concluded that the Facility could potentially result in the take of bald or golden eagles. Accordingly, DEC Staff concluded that requirements of the Endangered Species Act and Part 182 applied to the Facility with respect to the listed bird species.[124]

Bluestone agreed to Certificate Conditions addressing the potential take of bald and golden eagles. Those Certificate Conditions include the development of a NCBP for the bald and golden eagles (Certificate Condition 69) and a post construction avian and bat monitoring and adaptive management plan (Certificate Condition 70). The Conditions also include bald and golden eagle protection measures, including development of a bio-monitor (human observer) or automated avian detection and curtailment technology system to curtail certain turbines during spring and fall migration periods when eagles are detected in the Facility area, and ongoing adaptive mitigation (Certificate Condition 68).

The dispute among the parties centered on the estimated take of bald and golden eagles that Bluestone would be required to compensate for in the NCBP. Bluestone and DEC Staff agreed that the Facility had the potential to take six bald eagles and three golden eagles over the 30-year life of the project.[125] DOAS and Intervenor DeHaan challenged Bluestone's

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[123] RD, p. 59.

[124] RD, pp. 59-60.

[125] RD, pp. 60-63.

take estimate based upon an analysis using the Bayesian Risk Model employed by the U.S. Fish and Wildlife Service.[126] The Examiners rejected the intervenors' challenge on the ground that the Bayesian Risk Model is not appropriate for analyzing compliance with the State Endangered Species Act, which has requirements different from the federal law. The Examiners also concluded that intervenors offered no witnesses qualified to testify about how to conduct Bayesian Risk Model analyses or interpret their results, or qualified expert evidence refuting the Applicant's take estimate. Accordingly, the Examiners recommended that the Siting Board accept the Applicant's estimated take of six bald eagles and three golden eagles over the 30-year life of the Facility.[127]

The intervenors also challenged as insufficient and unacceptable the minimization and mitigation measures Bluestone proposed for the NCBP. In addition, the intervenors challenged Bluestone's proposal to use adaptive management to avoid and minimize impacts to the listed species. The Examiners rejected the intervenors' challenges based upon the analysis of the DEC Staff and the testimony of Bluestone's expert on adaptive management.[128]

The Examiners concluded that Bluestone carried its burden of proving that the Facility would operate in compliance with the State Endangered Species Act and Part 182. Accordingly, the Examiners recommended that the Siting Board

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[126] In the NCBP, Bluestone provided an estimated take of bald and golden eagles based on the Bayesian Risk Model. Those estimates are confidential. RD, p. 63, n. 220.

[127] RD, pp. 66-68.

[128] RD, pp. 72-79.

adopt Conditions 68, 69, and 70 as proposed by DEC Staff and Bluestone.[129]

DOAS takes exception to the Examiner's recommendation to issue a Certificate for the proposed Facility. DOAS contends that the evidence offered by DOAS's witnesses demonstrated the significant risks associated with the construction and operation of the proposed Facility to bald and golden eagles. In its Brief on Exceptions, DOAS notes, among other things, that its members conducted 384 hours of raptor surveys in the project study area during the fall of 2017, and the late-winter and spring of 2018 and 2019. During these surveys, eagles were observed flying along the ridges where turbines would be sited. During 236 hours of winter and spring surveys conducted from the Oquaga Creek Valley, DOAS mapped 502 eagle flight paths, which included 70 golden eagle observations. According to DOAS, many of these birds were flying lower than 200 meters, near the proposed locations of turbines 25, 26, and 29. DOAS argues that the Examiners inappropriately relied on the inadequate and inaccurate testimony offered by DEC and DPS staff witnesses as the bases for the findings outlined in the Recommended Decision.[130]

DOAS objects to the Applicant's claim of confidentiality concerning the estimated eagle take. DOAS argues that the public was inappropriately precluded from accessing this information, which resulted in the omission of data crucial to assessing the potential risks to eagles from the construction and operation of the proposed Facility. DOAS also objects to the Examiners' failure to rule on a motion related to the disclosure of this information. According to DOAS, the lack

[129] RD, pp. 79-80.

[130] DOAS Brief on Exceptions, pp. 2-4, 5-6.

of a ruling is cause for the Siting Board to withhold a decision on the proposed Facility until the disclosure issue has been addressed.[131]

DOAS argues that the Applicant's proposed avoidance and minimization measures are inadequate. DOAS objects to proposed Certificate Condition 68 due to its very limited curtailment of certain turbines, based on either a human or automated system. DOAS argues that it would be impossible for any human observer to watch all the high-risk turbines or view the eagles approaching them. In addition, DOAS argues that automated detection systems are generally unproven and, in particular, do not detect birds below the horizon.[132]

DOAS argues that relying on the adaptive management process to develop the NCBP is speculative and unproven for the following reasons. First, the process would depend on the Applicant's eagle observations and the number of individual birds taken during operations. Second, the plan would rely on observations that would be physically impossible to make. Third, the known mortality surveys are inadequate. Finally, the source of all data related to eagle mortality would come from the Applicant who would be the entity most harmed by disclosure of this information.[133]

DOAS objects to DEC Staff’s proposal to fund wildlife rehabilitators to treat golden eagles as part of the NCBP. DOAS notes, however, that testimony from its witnesses showed that golden eagles rarely need rehabilitation treatment, and that funding for eagle rehabilitators is not a limiting factor in

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131 DOAS Brief on Exceptions, p. 4.

132 DOAS Brief on Exceptions, p. 5; see also BCCR Brief on Exceptions, p. 10.

133 DOAS Brief on Exceptions, p. 5 and 7; see also BCCR Brief on Exceptions, pp. 10-11.

treating these birds. According to DOAS, the Applicant has not identified any effective, quantifiable mitigation for golden eagles.[134]

Intervenor DeHaan notes that DEC Staff recommended the following mitigation to avoid adverse impacts to eagle species. First, DEC Staff identified 10 turbines that should be removed; however, the Applicant agreed to remove only two of them. Second, DEC Staff recommended micro-siting some of the turbines that are most likely to result in collisions, but the Applicant also objected to this proposed mitigation.[135] Intervenor DeHaan argues that the Applicant has the burden to show that either removing or micro-siting turbines would not be practicable, and contends that the Applicant failed to meet this burden.[136]

DeHaan notes further that DEC Staff recommended additional mitigation in the form of daytime curtailment based on an observation system during certain times of high levels of eagle activity.[137] Intervenor DeHaan asserts that the limited curtailment plan accepted by the Applicant, which would rely on one human observer, would not be sufficiently protective, and argues that the Applicant did not prove that implementing a broader curtailment strategy, such as one observer for each of the three at risk turbines, would be impractical. Intervenor DeHaan also objects that the Applicant has not been required to present a complete mitigation plan, and contends that the Siting Board cannot determine whether significant adverse environmental effects would be minimized to the maximum extent practicable unless the Siting Board knows the contents of the entire plan.

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[134] DOAS Brief on Exceptions, p. 6.

[135] RD, p. 70.

[136] DeHaan Brief on Exceptions, pp. 19-20.

[137] RD, pp. 70-71.

Intervenor DeHaan states that these circumstances are another example of how the application is incomplete.[138]

According to Intervenor DeHaan, when intervening parties objected to the proposed NCBP for eagles, the Applicant was obliged to show that the proposed mitigation would minimize adverse impacts to the maximum extent practicable. Intervenor DeHaan takes exception to relying on adaptive management to develop the NCBP subsequent to the Siting Board's final determination.[139]

In its Brief on Exceptions, BCCR argues that the Examiners "distorted" the burden of proof. BCCR argues that ample record evidence supports the conclusion that the Applicant and DEC Staff failed to substantiate the estimated take of six bald and three golden eagles over 30 years with any evidence whatsoever. BCCR asserts that it should not be intervenors' burden to refute non-existent evidence with expert testimony. Rather, BCCR claims that intervenors properly exposed the lack of evidence supporting the Examiners' conclusions through cross-examination of the proffered experts.[140]

In its Brief Opposing Exceptions, Bluestone argues that the Examiners correctly held that Bluestone satisfied its burden under PSL §168(3) and ECL Article 11, and has avoided, minimized, and mitigated impacts to bald and golden eagles to the maximum extent practicable.[141] Bluestone asserts that, contrary to the exceptions raised by DOAS, Intervenor DeHaan, and BCCR, the Examiners considered all the evidence in the record regarding risks to bald and golden eagles, and correctly

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[138] DeHaan Brief on Exceptions, pp. 21-22.

[139] DeHaan Brief on Exceptions, pp. 22-23.

[140] BCCR Brief on Exceptions, pp. 10-11.

[141] Bluestone Brief Opposing Exceptions, p. 11.

gave greater weight to the evidence presented by the Applicant, DPS Staff, and DEC Staff.[142] Bluestone further asserts that the weight of record evidence supports the minimization and mitigation measures incorporated into the recommended Certificate Conditions.[143] Bluestone argues that it demonstrated that the removal of more than 30 percent of the turbines from the Facility as proposed by intervenors, and the curtailment strategies advocated by Intervenor DeHaan are impracticable and would jeopardize the Project.[144]

With respect to the estimated take numbers agreed to by Bluestone, DPS Staff, and DEC Staff, Bluestone asserts that those estimates are supported by the weight of record evidence. Bluestone further argues that the Examiners correctly declined to use the Bayesian Risk Model to calculate the potential take of eagles under State law.[145] As to DOAS's objections regarding the confidentiality of the estimated eagle take, Bluestone notes that DOAS had access to the confidential information under the Protective Order and has had a full and fair opportunity to examine the issue.[146]

With respect to biomonitoring and the curtailment strategy for eagles, Bluestone asserts that DOAS's objections are not based on record evidence. To the contrary, Bluestone contends that automated eagle detection systems have been successfully employed in the United States, Germany, and Australia in a variety of topographical and vegetational

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[142] Bluestone Brief Opposing Exceptions, pp. 12-13.

[143] Bluestone Brief Opposing Exceptions, pp. 13-14.

[144] Bluestone Brief Opposing Exceptions, pp. 14-15.

[145] Bluestone Brief Opposing Exceptions, pp. 16-18.

[146] Bluestone Brief Opposing Exceptions, p. 16, n. 8.

settings.[147] Similarly, Bluestone contends that, contrary to DOAS's argument, record evidence supports the conclusion that golden eagles will benefit from increased resources for wildlife rehabilitators. Bluestone asserts that it is committed to working with DEC Staff and DPS Staff to develop an effective adaptively management monitoring protocol and mitigation measures that will result in a net conservation benefit to the two species.[148]

In its Brief Opposing Exceptions, DEC Staff takes issue with DOAS's criticism of increased funding for wildlife rehabilitators as part of a NCBP for golden eagles. First, DEC Staff notes that criticism of the NCBP for golden eagles is premature because Bluestone has not prepared and submitted a final plan for review and acceptance by DEC. In addition, DEC Staff contends that in the NCBP, Bluestone may include other potentially acceptable mitigation measures aside from rehabilitation measures. DEC Staff assures the Siting Board that the Applicant will be required to implement a DEC-approved NCBP to mitigate all remaining impacts to golden eagles after minimization measures are implemented. Accordingly, DEC Staff urges that based upon the proposed Certificate Conditions relevant to golden eagles, the Siting Board may conclude that the Project will comply with applicable State endangered species law and regulations.[149]

Intervenors' exceptions are denied. We agree with the Examiners that the weight of record evidence supports the number of eagles potentially taken by the Project as estimated by Bluestone and DEC Staff. We also agree with the Examiners that

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[147] Bluestone Brief Opposing Exceptions, p. 18.

[148] Bluestone Brief Opposing Exception, pp. 18-19.

[149] DEC Staff Brief Opposing Exceptions, pp. 5-7.

the Bayesian Risk Model is not an appropriate method for calculating takings for purposes of State endangered species law. DEC Staff's expert witness testified that, based on data from currently operating wind facilities in New York, the Bayesian Risk Model significantly overpredicts the number of eagles taken by wind projects in the State.[150] Finally, we conclude that the procedure by which Bluestone will develop a NCBP in consultation with, and subject to the acceptance of, DPS and DEC Staff and submit the plan to the Siting Board as Compliance Filings provides adequate assurance that the Project will comply with State Endangered Species law and regulations, and will avoid and minimize impacts to eagles to the maximum extent practicable. Accordingly, we adopt the recommendations of the Examiners.

## D. Public Health and Safety

### 1. Shadow Flicker

Shadow flicker refers to intermittent changes in light intensity in a given location due to the interaction of a wind turbine's blades with the sun.[151] 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.[152] The RD summarizes the issues developed by the parties in the proceeding.

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[150] RD, p. 62; Tr. 43-44, 94.

[151] Hrg. Exh. 2, Application (App.) Exh. 15, p. 8.

[152] Hrg. Ex. 2, App. Exh. 15, pp. 8-9.

In the RD, the Examiners recommended that the Siting Board adopt Proposed Certificate Condition 64 and the related provisions of the SEEP. Subject to these conditions and terms, the Examiners concluded the record will support a Siting Board finding that the adverse environmental effects of shadow flicker related to the construction and operation of the facility will be minimized or avoided to the maximum extent practicable, and a finding that construction and operation of the Facility will be in the public interest.

No party has raised any valid exceptions to the Examiners' recommendations regarding shadow flicker. For example, BCCR asserts on exception that shadow flicker is a critical health outcome and contends that further study is necessary because the proposed mitigation measures for shadow flicker impacts will not adequately protect public health.[153] We reject this exception because BCCR failed to show how the Applicant has improperly addressed this issue in the case.[154] Similarly, while DeHaan posed hypothetical questions regarding shadow flicker, her brief on exceptions did not cite any grounds for exception or offer any argument in support of any exception, as is required by Rule 4.10.[155] For the reasons established in the RD, we find that the Applicant has appropriately addressed the issue of shadow flicker.

2. Noise and Vibration

a. Regulatory Limits and Design Goals

After extensive discussion of the record, the Examiners recommended that we adopt the same design and regulatory limits for noise that were applied to the Baron Winds

[153] BCCR Brief on Exceptions, p. 11.

[154] 16 NYCRR §4.10(c)(2).

