NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 16-F-0062 - Application of Eight Point Wind, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Project.

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

Issued and Effective: August 20, 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 August 20, 2019

BOARD MEMBERS PRESENT:

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

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

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

Vincent Ravaschiere, Alternate for
Howard Zemsky, Commissioner, President & CEO
New York State Empire State Development Corporation

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

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BY THE BOARD:

INTRODUCTION

By this order, we grant to Eight Point Wind, LLC (Eight Point or the Applicant) a Certificate of Environmental Compatibility and Public Need to construct and operate a wind farm generating facility in Steuben County, New York. With the extensive conditions attached to and made a part of this order, we determine the wind farm will meet all the statutory requirements for certification under Article 10 of the Public Service Law (PSL). Our decision is supported by the extensive evidentiary record compiled through hearings before the Presiding Examiners 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 ultimate 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 opposing exceptions, public comments, and all applicable law and policy.

BACKGROUND

Description of the Project

The proposed commercial-scale wind power project will consist of up to 31 wind turbines with a total capacity of up to 101.8 megawatts (MW) (the Project or the Facility). Wind turbines will be located on leased or purchased land in the Towns of Greenwood and West Union (the Towns). Eight Point will most likely use 27 General Electric (GE) 3.43 MW wind turbines and four GE 2.3 MW wind turbines. The 3.43 MW wind turbines will have a rotor blade diameter of 137 meters (449.4 feet) and will be mounted on a 110-meter (360.8 feet) tubular steel tower,

for a total height of approximately 585 feet. The 2.3 MW wind turbines will have a rotor blade diameter of 116 meters (380.5 feet) and a 94-meter (308.3 feet) tubular steel tower, for a total height of approximately 498.5 feet.

In addition to the 31 wind turbines, the RD's recommendations allow for the construction of access roads, a collection substation, mostly underground 34.5 kilovolt (kV) collection lines, up to two permanent meteorological towers, temporary staging and laydown areas, an operations and maintenance building, and related facilities.

Procedural History

On January 29, 2016, Eight Point, a wholly-owned subsidiary of NextEra Energy Resources, LLC, submitted a letter to the Secretary of the New York State Board on Electric Generation Siting and the Environment (Siting Board), indicating its intent to apply for an Article 10 Certificate for a proposed 103.4 MW wind energy project located in the Towns of Canisteo, Greenwood, Hartsville, Hornellsville, Jasper, Troupsburg, and West Union. The January 29, 2016 letter also served as a formal submittal of the Applicant's Public Involvement Program (PIP) Plan, pursuant to §1000.4 of Part 16 of the Official Compilation Codes, Rules and Regulations of the State of New York (NYCRR). After amendment and revision pursuant to DPS review, the Applicant filed its final PIP Plan on March 29, 2016.[1]

On October 11, 2016, Eight Point submitted its Preliminary Scoping Statement (PSS).[2] The PSS indicated that the Applicant's proposed wind facility would be constructed in the Towns of Greenwood, Troupsburg, and West Union and would consist

[1] Hearing Exhibit (Hrg. Ex.) 1.

[2] Hrg. Ex. 6.

of up to 32 wind turbines with associated collection lines, access roads, and other temporary and permanent supporting infrastructure. Eight Point Wind also indicated that the Project's output would interconnect with New York State Electric and Gas Corporation's existing Bennett Substation in Hornellsville. As designed in the PSS, the Project would have a maximum generating capability of approximately 102 MW from an estimated 32 wind turbines.

The PSS is part of the pre-application procedures prescribed by the Board in 16 NYCRR §1000.5. During the pre-application scoping phase, the project applicant, DPS, other statutory parties, and interested participants determine the nature and scope of the studies that the applicant must conduct to support its Article 10 application. The scope of the studies, documented in written stipulations, determine what information the project applicant must include in its formal application. In general, the applicant's studies should evaluate the potential impacts of the project on the environment, public health, and other public interest factors. When the application is submitted, stipulations, if any, are used in conjunction with 16 NYCRR Part 1001 (which states the required contents of an Article 10 application) to determine whether the application complies with PSL §164.

Stakeholders provided comments on Eight Point's PSS on November 1, 2016.[3] Eight Point responded to the stakeholder comments on November 22, 2016. After conducting several meetings to negotiate stipulations concerning the studies necessary to complete its application, Eight Point filed draft

[3] A pre-application intervenor fund of $36,190 was established when the PSS was filed. In a series of rulings, these funds were awarded to the Towns to pay for eligible legal and engineering services.

stipulations on June 30, 2017. After receiving comments on the draft stipulations on October 19, 2017, Eight Point filed final, executed stipulations.

On November 29 and December 1, 2017, Eight Point filed the first iteration of its formal application for the Project. As proposed in the Application, the Project's nameplate capacity would be 101.8 MW and would include the installation and operation of up to 31 wind turbines, together with access roads, a collection substation, mostly underground 34.5 kilovolt (kV) collection lines, up to two permanent meteorological towers, temporary staging and laydown areas, an operations and maintenance (O&M) building, and related facilities. However, its construction would be limited to the Towns of Greenwood and West Union. On December 5, 2017, the Secretary issued Notices regarding party status requests and indicating the availability of the intervenor funds for the application phase of the proceeding.[4]

Two application deficiency letters were issued on January 29 and June 18, 2018, respectively. Eight Point filed application supplements on April 17, 2018, and August 13, 2018. Thereafter, by letter dated September 6, 2018, the Chair of the Siting Board sent formal notice to the Applicant that its application was deemed compliant with the requirements of PSL §164. In accordance with PSL §165(1), the Chair of the Siting Board set October 17, 2018, as the date for commencement of the public hearings.

On October 17, 2018, the Examiners conducted public statement hearings in Hornell, New York. At the hearings, 34

[4] Half of the application-stage intervenor fund of $105,885 was awarded to the Towns jointly and the other half was awarded the Citizens for Maintaining Our Rural Environment, a local advocacy group.

members of the public spoke, 26 against and eight in favor of the proposed Facility. On October 18, 2018, the Examiners conducted a procedural conference, also held in Hornell, to address party status and requests for the same, award intervenor funding, discuss applicable procedural rules and requirements, identify issues for adjudication, and establish a schedule for the filing of testimony and exhibits and the evidentiary hearing. The procedural schedule, adopted by rulings issued November 5, 2018, and January 18, 2019, called for the filing of direct testimony and exhibits on January 22, 2019, and rebuttal testimony and exhibits on February 11, 2019.

On November 13, 2018, Eight Point filed a Notice of Impending Settlement Negotiations. Eight Point indicated that the negotiations would be aimed at crafting proposed conditions to be included in any Certificate that may be issued in this proceeding. In accordance with the Siting Board's rules, the required review of the notice was completed and reported on November 16, 2018.

On January 22, 2019, DPS Staff, DEC Staff, the New York State Department of Agriculture and Markets (DAM) Staff, and Citizens for Maintaining Our Rural Environment (CMORE) filed direct testimony and exhibits concerning the Project. Eight Point and CMORE filed rebuttal testimony and exhibits. The Examiners held an evidentiary hearing in Alfred, New York, on March 11, 2019. The evidentiary record includes a transcript exceeding 780 pages and a total of 62 exhibits, many of which are multipart. Representatives of interested parties, including Eight Point, CMORE, DEC Staff, and DAM Staff attended the site visit. Eight Point, DPS Staff, DEC Staff, DAM Staff, and CMORE filed their initial post-hearing briefs on April 5, 2019. Eight Point filed its reply brief on April 19, 2019.

The Secretary issued the Examiners' RD on May 23, 2019, and a Notice Seeking Comment on the RD on June 3, 2019. On June 12, 2019, Eight Point filed a Brief on Exceptions to the RD. On June 28, 2019, DPS Staff filed a Brief Opposing Exceptions. One individual, who also filed several comments throughout the proceeding, filed public comments after the RD was issued, maintaining his opposition to the Project.

Public Involvement and Comments

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

Throughout the pre-application, scoping, and application phases, Eight Point implemented its public involvement program as described in the PIP Plan, including establishing a Project website, opening a local office in the Project area, and disseminating a toll-free number to provide public access to Project information. Eight Point also attended local town board meetings, met with school districts and emergency response organizations, communicated with certain stakeholders by letter and email, hosted three open houses for the public between June 2016 and July 2017, posted notice of the meetings and Project milestone filings in the local newspapers of record and established local public repositories where case documents could be reviewed by the public. As reported in the RD, Eight Point successfully implemented the PIP Plan elements and encouraged participation from municipal officials and

affected local, State and federal agencies and sought input from these stakeholders.[5]

The Examiners noted that additional opportunities for public involvement are available during the certification and compliance stages of the Project, as provided for in the proposed Certificate Conditions that they recommended that we adopt. We adopt the recommended Conditions. We note, for example, that pursuant to such Conditions, Eight Point will be required to notify the public of Project milestones and site activities and adopt processes to address Project-related complaints.[6] Accordingly, our adoption of the Certificate Conditions will ensure that the public continues to receive Project information and that Project-related complaints are handled consistently.

As noted above, many public comments were received at the public statement hearings and online. These comments were summarized and reported by the Examiners in the RD. Public comments also were submitted by one individual following the issuance of the RD. Consistent with the comments he submitted before the RD was issued, the commenter opposes the approval of this Project. In his post-RD comments, he maintains that there is no proof or data to support assertions that the Project will lower greenhouse gas emissions, that the setback for wind turbines must be 2,640 feet, and that nighttime noise limits

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[5] A list of parties to the case and of persons and organizations that request to be informed of Project filings is maintained by DPS. Those listed on the party and service lists were advised by mail or email of filings, rulings, and notices of Project milestones, and were provided information relating to Project activities, such as comment periods, procedural conferences, technical conferences and public statement hearings.

[6] See, for example, Certificate Conditions 12 and 56 in Attachment A.

should be 40 decibels -- a limit that he says is consistent with the World Health Organization (WHO) guidelines. Further, he states that this Project would negatively impact his health and property value. These comments will be addressed, as appropriate, in the relevant sections, below.

Settlement of Proposed Certificate Conditions

The settlement process that produced the Certificate Conditions that we are adopting in this order is described more fully in the RD. As noted in the RD, the Certificate Conditions specify that the Applicant is responsible for obtaining all other permits and approvals required for this Facility, including, the approval of the Public Service Commission (Commission) to construct the transmission line that will connect the Project to the electric system and any Commission approval that may be required pursuant to PSL §§68, 69 and 70. The Conditions require the Applicant to incorporate specified measures to minimize noise levels, visual impacts, and the extent of tree and vegetation clearing that will be required. The Article 10 Certificate that we are granting in this order is subject to these Conditions, as revised in the RD and herein. The Certificate Conditions are appended to this order as Attachment A.

REQUIRED STATUTORY FINDINGS

Article 10 Standards

On August 4, 2011, Governor Andrew Cuomo signed into law the Power NY Act of 2011, creating a new PSL Article 10.[7] The updated Article 10 recreates the Siting Board and charges it with establishing rules and regulations relating to the procedures for certifying major electric generating facilities. Recognizing the multi-disciplinary breadth of such a charge, the Siting Board is comprised of five permanent members: the Chair of the DPS, who also serves as Chair of the Board; the Commissioner of Environmental Conservation; the Commissioner of Health; the Chair of the New York State Energy Research and Development Authority; and the Commissioner of Economic Development. To include local input into the Siting Board's decisions, Article 10 also establishes two *ad hoc* board positions that are reserved for residents of the municipality in which a facility is proposed to be located, one appointed by the

[7] L. 2011, c. 388 (effective August 4, 2011). NY Senate Bill No. S5844 and NY Assembly Bill No. A08510 of the 2011-12 Legislative Session. The Bill states that its purpose was, *inter alia*, to "reauthorize and modernize Article X of the Public Service Law, regarding siting of major electric generating facilities in a manner that enhances public participation and augments environmental justice." Between 1992 and 2003, PSL Article X set forth the process applicable to siting major electric generating facilities in New York. After Article X expired on January 1, 2003, the State Environmental Quality Review Act (Environmental Conservation Law [ECL] Article 8 [SEQRA]) and applicable permitting provisions of the ECL governed the decision-making and permitting for proposed siting projects.

president *pro tem* of the Senate and the other by the speaker of the Assembly.[8]

Article 10 charges the Siting Board to make specific findings before issuing a Certificate. Specifically, PSL §168(2) requires that the Siting Board make explicit factual findings as to the probable environmental impacts of constructing and operating the facility, including impacts on (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. The Siting Board's findings must examine the cumulative impact of emissions on the local community, including a determination whether the construction and operation of the Facility will result in a significant and adverse disproportionate environmental impact on an Environmental Justice community.[9]

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[8] PSL §160(4). The Secretary sent letters, dated June 22, 2016, to the municipal chief executive officers in the Project area notifying them that, while no action was required at that time, they would be responsible for nominating ad-hoc members shortly after the Applicant filed a PSS. After receipt of the Applicant's PSS, the Secretary, via letters dated October 17, 2016, again contacted the municipal chief executive officers in the Project area seeking their nominations for ad hoc Siting Board members, and also contacted the president *pro tem* and the speaker of the assembly to request that they each appoint an ad hoc Siting Board member from the lists of nominees that were supposed to be submitted to them by the municipal chief executive officers. On December 7, 2016, the president *pro tem* of the Senate appointed Larry McCaffrey as the ad hoc Siting Board member. Mr. McCaffrey ultimately withdrew due to a conflict of interest. No other ad hoc appointments were made.