[155] 16 NYCRR §4.10(c)(2).

project. These are listed at Certificate Conditions 75 through 82. They include a short-term limit of 45 dBA-Leq-8-hour applicable during all hours of the day at non-participating residences and a limit of 55 dBA Leq-8-hour applicable all hours of the day for participating residences. The design goals include a long-term standard of 40 dBA Lnight outside at non-participating residences and 50 dBA Lnight at participating properties. The Examiners noted that the arguments offered for stricter limits were the same as those presented in the Baron Winds case and found that nothing in this record dictated a different result.

We note that, since the order in the Baron case, we have issued a Certificate in the Number Three Wind case that adopts the same short-term standard and design goals. As we indicated there, we expect to apply these standards in future cases unless and until new scientific evidence develops that suggests the approach is not adequately protective of human health. Thus, we accept the Examiners' recommendation for a short-term limit of 45-dBA-Leq [8-hour] at non participating and 55 dBA Leq-8-hour at participating residences. For similar reasons, we also adopt the long-term design goals of 40 dBA Lnight outside and 50 dBA Lnight outside at non-participating and participating residences, respectively.

Bluestone objected to the RD's suggestion that the short-term limit should apply during daytime and night time hours. The Applicant argues that a daytime regulatory noise limit is not necessary because daytime activities are not as noise sensitive, and because noise limits are intended to protect against sleep disturbance and annoyance. For these reasons, Bluestone asserts, the Siting Board should not set a

regulatory noise limit during the day.[156] However, as the RD notes, we have dealt with this issue in earlier cases, and most recently in the Number Three Wind case, where we held that the same short term limit would apply in both day and night time hours.[157] We see nothing in this case to support departing from the approach we have established in our earlier decisions on this issue.

Bluestone also excepts to the recommendation for sound power limits under Certificate Condition 75(c)(ii). Bluestone argues establishing a maximum sound pressure level for the turbines is unnecessary because design goals and noise limits at receptors will be sufficiently protective. Conversely, Bluestone argues, limiting sound pressure levels at turbines may discourage project design innovations that could have obvious environmental benefits. Bluestone points out that in the Baron Winds case DPS Staff agreed with this position, and the Siting Board itself chose not to impose any sound power limits.[158]

We agree with Bluestone. Based on the Examiners' reasoning in the RD,[159] and on our prior precedent, we reject Proposed Certificate Condition 75(c)(ii), which would establish limits for apparent sound power limits from the turbines at any wind speed at hub height.[160] We find that such sound power

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156 Bluestone Brief on Exceptions, pp. 13-14.

157 RD, pp. 93-94.

158 Case 15-F-0122, Baron Winds LLC – Wind Electric Generation Siting, Order Issuing CECPN With Conditions (issued September 12, 2019), p. 131; Errata Notice (issued October 4, 2019).

159 RD, pp. 89-96.

160 RD, Attachment A, Final Proposed Certificate Conditions, June 6, 2019, As Modified by the Examiners Per the RD, p. 31, Certificate Condition 75(c)(ii). See Case 15-F-0122, supra, Errata Notice (issued October 4, 2019) (striking Certificate Condition 68(d)(ii) to conform to the discussion on page 131 of the Siting Board Order).

limits are not necessary and need not be imposed. Nothing in the record before us requires a different approach in this case.

BCCR disagrees with the Examiners' recommendation to apply the same design and regulatory limits that were applied to Baron Winds to this proceeding.[161] BCCR claims that the Examiners improperly relied on information outside of the record in coming to their conclusion. We disagree. The Examiners carefully reviewed the record in this case and properly took in to account our decisions in earlier cases on noise issues. They evaluated the evidence and noted that nothing in the record suggested that the Siting Board should adopt a different standard than it established in the Baron order. As we stated in Number Three, because of the need for reasonable regulatory certainty, "the prospect of allowing such varying results" in similar cases should be avoided.[162]

BCCR also asserts that the Examiners did not consider the testimony of BCCR's health expert, Dr. Jerry Punch, about the negative health impacts associated with noise from wind turbines.[163] The RD demonstrates otherwise.

Finally, BCCR also rejects any weighing of project impacts against project benefits, asserting that "a certificate cannot be awarded unless adverse environmental impacts are minimized or avoided."[164] We disagree with BCCR's assertion that Article 10 requires identified impacts to be avoided or minimized regardless of other considerations. The statute adds

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161 BCCR Brief on Exceptions, p. 11.

162 Case 16-F-0328, Number Three Wind, LLC – Wind Electric Generation Siting, Order Granting Certificate of Environmental Compatibility and Public Need, with Conditions (issued November 12, 2019), p. 71.

163 BCCR Brief on Exceptions, p. 12.

164 BCCR Brief on Exceptions, pp. 13.

qualifiers: impacts must be "adequately" minimized, or avoided "to the maximum extent practicable."[165] This language suggests that we should interpret the statute in the context of the overall aims the Legislature intended to achieve. Further, the statute also requires the Siting Board to consider and weigh several factors, including "the consistency of the construction and operation of the facility with the most recent State energy plan."[166] Thus, contrary to BCCR's view, the statute directs the Siting Board to consider and balance different factors when evaluating whether impacts have been avoided or mitigated to the extent practicable.

b. Modeling Issues and Post Construction Monitoring

Having identified the performance standards that Bluestone will be expected to meet, we turn to questions related to the computer modeling that will be used to measure that performance. We note that the record reflects a significant amount of debate on this issue. As with the noise standards, our prior cases also dealt with concerns and disputes about approaches to noise modeling. We believe it is appropriate now to state our expectations for how noise modeling should be conducted, in order to clarify matters for future developers and other parties.

The key issue in these debates turns on whether or not the proposed modeling methodology is sufficiently "conservative." We understand that a computer model is not a perfect predictor of actual conditions, and we appreciate that model results depend to some extent on the inputs selected for the model. We recognize that different input assumptions may also be equally reasonable. Given this uncertainty, we believe

[165] PSL §168(3)(c).

[166] PSL §168(4).

a “conservative” approach –- one that tends to overstate actual noise levels –- is more protective of human health than a methodology that risks underestimating noise impacts. We have adopted similar methods in other cases for this reason. We will continue to follow the same approach.

In the Recommended Decision, the Examiners concluded that the inputs considered in Bluestone’s proposed modeling will produce results that avoid underpredicting the noise and vibration impacts of the Facility.[167] The Examiners further noted that Bluestone’s proposed noise modeling parameters are similar to parameters used in other wind energy projects, which have been verified through extensive post-construction measurements demonstrating that, even under worst-case conditions, actual measured sound levels are consistently below predicted sound levels.[168]

In its brief opposing exceptions, DPS Staff, for the first time, took exception to the use of a 1.5 meter receptor height for noise modeling.[169] Based on this, the Applicant sought leave to file a letter “reply” to DPS Staff’s Brief Opposing Exceptions.[170] We do not consider DPS Staff’s exception because DPS Staff raised this for the first time in its brief opposing exceptions, which is prohibited under Rule 4.10.[171] We also note that Bluestone’s modeling of a 1.5 meter receptor height was consistent with Stipulation 19. Since we do not

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167 RD, p. 100.

168 RD, p. 100.

169 DPS Staff Brief Opposing Exceptions, pp. 3-4.

170 Bluestone Letter to Acting Secretary Phillips (November 12, 2019).

171 16 NYCRR §4.10(c)(3).

entertain DPS Staff's exception, there is no reason to consider Bluestone's "reply" to DPS Staff's brief opposing exceptions.[172]

We adopt the Examiners' reasoning and recommendations for noise modeling, including the 1.5-meter receptor height requirement.[173] We find the methodology is appropriately conservative to avoid the risk of underpredicting noise, and that is supported by the literature.

We agree with the Examiners that the Applicant's post-construction monitoring protocol is sufficient to verify compliance with the regulatory limits imposed herein. We believe that the protocol will also ensure that Bluestone appropriately responds to noise and vibration complaints.[174] We will not require monitoring for compliance with long-term noise limits.[175] We note that our prior decisions concluded that establishing and then monitoring for long-term noise limits was unnecessary and impractical.[176] Relying on the record and our prior precedents, we adopt Bluestone's proposed noise monitoring protocol.

We do however identify an error in the RD with respect to Certificate Condition 76, which addresses the protocol to be followed for post-construction sound testing for the purpose of assessing Bluestone's compliance with the noise limitations we adopt in this order. In the RD, Certificate Condition 76 specified that measurements be taken at the 31.5 and 63 Hertz

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172 16 NYCRR §4.10(a) (unless authorized, pleadings other than briefs on exceptions and briefs opposing exceptions will not be entertained).

173 RD, pp. 100-101.

174 RD, p. 100-101.

175 RD, p. 102.

176 Case 15-F-0122, supra, Order Issuing CECPN With Conditions (issued September 12, 2019), pp. 122-123; Errata Notice (issued October 4, 2019).

frequency bands. This was in error because it is not consistent with the record. DPS Staff and Bluestone support a Sound Testing Compliance Protocol specifying that, when Bluestone conduct post-construction noise measurements, "[a]ll one-third octave band measurements will include the frequencies from 12.5 Hz through 10,000 Hz [and any] full octave band measurements will include the frequencies from 16 Hz through 8,000 Hz."[177] Because both DPS Staff and Bluestone agreed to this provision,[178] the record supports measurements at 16, 31.5 and 63 Hz, and does not support the more limited requirement specified in the RD.

We note that sonic energy at the 16 Hz frequency level is classified as infrasound. Local residents have expressed strongly-held concerns about the potential adverse impacts of infrasound. Given the possibility of complaints related to infrasound, it is important that post-construction noise

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[177] Hrg. Exh. 126, Paragraph 3(c), page 3 of 18.

[178] Bluestone witness O'Neal supported a Sound Testing Compliance Protocol specifying that "[a]ll one-third octave band measurements will include the frequencies from 12.5 Hz through 10,000 Hz [and] [a]ny full octave band measurements will include the frequencies from 16 Hz through 8,000 Hz." Hrg Exh. 126 (Rebuttal Exh. RO-R4), Section (3)(c), page 3 of 18. He also testified in support of Certificate Condition 79 which requires that "all noise levels from all noise sources from the Facility must 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 nonparticipating residence." O'Neal Rebuttal Testimony, p. 5 of 31, lines 2-9. Finally, O'Neal testified that one of Bluestone's design goals was "predicted sound levels at 16 Hz (infrasound), and 31.5 Hz and 63 Hz (low frequency sound)." Id.

In its Post-hearing Reply Brief, DPS Staff supported a noise protocol with identical language. On exceptions, Staff agreed with terms of Hearing Exhibit 126. Thus, in this case both Bluestone and Staff have agreed to post-construction noise measurements at the 16, 31.5 and 63 Hz frequency bands.

measurements include measurements at the infrasound level. To conform the requirements for post-construction noise measurements to the sound limits imposed by this order, we amend Certificate Condition 76 to specify that post-construction sound measurements will be taken at the 16 Hz, 31.5 Hz, and 63 Hz frequency bands.

E. Cultural, Historic and Recreational Resources

Pursuant to PSL §168(2)(c), the Siting Board must make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility, including impacts to cultural, historic, and recreational resources, including aesthetics and scenic values. Before an Article 10 Certificate may be issued, PSL §168(3)(c) requires the Siting Board to find that the adverse effects of the construction and operation of a facility on these resources will be minimized or avoided to the maximum extent practicable. In making its findings, the Siting Board may impose, and monitor compliance with, any terms and conditions it deems necessary.

1. Visual Impacts

The Examiners found that 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 nature and extent of visual impacts are represented in the visual impact assessment (VIA), which among other things, identifies visually sensitive resources, and provides high-resolution computer-enhanced photographic simulations from various viewpoints. The visual study area considered a 10-mile radius from the Facility.[179]

[179] RD, pp. 107-108.

With respect to construction, the Examiners found that potential visual impacts are anticipated to be relatively minor and temporary. Proposed Certificate Conditions would require all temporarily disturbed areas to be restored to original grades and reseeded to minimize visual impacts following the completion of construction.[180]

The Examiners found that measures to minimize and mitigate visual impacts are limited given the height of wind turbines generally. However, the Applicant agreed to incorporate recommendations outlined in DEC Program Policy: *Assessing and Mitigating Visual Impacts*, DEP-00-2 (NYSDEC, 2000) (NYSDEC Visual Policy), which are included in proposed Certificate Condition 43.[181] In addition, the terms of proposed Certificate Condition 54 (Facility Exterior Lighting Plan) would address design and control measures appropriate for mitigating impacts from lighting.[182]

With the appropriate Certificate Conditions in place, the Examiners recommended that the Siting Board conclude that the potential impacts to scenic resources would be minimized or avoided to the maximum extent practicable as required by PSL §168(3)(c).[183]

BCCR argues in its Brief on Exceptions that the character of the community would be negatively impacted and, therefore, fundamentally altered if the Siting Board issues a Certificate for the proposed Facility. Referring to the Recommended Decision, BCCR questions the significance associated with its members residing 1.5 miles or more from the nearest

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[180] RD, p. 110.

[181] RD, p. 111.

[182] RD, p. 112.

[183] RD, p. 112.

turbine.[184] BCCR contends that the proposed turbines with blinking lights would be visible from 1.5 miles away. BCCR argues that the VIA is deficient because it does not include nighttime simulations based on the actual turbines that would be installed. In addition, BCCR notes that the lighting plan was not available for review prior to the adjudicatory hearing. BCCR asserts that as a result, potential adverse visual impacts were not properly considered. BCCR argues that the record does not include sufficient evidence for the Siting Board to conclude that visual effects with their associated potential adverse impacts on community character would be avoided or mitigated to the maximum extent practicable.[185]

In her Brief on Exceptions, DeHaan notes that the Applicant promised to provide nighttime simulations, but did not provide them because, without selecting a turbine model, the Applicant could not determine what the nighttime lighting would be. Intervenor DeHaan observes that, based on these circumstances, the Applicant essentially supports her assertion that the application is incomplete.[186]

DeHaan takes exception to the finding that the field reviews conducted on March 27, April 29, and May 24, 2018, considered various weather and foliage conditions.[187] According to DeHaan, the landscape was not documented over different seasons because the Applicant conducted the surveys within a two-month period in the spring.[188]

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184 RD, p. 109.

185 BCCR Brief on Exceptions, pp. 14-15.

186 DeHaan Brief on Exceptions, p. 29.

187 RD, p. 109.

188 DeHaan Brief on Exceptions, p. 30.

According to Intervenor DeHaan, potential visual impacts from the construction and operation of the proposed Facility could be minimized by decreasing the height of the turbines, reducing the number of turbines, or both. Despite the Applicant's burden of proof, DeHaan argues that Bluestone did not provide any analyses concerning these alternatives. DeHaan argues further that it is not sufficient for the Applicant to assert that such alternatives would not be economically feasible. Rather, an evidentiary record should have been developed, but DeHaan contends that the Applicant refused to provide these alternative analyses for review and consideration.[189]

Intervenor DeHaan expresses concern about who would determine the feasibility of installing the radar-activated detection lighting system (ADLS) to mitigate the potential impacts associated with Federal Aviation Administration (FAA) lighting at night. DeHaan argues the determination should be based on whether this mitigation measure is practicable and should be made by the Siting Board. DeHaan recommends that Bluestone be directed to review the feasibility of using the radar-activated lighting system and to submit the reports for review before the application is considered complete.[190]

Bluestone opposes BCCR's exceptions, arguing that BCCR offered no evidence supporting its position that visual impacts have not been mitigated to the maximum extent practicable. Bluestone asserts its VIA was prepared in accordance with the applicable regulations, 16 NYCRR §1001.24, as clarified by the Stipulations agreed to by key parties. Bluestone asserts that its VIA, together with the testimony of its expert panel,

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[189] DeHaan Brief on Exceptions, p. 30.

[190] DeHaan Brief on Exceptions, p. 31.

provides a sufficient basis on which to assess the visual impacts of the Project, as recognized by the Examiners in the Recommended Decision. With respect to the Examiners' observation that three of the four BCCR members reside at least 1.5 miles from the nearest turbine, Bluestone asserts the Examiners were merely stating facts and were not discounting the objections of BCCR's members. Bluestone contends that in any event the visual impacts of wind farms are not evaluated based on whether individual residents will have views of a project. Rather, Bluestone argues, visual impacts are evaluated based upon a representative assessment identifying and analyzing potential impacts on a range of landscape types, user-groups and distance zones in the study area, as well as site-specific review of a facility's visibility from sensitive locations, including public lands and recreational resources. Bluestone contends that its VIA provides the required representative assessment. Finally, Bluestone argues a final lighting plan will be developed and filed in a Compliance Filing, and the absence of such a final plan in the Application provides no basis for denying a Certificate.[191]

Bluestone also opposes DeHaan's exceptions, arguing that, contrary to DeHaan's assertions, it performed a comprehensive assessment of nighttime impacts examining, among other things, the potential visibility of FAA warning lights. Bluestone asserts that its VIA contains a sufficient analysis of the Project's impacts during different seasons and under varying sky conditions. With respect to the ADLS, Bluestone notes that it is the FAA, not the Siting Board, that will determine whether the system may be used at the Facility. If the FAA approves the system, Bluestone has agreed to address the merits of the system

[191] Bluestone Brief Opposing Exceptions, pp. 31-33.

at the Facility. Finally, with respect to DeHaan's assertion that the alternative of shorter turbines should be analyzed, Bluestone argues that it is only required to consider "reasonable alternatives" under 16 NYCRR §1001.9[c], and contends that shorter turbines would significantly impact the technical and economic feasibility of the Project and would not be reasonable.[192]

The exceptions asserted by Intervenors are denied. Bluestone's VIA provides a valid basis for the necessary findings and the preponderance the record evidence supports the Examiners' conclusions. With respect to an ADLS, assuming the FAA approves the system for use at the Facility, Bluestone has agreed to assess its feasibility, and will install and use the system, if feasible. Contrary to Intervenor DeHaan's assertions, the Siting Board will make the final determination whether to approve the system, not Bluestone. Accordingly, we adopt the recommendations of the Examiners regarding the potential impacts to scenic resources from the Project.

2. Non-Visual Impacts

With respect to archaeological resources, the Applicant prepared a Phase 1A Archaeological Resources Survey and Phase 1B Fieldwork Plan to identify the Area of Potential Effect (APE) associated with the Facility site. The Applicant then followed up with a Phase 1B Archaeological Resources Study. The April 2019 update included changes in the Facility layout. As a result, some components of the proposed Facility were not initially reviewed as part of the Phase 1B archaeological survey, and additional reconnaissance was undertaken. The

[192] Bluestone Brief Opposing Exceptions, pp. 47-48.

results of the survey did not identify any additional resources.[193]

Bluestone agreed to Certificate Conditions to avoid potential impacts to archaeological resources. For example, construction drawings will identify all mapped locations of archaeological sites within 100 feet of any components related to the proposed Facility, and the locations of these sites would be identified in the field with construction fencing and signs restricting access. If potential impacts cannot be avoided, the Applicant would undertake a Phase 2 archaeological investigation consistent with OPRHP guidance. Finally, Applicant would develop an Unanticipated Discovery Plan that would require a Registered Professional Archaeologist to evaluate and document any archaeological resources during construction.[194]

The Applicant also assessed the potential adverse impacts of the proposed Facility on cultural and historic resources. As outlined in the Historic Resources Survey Report and supporting application materials, the proposed Facility would not damage or remove any of the identified historic architectural resources. The only potential effect on historic properties from the proposed Facility would be a change in the visual setting of the properties resulting from the introduction of wind turbines into the landscape. Bluestone has accepted Certificate Condition 66.[195]

The Examiners recommended that the Siting Board adopt the proposed Certificate Conditions related to archaeological, cultural, and historic resources. Based on those Certificate Conditions, the Examiners recommended that the Siting Board

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[193] RD, pp. 104-105.

[194] RD, p. 105.

[195] RD, pp. 106-107.

conclude that the Facility would avoid, minimize, and mitigate any adverse impacts to archaeological, cultural, and historic resources to the maximum extent practicable, in accordance with PSL §168(3)(c).[196]

In its Brief on Exceptions, BCCR states only its general exception to the Recommended Decision's sections on archaeological resources, and cultural and historic resources.[197] As concluded above, by stating only a general exception on these topics, BCCR waived any exception to the Recommended Decision's conclusions and recommendations regarding those sections.

In her Brief on Exceptions, Intervenor DeHaan argues that the Applicant's review of the potential impacts from the construction and operation of the proposed Facility to archeological and historic resources serves as another example of how the application is incomplete and premature. For example, DeHaan notes that the Applicant only undertook a "pedestrian reconnaissance" following the updated survey in April 2019, which included various changes in Facility layout.[198] Intervenor DeHaan argues that the same rigor applied to the Applicant's preliminary survey should be applied to those portions of the Facility site that the Applicant did not review initially. DeHaan objects to the apparent inconsistency.[199]

In response, Bluestone notes that no party, including Intervenor DeHaan, raised issues relating to cultural resources during the hearing phase of this proceeding, and argues that Intervenor DeHaan is raising this issue for the first time post-hearing. Moreover, Bluestone asserts that pursuant to New York

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196 RD, pp. 106-107.

197 BCCR Brief on Exceptions, p. 14.

198 RD, pp. 104-105.

199 DeHaan Brief on Exceptions, p. 29.

State Office of Parks, Recreation and Historic Preservation guidelines, additional field work is not necessary to address changes in the location of Project components if, as in this case, the total area of ground disturbance does not increase. Bluestone further asserts that DeHaan has offered no facts to support her argument that further study is necessary.[200]

DeHaan's exceptions are denied. DeHaan's late-raised issues are not properly before us. Moreover, DeHaan has not cited any record evidence supporting her claim that the Applicant's review of the Facility's impacts on archeological and historic resources does not support the required statutory finding. We adopt the Examiners' recommendations, and find that the Facility would avoid, minimize, and mitigate any adverse impacts to archaeological, cultural, and historic resources to the maximum extent practicable, in accordance with PSL §168(3)(c).[201]

F. Infrastructure Impacts

1. Transportation

The Examiners found that impacts on transportation will be minimized or avoided to the maximum extent practicable. Facility impacts on ground transportation are expected to be minimal, temporary, and limited to construction-related activities. Certificate Conditions 55 and 56 relate to traffic control, local and State permitting, and consultation with local officials regarding construction traffic and deliveries. Bluestone will be required to submit compliance filings including all Road Use Agreements, any crossing agreements with utility companies, and all permits associated with delivery of

[200] Bluestone Brief Opposing Exception, p. 47.

[201] RD, pp. 106-107.

Facility equipment. With regard to aviation, Bluestone has agreed to file final determinations from the FAA based on its final facility design, including all FAA approval documentation regarding turbine sites and lighting systems.

No party took exception to the Examiners' proposed findings on this issue, and we adopt them.

2. Communications

The Examiners found that there is no expected impact from the Facility on AM or FM radio broadcast, cable or satellite television, cellular phone service, emergency services, municipal/school district services, public utility services, GPS, federal communications systems, microwave, Next Generation Weather Radar (NEXRAD) or Doppler weather radar.

Possible impacts were identified for over-the-air television reception. Bluestone has agreed that any resident who experiences degraded over-the-air television service after installation of the Facility may file a complaint with Bluestone in accordance with the Complaint Resolution Plan. Bluestone will work with the complainant to resolve the issue consistent with the Complaint Resolution Plan.

No party took exception to the Examiners' proposed findings on this issue, and we adopt them.

3. Related Utilities

The Examiners found that impacts on utilities will be minimized or avoided to the maximum extent practicable. Compliance filings will be required, regarding the mapping of existing utilities and details of any protective requirements associated with co-location and crossings of existing utilities by Project components. Compliance filings will also be required to address cathodic protection impact studies, documentation of agreements with utility owners regarding crossings of existing utilities, detailed drawings of any such proposed crossings (by

Project components and construction machinery), and descriptions and details of any existing utility owner approved methods for crossing of utilities. All safety requirements related to underground pipeline interference will be observed. No party took exception to the Examiners' proposed findings on this issue, and we adopt them.

G. Environmental Justice – PSL § 168(2)(d) & (3)(d)

Under PSL §168(2)(d), the Siting Board must make findings on whether the Facility will result in significant and adverse disproportionate environmental impacts in any environmental justice areas. Bluestone's application concluded the Facility would have no such impacts because there were no environmental justice areas within the area of the Facility. As noted in the RD, Intervenor DeHaan made several motions on the question whether the Village of Deposit constitutes an environmental justice area, all of which were denied. These motions were based largely on DeHaan's conclusion that the Applicant's environmental justice analysis relied on outdated information rendering the analysis inaccurate. Bluestone's arguments regarding environmental justice are fully set out in its July 24, 2019, response to DeHaan's July 17, 2019, letter-motion/offer of proof. The RD includes a lengthy and detailed description of DeHaan's motion practice and the related rulings of the Examiners, and we will not repeat that information here.

In the RD, the Examiners treated DeHaan's environmental justice arguments, both in her post-hearing briefs and in various post-hearing motions, as administrative appeals from the Examiners' rulings on this topic. Based on this, the

Examiners referred such questions to the Siting Board. BCCR raises similar issues in its Brief on Exceptions.[202]

In the RD, the Examiners found that the record supports Bluestone's conclusion that construction and operation of the Facility will not result in any significant and adverse disproportionate environmental impact to Environmental Justice Communities.[203] We note also that DPS Staff and DEC Staff did not take issue with the Applicant's conclusion that the Facility would not have any environmental justice impacts.

We have reviewed the Application with respect to potential environmental justice impacts, DeHaan's various motions, the Examiners' rulings, and BCCR's arguments on exceptions. We find that DeHaan was allowed a full and fair opportunity litigate questions related to potential environmental justice impacts. We affirm in its entirety, the Examiners' September 27, 2019, Ruling on Motions, for the reasons stated by the Examiners therein.

We find that that BCCR has not raised any valid exception to the RD with respect to environmental justice issues. BCCR's claim that, under 6 NYCRR §487.5(b), Bluestone was required to work with DEC, residents and municipalities if "demographic data are not sufficient or adequate" suffers from circular reasoning. This assertion assumes the DEC data was not sufficient or adequate, but BCCR offers nothing to support this claim. Therefore, we reject BCCR's claim that Bluestone's reliance on the DEC data was unreasonable and unjustifiable. On this point, we note that neither the DEC Staff nor the DPS Staff have questioned Bluestone's conclusion that there is no environmental justice area present in the Impact Study Area.

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[202] BCCR Brief on Exceptions, pp. 16-18.

[203] RD, p. 121.

This is particularly significant because such areas are defined under regulations promulgated and administered by the DEC.[204]

We reject BCCR's assertion, in its brief on exceptions, that the evidence DeHaan offered regarding the existence of an environmental justice area within the Project Study Area was improperly excluded. DeHaan first sought to introduce this evidence at the evidentiary hearing, but offered no witness, or any explanation for why she did not offer such evidence previously. This is notable because at the July 1, 2019, procedural teleconference, DeHaan was informed by the Examiners that, in her pre-filed testimony, DeHaan had not raised any material fact issues regarding environmental justice impacts. If the Examiners had allowed DeHaan to present such evidence for the first time at the evidentiary hearing, that would have prejudiced Bluestone by depriving it of any opportunity to conduct discovery with respect to such evidence.[205] DeHaan offered no justification for offering the evidence for the very first time at the evidentiary hearing. Nor did DeHaan provide any justification for the delay needed to allow Bluestone to conduct discovery and prepare cross-examination on the evidence DeHaan offered.[206] Under these circumstances, the Examiners correctly excluded such evidence. The Examiners also reasonably concluded that Bluestone had timely and reasonable relied on data from the DEC to establish

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[204] 6 NYCRR Part 487.

[205] PSL §167(1)(b) (All testimony and information presented by the applicant, any state agency or other party shall be subject to discovery and cross-examination).

[206] 16 NYCRR §1000.12(a)(3) (Even relevant evidence may be excluded if its value is substantially outweighed by a potential for undue delay).

that no environmental justice area existed within the Project Study Area.[207]

For these reasons, we reject BCCR's unsupported assertion in its brief on exceptions that the exclusion of the evidence offered by DeHaan for the first time at the evidentiary hearing led to a flawed and deficient record.[208]

Finally, even if we were to assume that the Village of Deposit qualified as an environmental justice area, no party has cited anything in the record suggesting that the Village of Deposit would experience a significant disproportionate adverse environmental impact from the construction and operation of the Facility. The Application indicates that no long-term sound, shadow flicker, human health, transportation or other environmental impacts are anticipated within the Village of Deposit. No party has cited anything in the record to the contrary. The Project will not release any air emissions or otherwise have a negative impact on air quality, which is a primary criterion for evaluating potential environmental justice impacts.[209]

For all these reasons, we agree with the Examiners and find that the construction and operation of the Facility will not result in any significant and adverse disproportionate environmental impacts in any environmental justice areas.