[9] PSL §168(2)(d).

Section 168(3) prohibits the Siting Board from issuing a Certificate unless it determines that: the facility is a beneficial addition to, or substitution for, the electric generation capacity of the State; the adverse environmental impacts of the project's construction and operation have been adequately minimized or avoided to the maximum extent practicable; and, the construction and operation of the facility will serve the public interest. The Siting Board also must determine that the facility is designed to operate in compliance with applicable State and local laws and regulations concerning, among other matters, the environment, public health and safety. To assist the Siting Board in its local law determination, PSL §168(3) requires that the Siting Board provide the affected municipalities an opportunity to present evidence on its own ordinances, laws, resolutions, regulations or other relevant local actions. Further, PSL §168(3) provides that, where an Environmental Justice community has been identified, the Siting Board may not issue a Certificate unless it determines either that the facility does not result in or contribute to a significant and adverse disproportionate environmental impact to that community, or, if it does create such an impact, that the applicant will avoid, offset or minimize such to the maximum extent practicable for the duration of the Certificate.

Pursuant to PSL §168(4), the Siting Board's conclusions under PSL §168(3) are to be supported by consideration of the state of available technology, the nature and economics of reasonable alternatives, the Board's PSL §168(2) findings on the project's environmental impacts, the impact of construction and operation of any related project facilities, the consistency of the construction and operation of the facility with the most recent State energy plan, and the impact on community character and whether the facility would

affect communities that are disproportionately impacted by cumulative levels of pollutants. Finally, the Siting Board may consider any other social, economic, visual or other considerations that it deems pertinent. We have examined the record evidence regarding these factors, where relevant, in our discussion of the PSL §168(3) determinations.

Electric Generation Capacity - PSL §168(3)(a)

PSL §168(3)(a) and PSL §168(4) require a finding that the Facility will be a beneficial addition to the electric generation capacity of the State, taking into consideration whether the proposals are consistent with the State's energy policy and planning objectives. Based on Hearing Exhibits 8 and 28, the Examiners found that the Facility will be a beneficial addition to the electric generation capacity of the State and is consistent with the State's energy policy and planning objectives.

The latest State Energy Plan (SEP), issued in 2015, and the Clean Energy Standard (CES), adopted by the Commission in Case 15-E-0302,[10] emphasize the importance of renewable electric generation, which will be provided by the Facility. The Facility will serve the goals of increasing and improving fuel diversity by adding more wind power into the mix. The Examiners recommended that we determine that the Project is a beneficial addition to New York's electric generation capacity through the provision of renewable energy to the regional market, the diversification of New York's generation mix, and the reduction of greenhouse gas emissions. No party took

[10] Case 15-E-0302, Implementation of a Large-Scale Renewable Program and a Clean Energy Standard, Order Adopting a Clean Energy Standard (issued August 1, 2016) (CES Order).

exception to the RD's proposed findings and determinations on this issue, and we adopt them.[11]

Public Interest (PSL §168(3)(b))

Section 168(3)(b) of the PSL requires the Siting Board to determine that construction and operation of the Project will serve the public interest. In making this determination, the Siting Board considers 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 SEP and additional social, economic, and other factors deemed relevant by the Board. The Examiners recommended that we find that the Project is in the public interest based on its creation of direct construction and ongoing jobs, other estimated monetary benefits, and its consistency with the State's CES and SEP policies and goals.

As we discussed above, we agree with the Examiners' determinations concerning the consistency of the construction and operation of this Facility with the SEP and other State energy policies. We also agree with the Examiners' determination that the record information concerning the monies that will be injected into the local communities, along with the undisputed benefits of the numerous direct construction and ongoing jobs created because of the Project, provide additional support for finding that the Project is in the public interest. However, the Examiners recommended that, in an excess of

[11] With respect to the post-RD commenter's assertion that there is no proof or data to support the conclusion that the Project will lower greenhouse gas emissions, at page 51 of the RD, the Examiners summarized the record evidence concerning the annual reductions in CO2, NOx, and SO2 emissions expected as a result of Project operation. This evidence supports the conclusion that the Project will reduce greenhouse gas and other emissions.

caution, we give little to no weight to annual secondary employment and economic activity likely to be generated by the facility's construction in determining whether the Project will be in the public interest. Eight Point takes exception to this recommendation. DPS Staff opposes Eight Point's exception.

Eight Point acknowledges that even if we grant its exception, the RD's recommendation for certification of the Project would not change. Still, Eight Point takes exception to the recommendation at issue "because of the possible precedential effect it could have on subsequent Article 10 proceedings in which [its] affiliates are involved." Eight Point claims an error with respect to the RD's conclusion that the reliability of Eight Point's secondary job estimates might reasonably be questioned for several reasons including, among others, that the results of the JEDI model reflect only gross (not net) inputs and that the results are dependent on the multipliers used. Eight Point states that rather than reject the secondary job estimates because the multipliers used in the JEDI model are proprietary and, therefore, not transparent to the users of the model, a more balanced approach would be to assign a margin of error to the estimates. Accordingly, Eight Point requests that we assign a plus or minus 25% margin of error to the secondary job estimates developed in this case.

DPS Staff opposes Eight Point's request, stating that secondary jobs cannot be estimated from project-related budgets and plans or be directly observed or measured, and that Eight Point's margin of error proposal is untenable.

The exception is denied. Eight Point's argument is that it is "patently true" that secondary jobs will be created. However, the RD did not conclude that no secondary jobs would be created. Instead, it questioned the reliability of Eight Point's secondary job estimate. Our regulations require that

the argument in support of the exception not simply reiterate the party's position but include references to the record and to authorities relied on to support the argument on exceptions (16 NYCRR §4.10[c][2]). No record reference or authority is provided to support or justify Eight Point's claim that the RD erred or its proposal that we assign a plus or minus 25% margin of error to the secondary job estimates.[12]

The Examiners also recommended that we adopt Certificate Condition 71[13] which requires the Applicant to file a tracking of the actual number of jobs and the actual earnings and output created during the construction and operation phases of the Project, as well as the actual tax payments to local jurisdictions made during the construction and operation of the Project. No party excepted to this recommendation and we adopt it.

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

PSL §168(2) requires the Siting Board to make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility. Among the environmental impacts the Siting Board is specifically directed to examine are impacts related 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,

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[12] On July 9, 2019, Eight Point filed a one-page response objecting to one aspect of DPS Staff's Brief Opposing Exceptions – namely, urging that we assign no evidentiary weight to the implied estimates cited by DPS Staff at page 4 of its Brief Opposing Exceptions. Because responses to Briefs Opposing Exceptions are not authorized by our rules, Eight Point's response was not considered.

[13] The RD, at page 32, references Condition 72. The correct reference is Condition 71.

communication, utilities, and other infrastructure. PSL §168(2). PSL §168(3)(c) further requires the Siting Board to determine that any adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable before the Board issues an Article 10 Certificate. In addition, PSL §168(3)(e) requires the Siting Board to determine that the facility is designed to operate in compliance with applicable State environmental, and public health and safety laws. In making its determinations, the Siting Board may impose, and monitor compliance with, any terms and conditions it deems necessary.[14]

The following sections summarize the probable environmental impacts associated with the Project identified by the Examiners, the Examiners' recommendations regarding the findings the Siting Board is required to make, the objections to the Examiners' recommendations, if any, and our findings and determinations with respect to the impacts identified.

Ecology

Part 1001 of 16 NYCRR requires an applicant to identify terrestrial (16 NYCRR §1001.22) and aquatic (16 NYCRR §1001.23) ecology in the project area. The applicant must analyze temporary and permanent impacts of construction and operation (16 NYCRR §1001.22[b]) and identify and evaluate reasonable measures to avoid or mitigate those impacts (16 NYCRR §1001.22[c]). The applicant must also demonstrate compliance with State law governing the control of invasive species (16 NYCRR §1001.22[p]).

Impacts to Forestland

Based upon their review of the record, the Examiners found the Project area's predominant land types are forestland

[14] PSL §§162 and 168(5).

and agricultural land, with forestland making up the majority of the area.[15] With respect to forestland, the Examiners found that the Project will result in temporary and permanent impacts arising from land clearing and maintenance associated with the construction and operation of turbines, access roads, meteorological tower foundations and pads, underground transmission lines, overhead transmission lines and overhead collection line structures, an O&M building and a collection substation.[16] Permanent impacts are not expected to be significant, representing the loss of only 0.11% of forestland within the Project area.[17] Various measures to avoid and minimize temporary impacts will be implemented, and areas that are impacted will be restored to their original condition to the extent possible.[18] The Examiners noted that temporary or permanent impacts to plant communities in the Project area are not expected to result in the complete eradication or significant loss of those communities.[19] The Examiners further noted that Eight Point did not identify any State or federally listed endangered, threatened, candidate, or rare plant species, or any significant ecological communities in the Project area through its database requests, or through on-site observations during its survey operations.[20] Accordingly, no impacts to such areas are expected to occur.[21]

Proposed Certificate Conditions designed to avoid or mitigate any impacts to forests and other vegetation in the

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15 RD, p. 36.

16 RD, pp. 37-38.

17 RD, pp. 38-39.

18 RD, p. 39.

19 RD, p. 38.

20 RD, pp. 38-39.

21 RD, p. 39.

Project area noted by the Examiners include Conditions 6, 9, 29, 63, 84, 97, 98, 101, 109, 110, 112, 114, and 135.[22]

Agricultural Mitigation Measures and Monitoring

With respect to impacts to agricultural land -- the second most common land cover type in the Project area -- the Examiners noted that temporary and permanent impacts to vegetation associated with crops and pastures may arise from the siting of underground collection lines and other Project components, along with the clearing of vegetation for the placement of various components during the construction phase of the Project.[23] Eight Point proposed measures to avoid impacts unique to agricultural lands, including adherence to DAM's Guidelines for Agricultural Mitigation for Wind Power Projects.[24]

DAM Staff and Eight Point agreed to proposed Certificate Conditions 126 and 127 to resolve potential impacts to agricultural lands arising from the proposed routing of underground collection lines through an existing tree farm; the Project's potential impact on engineered drainage features such as diversion terraces constructed on agricultural lands; the Project's potential impact to subsurface drain tile systems; and the routing of a proposed access road to turbine T13.[25] In addition, Eight Point and DAM Staff agreed to proposed Certificate Condition 29(a), which provides for a separate full-time agricultural monitor for the Project and its associated Article VII transmission line project.[26]

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[22] RD, p. 40; Attachment A, pp. 2-3, 10, 23, 33, 36-43, 48.

[23] RD, pp. 40-41.

[24] RD, pp. 40-41.

[25] RD, pp. 40-42.

[26] The RD, at page 42, references Condition 96(a). The correct reference is Condition 29(a).

Invasive Species

Environmental Conservation Law (ECL) Article 9, Title 17, empowers DEC to examine projects subject to State review for risks posed by invasive species to the State's environment, including the detrimental effect on the State's "fresh and tidal wetlands, water bodies and waterways, forests, agricultural lands, meadows and grasslands, and other natural communities and systems" (ECL §9-1701) and, wherever practical, to prohibit and actively eliminate invasive species at project sites regulated by the State. ECL §9-1709(2)(iv).[27] DEC Staff requires an applicant to provide an approvable invasive species prevention and management plan as part of an Article 10 application. 16 NYCRR §1001.22(p).

The Examiners reviewed the record on the Project's potential impacts from invasive species, including Eight Point's revised draft Invasive Species Control Plan (ISCP) (Supplement to the Application Attachment T, Hearing Exhibit 10), and inventories of invasive plant, insect, and aquatic species.[28] Based upon the control measures detailed in the draft ISCP, and the imposition of Certificate Conditions 35, 52, 69, 85, 91, 98(b) and (d), and 104 attached to the RD, the Examiners recommended that the Siting Board conclude that the Project will be constructed to minimize or avoid the spread of terrestrial invasive species to the maximum extent practicable, and the Project is designed to operate in compliance with applicable State law regarding invasive species.[29] PSL §168(3)(c) and (e). In addition, based upon the application materials and the

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[25] See also 6 NYCRR §575.3 (restricting the sale, purchase, possession, propagation, introduction, importation, and transportation of invasive species).

[28] RD, pp. 44-45.

[29] RD, p. 46.

proposed Certificate Conditions noted above relevant to the area's ecology in general, and agricultural lands in particular, the Examiners recommended that the Siting Board conclude that the adverse environmental impacts to the area's ecology from the construction and operation of the Project will be minimized or avoided to the maximum extent practicable.[30] PSL §168(3)(c).

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the Project's potential adverse environmental impacts to the area's ecology, or the Project's compliance with State law governing the control of invasive species. Accordingly, we adopt the Examiners' recommendations. Based upon the record of the proceeding and the relevant proposed Certificate Conditions, we conclude that the Project's construction and operation will minimize or avoid impacts to the area's ecology to the maximum extent practicable, and that the Project is designed to operate in compliance with applicable State environmental laws and regulations governing invasive species.

Air

Environmental Conservation Law (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.).

Under Article 10, DEC retains jurisdiction to review applications and issue permits required under ECL Article 19 for facilities subject to New York State Public Service Law (PSL)

[30] RD, p. 46.