H. State and Local Laws and Regulations – PSL § 168(3)(e)

PSL §168(3)(e) addresses the applicability of State and local procedural and substantive legal requirements to the

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[207] Case 16-F-0559, Ruling on Motions (issued September 27, 2019) pp. 3-4.

[208] BCCR Brief on Exceptions, p. 18.

[209] 6 NYCRR §487.7. Bluestone Response Opposing DeHaan July 17, 2019 Letter/Offer of Proof (July 24, 2019), p. 6 of 7.

construction and operation of a proposed major electric generating facility under Article 10. With certain exceptions, PSL §168(3)(e) preempts State and local procedural requirements that otherwise would be applicable, unless the Siting Board expressly authorizes the enacting local authority to exercise such procedural requirements.[210] With respect to substantive State and local legal requirements, the Siting Board cannot grant a Certificate unless it determines that "the facility is designed to operate in compliance with applicable state and local laws and regulations issued thereunder concerning, among other matters, the environment, public health and safety."[211]

The Siting Board, however, "may elect not to apply, in whole or in part, any local ordinance, law, resolution or other action or any regulation issued thereunder . . . which would be otherwise applicable if it finds that, as applied to the proposed facility, such is unreasonably burdensome in view of the technology or the needs of or costs to ratepayers whether located inside or outside of such municipality."[212] An applicant seeking a waiver of a local substantive law has the burden of justifying its waiver request by showing "the degree of burden caused by the requirement, why the burden should not reasonably be borne by the Applicant, that the request cannot reasonably be obviated by design changes to the proposed facility, the request is the minimum necessary, and the adverse impacts in granting the request are mitigated to the maximum extent practicable."[213]

The Examiners concluded that, subject to the recommended Certificate Conditions, the construction and

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[210] See also, PSL §172(1); 16 NYCRR 1001.31(a).

[211] PSL §163(3)(e); 16 NYCRR.31(d).

[212] PSL §163(3)(e).

[213] 16 NYCRR §1001.31(e).

operation of the Facility will comply with applicable State and local laws. The Examiners took judicial notice of the Town of Sanford Local Law No. 2-2019, enacted on August 13, 2019, after the close of the evidentiary hearing. That local law imposed a three-month moratorium, ending November 2019, on Town approval of any wind energy systems within the Town.[214]

The Examiners concluded the Siting Board can make a finding that the Project will comply with currently applicable substantive local laws because the Town's moratorium did not amend, repeal, adopt or otherwise affect any substantive local law of the Town. It only prohibited local approvals,[215] pending further study, and by its express terms is intended to be consistent with the Public Service Law.[216] For these reasons, the local moratorium does not affect the Siting Board.[217] The Examiners also found that the mere possibility of the Town's later enactment of a new local law cannot prevent a Siting Board finding that the Facility as proposed conforms to local substantive laws.[218] Therefore, the Examiners recommended that the Siting Board make a finding that the Project as designed will comply with local laws.

In its brief on exceptions, BCCR argued that the Town's moratorium requires an extension of the 12-month deadline for a Siting Board decision to allow for further development of the record on whether Bluestone will comply with all substantive local laws after the moratorium expires.[219] BCCR also argues the

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[214] Town of Sanford Local Law No. 2-2019, §§1, 2(C), 4.

[215] Bluestone's Response to Motion to Strike, p. 3.

[216] Local Law §2.A.

[217] Local Law §2.A and §6.

[218] RD, p. 126.

[219] BCCR Brief on Exceptions, p. 18.

local moratorium is substantive, rather than procedural, because, by prohibiting local approvals, it "effectively makes industrial wind development a prohibited use, albeit for a temporary period of time."[220] BCCR also asserts that under PSL Article 10, the Siting Board steps into the town's shoes, and wields the local government's legislative power, when issuing a Certificate under Article 10. BCCR does not cite any legal authority in support of these assertions, beyond the local law itself. Based on this, BCCR asserts the Siting Board is bound by the Town of Sanford's moratorium.

BCCR also argues that the local moratorium is an extraordinary circumstance under PSL §165(4)(a) that necessitates an extension of the deadline for a Siting Board decision in this case.[221]

Opposing BCCR's exceptions on these issues, Bluestone argues that BCCR ignores the language of the local law, which by its terms does not apply to the State's Article 10 review process. BCCR also ignores language in the local law stating it is intended to be consistent with State laws. Bluestone asserts the Town law is procedural because it suspends Town actions regarding wind development and has no effect on the State Article 10 process. Therefore, Bluestone argues, the local law is procedural and preempted by Article 10.[222]

Next, Bluestone argues the enactment of a local law after the close of the evidentiary hearing does not qualify as an "extraordinary circumstance" within the meaning of PSL 165(4)(a), and therefore cannot sustain a delay in the State's

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[220] BCCR Brief on Exceptions, p. 21.

[221] BCCR Brief on Exceptions, p. 23.

[222] Bluestone Brief Opposing Exceptions, pp. 20-21.

Article 10 review of the Facility.[223] To hold otherwise, Bluestone argues, would encourage local municipalities to enact local moratoriums for additional study and then delay local review in order to prevent timely State review and action under Article 10. That would impermissibly permit localities to interfere with the statutorily prescribed Article 10 review process by means of post-application and/or post-evidentiary hearing changes to local laws.[224] This would impermissibly interfere with the process mandated under the Public Service Law, Bluestone asserts. Bluestone further argues that, to ensure timely review and State decision making under Article 10, which is necessary to meet the State's policies relating to renewable energy, the PSL must be read to require municipalities to promptly identify the local laws they seek to enforce. Any failure to timely do so, Bluestone asserts, would support a Siting Board waiver of compliance with such local laws. Therefore, Bluestone asserts, no stay or delay in the Siting Board's review is necessary or appropriate.[225]

After the conclusion of the exceptions process, on November 12, 2019, the Town of Sanford approved Local Law 3-2019, which extended the moratorium until March 1, 2020 or the repeal of the Local Law.[226] On November 27, 2019, BCCR filed a motion requesting that the Siting Board extend the one-year deadline for adjudication of the proceeding on the basis that the Town of Sanford had further extended its moratorium on wind energy development. Bluestone opposed the motion on December 6, 2019, raising the arguments it made regarding the previous

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[223] Bluestone Brief Opposing Exceptions, p. 21.

[224] Bluestone Brief Opposing Exceptions, pp. 21-22.

[225] Bluestone Brief Opposing Exceptions, pp. 22-23.

[226] Town of Sanford, Local Law 3-2019, §3.

moratorium. BCCR renewed its request by letter dated December 6, 2019 and, in the alternative, requested that the Chair of the Siting Board adjourn the scheduled Siting Board meeting until the Board rules of the motion to extend. By letter, dated December 11, 2019, BCCR notified the Chair that the Town of Sanford had enacted a new local law on December 10, 2019 that lifted the moratorium. The letter also described the substance of the law and renewed BCCR's prior request to extend the 12-month statutory deadline under Article 10. BCCR did not provide a copy of the law with its submission.

We have undertaken our own review of Local Law No. 2-2019, as well as Local Law 3-2019. As a threshold issue, PSL § 168(1) provides that the Board "shall make the final decision on an application for a certificate . . . upon the record before the presiding officer." The Town of Sanford enacted Local Law No. 2-2019 well after the evidentiary hearing record closed in this case, which occurred on July 11, 2019. Under these circumstances, Section 168(1) forecloses our consideration of these laws. Accordingly, we overrule that aspect of the RD that reopened the record for consideration of Local Law 2-2019.[227]

In any event, we acknowledge that the Local Law No. 2-2019 has since been extended by Local Law 3-2019, which according to BCCR, has now been replaced by another local law. We rule that we are foreclosed under PSL § 168(1) from examining either Local Law 3-2019 or the later law apparently enacted by the Town of Sanford, given that both laws were passed after the close of the evidentiary hearing and thus were not available or

[227] The Legislature's use of the word "shall" in Section 168(1) indicates its intent to create a static point in time when the record is closed.

reviewed by the parties during the evidentiary phase of this proceeding or during post-hearing briefing.[228]

We do not come to this part of our decision lightly. While the Town of Sanford was a party in the case, received intervenor funding, and was afforded an opportunity to present evidence in support of its local laws, it never took a position regarding whether the Project complies with local laws. Nor did the Town take exception to any of the recommended findings in the RD, including the finding that the Project complied with all local laws. Accordingly, we adopt the aspects of the RD to the extent it found that the Project complies with all local laws at issue when the record closed on July 11, 2019.

Although not required to do so, we nevertheless examine Local Law No. 2, which was addressed in the Recommended Decision, to evaluate its intended affect. While we agree with the Examiners that aspects of the law are procedural in nature, and content neutral, other aspects appear to be substantive.[229] Subsection 4(A) of Local Law No. 2-2019, for example, focuses on permitting requirements, which are procedural in nature and thus preempted by Article 10. However, we read the rest of Section 4 to be substantive in nature. Subsections 4(B) and (C), read together, characterize the Town's moratorium as a "prohibition" on the siting of any wind energy and ancillary facilities, and Subsection 4(D) provides that the "moratorium and prohibition shall apply to all real property within the Town." When read in its entirety, Local Law No. 2-2019 constitutes a ban on construction, albeit on a temporary basis. Although Local Law No. 3-2019 modifies Local Law No. 2-2019 by extending the

[228] We also deny BCCR's request to extend the statutory deadline for failure to make the requisite showing of "extraordinary circumstances." See PSL § 165(4)(b).

[229] Compare Local Law No. 2-2019, § (4)(A) to § 4(B)-(E).

moratorium through March 1, 2020 or the repeal of the Local Law, the other provisions, discussed above, remain in effect.

In this case, the Town had a full and fair opportunity in the case to explain why a local law more narrowly tailored could not have addressed any perceived negative impacts associated with the Project, which would have given Bluestone an opportunity to address those impacts while the record remained open. The Town, however, did not and still has not articulated what those negative impacts might be, much less make a case for why it would not be possible to address them with a less burdensome local law. Further, as noted, the Town was a party in the case and did not object to the siting of the Project prior to the record being closed. Given these circumstances, it is clear that the Town's moratorium is "unreasonably burdensome" within the meaning of PSL § 168(3)(e).[230]

Thus, had it been applicable, we also would waive Local Law No. 3-2019. Accordingly, BCCR's multiple recent filings requesting that the Siting Board extend by six months the one-year deadline for adjudication of this proceeding are denied.[231]

## I. Decommissioning and Restoration – 16 NYCRR § 1001.29

After discussions with DPS Staff, Bluestone agreed not to deduct anticipated salvage recoveries from the amount of decommissioning and site restoration costs that will be subject to letters of credit to be held by the Towns of Windsor and Sanford.[232] Bluestone and DPS Staff, the only parties to address

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[230] We raise this issue sua sponte given that the moratorium was adopted after the hearing record in the case was closed.

[231] See, e.g., Letter from J. Rhodes to B. Wisniewski (December XXXX, 2019)

[232] Hrg. Exh. 10, Final Certificate Condition 48.

this issue in detail, also agree on what events would trigger the decommissioning and restoration obligations, the scope of work, and the use of letters of credit to provide the Towns with financial assurance for decommissioning and restoration funding.[233] Both parties also agree that decommissioning expenses should be estimated and submitted as a part of the compliance process rather than determined at this time.[234]

The Examiners found that there were only two remaining issues of disagreement on the topic of decommissioning: (1) how to allocate between the two Towns' letters of credit the non-turbine related costs of decommissioning and restoration, such as access road, meteorological tower and substation removals and restorations; and (2) the calculation of the estimated cost of access road demolition and restoration.

On the first question, the Examiners rejected DPS Staff's recommendation to allocate non-turbine costs equally to each turbine. The Examiners agreed that Bluestone's more detailed proposal for allocating costs, based on the actual facility layout and the specifics of the decommissioning process, is likely to be more accurate and is therefore more appropriate. On this basis, the Examiners accepted Bluestone's proposed changes to Certificate Condition 48.[235]

As to the second issue, the Examiners accepted DPS Staff's estimate of $24 per cubic yard estimate based on the testimony of the DPS Staff Decommissioning Panel, which relied on industry standards and the Siting Board's decision in the Cassadaga Wind case.[236] The Examiners noted that the purpose of

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[233] DPS Staff Reply Brief, p. 15.

[234] DPS Staff Reply Brief, p. 15; Bluestone Initial Brief, p. 127.

[235] RD, pp. 130-131.

[236] RD, p. 132.

this cost estimate was to ensure that the Towns are fully secured if they are required to take over removal and restoration activities. Given this, the Examiners reasoned that the record uncertainty on the amount of such costs should be resolved in favor of DPS Staff's higher cost estimate.

BCCR took exception to the Examiners' recommendations as to allocation of non-turbine decommissioning costs. BCCR said it supports DPS Staff's allocation proposal, because BCCR believes there is insufficient record evidence to support the Examiners' finding that Bluestone's proposal is likely to provide a more accurate estimation of Town-specific costs.[237] However, BCCR provided nothing to explain the basis for its belief, did not cite to anything in the record that might support its assertion, and did not present any argument that would support its position. Therefore, BCCR has failed to state a valid exception on this issue.[238]

Bluestone excepted to the Examiners' decision to adopt DPS Staff's cost estimate for access road demolition and restoration. The Company argues that Staff's sole justification was a vague reference to "industry standards." Bluestone also argues that DPS Staff's criticism of the Applicant's estimate was devoid of specifics.[239] Conversely, Bluestone argues, its expert witness explained the assumptions under his estimate and a line item breakdown of costs developed based on his extensive experience in preparing decommissioning plans for over 200 facilities, including wind energy and solar facilities. On this basis, Bluestone argued, the Siting Board should rely on Bluestone's expert, rather than the testimony of the DPS Staff.

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[237] BCCR Brief on Exceptions, p. 24.

[238] 16 NYCRR §4.10(c)(iv).

[239] Bluestone Brief on Exceptions, pp. 24-25.