Article 10 (PSL §§167[1][a][31] and 172[1]). DEC administers any required Article 19 permits in separate but concurrent proceedings under ECL Article 70 (Uniform Procedures Act) and its implementing regulations, 6 NYCRR Part 621 (Uniform Procedures) and Part 624 (Permit Hearing Procedures). Prior to issuing a Certificate pursuant to Article 10, the Siting Board must make explicit findings regarding probable environmental impacts of construction and operation of the facility on air quality, determine that the adverse impacts to air quality from the construction and operation of the facility will be minimized or avoided to the maximum extent practicable, and determine that the facility is designed to operate in compliance with applicable State and local air pollution control laws (PSL §168[2][a], [3][c] and [e]).

The application for a Certificate must contain a demonstration of the facility's compliance with applicable federal, State, and local regulatory requirements regarding air emissions; an assessment of existing ambient air quality levels and air quality trends for pollutants in the region surrounding the facility; a tabulation of emissions by combustion source at the facility; an assessment of potential impacts to ambient air quality that may result from pollutant emissions from the facility; and an offsite consequence analysis for any ammonia to be stored onsite. 16 NYCRR §1001.17.

Eight Point stated that ambient air quality data collected at DEC Region 8[32] air monitoring stations were within acceptable levels under the CAA's national ambient air quality

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[31] In the first full paragraph of page 47, the RD cites PSL §169(1)(a). The correct citation is PSL §167(1)(a).

[32] RD, p. 48. The Project is located within DEC's Region 8.

standards (NAAQS), and that no additional local data regarding air quality was available in the Project area.[33]

The Examiners noted that Eight Point did not provide the tabulation specified in 16 NYCRR §1001.17(c) because the Project will not combust fuel during operation.[34] Additionally, Eight Point does not require a title V permit, State air facility permit, or facility registration because the Project will not emit air pollutants.[35] There are no local regulatory requirements regarding air emissions in the Project area, and ammonia will not be stored onsite during construction or operation.[36]

Mitigation of Construction-related Emissions

Eight Point anticipated temporary minor adverse impacts to air quality during Project construction from fugitive dust and exhaust emissions related to the operation of equipment and vehicles.[37] Emissions from on-site concrete batch plants and fuel-fired generators could also be temporary sources of air emissions during the construction of the Project.[38]

Eight Point proposed measures to mitigate the impact on air quality that included submission of a dust control procedures plan consistent with the New York State Standards and Specifications for Erosion and Sediment Control in a compliance filing.[39] In addition, Eight Point agreed to maintain mufflers on all transportation and construction machinery, to supply copies of necessary permits if an on-site concrete batch plant

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33 RD, p. 48

34 RD, p. 48.

35 RD, p. 48.

36 RD, p. 48.

37 RD, p. 48-49.

38 RD, p. 49.

39 RD, p. 49.

is used for the Project, and to instruct contractors not to leave generators idling when electricity is not needed.[40]

No party disputed Eight Point's analysis of potential impacts to air quality associated with Project construction or the effectiveness of the proposed mitigation measures.[41] The Examiners recommended that the Siting Board include proposed Certificate Conditions 44(d) and 50,[42] as set forth in Attachment A of the RD. The Examiners also recommended that the Siting Board modify Condition 76[43] to include provisions requiring Eight Point to ensure all required emission control systems are maintained on all transportation and construction machinery; to not leave generators idling when electricity is not needed; and to not leave diesel engines idling when the equipment is not in use.[44] The Examiners recommended that if the modifications are approved, the Siting Board may conclude the construction-related air emissions from the Project will be avoided or mitigated to the maximum extent practicable, and that the Project will be in compliance with all applicable State air pollution control laws.[45]

Expected Emissions Reductions During Operation

Eight Point anticipated that during Project operation, only small impacts to air quality may occur due to indirect or direct emissions from service vehicles.[46]

DPS Staff and Eight Point agreed that operation of the Project would displace air emissions from fossil fuel fired

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40 RD, p. 49.

41 RD, p. 50.

42 RD, pp. 49-50; Attachment A, pp. 17, 19.

43 RD, p. 50; Attachment A, p. 30.

44 RD, p. 50.

45 RD, p. 50.

46 RD, p. 50.

power plants, resulting in improved air quality during the Project's entire operational life.[47] DPS Staff concluded that the Project will have a positive impact on air quality, with estimated annual reductions of 98,940 tons of CO2, 21 tons of NOx, and 1 ton of SO2.[48]

The Examiners concluded that the Project's operation will not result in significant adverse air emissions.[49] Accordingly, the Examiners recommended that the Siting Board conclude that air emissions will be avoided or minimized to the maximum extent practicable during the operational phase of the Project, and that the Project will be operated in compliance with all applicable State air pollution control laws.[50]

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the Project's impacts to air quality. Accordingly, we adopt the Examiners' recommendations. Based upon the record of the proceeding and proposed Certificate Conditions 44(d), 50, and 76, we find that the Project's impacts to air quality will be minimized or avoided to the maximum extent practicable, and that the Project is designed to operate in compliance with State air pollution control laws.

Ground and Surface Water

PSL §168(2) requires the Siting Board to make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility on ground and surface water resources. Before granting an Article 10 Certificate, the Board must determine that any adverse

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47 RD, p. 51.

48 RD, p. 51.

49 RD, p. 51.

50 RD, p. 51.

environmental effects of the construction and operation of the facility on water resources will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State water pollution control, stream protection, and freshwater wetland protection laws and regulations (PSL §168[3][c] and [e]). In addition, the Project will require a Section 401 Water Quality Certification pursuant to 6 NYCRR §608.9(a) (16 NYCRR §1000.8).

Groundwater and Wells

Eight Point conducted studies and surveys that identified and mapped groundwater aquifers and known existing private water wells in the Project area, some of which are used by residents as sources for potable water.[51] Based on its investigations, Eight Point determined that the Project will not impact any groundwater aquifers.[52] Further, Eight Point's studies did not indicate any known water wells within 1.5 times (or 897 feet) the turbine height of the proposed turbine locations, or wells within 100 feet of Project infrastructure.[53] In addition, all turbines are sited at least 1,400 feet from residences.[54]

The Examiners anticipated no direct impacts to sole source, primary, or principal aquifers from construction or operation of the Project.[55] The Examiners expected no permanent impact to groundwater quality or quantity other than negligible effects on groundwater recharge in the local region resulting from the installation of small areas of impervious surfaces.[56]

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51 RD, p. 52.

52 RD, p. 53.

53 RD, p. 55.

54 RD, p. 55.

55 RD, p. 53.

56 RD, pp. 53-54.

The Examiners noted, however, that temporary impacts to groundwater may arise due to accidental discharges of chemicals used during the construction, operation, or maintenance phases of the Project.[57] Construction of turbine foundations may also result in temporary localized impacts to groundwater resources, including alterations to groundwater recharge and pH in the immediate area.[58]

Eight Point proposed to notify owners and operators of water wells within one mile of the Project area of the commencement of construction, and use the Complaint Resolution Plan process if owners and operators believe the Project has impacted their water well during construction or operation.[59] The Examiners recommended incorporating Eight Point's proposal in Certificate Condition 12's notice provisions, as set forth in Attachment A.[60]

The Examiners recommended that the Siting Board adopt proposed Certificate Conditions 28 and 53,[61] which provide siting and setback requirements for the Project, along with potential pre- and post-construction water testing requirements if Project components must be sited within 100 feet of a well.[62] The Examiners also recommended the adoption of proposed Certificate Conditions 54 and 55,[63] which include requirements for obtaining coverage under the DEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (General Permit), and for filing a

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57 RD, p. 54.

58 RD, p. 54.

59 RD, p. 55.

60 RD, p. 55; Attachment A, p. 5.

61 Attachment A, pp. 9 and 19.

62 RD, p. 54.

63 Attachment A, p. 19-20.

Stormwater Pollution Prevention Plan (SWPPP) and a Spill Prevention, Containment and Counter Measures (SPCC) Plan.

Citizens for Maintaining Our Rural Environment (CMORE) raised concerns about the Project's potential impact on an artesian spring used for drinking water.[64] CMORE argued that Eight Point should be required to conduct water testing on all properties in the Project area.[65] Eight Point contended that no evidence supported CMORE's request, and noted that Eight Point and DPS Staff had already reached an agreement on when water testing would be needed and when remedial measures would be implemented.[66]

The Examiners agreed with Eight Point that CMORE's recommendation should be rejected. Thus, the Examiners recommended that, based on the hearing record and proposed Certificate Conditions, as modified, the Siting Board may conclude that impacts to groundwater and water wells have been avoided or minimized to the maximum extent practicable.[67]

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the Project's potential impacts to groundwater and drinking water supplies. Accordingly, the Examiners' conclusions and recommendations are adopted. Based upon the record of the proceeding and proposed Certificate Conditions 12, 28, and 53 through 55, we conclude that with respect to groundwater and wells, the Project is designed to operate in compliance with the State's water quality standards established by ECL Article 17, and 6 NYCRR Parts 700 et seq. Additionally, adverse environmental effects of the

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64 RD, p. 56.

65 RD, p. 56.

66 RD, pp. 56-57.

67 RD, p. 58.

construction and operation of the Project on groundwater and wells will be minimized or avoided to the maximum extent practicable.

Surface Water, Protected Streams, and Wetlands

ECL Article 24 and 6 NYCRR Parts 663 and 664 establish the State's environmental laws regarding protected freshwater wetlands and their adjacent areas. ECL Article 15 and DEC's regulations at 6 NYCRR Part 608 establish the State's environmental laws regarding disturbance of protected streams. In general, State protected wetlands and their adjacent areas, and State protected streams, may not be disturbed without approval from the State. See ECL §24-0701; ECL §15-0501; ECL §15-0505. In addition, Eight Point must comply with State water pollution control law by obtaining coverage under DEC's General Permit.[68]

Investigations by Eight Point resulted in delineations of all wetlands and streams located on land that Eight Point controls and within 500 feet of the limits of disturbance (LOD) in accordance with DPS Staff's memorandum, "Advice to Applicants on Wetlands Delineation Requirements of the Article 10 Regulations."[69] Eight Point's surveys identified 147 wetlands in the area that contained portions of emergent, scrub-shrub, and forested cover types, and open water areas.[70] Of the wetlands identified in the survey area, three are State-regulated Class II or Class III wetlands.[71] The surveys also identified 81 waterbodies, including perennial streams, intermittent streams,

[68] RD, p. 63.

[69] RD, p. 58.

[70] RD, p. 58.

[71] RD, pp. 58-59.

and ephemeral streams.[72] Two streams -- Bennetts Creek and its tributaries and Cryder (Marsh) Creek and its tributaries -- are classified C(T) or higher under the State's classification of waters program[73] and are protected under ECL Article 15.[74] Twenty streams in the Project area are classified as Class C.[75]

Eight Point estimated a total of 4.1 acres of wetlands and 3,870 linear feet of waterbodies will be impacted by the Project.[76] Of those areas, 0.05 acres of wetlands and 169 linear feet of waterbodies are expected to be permanently impacted.[77]

The Examiners concluded that the Project may result in direct and indirect impacts during construction, including direct placement of fill in surface waters to accommodate road crossing; disturbance of stream banks from buried cable installation; an increase in water temperature and conversion of cover type due to vegetation clearing; and erosion and sedimentation due to excavation, grading and other construction-related activities near wetlands and other waterbodies.[78]

With respect to potential impacts to water resources from soil erosion and sedimentation caused by construction-related activities, Eight Point submitted a preliminary Stormwater Pollution Prevention Plan (SWPPP) and indicated its intent to finalize the SWPPP and submit it with a Notice of Intent (NOI) to seek coverage under the General Permit for DEC's

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72 RD, p. 59.

73 See ECL §17-0301.

74 RD, pp. 59-60.

75 RD, p. 60.

76 RD, p. 60.

77 RD, p. 60.

78 RD, p. 60.

review and approval.[79] The final DEC-approved SWPPP then will be filed with the Secretary.[80]

With respect to surface water resources, Eight Point planned to place turbines outside of wetlands and waterbodies, and route access roads and collection lines around wetlands and waterbodies.[81] Further, where access roads and collection lines cross wetlands or waterbodies, Eight Point planned to use the narrowest or previously disturbed portions and use horizontal directional drilling (HDD) for placement of buried collection lines where beneficial and cost effective.[82]

Pursuant to ECL Article 24, certain activities that impact State-regulated wetlands or their 100-foot adjacent areas require State approval (see 6 NYCRR §633.4[a]). The Examiners concluded that Eight Point does not require further approval under ECL Article 24 because, based on Eight Point's construction plan, State-regulated wetlands and their regulated adjacent areas will not be impacted by the direct placement of Project components, or by clearing or ground disturbance from the Project.[83] The Examiners recommended the Siting Board adopt proposed Certificate Conditions 98, 99, 100, 103, and 111[84] to ensure the Project will be constructed in compliance with ECL Article 24.[85]

With respect to impacts to protected streams subject to 6 NYCRR Part 608, and in consideration of the Project design,

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79 RD, pp. 62-63.