Adopting Bluestone's cost estimate, the Company argued, would not expose the Towns to risk because the Company's lower estimate was still sufficiently conservative since it was based on the assumption that all access roads will be removed. Bluestone asserts that this is unlikely, so the Towns will not be at risk.[240]

We agree with the Examiners that Bluestone's proposal for allocating non-turbine decommissioning costs will likely be more accurate and is therefore superior. As to the cost estimates for decommissioning and restoration of access roads, we agree with the Examiners that the record uncertainty should be resolved in favor of DPS Staff's higher cost estimate. The Examiners are best positioned to assess the weight and credibility the parties' position on a disagreement of this kind, where expert opinions diverge. Moreover, the Examiners' recommendation to resolve record uncertainty in favor of the higher estimate will best ensure that, if necessary, the Towns have adequate resources to perform such decommissioning and restoration work.

J. Public Interest Review – PSL § 168(3)(b)

Section 168(3)(b) of the PSL requires the Board to determine that construction and operation of the Project will serve the public interest. In making this determination, we consider the consistency of the construction and operation of the Facility with energy policies and long-range planning objectives and strategies contained in the most recent State Energy Plan (SEP) and additional social, economic, and other factors that the Board deems relevant.

[240] Bluestone Brief on Exceptions, pp. 25-26.

Based on the beneficial impact of the Facility on air quality, job creation, and other direct economic benefits, the Examiners recommended that the Siting Board find that the construction and operation of the Facility will be in the public interest.[241] In doing so, however, the Examiners recommended that the Board give little or no weight to Bluestone's estimate of the secondary economic benefits of the Facility. The Examiners found that Bluestone's estimate, developed using the National Renewable Energy Laboratory's Jobs and Economic Development Impact (JEDI) model, failed to account for potential job losses related to retail price increases and other factors.

While agreeing with the RD's recommendation that the Board find that certificating the Facility would be in the public interest, some of the parties nevertheless addressed the appropriateness of using of the JEDI model for purposes of evaluating the economic impacts of the Facility. Bluestone asserts, for example, that its estimate of economic benefits should be given appropriate consideration because the JEDI model is widely used, there is no workable alternative, and the model provides a reasonable estimate of direct job impacts.[242] For its part, DPS Staff argues that Bluestone's use of the JEDI model by its nature does not appropriately consider negative economic impacts and its use here is thus inconsistent with the regulations.

We find it unnecessary to get into a debate over whether the JEDI model appropriately examines the economic impacts associated with the siting of renewable energy facilities. We base this finding on our determination that the Facility will without question be consistent with the energy

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[241] RD, pp. 133-138.

[242] Bluestone Brief on Exceptions, p. 24.

policies and long-range planning objectives and strategies contained in the most recent State Energy Plan, as well as the additional relevant social, economic, and other factors that were discussed in the RD. Accordingly, subject to the Certificate Conditions attached to this Order, the construction and operation of the Facility will be in the public interest.[243]

## IV. 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 Bluestone Wind, LLC with the conditions set forth in Attachment A to this order.

The Board on Electric Generation Siting and the Environment orders:

1. The recommended decision of Examiners Sean Mullany and Daniel P. O'Connell, to the extent consistent with this opinion and order, is adopted and, together with this opinion and order, constitutes the decision of this Siting Board in this proceeding.

2. Except as here granted herein, all exceptions to the Examiners' Recommended Decision are denied.

3. Subject to the conditions set forth in this opinion and 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 Bluestone Wind, LLC (Bluestone) for the construction and operation of a wind farm with a capacity of up to 124 megawatts, consisting of up to 27 wind turbines in the Towns of Sanford and Windsor, in Broome

[243] RD, pp. 133-140.

County, provided that Bluestone files a written acceptance of the Certificate pursuant to 16 NYCRR §1000.15(a) within 30 days after the date of issuance of this opinion and order.

4. Upon acceptance of the Certificate granted in this opinion and order or at any time thereafter, Bluestone shall serve copies of its compliance filings in accordance with the requirements set forth in 16 NYCRR §1002.2(c) and, without limitation, Certificate Conditions 35, 40, 42, 48, 50, 51, 56, 80, 85, 138, and 141. Pursuant to 16 NYCRR §1002.2(d), interested persons and parties may file comments on the filing within 21 days of its service date.

5. 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.

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

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

8. This proceeding is continued.

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

(SIGNED) MICHELLE L. PHILLIPS
Secretary

ATTACHMENT A

# Bluestone Wind Project
# Case No. 16-F-0559
# CERTIFICATE CONDITIONS

## I. Project Authorization

1. The Certificate Holder is authorized to construct and operate the Facility (or the Project), as described in the Application by Bluestone Wind, LLC (Bluestone 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 and 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 27 wind turbines in the Towns of Sanford and Windsor, in Broome County, together with the following: temporary or permanent access roads, 34.5 kilovolt (kV) underground collection system, collection and interconnection substation, overhead 115 kV transmission line, 10 MW battery storage system, two permanent meteorological towers, one operations and maintenance (O&M) facility (in Sanford), temporary concrete batch plant (if necessary) and two temporary laydown yard/staging areas. The total nameplate capacity of the Facility shall not exceed 124 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. 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. 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 (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 by the Chief of the Environmental Certification and Compliance Section of the New York State Department of Public Service Office of Electric, Gas and Water. Upon receipt of any and all permits, the Certificate Holder shall file notice of receipt of the permit(s) with the Secretary as soon as

practical. Should any permits 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 DPS Staff determine that a compliance filing requires additional information, details or deliberation, such that the filing will not be decided at the next available session of the Board or Commission, DPS Staff will notify the Certificate Holder within 30 days of submission of the filing and inform the Applicant of the information needed to place the filing on the next available session.

**II. General Conditions**

10. 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 DPS Office of Electric, Gas and 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.

11. Commencement of construction is defined as the beginning of unlimited and continuous site clearing, site preparation and grading activity; construction of the Facility and does not include staging, tree-cutting activities related to testing or surveying (such as geotechnical drilling and meteorological testing), together with such testing,

surveying, drilling and similar pre-construction activities to determine the adequacy of the site for construction and the preparation of filings pursuant to these conditions.

12. 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.

13. The Secretary or the Chief of the Environmental Certification and Compliance Section of the DPS Office of Electric, Gas and 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 a Tree Clearing Plan consistent with Appendix A, "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project" Section D.

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

15. 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.

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

17. 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.

18. 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.

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

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

b) A stop work order shall expire 24 hours after issuance, or earlier if the issue promoting the stop work order is resolved, unless confirmed by the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, including by Order issued by the Chair of the Siting Board or by one Commissioner of the Commission. DPS 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 DPS Staff, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.

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

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

in the presence of such personnel who, after consultation with DPS Staff, refuses 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, DPS 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 DPS Staff if the situation prompting its issuance is resolved.

e) If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, DPS Staff may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with DPS Staff, refuse to take 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 DPS Staff's directive as provided through the communication protocol. DPS Staff will immediately thereafter inform Certificate Holder's Construction Inspector(s) and/or environmental monitor(s) of the action taken.

**III. Notifications**

20. At least 14 days prior to the Certificate Holder's commencement of construction date, the Certificate Holder shall notify the public as follows:

a) Provide notice by mail to host landowners, and to adjacent landowners within 2,500 feet of parcels 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 Town Halls of the host communities, at least one library in each host community, at least one post office in each host community, the Facility website, and the Facility construction trailers/offices; and

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

21. The Certificate Holder shall write the notice(s) required in Condition 20 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) The procedure and contact information for registering a complaint; and

f) Contact information for the Siting Board and Commission.

22. Upon distribution of the 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.

23. 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.

24. Prior to the end of construction, the Certificate Holder shall notify the entities identified in Condition 20(a), 20(b), and 20(e) with the contact name, telephone number, email and mailing address of the Facility Operations Manager.

25. 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.

26. 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. Information Reports and Compliance Filings Requirements

### 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 reports and other documentation shall be filed prior to the commencement of construction of component facilities related to the report, unless otherwise noted.

### General

27. The Certificate Holder shall contact all known pipeline operators within the Project Area and land owners, if necessary, on which Project facilities are to be located or whose property lines are within the zone of safe siting clearance, if any, and shall reach an agreement with each operator to provide that the collection system will not damage any identified pipeline's cathodic protection system or produce damage to the pipeline, either with fault current or from a direct strike of lightning to the collection system, specifically addressing 16 NYCRR §255.467(g) (External corrosion control; electrical isolation), subject to the provisions of Condition 4 herein. A copy of any agreements so entered shall be provided to the Siting Board, or the Commission after the Siting Board's jurisdiction has ceased, by filing with the Secretary.

28. 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 DPS Staff and redacted to protect confidential information.

29. 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.

30. Facilities Studies:

    a) 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.

31. 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.

32. Certificate Holder shall submit 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. All such updates will be submitted 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.

33. 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).

34. The Certificate Holder shall file with the Secretary within 60 days after the commercial operation date a certification that the collector lines were constructed to the latest editions of ANSI standards. The Facility's electrical collection system shall be designed in accordance with applicable standards, codes, and guidelines as specified in Exhibit 5 of the Application.

35. 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.

36. 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.

37. 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.

38. 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.

39. 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.

**Permits and Approvals**

40. 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.

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

    a) 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 Appendix A "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project" and detailed in Condition 56, 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.

42. 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. county permits for sewage and water, and local certificates of completion and temporary certificates of completion issued by a qualified independent engineering firm engaged by the Towns). 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**

43. 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) Medium-intensity red strobe lights on turbines for aviation hazard marking, and the extent of lighting will be minimized to the extent allowable by the FAA; and

d) Lighting controls at substations, turbines and turbine sites shall be maintained.

44. 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) GIS shapefiles showing all components of the Project (wind turbine locations, electrical collection system, substation, buildings, access roads, met towers, point of interconnection, etc.);

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 co-located installations.

**Environmental**

45. 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 Towns upon request.

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, the Certificate Holder shall perform the pre- and post-construction water potability testing described in Condition 44(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 Towns upon request.

e) Should the NYSDOH-certified laboratory testing described in Conditions 44(c) and 44(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.

**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**

46. The Certificate Holder shall submit a Site Engineering and Environmental Plan (SEEP) in accordance with Appendix A "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project" which shall describe in detail the final Facility design and the environmental protection measures to be implemented during construction of the Facility. The SEEP will include a table outlining the specific Certificate Conditions referenced in the SEEP.

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 DPS Staff and the Towns 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. Prior to commencement of construction, a **Final Decommissioning Plan** shall be submitted. Letters of credit will be established by the Certificate Holder to be held by each town hosting Facility components. The total amount of the letters of credit created for the Towns of Sanford and Windsor will represent the total final decommissioning and site restoration estimate, as described below. The letters of credit shall remain active until the Facility is fully decommissioned. The **Final Decommissioning Plan** will include the following:

    a) A final decommissioning and site restoration estimate (no offset for projected salvage value is permitted in the calculation of the estimate) based on the final Project layout. With respect to turbines, this estimate will be calculated by multiplying the decommissioning and site restoration cost per turbine by the total number of turbines proposed for the Project. With respect to other facilities required to be decommissioned and restored, including but not limited to access roads, meteorological towers and the

collection substation, the costs will be allocated between the Towns of Windsor and Sanford based on the estimated cost associated with the removal and restoration of the facilities located in each Town. The estimate will include a 10% contingency. The estimate shall be updated by a qualified independent engineer licensed to practice engineering in the State of New York to reflect inflation and any other changes after one year of Facility operation, and every fifth year thereafter. Updated estimates will be filed with the Secretary after one year of Project operation and every fifth year thereafter;

b) Documentation indicating approval by the Towns of Sanford and Windsor of an acceptable form of letter of credit;

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

d) Letters of credit shall be updated after one year of Facility operation and every fifth year thereafter, based on updated estimates described in sub-section a of this condition. Documentation shall be filed with the Secretary after one year of Project operation and every fifth year thereafter specifying changes to the structure of the letters of credit; and

e) Copies of agreements between the Certificate Holder and the Towns, establishing a right for each Town to draw on the letters of credit dedicated to its portion of the Facility.

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 Towns. A copy of the Final Complaint Resolution Plan shall be submitted to the Towns 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 Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

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 DPS Staff, the NYS Division of Homeland Security and Emergency Services, and local emergency responders that serve the Facility. The Certificate Holder may submit separate emergency procedures for construction and operation. 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 DPS Staff, the NYS Division of Homeland Security and Emergency Services, and local emergency responders that serve the Facility. The Certificate Holder may submit separate 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.

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:

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 Towns of Windsor and Sanford, 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 Appendix A "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project":

    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;

    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. 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, in accordance with the requirements set forth in Appendix A “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

58. Final design drawings, site plans, and construction details (to be included as part of the SEEP in accordance with the requirements set forth in Appendix A “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project” )will show wind turbine setback dimensions that meet or exceed the turbine setback requirements in each Town’s applicable local law.

59. The Certificate Holder shall provide all of the information required pursuant to Section A. Linear Facility Components of Appendix A “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project” as applicable to Project, including details of proposed component crossings of, or co- locations with, existing gas pipelines within the Project Area.

60. Shapefile data shall be provided to DPS Staff for the locations of turbines, collection lines, transmission lines, substation, designated clearing, construction and laydown areas, access ways, limits of disturbance and other Project facilities.

**Environmental**

61. **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 horizontal directional drilling (HDD) is proposed and identify all locations where blasting operations will be required.

62. A site-specific **Final Blasting Plan** designed to protect surrounding structures, including groundwater wells.

63. An **Agricultural Area Plan** which shall describe the programs, policies, and procedures to mitigate agricultural impacts.

64. **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 residential receptor, 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 Appendix A, "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project".

65. Upon completion of construction of the Facility, the Certificate Holder shall conduct an assessment of the need for landscape improvements, including vegetation planting, earthwork or installed features to screen or landscape the O&M Building. Based on the results of the assessment, the Certificate Holder shall develop the following in consultation with DPS Staff and the Towns 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;

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

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

66. 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 (31 meters) of proposed Facility-related impacts shall be identified as "Environmentally Sensitive Areas" or similar on the final Facility construction drawings, and marked in the field by construction fencing with signs that restrict access.

b) **Final Unanticipated Discovery Plan**, 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 NYSOPRHP.

c) If complete avoidance of archaeological sites is not possible, the Certificate Holder shall consult with the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and DPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be 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 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.

67. **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. Following this curtailment regime, operation of the Project for a period of 30 years will result in an estimated take of 16 NLEB.

b) The Certificate Holder shall submit to DEC and DPS 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 in the fatality of NLEB), which is based on the estimated take of 16 NLEB. The curtailment plan may only be modified with the consent of DPS, DEC, the Certificate Holder, and/or USFWS if such consent is applicable under federal law.