80 RD, p. 63; see Certificate Condition 54, Attachment A, pp. 19-20.

81 RD, p. 64.

82 RD, p. 64.

83 RD, pp. 60-61.

84 Attachment A, pp. 36-40.

85 RD, p. 61.

the Examiners recommended that the Siting Board adopt proposed Certificate Conditions 36, 49, 82 through 114, 121, 122, 131, and 134,[86] to ensure Part 608 permitting standards are met.[87]

The Examiners recommended that, based on Eight Point's plans to avoid and minimize impacts to surface waters, wetlands, and other waterbodies, the Siting Board adopt proposed Certificate Conditions 36, 37, 55, 68, 70, 82 through 114, 121 through 122, and 129 through 135.[88] The Examiners also recommended that the Siting Board adopt proposed Condition 54[89] to regulate impacts to water resources from erosion and sedimentation.[90] Examiners recommended that the Siting Board include proposed Certificate Condition 29(a)[91] to fund an independent, third-party environmental monitor to perform daily inspections of construction and issue regular reports and compliance audits.[92] Finally, because of the high number of existing oil and gas wells in the Project Area, some of which are still active, the Examiners recommended that the Siting Board adopt proposed Certification Conditions 28(c) and 148 to avoid impacts to existing wells and to address petroleum-impacted soils that might be encountered during Project construction.[93]

Based upon the Project plans as conditioned by the proposed Certificate Conditions, the Examiners recommended that the Siting Board determine that Eight Point will minimize or

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[86] Attachment A, pp. 15, 18-19, 33-43, 45, and 47-48.

[87] RD, p. 62.

[88] RD, pp. 64-65; Attachment A, p. 15, 20, 27, 33-43, and 45-48.

[89] Attachment A, p. 19.

[90] RD, p. 63.

[91] Attachment A, p. 10.

[92] RD, p. 65.

[93] RD, p. 65; Attachment A, pp. 9 and 50-52.

avoid the adverse environmental impacts to surface waters, wetlands, and streams to the maximum extent practicable.[94] The Examiners also concluded that the Project will meet all applicable State statutory and regulatory standards governing water pollution control, stream protection, and freshwater wetland protection (PSL §168[3][c] and [e]).[95]

No party raised any exceptions to the Examiners' conclusions regarding the Project's impacts to surface waters, streams, and wetlands. Accordingly, the Examiners' recommendations are adopted. Based upon the record of this proceeding and relevant proposed Certificate Conditions (Attachment A to the RD), we conclude that the Project is designed to operate in compliance with applicable State environmental laws and regulations governing freshwater wetlands, protected streams, and pollution control. In addition, we conclude that the adverse environmental effects of the construction and operation of the Project on surface waters, freshwater wetlands, and streams will be minimized or avoided to the maximum extent practicable.

Water Quality Certification

DEC Staff noted that the Project will require a Section 401 Water Quality Certification (WQC) pursuant to Section 401 of the federal Clean Water Act (6 NYCRR §608.9[a]).[96] The governing State standards an applicant must meet to obtain a WQC are set forth in 6 NYCRR Parts 701, 702, 703, 704 and applicable provisions of Part 750.

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94 RD, p. 67.

95 RD, p. 67.

96 Water quality certifications for Article 10 projects are issued by the Siting Board (16 NYCRR §1000.8).

DEC Staff concluded that the Project meets the standards for issuance of a WQC.[97] The Examiners recommended that upon a request or application pursuant to proposed Certificate Condition 5,[98] the Siting Board may issue a WQC for the Project.[99]

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the WQC. Eight Point's certification application will be reviewed pursuant to 16 NYCRR §1000.8 upon its submission to the Siting Board.

Wildlife and Habitat

PSL §168(2) requires the Siting Board to make explicit findings regarding the probable environmental impacts from the construction and operation of a proposed facility on wildlife and habitat. Before granting an Article 10 Certificate, the Board must determine that any adverse environmental effects of the construction and operation of the facility on wildlife and habitat will be minimized or avoided to the maximum extent practicable, and that the facility is designed to operate in compliance with applicable State law protecting wildlife, namely the State Endangered Species Act (ECL §11-0535) and its implementing regulations at 6 NYCRR Part 182 (PSL §168[3][c] and [e]).

Wildlife Other Than Bats and Habitat

Eight Point conducted desktop analyses and field surveys that revealed the predominant wildlife habitat and wildlife species in the Project area.[100] Wildlife habitat included forestland, successional shrubland, successional old-

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97 RD, p. 67.

98 RD, p. 67; Attachment A, p. 2.

99 RD, p. 67.

100 RD, p. 68.

field, open water, and active agriculture habitats.[101] Wildlife species identified or presumed to occur in the Project area were those typically found in those habitats in New York.[102]

Eight Point also compiled a list of State- and federally-listed threatened or endangered (TE) species that are believed to occur, or have the potential to occur, within the Project area.[103] Eight Point's studies revealed no State- or federally-listed endangered, threatened, candidate, or rare plant or mammal species (other than bats).[104] However, the studies noted several State-listed bird species documented to potentially occur, and identified two reptile species listed as Species of Greatest Conservation Need[105] within the Project area.[106]

With respect to impacts to habitat, Eight Point estimated that about 477 acres of wildlife habitat will be temporarily impacted during construction.[107] Of those acres, about 299.6 acres are active agricultural land, which is already regularly disturbed by human activity.[108] Eight Point estimated

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101 RD, p. 68.

102 RD, p. 68.

103 RD, p. 68.

104 RD, pp. 68-69.

105 "Species of Greatest Conservation Need" are species that experience some level of population decline, have identified threats that may put them in jeopardy, and need conservation actions to maintain stable population levels or sustain recovery. Department of Environmental Conservation, New York State Wildlife Action Plan, p. 7 (2015), available at http://www.dec.ny.gov/docs/wildlife pdf/swapfinaldraft2015.pdf (last accessed June 4, 2019).

106 RD, p. 69.

107 RD, p. 70.

108 RD, p. 70.

that about 29.8 acres of wildlife habitat will be permanently impacted, of which 19.3 acres is active agricultural land.[109]

The Examiners determined that impacts to wildlife during Project construction are expected to be incidental, temporary, and random because most mobile and mature species will vacate construction areas.[110] The record contains no indication that State-listed TE species will be "taken"[111] during Projection construction.[112]

During operation, the Examiners noted that the most significant impact to wildlife (other than to bats) is bird mortality from collisions with wind turbines and power lines.[113] However, wind turbines account for less than one percent of overall bird mortality caused by human activity.[114]

Although State-listed TE bird species (including bald and golden eagles) were observed in the Project area, Eight Point sited Project turbines to avoid preferred habitats of those species.[115] Moreover, no occupied eagle nests were identified within the Project area, and the Examiners concluded that the record contained no other indications that eagles will likely be taken by Project operations.[116]

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109 RD, p. 71.

110 RD, p. 70.

111 "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).

112 RD, p. 70.

113 RD, p. 71.

114 RD, p. 71.

115 RD, p. 72.

116 RD, p. 72.

Based on those anticipated impacts, the Examiners determined that an incidental take permit pursuant to 6 NYCRR Part 182 is not required for non-bat TE species.[117]

The Examiners recommended that the Siting Board adopt proposed Certificate Conditions 78 through 81[118] to establish procedures if any State- or federally-listed TE species are observed, or any dead, injured, or damaged TE species or their parts, eggs, or nests are encountered during Project construction or operation.[119] The Examiners recommended proposed Certificate Condition 135[120] to avoid impacting wildlife during breeding and habitat occupancy during spring and summer months.[121] With respect to wildlife and wildlife habitats altogether, the Examiners recommended the adoption of proposed Certificate Conditions 11, 29, 49, 54, 55, 58, 63, 70, 78 through 114, 121, 122, and 129 through 135.[122] The Examiners recommended that, with the adoption of the proposed Certificate Conditions, the Siting Board may determine that the impacts to wildlife habitats and wildlife (other than bats) will be avoided or minimized to the maximum extent practicable.[123]

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the Project's potential impacts to wildlife other than bats and wildlife habitat for non-bat species. Accordingly, the Examiners' recommendations are adopted. Based upon the record of the

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[117] RD, pp. 70, 72.

[118] Attachment A, pp. 31-33.

[119] RD, p. 70.

[120] Attachment A, p. 48.

[121] RD, p. 70.

[122] RD, p. 72; Attachment A, pp. 3-5, 10, 18-20, 22, 23, 27, 31-43, 45-48.

[123] RD, p. 73.

proceeding and the relevant proposed Certificate Conditions set forth in Attachment A, we conclude that the adverse environmental effects of the Project's construction and operation on wildlife other than bats and wildlife habitat for non-bat species will be minimized or avoided to the maximum extent practicable.

Bats

Eight Point conducted bat surveys that revealed the presence of several bat species in the Project area, including the eastern small-footed bat, little brown bat, big brown bat, silver-haired bat, eastern red bat, hoary bat, and tri-colored bat.[124] The survey also included the possible presence of State- or federally-listed TE species: the northern long-eared bat (NLEB)[125] and the Indiana bat.[126] DEC Staff testified that all bat species resident in New York, except for the big brown bat, are considered Species of Greatest Conservation Need.[127]

Impacts to bats during Project construction include loss of foraging and roosting forest habitat due to tree clearing.[128] The Examiners concluded that negative impacts will be minimal, and that construction will improve foraging for some bat species.[129] Thus, the construction phase of the Project is

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[124] RD, p. 73.

[122] 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).

[126] RD, pp. 73-74. The Indiana bat was not included in further analysis because the Project area does not overlap its known range and its presence in the Project Area could not be confirmed. RD, p. 74.

[127] RD, p. 74.

[128] RD, p. 74.

[129] RD, p. 74.

not expected to significantly change the composition of bat species in the Project area.[130]

Impacts to bats during Project operation are significant because of bat collisions with wind turbines. DEC Staff testified that wind turbines are the single greatest known source of mortality for several bat species in North America.[131] DEC Staff advised that without immediate action to reduce bat fatalities caused by wind turbines, one or more additional bat species in New York are likely to experience population declines so severe as to warrant protection under New York's Endangered Species Act (ECL §11-0535).[132] Eight Point estimated that if it does not adopt any measures to minimize potential impacts, the mean mortality rate for bats at the Project would be 356 bats annually, and 10,695 bats over the 30-year life of the Project.[133] With respect to NLEB, DEC Staff estimated that the expected fatality rate of NLEB at wind projects across the State is 2.7 NLEB per 100 megawatts (MW) per year.[134]

NLEB Net Conservation Benefit Plan; Curtailment

ECL §11-0535 prohibits, among other things, the "taking" of any threatened or endangered species except under license or permit from the State. Under 6 NYCRR §182.11, an incidental take permit is required "for any activity that is likely to result in the take or taking of" any endangered or threatened species.

130 RD, pp. 74-75.

131 RD, p. 75.

132 RD, pp. 75-76.

133 RD, p. 75.

134 RD, p. 76.

To obtain an incidental take permit, an applicant must first avoid all impacts to listed species to the extent practicable. If full avoidance, which is one or fewer kills of a listed species every ten years, is achieved, no further minimization or mitigation measures are required.[135]

If, however, an applicant can demonstrate that full avoidance is impracticable, 6 NYCRR §182.11(c) requires that the applicant prepare a plan with minimization and mitigation measures that will result in a net conservation benefit to the species.[136]

The Examiners noted that, currently, the only effective method to reduce bat mortality at wind energy projects is to curtail turbine operations -- usually by "feathering" the blades to reduce rotation during times when most fatalities have been documented to occur.[137] To constitute full avoidance of NLEB, the Project must curtail all turbines from 30 minutes before sunset to 30 minutes after sunrise daily from July 1 through October 1, when ambient temperatures are above 50 degrees Fahrenheit, until local wind speed measured at hub height is equal to or greater than 6.9 meters per second (m/s).[138] Studies show that fatalities of all bat species can be reduced by more than 80% when turbines are curtailed until wind speeds reach at least 6.9 m/s; up to 82% when turbines are curtailed at wind speeds below 6.5 m/s; about 60% when turbines are curtailed below 6.0 m/s; and between 50-70% when turbines

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135 Case 14-F-0490, Cassadaga Wind LLC, Order Granting Certificate of Environmental Compatibility and Public Need (issued January 17, 2018) (Cassadaga Wind Order), pp. 43, 52.

136 See Cassadaga Wind Order, p. 52.

137 RD, p. 78.

138 RD, p. 79; see also Cassadaga Wind Order, p. 53.

are curtailed below 5.5 m/s.[139] Additionally, studies show that 83% of all bat fatalities occurred between July 1 and October 1 during nighttime hours.[140]

All parties except Citizens for Maintaining Our Rural Environment (CMORE) agreed that the 6.9 m/s curtailment regime is not feasible for the Project.[141] Thus, full avoidance of impacts to the NLEB cannot be achieved.[142] Eight Point and DEC Staff further agreed that, without minimization or mitigation measures, the Project would result in an estimated take of 96.2 NLEBs[143] over the 35-year life of the Project.[144] Accordingly, Eight Point agreed to submit a Net Conservation Benefit Plan (NCBP) to DEC no later than March 15, 2019.[145] Further, Eight Point agreed to implement a curtailment regime during the period from July 1 through October 1 in which it would curtail turbine operations 30 minutes prior to sunset through 30 minutes after sunrise, when ambient air temperature is 50 degrees Fahrenheit or greater, and when wind speed is equal to or less than 5.5 m/s.[146]

All parties, except CMORE, agreed that the 5.5 m/s curtailment regime will result in the take of 15.43 NLEB over the life of the Project and, accordingly, the NCBP will include mitigation measures that will result in a positive benefit to

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139 RD, p. 78.