68. Bald and Golden Eagle Protection Measures, including:

a) The use of a single bio-monitor to simultaneously monitor turbine locations T25, T26 and T29 during the spring migration (February 15 – April 30) and fall migration period (October 15 – November 30) during all daylight hours for a minimum of two-years after operations or the deployment of Indentiflight® or equivalent automated avian detection and curtailment technology systems covering turbine locations T25, T26 and T29. Curtailment will be implemented at turbines T25, T26, and T29 upon detection of eagles based on a plan prepared in consultation with and accepted by DEC and DPS prior to Project operation. Regardless of the type of monitoring system deployed, the date and time of all eagle detections within 500m of turbines T25, T26, and T29 will be recorded, along with date, time and duration of any curtailment initiated in response to

those detections. A summary of the monitoring data shall be shared with DEC on an annual basis.

b) After the first two years of operation the Certificate Holder will consult with the DPS and DEC to discuss if ongoing monitoring is needed or determine appropriate changes based upon on-site data, updated automated avian detection and curtailment technology, and current research in wind-eagle interactions.

c) In the event of an eagle fatality at any turbine during any time of year at the Facility the Certificate Holder will coordinate with DPS and DEC to evaluate data and information related to the take, such as but not limited to weather immediately preceding the fatality, age, sex, or proximity to known food sources, and determine practicable measures to address the impact and minimize further fatalities to avoid exceeding the estimated take of 6 bald eagles and 3 golden eagles, if warranted. Such additional minimization may include expanding the bio-monitors to additional turbine locations or deploying Indentiflight® or equivalent automated avian detection and curtailment technology systems at other turbine locations.

69. A final **Net Conservation Benefit Plan** (NCBP), for the take of NLEBs, bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) ("affected species"), shall address the following:

a) To achieve a net conservation benefit for unavoidable impacts to NLEB, mitigation actions will be implemented to compensate for the loss of 16 NLEB.

b) To achieve a net conservation benefit for unavoidable impacts to bald eagles, mitigation actions will be implemented to compensate for the estimated take of 7 bald eagles over the operational period of 30 years.

c) To achieve a net conservation benefit for unavoidable impacts to golden eagles, mitigation actions will be implemented to compensate for the estimated take of 4 golden eagles over the operational period of 30 years.

The final NCBPs shall be prepared in consultation with and accepted by DEC and DPS, such acceptance may not be

unreasonably withheld, and consultations must take place in a timely manner. The final, DEC-accepted NCBP shall be filed prior to implementation and Project operation. The minimization measures in the NCBP that require installation of equipment or monitoring systems shall be installed prior to operation of the Facility. Mitigation actions in the NCBP shall be implemented prior to the start of Project operation.

If this timeframe is not met, to avoid impacts to NLEB, the Certificate Holder shall implement the following curtailment regime until the NCBP has been accepted by DPS and DEC, finalized, and mitigation actions implemented: during the period July 1 through October 1 a minimum curtailment of 6.9 m/s, 30 minutes prior to sunset through 30 minutes after sunrise, when temperatures are greater than 10 degrees Celsius. At such time that the NCBP is accepted by DPS and DEC, finalized, and mitigation actions implemented, curtailment at 5.5 m/s as described above will begin and continue for the remaining life of the Project.

At a minimum, the **Net Conservation Benefit Plan** shall contain:

a) a demonstration that the Net Conservation Benefit Plan (NCBP) results in a positive benefit on each of the affected species;

b) detailed net benefit calculations based on the actual location and type of minimization measures to be taken for each of the affected species;

c) full source information used as inputs to the net benefit calculations for each of the affected species;

d) a consideration of potential minimization and mitigation measures identified by DEC Staff and measures proposed by the Certificate Holder for each of the affected species;

e) a consideration of potential sites identified by DEC Staff for mitigation measures and sites proposed by the Certificate Holder for each of the affected species;

f) the identification and detailed description of the additional minimization measures developed to minimize

potential take of the species that will be undertaken by the Certificate Holder;

g) the identification and detailed description of the mitigation actions that will be undertaken by the Certificate Holder to provide a net conservation benefit to the affected species; and

h) a letter or other indication of the Applicant's financial and technical capability and commitment to fund and execute such management, maintenance and monitoring for the life of the Project/term of the permit.

70. A **Post Construction Avian and Bat Monitoring and Adaptive Management Plan** shall be filed prior to the commencement of commercial operation of the Facility. The 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 DEC'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 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 DEC, and accepted by DEC prior to filing. The post-construction monitoring, and adaptive management plan shall be properly designed to evaluate mortality and displacement impacts that will occur over the life of the Project. The plan will also include notification requirements, adaptive management options and next steps to be implemented if 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.

71. An **Inadvertent Return Plan** showing all locations where horizontal directional drilling (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 Appendix A, "Guidance for the Development of

Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

72. A long-range **Facility and Corridors Management 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.

73. 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 Storm Water Pollution Prevention Plan (SWPPP). A post-construction monitoring program (MP) shall be conducted in year 1, year 3, and year 5 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISCP effectiveness.

At the conclusion of the MP, a report shall be submitted to DPS Staff, DEC, the Towns, and DAM, and filed with the Secretary, that assesses how well the goal of no net increase of invasive species per the recommendation of the Invasive Plant Species Survey Baseline Report ("Baseline Species Report"), due to construction of the Facility, is achieved. In the event that the report concludes that ISCP goals are not met, and there is an increase of invasive species due to Facility construction, the Certificate Holder, DPS, DEC and DAM will meet to consider why initial control measures were ineffective and the probability of successful additional treatment measures without the need for perpetual treatments.

74. A **Facility Vegetation Clearing Management and Herbicide Use Plan** containing details as outlined in Section B of Appendix A, "Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project."

**V. Noise and Vibration**

75. The Certificate Holder shall submit 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) The locations of all turbines identified with Geographic Information System (GIS) coordinates and GIS files. 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:

i. 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 TS 61400-14 standard (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.

ii. Apparent Sound Power levels from the turbines at any wind speed at hub height shall not exceed the final overall broadband (dBA) and the 16 Hz, 31.5 Hz, and 63 Hz full octave band levels (linear) presented in the Application or any subsequent supplement, as measured by following the IEC 61400-11 Standard.

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 Local Laws on Noise for the Towns of Windsor and Sanford, and the regulatory limits of Conditions 79(a) and 79(e). In addition, the revised sound modeling will show conformance with 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 non-participating residence.

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

iii. 50 dBA L(night-outside), annual equivalent continuous average nighttime sound level from the Facility across any portion of a non-participating property except for portions delineated as wet lands as demonstrated through compliance with the limit at worst-case locations. The Applicant shall include a demonstration of how it determined the

worst-case locations with noise data reflecting the final turbine array.

iv. 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.

76. Compliance with Certificate Conditions for the Facility shall be evaluated by the Certificate Holder by following a **Sound Testing Compliance and Noise Complaint Protocol** that shall follow the provisions and procedures for post construction noise performance evaluations presented by the Application and as stated in the Order, in addition to:

a. monitoring for compliance with maximum noise limit of 65 dB Leq-1-h at the full octave frequency bands of 16, 31.5, and 63 Hertz outside of any non-participant residence existing as of the issuance date of this Certificate in accordance with Annex D of ANSI standard Sl2 .9-2005/Part 4 Section D.2.(1)(Analysis of sounds with strong low-frequency content).

b. during the Sound Compliance Tests described in Certificate Condition 77, and any subsequent sound testing related to compliance or violations of the noise limits applicable to the Facility, the uncertainty factor in ANSI S12.9 Part 3 Clause 7.3 should be applied against the Facility.

77. 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, the Certificate Holders shall perform and complete the first Sound Compliance Test and the results shall be filed with 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, no later than eight months after the commercial operations date, 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 sub-condition 77(a), but no later than thirteen (13) months after the commencement of operations of the Facility.

78. 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 Violations 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 a 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 feasible and appropriate.

b) Implement any operational noise mitigation measures within 90 calendar days after the finding of a 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 Certificate Conditions on noise of this Certificate, no later than 90 days after the minimization measures are implemented.

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

a) Comply with a maximum noise limit of 45 dBA Leq (8-hour), at any existing permanent or seasonal non-participating residence, and 55 dBA Leq (8-hour) at any participant residence existing as of the issuance date of this Certificate;

b) 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 issuance 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 sub-condition 79(a).

c) Comply with a maximum noise limit of 65 dB Leq-1-h at the full octave frequency bands of 31.5, and 63 Hertz outside of any non-participant residence existing as of the issuance date of this Certificate in accordance with Annex D of ANSI standard Sl2 .9-2005/Part 4 Section D.2.(1)(Analysis of sounds with strong low-frequency content).

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 sub-condition 79(b).

Emergency situations are exempt from any of these limits.

80. The Certificate Holder shall adhere to the following condition regarding noise 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.

b) The Certificate Holder shall provide the Towns of Sanford and Windsor 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 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 implemented. 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-hr, 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 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 the identified minimization measures with the Secretary and implementing such measures after, and consistent with, 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 its 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.

81. 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. These records shall be maintained by the Certificate Holder for five years from occurrence.

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

a) Comply with all local laws regulating construction noise;

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

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

## VI. Facility Construction and Maintenance

### General

83. At least 30 days prior to the start of construction, the Certificate Holder shall become a member of Dig Safely New York. 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).

84. 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).

85. 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 DPS Staff, issue regular reporting and compliance audits. Copies of the reporting and compliance audits will be provided to the Towns upon request. 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 the Department of Agriculture and Markets (DAM) agrees that the independent third party monitor is qualified on agricultural issues, one monitor can act as both environmental and agricultural monitor.

86. 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.

87. 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.

88. At least 14 days before the commencement of construction, the Certificate Holder shall hold a pre-construction meeting with DPS Staff, Staff of the New York State Department of Agriculture and Markets (DAM), New York State Department of Transportation (DOT), Town Supervisors and Highway Departments, County Highway Department, and DEC. 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 DPS Staff and the Certificate Holder and distributed to the attendee list at least one week prior to the meeting;

b) Maps showing designated travel routes, construction worker parking and access road locations and a general project schedule shall be distributed to the attendee list at least one week prior to the meeting;

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

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

89. 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 and delivery activities which may need to occur during extended hours beyond this schedule on an as-needed basis.

a) Construction work hour limits apply to Facility construction, 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 vehicles used for transporting construction or maintenance workers, small equipment, and tools to the site to begin 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 DPS 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.

90. At least two weeks, unless a shorter time is agreed to with DPS 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 right-of-way (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, waterbodies and DEC wetland adjacent areas;

f) Designated restrictive areas and sensitive environmental resources; and

g) Structure locations.

91. 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.

92. The Certificate Holder shall organize and conduct monthly site-compliance inspections for DPS Staff as needed during construction through final completion of the Facility site. A

designated official or representative from the Towns 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 DPS 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**

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

94. 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.

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

96. 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.

97. 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 fuel-wood. Where merchantable logs and fuel-wood 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.

98. Use of hay is prohibited.

99. 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.

100. 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.

101. 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.

102. 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 NYSDEC Part 575 Regulations as a potential problem at the project site. If these insects are found, they must be reported to the DEC as soon as practicable.

***Threatened and Endangered Species***

103. All tree clearing activities shall be allowed between November 1 to March 31 without restrictions. From April 1 to October 31, the following restrictions will be implemented, unless otherwise agreed to with DEC and DPS staff:

    a) The Certificate Holder shall leave uncut all snag and cavity trees, as defined under Department of Environmental Conservation (DEC) 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;

    b) The Certificate Holder shall leave uncut all known and documented roost trees and any trees within a 150-foot radius of a documented summer occurrence;

    c) 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 DEC 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 DEC and DPS Staffs have been consulted and both agencies authorize resumption of work.

104. **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 pre-existing 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.

105. **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 DPS and DEC 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 DEC and DPS 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, golden eagle, 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 DEC and DPS 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.

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

a) Excluding bald eagles and golden eagles, if a nest 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, the following actions shall be taken:

i. DEC and DPS shall be notified within twenty-four (24) hours of discovery and prior to any further disturbance around the nest;

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

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

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 any of these species are observed in the Facility area exhibiting breeding or roosting behavior, the following actions shall be taken:

i. DEC and DPS shall be notified within twenty-four (24) hours of discovery/observation of the nest 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 DPS in concurrence with DEC; and

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

c) If any dead, injured, or damaged federally- or State-listed T&E species, or their eggs or nests thereof are discovered (by the Certificate Holder's on-site environmental monitors, environmental compliance manager, or other designated agents) at any time during the life of the Project within the Facility Site, the Certificate Holder will immediately (within twenty-four (24) hours) contact DEC (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.

Each record will be kept with the container holding the specimen(s) and given to DEC 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 with the specimen(s). Unless otherwise directed by DEC or USFWS, after all information has been collected in the field, the fatality specimen(s) will be placed in a freezer, or in a cooler on ice until transported to a freezer, until it can be retrieved by the proper authorities. DPS 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**

107. The Certificate Holder shall perform all construction, operation and maintenance in a manner that avoids then minimizes adverse impacts to waterbodies, wetlands, and the one hundred (100) foot adjacent areas associated with all State-regulated wetlands. The Certificate Holder shall ensure the provisions to protect wetlands, waterbodies, and adjacent areas are in accordance with the details contained in Appendix A “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project.

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

109. All in-stream work is prohibited from October 1 through May 31 in cold water fisheries, and from March 1 through July 31 in warm water fisheries, or using methods outlined within Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

110. The Certificate Holder shall conduct all work in streams in dry conditions, using appropriate water handling measures to

isolate work areas and direct stream flow around the work area, or using methods outlined Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

111. To the extent practicable, buried utilities shall be installed using trenchless methods when traversing wetland and waterbodies. If a trenchless installation method is not practicable, other crossing methods such as open cut or direct burial shall be utilized in accordance with the methods within Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

112. Open cut trenching for the installation of underground utilities in wetlands and waterbodies shall be conducted in one continuous operation and shall not exceed the length that can be completed in one day.

113. a) A culvert crossing will be utilized for temporary or permanent stream crossings and shall meet the NYSDEC and/or US Army Corps of Engineers requirements as outlined in Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

b) Bridges shall be installed wherever a new permanent crossing of a State-protected stream is required. If a bridge is not practicable for a new permanent crossing of a State-protected stream, a culvert crossing will be utilized as provided in subdivision A above. For all proposed permanent culvert crossings of State-protected streams, the Certificate Holder shall include in the SEEP’s Stream Crossing Plan a written justification demonstrating that installation of a bridge is not practicable.

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

115. 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 Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project.”

116. 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.

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

118. 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 other approved device. All necessary measures shall be implemented to prevent any substantial visible increase in turbidity or sedimentation downstream of the work site.

119. All disturbed soils within regulated freshwater wetlands and the associated adjacent areas 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.

120. Restoration of state regulated wetlands and NYS-regulated adjacent areas to pre-construction contours must be completed within 48 hours of final backfilling of the trench unless the SEEP specifies different grading:

    a) Immediately upon completion of grading, the area shall be seeded with an appropriate species mix.

b) Restored areas shall be monitored for a minimum of 5 years. Monitoring shall continue until an 80% cover of appropriate species has been reestablished over all portions of the replanted area, unless the invasive species baseline survey indicates a smaller percentage of appropriate species exists prior to construction.

121. Cut vegetation in wetlands may be left in place (drop and lop or piled in dry or seasonally saturated portions of freshwater wetlands and 100-foot adjacent areas to create wildlife brush piles).

122. Installation of underground collection lines in wetlands shall be performed using the methods indicated in Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

123. Installation of access roads through streams and wetlands shall be performed using the methods, indicated in Section B of Appendix A, “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project”.

124. Concrete batch plant operations and concrete washout areas shall be located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, the SEEP shall provide justification and demonstrate that impacts to wetlands and waterbodies from concrete batch plants and concrete washout areas shall be avoided or minimized to the maximum extent practicable.

125. Disturbed streams shall be restored to equal width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to the profile of the stream channel upstream and downstream of the disturbance. All disturbed stream banks shall be mulched within (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.

126. Trees shall not be felled into any stream.

127. 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.

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

129. Any in-stream habitat structures placed in a stream must not create a drop height greater than 6 inches.

130. Following installation of underground facilities, wetlands and State-regulated wetland adjacent areas shall be stabilized within 48 hours of final backfilling of the trench and restored to pre-construction contours as soon as practicable, but no later than 14 days of final backfilling. Immediately upon completion of grading, and as consistent with existing land uses, the area shall be seeded with a seed mix of native plants specified in the SEEP that is appropriate for wetlands and upland areas adjacent to wetlands. Overall vegetative cover in restored areas shall be monitored for a minimum of 5 years or until an 80% cover of plants with the appropriate wetland indicator status has been reestablished over all portions of the restored area. Invasive species growth in the restored areas shall be monitored for a minimum of 5 years. The proportion of invasive species in the wetlands and State-regulated wetland adjacent areas cannot exceed the proportion that existed immediately prior to the start of construction as described in the baseline invasive species survey. If, after one complete growing season, the 80% cover requirement has not been established or the proportion of invasive species has increased, the Certificate Holder shall consult with DEC and prepare a Wetland Planting Remedial Plan (WPRP) in accordance with Appendix A “Guidance for the Development of Site Engineering and Environmental Plan for the Construction of the Bluestone Wind Project” and shall submit the WPRP to DEC and DPS for acceptance prior to implementation.

131. The Certificate Holder shall work with DEC to develop a Wetland Mitigation Plan in accordance with Appendix A “Guidance for the Development of Site Engineering and

Environmental Plan for the Construction of the Bluestone Wind Project" and shall submit the Wetland Mitigation Plan for DEC 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**

132. 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.

133. 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.

134. 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.

135. 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.

136. 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.

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

138. Transmission Related Incidents:

a) The Certificate Holder shall call the DPS 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.

139. 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.

140. 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.

141. 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 one year and a day. However, if the Certificate Holder is expecting delays due to a part manufacturer or complications regarding the repair of non-operational 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 and a day. The petition shall include an explanation of the circumstance and an estimation of the amount of time it will take to repair the turbine(s).

142. In the event of a blade failure, fire or other catastrophic event involving a wind turbine and its associated equipment,

the DPS Chief of Bulk Electric Systems shall be notified no later than 12 hours following such an event.

143. 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 under taken and a diagram of the wind turbine blade.

144. 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 condemner 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.

145. 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.

BLUESTONE WIND PROPOSED SEEP CASE 16-F-0559

**APPENDIX A to ATTACHMENT A**

# GUIDANCE FOR THE DEVELOPMENT OF SITE ENGINEERING AND ENVIRONMENTAL PLAN FOR THE CONSTRUCTION OF THE BLUESTONE WIND PROJECT

The proposed Bluestone 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 Bluestone 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 streams, wetlands, and protected habitats, identification of sensitive receptors, agricultural lands, and protocols to protect previously unknown cultural resource sites during construction.

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

For reference, the SEEP will include a table outlining the specific Certificate Conditions incorporated into the SEEP with references to the section of the SEEP where those conditions may be found.

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BLUESTONE WIND PROPOSED SEEP CASE 16-F-0559

**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.

Non-Linear Facility Components: 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 of the following Site Engineering and Environmental Plan (SEEP) 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 Bluestone 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 copy of the American Land Title Association (ALTA) survey showing locations of existing utility infrastructure.
- Details and specifications of the selected turbine model(s) (including cut sheets and blade details such as length and thickness).
- Foundation drawings including plan, elevation, and section details for each foundation type proposed; if multiple foundation designs are to be utilized for the Facility, the foundation type at each turbine location shall be specified on site plans; applicable criteria regarding foundation design shall be listed and described in the drawings and details.
- 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.

[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.

- Details showing limits of clearing, temporary and permanent grading, and laydown space required for wind turbine installation; details of SWPPP should be indicated.

- 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 or local requirements.

- 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;
    - **iv.** general concrete testing procedures, including a plan outlining the Certificate Holder's monitoring and testing of concrete procedures in conformance with the Building Code of New York State, ACI, ASTM, and any other applicable specifications.

- The locations or description of locations for concrete chute washout and any other cleaning activities (e.g., equipment cleaning for control of invasive species).

- Maps showing the location for the selected operations and maintenance (O&M) building. If an existing building is not utilized, prior to construction of the O&M building, the Certificate Holder shall provide the final O&M building details and construction drawings. Plans for the O&M building property 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 the Facility, in which case a plan for the timing of the submission of the O&M building details and construction drawings will be provided.

<u>Linear Facility Components:</u>

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[2] 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:

a. *Collection System Circuits Map* for the collection substation and collection line circuits' configuration and location, indicating locations of all overhead and underground installations and the number of required circuits per circuit-run.

b. Final design and details of single and multiple electric circuit underground collection lines. Each Project circuit layout (single, double, triple, etc.) shall include a cross-section and clearing and ROW widths needed for accommodating circuit installations.

c. Final details of single and multiple-circuit overhead 34.5 kV electric collection line layouts. Each Project circuit layout (single, double, triple, etc.) shall include typicals for all overhead structures, proposed guying, and associated clearing.

d. The boundaries of any new, existing, and/or expanded utility right-of-way or road boundaries, and where linear Facility lines or cables are to be constructed overhead or underground; plus, any areas contiguous to the Facility or street within which the Certificate Holder will obtain additional rights.

e. The location of each Facility structure (showing its height, material, finish and color, and type), structural foundation type (e.g., concrete, direct bury) and dimensions, fence, gate, down-guy anchor, and any counterpoise required for the Facility (typical counterpoise drawings will suffice recognizing that before field testing of installed structures the Certificate Holder may be unable to determine the specific location of all required counterpoise), conductors, insulators, splices, and static wires and other components attached to Facility structures.

f. Each Facility access road will be identified by a unique name designation. Each access road will be shown on a scaled drawing indicating the width used during construction and the proposed width post- construction on the restoration plan. Temporary and permanent cut and fill contours for each road shall also be shown at two-foot contours. Access controls such as gates shall be indicated, with typical or specific design indicated as applicable to individual sites, and identifying construction and material details of gates and berms.

g. Discuss the types of access roads or paths that will be used including consideration of:
   i. temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile underlayment, gravel surface, etc.);
   ii. permanent installations (e.g., cut and fill earthen road, geotextile under-layment,

[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.

gravel surface, paved surface, etc.);
iii. use of existing roads, driveways, farm lanes, rail beds, etc.; and,
iv. other access, e.g., helicopter or barge placement.

h. For each temporary and permanent access type, provide a typical installation plan view, cross section and side view with appropriate distances and dimension and identification of material. Where existing access ways will be used, indicate provisions for upgrading for Facility construction. Demonstrate accommodation of planned or proposed future access to sites and lands within or adjacent to the facilities locations (and landowner requested improvements (e.g., access roads across linear facilities such as wires, pipes, or conduits.).

i. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide re-vegetation materials specifications. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:
i. check dam (for 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.

- 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;
  iii. bridges (either temporary or permanent); and,
  iv. fords.

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

- 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.

- 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:

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 existingutilities);
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.

- 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 Storm Water Pollution Prevention Plan (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. Such

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

plan and drawings shall include contingencies for construction during extreme weather events (e.g., a 100-year storm) to avoid and minimize the cumulative impacts of multiple proximate disturbed areas.

**3. Vegetation Clearing and Disposal Methods**

Identify on the plan and profile drawings:

a. the locations of sites requiring trimming or clearing of vegetation including both above and below ground (i.e., stumps) and the geographic limits of such trimming or clearing;

b. the specific type and manner of cutting, disposition or disposal method for vegetation (e.g., chip; cut and pile; salvage merchantable timber, etc.);

c. the disposal locations of all vegetation (including stumps) to be cut or removed from each site;

d. any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods;

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. Building and Structure Removal**

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

**5. 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 and operation.

b. Show the location of all potable water sources, including springs and wells on or within 100 feet of the Facilities site, indicating on a site-by-site basis, precautionary measures to be taken to protect each water source.

**6. <u>Wetlands</u>**

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.

**7. <u>Land Uses</u>**

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 (Ag&Mkts.)

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:

i. Identify and indicate the location of known sensitive land uses and resources that may be affected by construction or maintenance of the Facility or by construction-related traffic (e.g., hospitals, emergency services, sanctuaries, schools, and residential areas).

c. Geologic, Historic, and Scenic or Park Resources:
   i. Indicate the locations of geologic, historic, and existing or planned scenic or park resources and specify measures to minimize impacts to these resources (e.g., specified setback distances, vegetation protection, fencing, signs).

d. Recreational Areas:
   i. Indicate the locations where existing recreational use areas, designated trails, trailhead parking areas or associated access driveways would affect or be affected by the Facility location, site clearing, construction, operation or management of the Facility.

**8. Access Roads, Lay-down Areas and Workpads**

a. Indicate the locations of temporary and permanent access roads, lay- down areas and work pads.

b. Provide construction type, material, and dimensions and their associated limits of disturbances.

c. Indicate provisions for upgrading any existing access roads.

**9. Noise Sensitive Sites**

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

**10. Ecologically and Environmentally Sensitive Areas**

a. Indicate the general locations of any known ecologically and 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 with 100 feet of any access roads to be constructed, improved or maintained for the Facility. Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs "Sensitive Environmental Areas, No Access").

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. Invasive Species of Special Concern

a. Identify the location(s) of Invasive Species of Special Concern (based on site invasive species survey as required by the Certificate) and the prescribed method to control the spread of the identified species on the site during construction.

## 12. Vegetation Controls and Herbicides

a. Indicate areas where herbicides will be used, and prescribed treatment methods for specific vegetation control, on the site plans and construction drawings.

## *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 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. Facility Location and Description

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 objections raised by Federal, State or local transportation (highways, waterways, or aviation) officials to the final location or manner of installation of, or access to, the certified Facility site(s).

### 2. Environmental Compliance and Monitoring Plan.

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 environmental monitor;

b. Full-time construction supervisor;

c. Part-time or full-time agricultural inspector; 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.

g. Include a procedure for providing DPS Staff, Ag&Mkts, and DEC 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 Towns any complaints not resolved within 30 days of receipt;

f. Mediating 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

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 Storm Water Pollution and Prevention Plan (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 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 Counter Measures (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 the Road Use Agreements with State (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 NYS Department of Transportation, NYS State Police Barracks, County Department of Public Works, local school districts, County Sheriffs and local Police department have been contacted or when they will be contacted. The plan shall identify weight limited bridges in the area to be avoided. The plan shall include constraints on use of heavy equipment and vehicles used for construction.

c. The SEEP shall attach a *Traffic Control Plan* that identifies:

   i. The delivery route(s) in the Towns of Sanford and Windsor, (all transportation routes from where they exit Interstate 86 to where they end at the delivery site) 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 Clearing 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. Specifies the locations where herbicides are to be applied. Provide a general discussion of the site conditions (e.g., land use, target and non-target vegetation species composition, height and density) and the choice of herbicide, formulation, application method and timing. Provide lists of desirable and undesirable vegetation species.

b. 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.

**9. Plans, Profiles, and Detail Drawings**

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

**10. Land Uses**

a. The SEEP shall attach 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**

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

**12. Inadvertent Return Plan**

a. The SEEP shall attach an *Inadvertent Return Plan* showing all locations where horizontal directional drilling (HDD) 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 freshwater and allowed to dry and dissipate naturally.

v. If the amount of surface return exceeds that which can be collected using small pumps, drilling operations shall be suspended until surface volumes can be brought under control.
vi. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area (i.e. wetlands and water bodies) the returns shall be monitored and documented.
vii. Drilling operations must be suspended if the surface returns pose a threat to the resource or 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, handing and disposal.

**13. <u>Final Blasting Plan</u>**

a. The SEEP shall attach a site-specific final Blasting Plan designed to protect surrounding structures, including groundwater wells. The Blasting Plan shall include:
   i. Setbacks;
   ii. Blasting safety protocols;
   iii. Notification procedures for the public and emergency responders;
   iv. Water well survey protocols;and
   v. Seismic monitoring protocols.

**14. <u>Visual Mitigation</u>**

a. If required by the issued Certificate, 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;
   ii. a protocol for monitoring operational conditions and potential flicker exposure at the wind turbine locations identified in the analysis, based on meteorological conditions;

iii. details of the shadow prediction and prevention technology that will be adopted for real-time meteorological monitoring and operational control of turbines;
iv. temporary turbine shutdowns during periods that produce flicker over 30 hours/year; and
v. shielding or blocking measures (such as landscape plantings and window treatments) for receptor locations that submit complaints for exposures that are not subject to the 30-hour annual limit.