140 RD, pp. 78-79.

141 RD, p. 79.

142 See Certificate Condition 33, Attachment A, p. 12-13.

143 See Certificate Condition 33, Attachment A, p. 12-13.

144 RD, p. 77.

145 See Certificate Condition 34, Attachment A, p. 13-15.

146 RD, pp. 79-80; see Certificate Condition 34(i), Attachment A, pp. 14-15.

the NLEB species beyond offsetting the take of 15 individuals.[147] Measures proposed for the NCBP include mist-netting and radio-telemetry tracking operations to identify previously unknown maternity roost trees or hibernacula, or gating of known hibernacula.[148]

The Examiners recommended that with the adoption of proposed Conditions 33, 34, 58, and 78-81,[149] the Siting Board may conclude that the Project will meet the requirements of the State Endangered Species Act (ECL Article 11) and Part 182.[150] The Examiners noted, however, that the time frames provided for in proposed Certificate Condition 34 have already passed and recommended that the Siting Board approve the procedures notwithstanding the specific time frames therein.[151] Further, the Examiners recommended that the Siting Board require submission of the final NCBP as a compliance filing.[152] We see no reason to approve language in the Certificate Conditions for activities whose deadlines have already passed. Therefore, we modify the language to require only that the applicant submit a NCBP as a compliance filing for our approval.

Bats Other Than NLEB

DPS Staff cautioned that lower wind speed curtailment regimes are not as protective for migratory tree bats because tree bats fly at higher wind speeds.[153] Further, a NCBP designed to protect NLEB will not necessarily provide any benefits to

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147 RD, p. 80.

148 RD, p. 80.

149 Attachment A, pp. 12-15, 22, 31-33.

150 RD, p. 81.

151 RD, p. 81.

152 RD, p. 81. This is reflected in revised Condition 34.

153 RD, p. 81.

migratory tree bat species.[154] Regardless, DPS Staff argued that the 5.5 m/s curtailment regime provides an incremental benefit for migratory tree bats over the 5.0 m/s regime that was adopted by the Siting Board in the Cassadaga Wind Order.[155]

The Examiners recommended that the Siting Board adopt proposed Certificate Conditions 57 and 58,[156] which would require Eight Point to consider the feasibility of installing radar-activated aviation hazard warning lights, and report on and potentially implement new technology to reduce migratory tree bat fatalities as it became available.[157] The Examiners concluded that the Project as conditioned will minimize or avoid impacts to all bat species to the maximum extent practicable and recommended that the Siting Board make the required statutory findings accordingly.[158]

No party raised any exceptions to the Examiners' conclusions and recommendations regarding the Project's potential impacts to bats and bat habitat. Accordingly, the Examiners' recommendations are adopted. Based upon the record of the proceeding and the proposed Certificate Conditions 33, 34, 57, 58, and 78 through 81, as modified herein, we conclude that the adverse environmental effects of the Project's construction and operation to all bat species and bat habitat will be minimized or avoided to the maximum extent practicable. We also conclude that the Project as conditioned by the relevant proposed Certificate Conditions is designed to operate in

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154 RD, pp. 81-82.

155 RD, p. 82.

156 Attachment A, pp. 21-22.

157 RD, p. 82.

158 RD, p. 82.

compliance with State law and regulations governing threatened and endangered species.

Public Health and Safety

PSL Article 10 requires us to make explicit findings regarding the nature of the probable environmental impacts of the construction and operation of the facility, including impacts on public health and safety. Public health considerations are potentially implicated by several aspect of the Project. Exhibit 15 to the Application identifies and discusses all potential significant adverse impact of the Project on the environment and public health, including any such impacts that cannot be avoided.

In this case, Application Exhibit 15 identifies blade throw/tower collapse, audible noise, low frequency noise/infrasound, ice throw and shadow flicker as the most common areas of public health concern in relation to wind turbines.[159] In this section, we discuss impacts relating to shadow flicker, noise, electric and magnetic fields and potential impacts on dairy operations.

Shadow Flicker

Shadow flicker refers to intermittent changes in light intensity in a given location due to a wind turbine's interaction with the sun.[160] 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

[159] Hrg. Ex. 8, App. Exh. 15, p. 3.

[160] Hrg. Ex. 8, App. Appendix 15-1, p. 5-1.

clouds must not obscure the sun at the relevant times.[161] The regulations, 16 NYCRR §§1001.15(e) and 1001.24(a)(9), require an applicant to address impacts due to shadow flicker and to provide an analysis and description of related operational effects of the facility such as visible plumes, shading, glare and shadow flicker.

The Application includes a discussion of the potential health impacts of shadow flicker, based on a search conducted by Eight Point of "the primary scientific literature and the Internet."[162] Eight Point stated that the main health concern associated with shadow flicker is the potential risk of seizures in people having photosensitive epilepsy. Eight Point cited an informal poll in 2012 of the members of the Epilepsy Society in the United Kingdom, for its finding that "no one had experienced an epileptic seizure living or being in proximity to a wind farm from shadow flicker."[163]

Eight Point also cited two studies[164] that investigated the relationship between photosensitive epilepsy and wind farm shadow flicker, and reached findings suggesting that turbine shadow flicker at frequencies greater than 3 Hertz (Hz) pose "a negligible potential risk of inducing photosensitive seizures."[165] Eight Point asserted that, for turbines having three blades, this translates to a maximum speed of rotation of 60 revolutions per minute (rpm), and modern turbines commonly spin at rates well below this threshold, typically below 20 rpm.

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[161] Hrg. Ex. 8, App. Ex. 15 at 38. Shadow flicker usually occurs in the morning and evening close to sunrise and sunset when shadows are the longest. Id.

[162] Hrg. Exh. 8, App. Ex. 15, p. 38.

[163] Hrg. Exh. 8, App. Ex. 15, p. 39.

[164] Harding et al. (2008) and Smedley et al. (2010).

[165] Id.

Eight Point noted that the turbines proposed for this project, the General Electric (GE) 3.43-137 and GE 2.3-116, have a maximum rotational speed of 15.7 rpm. Based on this, Eight Point asserted that shadow flicker in this case would not trigger epileptic seizures.[166] Eight Point also cited a 2011 consultant's report, issued by the Department of Energy and Climate Change (United Kingdom), and a Wind Turbine Health Impact Study, issued by an expert panel in Massachusetts in 2012, that each concluded that the frequency of shadow flicker from wind turbines does not pose a risk for eliciting seizures.

Eight Point's shadow flicker report is contained in Application Appendix 15-1 and its shadow flicker analysis is discussed in Application Exhibit 24.[167] The modeling analysis conservatively included the 31 proposed and the four alternate wind turbines for the Project. Eight Point modeled "worst case" shadow flicker in the area surrounding the wind turbines, assuming the sun is always shining during daylight hours and that the wind turbine is always operating.[168] Because there are no applicable federal, State, or local laws or regulations establishing quantitative shadow flicker limits, Eight Point employed the methodology specified in the Stipulations,[169] which required Eight Point's shadow flicker study to evaluate the predicted annual shadow flicker relative to a design goal of 30 hours per year.[170] This goal was based on Eight Point's survey of shadow flicker design goals in the United States which indicated that, where ordinances or state requirements for

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166 Hrg. Ex. 8, App. Ex. 15, p. 39-40.

167 Hrg. Ex. 8, App. Ex. 15, Appendix 15-1, and App. Ex. 24, p. 21.

168 Hrg. Ex. 8, App. Ex. 15, p. 39.

169 Hrg. Ex. 7, Final Stipulations, p. 101.

170 Hrg. Ex. 8, App. Ex. 15, pp. 41-42.

shadow flicker exist, they set a standard of 30 hours per year for non-participating homes.[171]

In addition to the agreed upon 30-hour annual limit for shadow flicker for non-participating homes, DPS Staff witness Davis recommended a shadow flicker limit of 30 minutes per day at any non-participating landowner residence. To resolve the dispute over whether a 30-minute per day limit was necessary, Eight Point agreed to treat all shadow flicker complaints through the Complaint Resolution Process that is described in Condition 56, including nonparticipating homes exposed to less than 30 hours of shadow flicker annually.[172] The Examiners noted that Eight Point effectively agreed to provide, at its expense, blocking measures (such as landscape plantings and window treatments) if the Complaint Resolution Process leads to a finding that mitigation measures are needed.[173] Accordingly, based on the record and the relevant proposed Certificate Conditions, the Examiners recommended that the Siting Board conclude that shadow flicker from the Project will not cause adverse health impacts.[174]

In its June 12, 2019, brief on exceptions Eight Point recommended a clerical revision to Proposed Certificate Condition 31(e).[175] That sub-clause addresses shielding or blocking measures for receptor locations that submit complaints for exposures to shadow flicker that are not subject to the 30-hour annual limit. As proposed by the parties, the last

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171 Hrg. Ex. 8, App. Ex. 15, p. 42.

172 Eight Point's rebuttal testimony, Tr. 360, references initially proposed Condition 55, which became Condition 56 in the Final Proposed Certificate Conditions.

173 Tr. 359-360. See Condition 31(e).

174 RD, p. 90.

175 Eight Point, Brief on Exceptions, p. 2.

sentence of sub-clause 31(e) was a stand-alone sentence. In the document attached to the RD, however, the stand-alone sentence was reformatted to the last sentence of sub-clause 31(e).

Eight Point notes that the sentence should not be included as part of sub-clause 31(e), which relates to the use of shielding or blocking measures. The sentence in question does not fit under sub-clause 31(e) because it relates to the inclusion of details about flicker control, minimization and mitigation measures in the final design drawings and site plans. Eight Point asks that this text be kept as a stand-alone sentence or be appended to the end of sub-clause 31(c) which addresses the details of shadow detection and prevention technology.

We agree that the sentence in question does not fit under sub-clause 31(e) and have re-formatted the Proposed Certificate Conditions to make the sentence a stand-alone sentence, as originally proposed by the parties.

Receptor Locations

In its initial post-hearing brief, CMORE asserted that the Donald Lewis residence will experience shadow flicker from turbines 26 and 27 for greater than 50 minutes per day.[176] Eight Point asserted that CMORE was incorrect on this point. Eight Point noted that the shadow flicker modeling analysis included a modeling receptor for the Donald Lewis farm, Number 535.[177] Eight Point then explained that the worst-case daily modeling results for this receptor showed a maximum of 27

[176] CMORE Initial Brief, p. 3, citing Map 6-2 [sic], Map 18 of 21.

[177] Eight Point Reply Brief, p. 7, citing Hrg. Ex. 8, App. Appendix 15-1, Figure 6-2, Map 18.

minutes of shadow flicker during the course of a single day.[178] Eight Point also pointed out that the Donald Lewis farm is modeled to experience 20.5 hours of shadow flicker annually, which Eight Point characterizes as "well below" the recommended annual shadow flicker standard of 30 hours per year.[179]

Eight Point argued that it is undisputed that the modeling is conservative and that actual experienced flicker should be less than modeled. Eight Point also noted that CMORE introduced no scientific evidence to undermine the adequacy of the 30-hour annual standard. Finally, Eight Point maintained that the evidentiary record squarely supports the conclusion there will be no adverse health impacts from shadow flicker.[180]

Based on the above, the Examiners recommended that we reject CMORE's objection on the ground that it is unsupported by the record. No parties took exception to the Examiners' conclusions and recommendations on the impacts from shadow flicker in general or on the Donald Lewis farm specifically. Accordingly, we find no basis for CMORE's objection to Eight Point's examination and analysis of potential shadow flicker impacts on the Donald Lewis residence. We also find that substantial record evidence supports the conclusion that shadow flicker from the Project will not cause adverse health impacts.

Noise Impacts, Compliance Protocols and Mitigation Measures

Article 10 applications must include a detailed study of the noise impacts of the construction and operation of the proposed generating facility, related facilities and ancillary

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[178] Eight Point, p. 7, citing Hrg. Exh. 8, App. Appendix 15-1, Appendix D, p. 13.

[179] Eight Point Reply Brief, p. 7.

[180] Eight Point Reply Brief, p. 7, citing Hrg. Exh. 8, App. Ex. 15, p. 40.

equipment.[181] An application must include a statement, in tabular form, of the A-weighted/dBA sound levels as indicated by measurements and computer noise modeling at the representative external property boundary lines of the facility and related facilities and ancillary equipment sites, and at the representative nearest and average noise receptors, under a variety of scenarios.[182]

DPS Staff reported that, in accordance with the terms and conditions described in the Stipulations, Eight Point had provided the studies required by 16 NYCRR §1001.19.[183] For the worst-case $L_{eq\text{-}1\text{-}hour}$ sound level, Eight Point's modeling showed that no non-participating land owners are expected to experience sound levels in excess of 44 dBA.[184] With one exception, all participating landowners would experience sound levels 45 dBA or lower.[185] Eight Point maintained that, because the Board in Cassadaga Wind LLC found 45 dBA $L_{eq\text{-}8\text{-}hour}$ for non-participants to

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[181] See 16 NYCRR §1001.19 and App. Ex. 19.

[182] 16 NYCRR §§1001.19(f)(1)-(9).

[183] DPS Initial Brief, p. 27.

[184] Eight Point Initial Brief, pp. 32-33, citing Hrg. Exh. 8, App. Ex. 19, p. 13. The NIA is in Application Appendix 19-1. NIA Appendix E includes the A-weighted and octave band modeled sound levels (Table E-1).