**15. Cultural Resources**

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

**16. Avian and Bat Impacts**

a. The SEEP shall attach an Avian and Bat Construction Impact Plan describing measures to be implemented during construction to reduce impacts to birds and bat species.

**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 of the SEEP, 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 any backfilling occurs;

iii. The Certificate Holder shall utilize free span temporary equipment bridges or culverts designed to NYSDEC and/or US Army Corps of Engineers standards to cross all streams with flow at the time of the proposed crossing. This will outline how:

a) All structures must be able to safely pass the 1% storm event and be capable of withstanding any higher flow intervals likely to be experienced within a specific waterbody 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.

iv. If there is an inadvertent puncturing of a hydrologic control for a wetland, then the puncture shall be immediately sealed, and no further activity shall take place until DPS and DEC staff are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved by DPS and DEC;

v. 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;

vi. Work areas shall be isolated from flowing streams by use of sandbags, cofferdam, piping or pumping around the work area. Waters accumulated in the isolated work area shall be discharged to an upland settling basin, field or wooded area to provide for settling and filtering of solids and sediments before water is returned to the stream. Return waters shall be as clear as the flowing water upstream from the work area. Temporary dewatering structures (i.e., cofferdams, diversion pipes, etc.) and associated fill shall be completely removed, and the disturbed area shall be regraded and restored immediately following the completion of work;

vii. 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; and

viii. 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 utility crossings that cannot use trenchless methods; specific plans with the alignment for each wetland crossing; the extent of clearing and ground disturbance; proposed locations of temporary access roads; description of methods used to minimize soil compaction; and adherence to the following requirements:

i. Excavation, installation, and backfilling must be done in one continuous operation;
ii. Work within wetlands should be conducted during dry conditions without standing water or when the ground is frozen, where practicable;
iii. Before trenching occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of turbid trench water from entering wetlands or waterbodies;
iv. Trench breakers/plugs shall be used at the edges of wetlands as needed to prevent wetland draining during construction as described in Section B(5);
v. Only excavated wetland topsoil, hydric soils, and subsoil shall be utilized as backfill at wetland restoration areas;
vi. Wetland topsoil shall be removed and stored separately from wetland subsoil and temporarily placed onto a geo-textile blankets;
vii. The length of the trench to be opened shall not exceed the length that can be completed in one day. This length of trench generally should not exceed 1,500 feet in a wetland; and
viii. When backfilling occurs in wetlands, the subsoil shall be replaced as needed, and then covered with the topsoil, such that the restored topsoil is the same depth as prior to disturbance.

d. Description of wetland restoration measures, including:

i. Contours shall be restored to pre-construction conditions within 48 hours of final backfilling of the trench within wetlands and state-regulated adjacent areas;
ii. Immediately upon completion of grading, wetland and adjacent areas shall be seeded and/or replanted with native shrubs and herbaceous plants at pre-construction densities. Seeding with an appropriate native wetland species mix (e.g. Ernst Wetland Mix (OBL-FACW Perennial Wetland Mix, OBL Wetland Mix, Specialized Wetland Mix for Shaded OBL-FACW), or equivalent), or seeding with crop species mix consistent with 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 DEC 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 and 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. To safely pass the 1% annual (100-year return) chance storm event;

ii. 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;

iii. Shall be a minimum width of 1.25 times (1.25X) the bankfull width of stream channel;

iv. The slope shall remain consistent with the slope of the adjacent stream channel. For slopes greater than 3%, an open bottom culvert, where practicable;

v. Shall facilitate downstream and upstream passage of aquatic organisms; and

vi. Water handling plan describing the measures to direct stream flow around the work area and measures to dewater the isolated work area.

The Stream Crossing Plan will also include an analysis of the proposed collection line crossing of Oquaga Creek consisting of:

vii. Plan view and cross-sectional view drawings which depict the extent of clearing and disturbance;

viii. An analysis of vertical and lateral profiles for Oquaga Creek at the location of the proposed collection line crossing showing the stream bed is sufficient to prevent exposure of the collection line from stream erosion both vertically and horizontally for the life of the pipeline. A collection line profile of the crossing will be provided in per Section A(1) above;

ix. A description of access location, types and restoration practices; and

x. A description of specific dewatering practices for Oquaga Creek crossing (including the nearby adjacent wetlands and tributaries) demonstrating consistency with SWPPP, and/or the use of additional BMPs (i.e., silt sacs, dewatering bags, etc.).

f. A description of stream restoration demonstrating adherence with the following:

i. The restored stream channel shall be equal in width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to profile of the stream channel upstream and downstream of the project area. The planform of

any stream shall not be changed;

ii. Any 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. Any in-stream habitat structures shall not create a drop height greater than 6-inches;

iv. All disturbed stream banks below the normal 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 ordinary 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; and

vi. Destroyed bank vegetation shall be replaced with appropriate native shrubs, live stakes, and/or tree plantings as site conditions, as appropriate.

g. 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. If on-site wetland mitigation is required, the SEEP shall attach a copy of the final *Wetlands Mitigation Plan*, developed in coordination with DEC, DPS Staff, and the Army Corps of Engineers, addressing permanent impacts to federal and State-regulated wetlands. The Wetlands Mitigation Planshall:

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. 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 these

proposed certificate conditions;

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 beingachieved;
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**

a. The SEEP shall attach a Final Invasive Species Control Plan (ISCP), based on the pre-construction invasive species survey of invasive species conducted within the Project Area during the previous growing season. The ISCP shall include:

i. measures that will be implemented to minimize the introduction of Invasive Species of Special Concern and control the spread of existing invasive species of special concern during construction (e.g., soil disturbance, vegetation clearing, transportation of materials and equipment, and landscaping/re-vegetation).

ii. Control measures shall include construction materials inspection and sanitation, invasive species treatment and removal, and site restoration.

iii. A post-construction monitoring program (MP) shall be conducted in year 1 and year 3 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISCP effectiveness.

**19. Sound**

a. A statement that the Certificate Holder will comply with the following conditions regarding construction noise:

i. Comply with all local laws regulating construction noise;

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

iii. Respond to noise and vibration complaints according to the protocols established in the Complaint Resolution Plan.

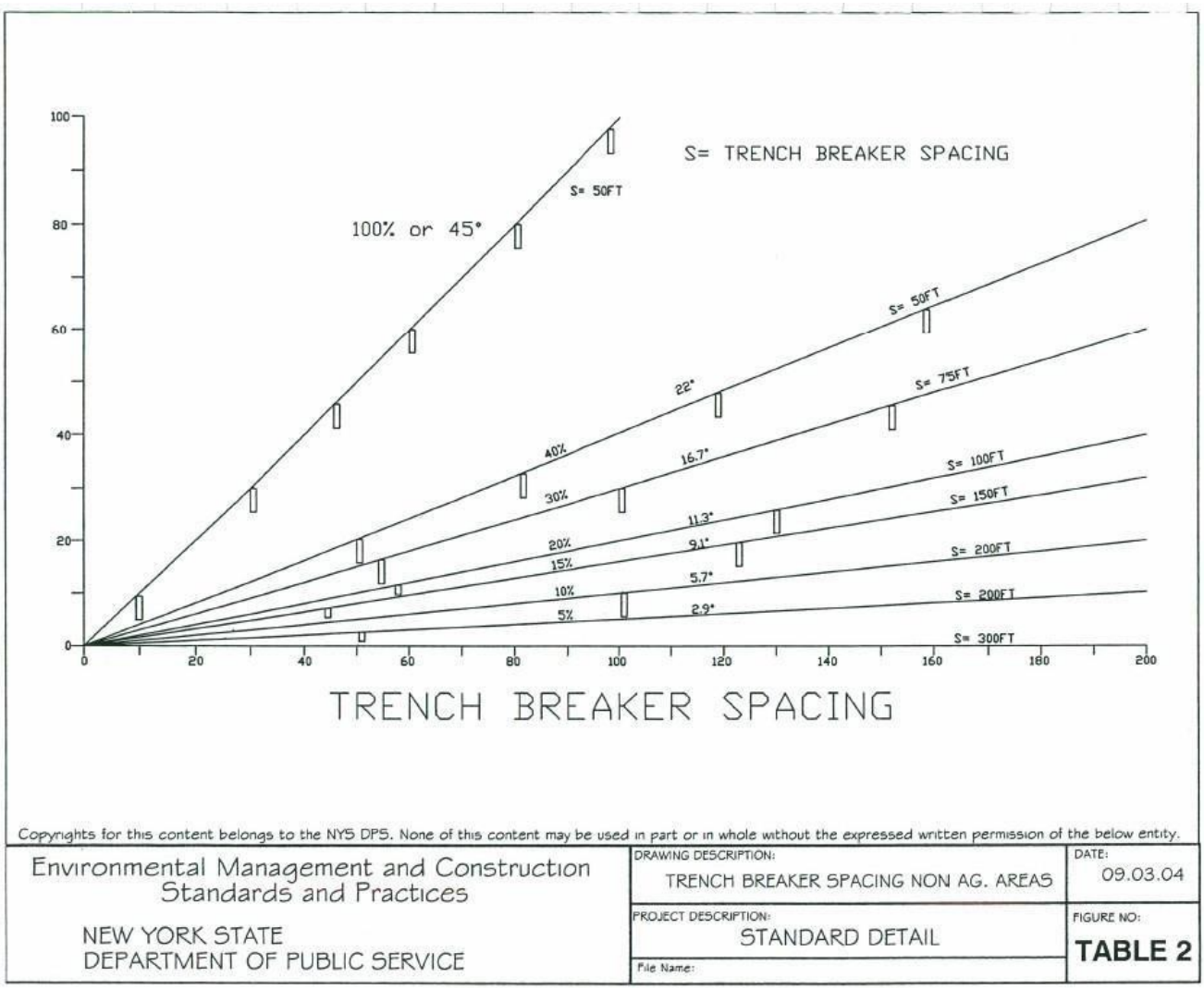
b. Specify procedures to be followed to minimize noise impacts related to facility site clearing and construction of the Facility. Indicate the types of major equipment to be used in construction and Facility operation; sound levels at which that equipment operates; days of the week and hours of the day during which that equipment will normally be operated; any

exceptions to these schedules; and any measures to be taken to reduce audible noise levels caused by either construction equipment or Facility operation.

**20. Operations Schedule and Timing**

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

## *Appendix 1 - Trench Breaker Spacing*



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|---|---|---|
| Environmental Management and Construction Standards and Practices<br>NEW YORK STATE<br>DEPARTMENT OF PUBLIC SERVICE | DRAWING DESCRIPTION: TRENCH BREAKER SPACING NON AG. AREAS | DATE: 09.03.04 |
| | PROJECT DESCRIPTION: STANDARD DETAIL<br>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

- 10.1.1 Battery Storage
- 10.1.2 Laydown Areas
- 10.1.3 O&M Building
- 10.1.4 Concrete Batch Plant
- 10.1.5 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
    - 19.2 Revised Sound Modeling
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 of the following Site Engineering and Environmental Plan (SEEP) 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 BLUESTONE 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
    - 53 Fugitive Dust Control Measures
    - 54 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.

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## 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 97, 98, 102, 013, 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 environmental monitor;

b. Full-time tree clearing supervisor;

c. Part-time or full-time agricultural inspector; 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;

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 *Spill Prevention, Containment and Counter Measures (SPCC) Plan* for tree clearing. Areas to be cleared will be staked and/or flagged as relevant in accordance with Condition 90 (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 Towns of Sanford and Windsor, (all transportation routes from where they exit Interstate 86 to where they end at the delivery site) 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) Specifies the locations where herbicides are to be applied. Provide a general discussion of the site conditions (e.g., land use, target and non-target vegetation species composition, height and density) and the choice of herbicide, formulation, application

method and timing. Provide lists of desirable and undesirable vegetation species.

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 is not possible, the Certificate Holder shall consult with the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and DPS Staff to determine if mitigation is warranted. The identification of mitigation measures will be 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 DEC, 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, 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 Storm Water Pollution and Prevention Plan (SWPPP).

**12. <u>Invasive Species Control Plan</u>**

a. 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:
    i. measures that will be implemented to minimize the introduction of Invasive Species of Special Concern and control the spread of existing invasive species of special concern during tree clearing
    ii. Control measures shall include materials inspection and sanitation, invasive species treatment and removal, and site restoration.
    iii. A post-construction monitoring program (MP) shall be conducted in year 1 and year 3 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISCP effectiveness.

**13. <u>Sound</u>**

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)[4] showing:

- Details showing limits of clearing, temporary and permanent grading, and laydown space required for wind turbine installation;
- Details of SWPPP shouldbe 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[5] Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet) showing:

- Details showing limits of clearing, temporary and permanent grading, required for linear components;
- Details of SWPPP shouldbe indicated;
- 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.
- 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 (forditches or stabilization of topsoil);
  ii. broad-based dip or berm (for water diversion across the access road);
  iii. roadside ditch with turnout and sedimenttrap;
  iv. French drain;

[4] 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.

[5] 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.

v. diversion ditch (waterbar);

vi. culvert (including headwalls, aprons, etc.);

vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and,

viii. silt fencing.

- 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:
  - ix. timber mat or other measures to prevent soil compaction;
  - x. culverts includingheadwalls;
  - xi. bridges (either temporary or permanent); and,
  - xii. fords.
- All diagrams and specifications should include material type and size to be placed in streams and on streamapproaches.
- 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 Storm Water Pollution Prevention Plan (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:

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

- 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;
- 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;
- areas requiring danger tree removal (i.e., trees with cracks or decay in proximity of a utility right-of-way); and
- 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, hedgerowsetc.

**4. Waterbodies**

- 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;
  i. the activities to be restricted in such zones; and,
  ii. 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.
- Show the location of all potable water sources, including springs and wells on or within 100 feet of the Facilities site, indicating on a site-by-site basis, precautionary measures to be taken to protect each watersource.

**5. Wetlands**

- 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 asappropriate.
- 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 anddelineation.
- 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

- 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 (Ag&Mkts.)
  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.

- Sensitive Land Uses and Resources:

  Identify and indicate the location of known sensitive land usesand 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).

- 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).

- 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

- 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 with 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").
- 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. Invasive Species of Special Concern**

- Identify the location(s) of Invasive Species of Special Concern (based on site invasive species survey as required by the Certificate) and the prescribed method to control the spread of the identified species on the site during tree clearing.

**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.