[185] The maximum sound level presented in Table E-1 in Appendix E of the NIA is 48 dBA (ID #332). Although this sound level exceeds the 45 dBA guideline value, this sound level is modeled at a hunting cabin, and the owner is a Participant in the Project. Participating landowners have signed contracts that include an easement for effects including sound. Hrg. Ex. 8, App. Ex. 19 at 19. The highest sound level at a non-participating receptor is 44 dBA. Therefore, Eight Point noted, the Project meets the 45 dBA guideline.

be acceptable,[186] the modeled expected sound levels for non-participating landowners are consistent with that decision.[187]

The World Health Organization issued revised guidelines in October 2018 (WHO-2018), subsequent to the filing of Eight Point's Application. The WHO-2018 guidelines withdrew the WHO-1999 outdoor short-term recommendation for a nighttime maximum sound level of 45 dBA L_{eq} (8-hour).[188] DPS Staff witness Moreno-Caballero testified that the WHO-1999 standard was the basis for the Board's adoption of the 45 dBA short-term limit for any non-participating residence in the Cassadaga Wind Order.[189] DPS Staff witness Moreno-Caballero recommended that the short term 45 dBA-L_{eq} (8-hour) is not the most protective, and that a lower short-term limit, on the order of 42 dBA, should be adopted in order to minimize the potential adverse noise effects from the facility.[190] DPS Staff witness Moreno-Caballero proposed changes to various Certificate Conditions and a different post-construction noise monitoring protocol that, in

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[186] Eight Point Initial Brief, pp. 32-33, citing the Cassadaga Wind Order, p. 70.

[187] Eight Point also asserts that the modeled levels will be reduced even further based upon the noise limits imposed by the Recommended Certificate Conditions.

[188] In acoustics, L_{eq} is the preferred method to describe sound levels that vary over time, resulting in a single decibel value that takes into account the total sound energy over the period of time of interest. Thus, $L_{eq\text{-}8\text{-}hour}$ indicates that the sound pressure equivalent measure was measured over an 8-hour period. For example, to comply with a 45 dBA $L_{eq\text{-}8\text{-}hour}$ standard, the measured equivalent sound over 8 hours from a source should be 45 dBA or less. Cassadaga Wind Order, p. 59, n. 106.

[189] Tr. 498; See Case 14-F-0490, Cassadaga Wind Order, pp. 59 and 70.

[190] Tr. 499.

his view, would provide better protection than those proposed by the Applicant.[191]

Eight Point originally took issue with DPS Staff witness Moreno-Caballero's positions on all issues. Ultimately, as a result of settlement negotiations, Eight Point, DPS Staff and others agreed to a 42 dBA $L_{eq-8-hour}$ limit outside the homes of non-participating landowners and a limit of 52 dBA $L_{eq-8-hour}$ for participating landowners.[192] To conserve noise reducing operations (NROs) for use in performing any mitigation that may be required after operation commences, DPS Staff and Eight Point have further agreed that Eight Point will first use best efforts to enter into agreements with nonparticipating homeowners who would experience sound levels above the 42 dBA $L_{eq-8-hour}$ limit. DPS Staff also agreed that Eight Point can resort to the elimination of turbine ALT-3 and the use of Alternate Turbines 1, 2, and 4 as needed, provided they meet the 42 dBA $L_{eq-8-hour}$ limit applicable to all nonparticipating residents.[193]

DPS Staff argued that the Applicant's commitments and the Proposed Certificate Conditions 64-67 (requiring the submission of site plans, limiting sound power levels at turbine at hub height, requiring revised sound modeling, and requiring post-construction monitoring and compliance testing); 73-77 (setting noise standards for construction and operation, requiring the resolution of noise complaints and detailing the

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191 Tr. 540.

192 Certificate Condition 73 would require that noise levels from all noise sources from the Facility, related facilities, and ancillary equipment shall comply with a maximum noise limit of 42 dBA $L_{eq-8-hour}$ at any permanent or seasonal non-participant residence existing as of the issuance date of the Certificate, and 52 dBA $L_{eq-8-hour}$ for any participant residence existing as of the issuance date of the Certificate.

193 DPS Initial Brief, p. 28, citing Tr. 358-359; Eight Point Initial Brief, p. 35; Certificate Condition 64(c)(ii).

changes regarding Alternate Turbines); and 120 (limiting work hours to minimize noise impacts during construction) support a finding that the adverse environmental effects from noise and vibration have been minimized in the most recent design to the maximum extent practicable. DPS Staff maintained that the proposed Certificate Conditions and the protocols agreed to in conjunction with contingency mitigation options will ensure that adverse environmental effects from noise and vibration, if any, will be offset or minimized to the maximum extent practicable during the duration of the Certificate using verifiable measures and that the Project will comply with relevant local laws regarding noise.

Based on the Application and the proposed Certificate Conditions, the Examiners found that substantial record evidence supported a finding by the Siting Board that any adverse environmental effects due to noise and vibration from the Project will be offset or minimized to the maximum extent practicable. No parties took exception to the Examiners' conclusions. Accordingly, the Examiners' conclusions and recommendations with respect to potential adverse impacts due to noise and vibration from the Project are adopted.

Dairy Farm Operations

In oral and written comments and in pre-filed testimony, several CMORE witnesses raised concerns about the potential adverse impacts of Project-related noise, pressure, vibrations, and shadow flicker on dairy operations and production.[194] In their closing brief, CMORE argued that because no studies concerning the impacts of noise or shadow flicker

[194] Tr. 721-731, 779-780.

from wind turbines on dairy cattle have been conducted, a peer-reviewed study should be completed.[195]

The Examiners concluded that while CMORE had voiced concerns about potential impacts on dairy operations, it had not offered any evidence that tended to support or corroborate those concerns.[196] On the other hand, the Examiners noted that DAM Staff had investigated the issue and reported that it had found no research or studies that persuasively support a conclusion that wind turbines adversely impact livestock or dairy operations.[197] Moreover, DAM Staff reported that it has not received any complaints about adverse impacts from the operation of commercial wind turbines on livestock or dairy operations. Accordingly, the Examiners found that there is no substantial evidentiary basis for requiring Applicant to conduct the study CMORE had requested.

No parties took exception to the Examiners' conclusions and recommendations with respect to potential adverse impacts of Project-related noise, pressure, vibrations, and shadow flicker on dairy operations and production. Accordingly, we adopt the Examiners' conclusions and recommendations.

Electric and Magnetic Fields

Electromagnetic fields (EMFs) are generated by the operation of facility components such as the turbine generator, electrical collection lines and transformers. Eight Point stated that the Project will comply with the EMF Guidelines established by the Commission with respect to the strength of electric and magnetic fields. DPS Staff concurred with the

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[195] CMORE Initial Brief, p. 2.

[196] RD, p. 100.

[197] Id.

Applicant and recommended that the Board find that the Facility will be operated well within the EMF limits established by the Commission and that the strength of the EMFs generated by the operation of Project's components will not be significant at any of the measurement locations required by the PSL Article 10 regulations.[198] Based on the above, the Examiners found that the Project will not have any significant adverse impacts on public health due to electric or magnetic fields.[199] No parties took exception to the Examiners' findings. Accordingly, the conclusions and recommendations of the Examiners with respect to impacts on public health due to electric or magnetic fields are adopted.

Cultural, Historic, and Recreational Resources

The Examiners determined that the record in this case, when coupled with proposed Conditions, including Certificate Conditions 32 and 77, provided adequate support for us to make the requisite findings as to the nature of the probable environmental impacts from the construction and operation of the Facility on cultural, historic, and recreational resources and to determine that any adverse impacts have been avoided or minimized to the maximum extent practicable after considering other relevant factors -- such as the state of available technology, consistency with State energy policies and plans, and visual and other pertinent aesthetic considerations. In reaching this determination, the Examiners recommended that we reject claims that the record provides inadequate support for

[198] DPS Initial Brief, pp. 31-32, citing Tr. 615-618.

[199] RD, p. 102.

the Board to make the necessary findings regarding the nature of the visual impacts due to the operation of this Project.

No party took exception to the RD's proposed findings and determinations on this issue, and we adopt them. Based upon the record of the proceeding and the relevant proposed Certificate Conditions, including requirements that the Applicant provide shielding or blocking measures in certain instances, we find that the Project's adverse visual impacts will be minimized or avoided to the maximum extent practicable, considering the state of available technology and the nature and economics of reasonable alternatives.

Infrastructure

Transportation

The Examiners summarized the nature of the probable environmental impacts on transportation, both by road and air, due to the construction and operation of this Project. They noted, among other things, that the Applicant provided record evidence demonstrating that, during construction, the traveling public would likely experience no impacts during off-peak periods and minimal, if any, impacts during peak periods. The Applicant will execute road use agreements with the Towns and will obtain all necessary transportation and road permits from affected State, county, and town agencies prior to construction, with all such road agreements and permits to be filed with the Secretary, and with a request that we not supplant such municipal procedural requirements and instead, pursuant to PSL §172, authorize the Towns or any other appropriate municipality to approve the road or highway work permits and delegate to the New York State Department of Transportation (NYSDOT) the authority to issue all approvals and permits within NYSDOT's jurisdiction, that may be required for construction or operation

of the Project. No party took exception to the RD's proposed findings or determinations on these issues.

Consistent with the RD's discussion and, based on the Application materials and our adoption of the relevant Certificate Conditions, we find that the Project's adverse environmental transportation effects should be minimal, and we determine that any such adverse effects will be minimized or avoided to the maximum extent practicable. In addition, pursuant to PSL §172 and consistent with our adoption of Certificate Condition 123, we authorize the Towns or other appropriate municipality, and delegate to NYSDOT authority to issue and approve road or highway work permits or approvals required for the construction or operation of this Project.

Communication

The Examiners determined that there was substantial evidence to support a finding by us that the Project will not have any significant adverse impacts on communications systems. No party took exception to this determination, and, consistent with the discussion in the RD, we adopt the Examiners' finding that the Project will not have any significant adverse impacts on communications systems.

Related Utilities

The Examiners determined that, if we adopt DPS Staff's Site Engineering and Environmental Plan (SEEP) specifications (attached as an appendix to the Certificate Conditions), along with the proposed Certificate Conditions, there is adequate support in the record for us to find that the Project will not have any significant adverse impacts on related utilities.[200] No

[200] The Staff Policy Panel recommended that the Board adopt Staff's proposed SEEP Specifications as an appendix to any Certificate Conditions approved by the Board. Tr., p. 557. The SEEP Specifications require several documents to be filed as Compliance Filings and prescribe minimum requirements for

party took exception to this determination. We adopt DPS Staff's SEEP Specifications and, based on the record and consistent with the discussion in the RD, find that the Project will not have any significant adverse impacts on related utilities.

Environmental Justice - PSL §168(2)(d) & §168(3)(d)

PSL §168(2)(d) and §168(3)(d) require the Siting Board to examine and make findings regarding a project's potential impacts to Environmental Justice communities as defined by 6 NYCRR Part 487 (see also 16 NYCRR §1001.28). The Application noted that no potential Environmental Justice areas are located within the Project's study area, and that the closest potential Environmental Justice areas are located outside the Project area.[201] The Application concluded that because the Project will result in no air emissions, the Project will not negatively impact these or any other potential Environmental Justice areas.[202] Accordingly, Eight Point stated that an Environmental Justice analysis pursuant to 6 NYCRR §487.6 was not required for the Project.

No party challenged these assertions. Accordingly, based on the record in this proceeding, we conclude that the construction and operation of the Project will not have a significant and adverse disproportionate environmental impact on any potential Environmental Justice area.

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those filings, in addition to any requirements specified in the Certificate Conditions. Tr. p. 574. If and to the extent that the SEEP Specifications conflict with the Certificate Conditions, the terms and conditions of the Certificate Conditions shall control.

[201] Hrg. Ex. 8, Application Ex. 28, p. 1.

[202] Id.

State and Local Laws - PSL §168(3)(e)

The discussion of issues elsewhere in this order demonstrates that the construction and operation of the Facility will comply with applicable State laws. In this section, we discuss compliance with, or waiver of, local laws.

Pursuant to 16 NYCRR §1001.31(a), any procedural provisions of local laws are preempted by Article 10 except as expressly authorized by the Siting Board. Pursuant to 16 NYCRR §1001.31(d), the Applicant must comply with any substantive requirement of local law unless the Siting Board finds that the local provision would be unreasonably burdensome.

The local wind energy facility laws of each of the Towns contain construction time-of-day limits, which Eight Point requests we not apply. As reflected in proposed Certificate Conditions 7 and 120, Eight Point, the Towns, DPS Staff, and other signatories to the recommended Certificate Conditions agreed that the construction time limits in the Towns' laws are unreasonably burdensome and proposed revised construction time limits. The Examiners recommended that we approve the revised construction time limits, proposed by the Towns, the Applicant, and the State agency parties, as part of the recommended Certificate Conditions, and determined that there was adequate support for us to otherwise find that Eight Point will comply with all other local law substantive provisions. No party took exception to the RD's proposed findings and determinations on this issue, and we adopt them.

Decommissioning and Restoration - 16 NYCRR §1001.29

Each Article 10 application must contain a statement of the performance criteria proposed for site restoration in the event the facility cannot be completed and for decommissioning of the facility, including a discussion of why the performance criteria are appropriate. 16 NYCRR §1001.29. The Examiners

noted that the record contains the required information, including a Decommissioning Plan that outlines the methods and means to decommission the Project at the end of its useful life, adding that there were no disputes regarding these provisions or the sufficiency of the record with respect to site restoration and decommissioning. However, to ensure that the letters of credit provide their anticipated benefits – an assured source for decommissioning and site restoration - the Examiners recommended that we specify that an acceptable form of letter of credit would expressly state that the letter of credit is for the benefit of the Towns and that, in the event of bankruptcy by the Certificate Holder, the letter of credit does not become subject to claims of secured and other creditors of the Certificate Holder. Eight Point notes in its brief on exceptions that it does not object to the Examiners' recommendations, and indicates that the letters of credit will provide that they are for the benefit of the Towns and that provisions will be made to ensure that the letters of credit will not become subject to claims of secured or other creditors of the Certificate Holder in the event of the bankruptcy of the Certificate Holder. Having considered the Examiners' recommendations regarding the letter(s) of credit, we find and decide that, in order to ensure that the letter(s) of credit provide an assured source for decommissioning and site restoration, each letter of credit must be irrevocable and must state on its face that it is held both by and for the sole benefit of the Towns. Further, we modify proposed Certificate Condition 21 so that it expressly states that the Certificate Holder shall not encumber, or create any security interest(s) in, the letter(s) of credit in favor of a third party.

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 Eight Point 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, Michelle L. Phillips and James T. McClymonds, 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, 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 Eight Point Wind, LLC (the Applicant) for the construction and operation of a wind farm with a capacity of up to 101.8 megawatts, consisting of up to 31 wind turbines in the Towns of Greenwood and West Union, in Steuben County, provided that the Applicant files a written acceptance of the Certificate pursuant to 16 NYCRR §1000.15(a) within 30 days after the date of issuance of this opinion and order.

4. Upon acceptance of the Certificate granted in this opinion and order or at any time thereafter, the Applicant shall serve copies of its compliance filings in accordance with the requirements set forth in 16 NYCRR §1002.2(c) and Certificate Conditions 18, 19, and 20. Pursuant to 16 NYCRR §1002.2(d),

parties served with the compliance filing 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) KATHLEEN H. BURGESS
Secretary

ATTACHMENT A TO ORDER

Case 16-F-0062, Application of Eight Point Wind, LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article 10 to Construct a Wind Energy Project.

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 Eight Point Wind LLC 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, updates and replies to discovery data requests, additional exhibits, and the Siting Board's Order Granting Certificate.

2. The Certificate Holder is responsible for obtaining all necessary permits and any other approvals (including those pursuant to PSL §§68, 69, 70, and 121, if applicable), land easements, and rights-of-way that may be required for this Facility and which the New York State Board on Electric Generation Siting and the Environment (Siting Board) is not empowered to provide or has expressly authorized. In addition, the Siting Board expressly authorizes the Public Service Commission (Commission) to require approvals, consents, permits, certificates or other conditions for the construction or operation of the Facility under PSL §§68, 69 & 70, with the understanding that the Commission will not duplicate any issue already addressed by the Siting Board and will instead only act on its police power functions related to the entity as described in the body of this Article 10 Certificate.

3. 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.

4. Facility construction is authorized for up to 31 wind turbines (including pad-mounted transformers and metering equipment) in the Towns of Greenwood and West Union, Steuben County, access roads, above and underground 34.5 kilovolt (kV) collection lines and the collection substation, two permanent turbine-hub-height meteorological towers, one operations and maintenance building, and up to six temporary staging/laydown areas. The Facility is proposed to connect with the New York State Electric & Gas (NYSEG) existing 115 kV Bennett Substation in Hornellsville, New York, north of the Project Area via an approximately 16.5-mile 115 kV overhead transmission line that is being permitted through the Article VII process. The total generating capacity of the Facility shall not exceed 101.8 megawatts (MWs).

II. General Conditions

5. Prior to the commencement of construction of the Facility the Certificate Holder shall file a request/application for a Clean Water Act Section 401 Water Quality Certification with the Secretary to the Siting Board (Secretary), which shall be filed and served and noticed pursuant to 16 New York Codes, Rules and Regulations (NYCRR) 1000.8(8). This request shall be filed concurrently with the permit application filed with the United States Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. 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.

6. The Certificate Holder shall implement the minimization and mitigation measures as described in the Application and clarified by the Certificate Holder’s supplemental filings, updates and replies to discovery data requests

or additional exhibits, and the Siting Board's Order Granting Certificate.

7. 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 and as such Application has been further clarified and supplemented in the evidentiary record of this proceeding by the Certificate Holder, except for the construction time limits and hours contained in the respective Section 12(N) of both the Town of Greenwood Amended Wind Energy Law (Local Law No.1 of 2017) and the Town of West Union Wind Energy Facility Law (Local Law No.1 of 2017) that the Siting Board refuses to apply as unreasonably burdensome in this proceeding. Certificate Conditions contained herein impose reasonable construction time/hour limits.

8. The Certificate Holder shall construct the collection facilities, including the 115 kV transmission line within the collection substation in accordance with the latest edition of American National Standards Institute (ANSI) C-2 for operation at 212 degrees Fahrenheit. The Certificate Holder shall construct the collector lines in accordance to the latest edition of ANSI C-2.

9. The Certificate Holder shall incorporate and implement as appropriate, in all compliance filings and construction activities, the 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.

10. The Certificate Holder shall work with NYSEG, and any successor Transmission Owner (as defined in the New York Independent System Operator (NYISO) Agreement)), so that,

with the addition of the Facility (as defined in the Interconnection Agreement between the Certificate Holder, NYISO and NYSEG), the Facility will have power system relay protection and appropriate communication capabilities so 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 and NYSEG criteria.

11. 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. Sixty (60) days prior to commencement of construction, as defined in Condition 12, the Certificate Holder shall provide, pursuant to 16 NYCRR 1002.4, an information report to DPS Staff, with a copy to the Siting Board, that identifies the Certificate Holder's construction organizational structure, contact list, and protocol for communication between parties. The contents of this report will be subject to consultation with DPS Staff after the report is filed;

    b. The Certificate Holder shall regard the Department of Public Service Staff (Staff or DPS Staff) representatives, authorized pursuant to PSL §66(8), as the Siting Board's representatives in the field and, after the Siting Board's jurisdiction has ceased, as the Commission's representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate, or may violate, the terms of the Certificate, Compliance Filings, or any other order in this proceeding; such DPS Staff representatives may issue a stop work order for that location or activity;

c. A stop work order shall expire 24 hours after being issued 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 the DPS Staff field representative, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect;

d. Stop work authority will 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 representatives 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. In the event that a DPS Staff representative 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. The issuance of a stop work order, or the implementation of measures as described below, may be directed at the sole discretion of the DPS Staff representative during these discussions;

e. If a DPS Staff representative 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, the DPS Staff representative may -- in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action -- direct the field crews to stop the specific potentially harmful activity immediately. If responsible Certificate Holder personnel are not on site, the DPS Staff representative will immediately thereafter inform the Certificate Holder's Construction Inspector(s) and/or Environmental Monitor(s) of the action taken. The stop work order may be lifted by the DPS Staff Representative if the situation prompting its issuance is resolved;

f. If the DPS Staff representative 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, the DPS Staff representative may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, 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 subpart (a) above. The field crews shall immediately comply with the DPS Staff representative's directive as provided through the communication protocol. The DPS Staff representative will immediately thereafter inform that Certificate Holder's Construction Inspector(s) and/or Environmental Monitor(s) of the action taken. DPS Staff will promptly notify the New York State Department of Environmental Conservation (DEC), Division of Environmental Permits, Chief, Major Project Management Unit, 625 Broadway, Albany, NY 12233-1750 and the Natural Resource Supervisor for Region 8 (Region 8 NRS), of any activity that involves a violation of a permit issued by the DEC for the Project

pursuant to federally delegated or approved authority, as required by PSL §172.1; and

g. 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.

III. Notifications

12. At least 14 days prior to the Certificate Holder's commencement of construction date, defined as the anticipated beginning of unlimited and continuous construction of the Facility but not including tree-clearing activities relating 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 the Compliance Filing, the Certificate Holder shall notify the public as follows:

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

b. Provide notice by mail to owners and operators of water wells within one mile of the final layout;

c. Provide notice to local Town and County officials and emergency personnel;

d. Publish notice in the local newspapers of record for dissemination;

e. 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, the Facility Office in Greenwood, and the Facility construction trailers/offices; and

f. File notice with the Secretary for posting on the DPS

Document and Matter Management website.

13. The Certificate Holder shall write the notice(s) required in Condition 12 in language reasonably understandable to the average person and shall ensure that the notice(s) contain:

    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 Secretary to the Siting Board and Commission.

14. Upon distribution, 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.

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

16. Prior to the end of construction, the Certificate Holder shall notify the entities identified in Condition 12(a) and 12(b) with the contact name, telephone number, and address of the Operations Manager, and shall file the same with the Secretary.

17. 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.

18. The Certificate Holder shall file compliance filings, and other filings, in accordance with 16 NYCRR Part 1002 et. seq, as provided herein. The Certificate Holder will make reasonable efforts to consolidate compliance filings directly related to topics, in which the Towns of Greenwood and West Union (the Towns) have expressed an interest herein, into one filing in order to facilitate the Towns' review.

19. Consistent with 16 NYCRR Part 1002.2, the Certificate Holder may not commence construction of all or any portion of the facility or interconnections for which the Board has required approval of a compliance filing as a condition precedent to such construction until the Certificate Holder has submitted the required compliance filing for that portion of the facility and received approval of it by the Board, or by the Commission after the Board's jurisdiction has ceased.

    a. For the purposes of preparing compliance filings, the Certificate Holder is authorized to conduct such testing in the Project Area as may be necessary, including without limitation, geotechnical and soil testing, prior to the submission and approval of any compliance filing. In order to gain required access for vehicles and /or testing equipment to conduct such testing, the Certificate Holder is authorized to conduct limited tree clearing.

    b. The Certificate Holder is also authorized to file with the Secretary, on or about May 31, 2019, a proposed plan for tree clearing, commencing November 1, 2019, and ending March 31, 2020 (the "Tree Clearing Plan") with the goal of having the DPS Staff approve the Tree Clearing Plan when the Board issues a certificate for the Project. A copy will also be provided to DEC staff. The Tree Clearing Plan shall comply with all applicable certificate conditions and shall also include sufficient information regarding how proposed clearing activities are directly tied to facility layout so that, including facility design drawings as

necessary, to ensure clearing is limited to what will be required for Project construction

20. The Certificate Holder shall submit in the Compliance Filing documentation demonstrating that the final Facility design meets or exceeds the turbine setback requirements set forth in the local laws and/or land use regulations for the Towns of Greenwood and West Union, unless written consent has been obtained from affected property owners. Proofs of consent shall be provided, redacted to protect confidential information, and indicated on the final design drawings.

21. A Final Decommissioning Plan and proof of financial security shall be filed in the Compliance Filing that contains the requirements of the Decommissioning Plan filed as Exhibit 29-1 of the Application and the information contained in this paragraph. The Certificate Holder agrees to consult with the Towns' representative concerning the decommissioning estimate to obtain their input before the Compliance Filing is made and will provide to the Towns the cost basis for said estimate. The Compliance Filing will be redacted to eliminate information proprietary to the Certificate Holder, which information in its unredacted form will be subject to examination by the DPS and Towns pursuant to the applicable Protective Order previously issued in Case 16-F-0062. The Decommissioning Plan shall also include (i) the anticipated life of the wind turbines; (ii) the estimate of decommissioning in current dollars; (ii) the method of ensuring that funds will be available for decommissioning and restoration as provide in the Plan; (iv) the method that the decommissioning estimate will be kept current; and (v) the manner in which the Project will be decommissioned and the site restored. In response to certain aforementioned requirements herein, the decommissioning estimate contained in the Plan 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. No offset for projected salvage value is permitted in the calculation of the estimate. The Certificate Holder shall work with DPS Staff and the Towns of Greenwood and West Union

("Towns") on an acceptable form of irrevocable letter or letters of credit each of which on its face shall state that it is held by and for the sole benefit of the Towns. The Certificate Holder shall not encumber, or create any security interest(s) in, the letter of credit in favor of a third party. The Certificate Holder shall also file with the Secretary, with a copy to the Towns of Greenwood and West Union, proof that the irrevocable letter or letters of credit have been obtained in the decommissioning estimate amount, as calculated pursuant to the Siting Board's direction, and that the letter of credit states on its face that it is held by and for the sole benefit of the Towns, and affirming that no security interest(s) in the letter of credit has been or will be created in favor of a third party. The letter or letters of credit should remain active for the life of the Facility, until it is decommissioned, as adjusted every fifth year in consultation with the Towns and DPS Staff. The Towns of Greenwood and West Union shall hold the letters of credit with each letter representing that portion of the respective Town's decommissioning cost. The Certificate Holder shall execute decommissioning agreements with the respective Towns establishing a right for them to draw on the letters of credit if the Certificate Holder defaults on its decommissioning obligations. Without relinquishing the authority granted to the Siting Board, and the PSC under PSL 168.7, the Towns of Greenwood and West Union are hereby delegated the authority, pursuant to PSL 172.1 to enforce the approved Decommissioning Plan subject to the provisions of Condition 3 herein.

Health and Safety

22. A Final Emergency Action Plan that shall be implemented during Facility construction, operation, and decommissioning shall be submitted as part of the Compliance Filing. It shall address, amongst other potential contingencies, provisions for the notification of pipeline operators/owners in the event of damage to an existing pipeline. Training drills with emergency responders shall occur at least once per year. 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.

23. The Final Site Security Plan for Facility Operations. Copies of the final plan shall be provided to the DPS Staff, NYS Division of Homeland Security and Emergency Services and local emergency responders that serve the Facility.

24. A Final Health and Safety Plan shall be implemented during Facility construction, operation, and decommissioning.

25. 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 3 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.

26. 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.

Transportation

27. The Board hereby delegates to the New York State Department of Transportation (NYSDOT) the authority, pursuant to PSL 172, to issue all approvals, consents, licenses and permits, within NYSDOT's jurisdiction, for the construction and operation of the Project.

Plans, Profiles, and Detail Drawings

28. Maps, site plans and profile figures, and construction details for the Facility to be constructed. Shapefile data shall be provided to DPS Staff for the locations of turbines, collection lines, transmission lines, designated construction and laydown areas, access ways, and other Project facilities. Final design drawings, site plans, and construction details will include setback dimensions that adhere to the following requirements for turbine locations:

    a. 1.5 times the turbine tip blade height from the substation;

    b. 1.5 times the turbine tip blade height from the 115 kV generator lead line;

    c. 1.1 times the turbine tip blade height from gas and oil wells (unless waived by landowner and gas and oil well operator);

    d. 1.2 times the turbine height from public roads;

    e. 550 feet from State lands;

    f. 1.5 times turbine height from non-residential structures;

    g. 1,400 feet from non-participating residences;

    h. 1,400 feet from participating residences;

    i. 1.2 times turbine height from non-participating parcels; and

    j. 100 feet from State jurisdictional wetlands, unless otherwise permitted pursuant to this Certificate.

Environmental

29. An Environmental Compliance Program Plan shall be included in the Compliance Filing including:

a. Establishment of funding for an independent, third-party environmental monitor ("Environmental Monitor") to oversee compliance with environmental commitments and permit requirements. The Certificate Holder will solicit input from the designated representative of the Towns with respect to the selection of the Environmental Monitor. The Environmental Monitor shall perform daily inspections of construction work sites and, in consultation with DPS Staff, issue regular reporting and compliance audits. When soliciting input from the DPS Staff and the Towns, the Certificate Holder shall identify one or more candidates and provide qualifications and contact information for the Environmental Monitor. There shall also be an independent, third party agricultural monitor ("Agricultural Monitor") approved by the Department of Agriculture and Markets (DAM), which Agricultural Monitor need not be onsite full time and who shall also serve as the Agricultural Monitor for the construction of the Article VII transmission line; provided however, there will be periods during Project and transmission line construction, and the subsequent restoration, when the Agricultural Monitor will be onsite full-time.

b. A Final Environmental Compliance Manual, which will serve as the basis for contractor training. The manual will identify construction organizational structure, contact list, and protocol for communication between parties;

c. Mandatory training requirements for all contractors and subcontractors;

d. Pre-construction coordination; and

e. Construction and restoration inspection standards.

30. A Final Detailed Geotechnical Engineering Report shall be submitted in the Compliance Filing verifying subsurface conditions at each turbine location, and horizontal directional drilling locations. The report shall identify appropriate mitigation measures required in locations of highly corrosive soils or soils with a high frost risk and

confirm whether blasting operations will be required in areas of shallow bedrock.

31. 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. The Shadow Flicker Impacts Analysis, Control, Minimization and Mitigation Plan shall include:

    a. Updated modeling analysis of realistic and receptor-specific predicted flicker based on the as built coordinates of the wind turbines;

    b. A protocol for monitoring operational conditions and potential flicker exposure at the wind turbine locations identified in the updated analysis, based on meteorological conditions;

    c. Details of the shadow detection and prevention technology, if available and determined by the Certificate Holder to be feasible, that will be adopted for real-time meteorological monitoring and operational control of turbines;

    d. Potential temporary turbine shutdowns during periods that produce flicker that exceed the aforementioned 30 hours maximum for two consecutive years and for which complaints are received from the affected residence existing as of the date this Article 10 certificate is issued and which complaints are not resolved through the Complaint Resolution Process required by Certificate Condition 56; and

    e. 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 and which complaints are not resolved through the Complaint Resolution Process required by Certificate Condition 56.

    Details of flicker control, minimization and mitigation measures shall be indicated on final design drawings and standards, and site plans as appropriate.

32. Cultural Resources Protection Measures shall be submitted in the Compliance Filing and contain the following:

a. Plans to avoid or minimize impacts to archaeological 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 evaluated or inventoried and assessed by the Certificate Holder for the presence of historic properties. 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 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 of all ground-disturbing construction-related activities within 100 feet (31 meters) of 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 the discovery of such remains until written permission is received from the New York State Office of Parks, Recreation and Historic Preservation.

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 Phase II investigations or mitigation is warranted. The results of any Phase II investigations and/or identification of mitigation measures will be included

in the plans.

d. Final C*ultural Resources Mitigation and Offset Plan*, either as adopted by a federal permitting agency in a 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 of mitigation funding awards for offset project implementation to be provided within two years of the start of construction of the Facility shall be included.

33. The Signatory Parties agree that the Certificate Holder has demonstrated that 6.9 m/s is not feasible for this Project and therefore full avoidance of impacts on the Northern Long Eared Bat ("NLEB") cannot be achieved. As such, the Facility will implement the minimization measures outlined below and herein. The operation of the Project will result in the estimated take of 96.2 NLEBs over the life of the Project and as a result will implement minimization and mitigation measures contained in this Certificate that meet the requirement of 6 NYCRR Part 182 (Incidental Take Permit).

a. Unless otherwise agreed to between the Certificate Holder and the NYSDEC, the Facility will avoid the potential for direct take of bats during construction by scheduling activities having a significant risk of impact (i.e., tree cutting) during the hibernation season (November 1 until April 1);

b. Unless otherwise agreed to between the Certificate Holder and the NYSDEC, the Facility shall avoid the direct take of occupied NLEB habitat by ensuring that no tree clearing activities occur within 150 feet of any known, identified maternity roost tree and any tree clearing outside the aforementioned 150-feet buffer zone for the known, identified maternity roost tree, within 1.5 miles of said tree, shall take place only between November 1 and April 1;

c. Reducing, to the maximum extent practicable, the amount

of forested habitat that needs to be removed; and

d. Moving any necessary forest clearing as far away from known, identified maternity roost sites or hibernacula, to the maximum extent practicable.

34. After prior consultation with DEC, the Certificate Holder shall file, as a compliance filing, a Net Conservation Benefit Plan (NCBP) that mitigates the total calculated take of 15.43 NLEB over the life of the Project. As provided in subsection (g) below, the NCBP shall comprise the following:

a. A demonstration that the mitigation actions described in the NCBP will result in a positive benefit to NLEB species, and not just an offset for take of individuals;

b. Detailed net benefit calculations based on the actual location and type of minimization measures to be taken;

c. Full source information use as inputs to the net benefit calculations;

d. An appropriate monitoring program to determine the effectiveness of the mitigation;

e. Adaptive management options and next steps to be implemented (except for additional curtailment) in the event that the authorized level of take stated herein (15.43 over the life of the Project) is actually exceeded by operation of the Project;

f. A letter of credit evidencing the Applicant's ability to fund and execute such management, maintenance, and monitoring for the 35-year life of the Project;

g. Eight Point Wind LLC, the applicant in this proceeding and the eventual Certificate Holder (referred to in this paragraph as the "Certificate Holder") shall conduct, while this Article 10 proceeding is ongoing, NLEB mist-netting and radio-telemetry tracking operations, or hibernacula gating operations as provided in the next paragraph, to assist in the identification

of previously unknown maternity roost trees and/or NLEB hibernacula. The mist-netting surveys shall be conducted first, at the Certificate Holder's election, as provided herein, in Suffolk County, Long island, on public lands with no-cost access to the Certificate Holder, or on privately-owned lands. Alternatively, at Certificate Holder's election, the mist netting surveys may be first conducted on lands adjacent to the Project Area, property which the Certificate Holder owns or to which it has the necessary property rights, which total approximately 350 acres (formerly owned by Chesapeake, (the "Chesapeake Property"). Survey efforts will comprise at least 20 net-nights (10 calendar nights, 2 nets per night) to capture, tag and radio track reproductive female and juvenile NLEB. The goal is to locate maternity roost sites to offset the estimated lifetime take of 15.43 NLEB. The identification of a new maternity roost tree will then allow the DEC to take steps to protect the identified site from disturbance and as such, offset the loss of up to five (5) NLEBs per new maternity roost tree identified on Long Island. New roosts are defined as any previously unidentified roost that is located greater than 150 feet from an already identified roost, i.e., roosts must be more than 150 feet apart to be counted as separate locations. If the Certificate Holder is unable to identify enough new maternity roost trees to offset its entire Project life NLEB take estimate of 15.43 NLEB bats in Suffolk County, Long Island, the Certificate Holder will be credited the appropriate number of NLEBs per new maternity roost tree identified, and then the Certificate Holder will conduct NLEB mist-netting and radio-telemetry tracking operations on the Chesapeake Property to identify the remaining quantity of new maternity roost trees required to offset the remainder of the aforementioned NLEB take estimate. If a roost tree is found on Long Island it equals 5 NLEBs, if roost tree is found on Chesapeake property, within 1.5 miles of project component, it equals 4 NLEBs. Nothing herein shall preclude the Certificate Holder from performing additional mist netting and tracking surveys at other properties. If, together with the gating of hibernacula, as provided in the next paragraph, a sufficient amount of roost trees is identified as a

result of these aforementioned netting and tracking operations to offset the estimated take of 15.43 NLEB over the life of the Project, then Certificate Holder's obligations herein under the NCB Plan shall be deemed satisfied. Notwithstanding anything herein, the Certificate Holder may implement the gating, netting and tracking operations in any sequence it deems reasonable. The results of the mist netting survey/gating operations shall be reported in the Compliance Filing. If all reasonable efforts to identify new maternity roost trees on the Chesapeake Property, and on the public lands and private lands identified by DEC in Suffolk County, Long Island, have been exhausted, and the Certificate Holder has not identified enough new maternity roost trees to offset the entire aforementioned NLEB take estimate, or the Certificate Holder has not gated a sufficient number of hibernacula pursuant to the next paragraph, the Certificate Holder will report that in the Compliance Filing and thereafter consult with DEC, prior to the commencement of commercial operation, on further NLEB mitigation to be implemented during operation of the Facility, except that additional curtailment shall not be considered as an option for further NLEB mitigation.

h. Based upon the information provided by DEC, the Certificate Holder shall investigate opportunities to obtain the necessary property rights to install physical gating of the identified bat hibernacula at locations that are deemed appropriate after consultation with DEC. Each hibernaculum that is gated will equate to 50% of the estimated number of resident NLEB estimated by DEC in the hibernacula towards offsetting the Project's lifetime 15.43 NLEB estimate, discussed in the preceding paragraph. The Certificate Holder is not required to enter the hibernacula to verify the presence or number of NLEB.

i. In addition to the above components of the NCBP, the Certificate Holder shall implement a curtailment regime during the period July 1 through October 1 requiring a minimum curtailment 30 minutes prior to sunset through 30 minutes after sunrise, when ambient air temperature is 50 degrees Fahrenheit or greater and when wind speed

is equal to or less than 5.5 m/s. This regime will be implemented at all turbines for the life of the project.

j. No additional curtailment or mitigation is required to mitigate impacts specifically related to migratory tree bats.

35. A final Invasive Species Control Plan (ISCP) shall be submitted in the Compliance Filing. 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, 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 the 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. As appropriate, additional control or removal measures may be necessary to meet ISCP goals that were not achieved.

36. Final wetland and stream impact drawings, site plans, and construction details shall be submitted in the Compliance Filing and incorporate and accurately depict methods for minimization of impacts to each wetland and stream. The plan shall include a table that identifies all wetlands and streams within the Project area and provides the following information for each individual resource:

a. Wetland delineation types and DEC stream classifications;

b. Identification and assessment of methods to minimize impacts, including crossing methods and identification of any time of year restrictions, as applicable; and

c. References to the location of each resource where shown in the final design drawings, site plans, and construction details.

37. A final Wetlands Mitigation Plan, if required, addressing impacts to federal and State wetlands shall be developed in coordination with DEC, DPS Staff, and the Corps to satisfy applicable federal and State regulations and be filed in the Compliance Filing.

38. The following shall be filed with the Secretary regarding Federal Aviation Administration (FAA) permits and required approval documentation, as applicable:

a. Final FAA Determinations or Determinations with conditions shall be submitted to the Secretary prior to construction;

b. Certificate Holder shall provide any updated material as Compliance Filings if relevant Project plans require modifications due to results of FAA studies and Determinations;

c. 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;

d. All material related to the FAA approval of lighting systems to be installed on wind turbines (and any associated equipment), including Aircraft Detection Lighting Systems and non-Aircraft Detection Lighting Systems, shall be filed to the Secretary prior to construction; 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 30

days of completion of construction of the Project.

39. Copies of any discretionary local or state permits and/or approvals required for construction and operation of the Facility if such approvals were authorized by the Siting Board shall be filed with the Secretary.

40. Documentation demonstrating that all necessary agreements are in place for use of the Facility Site for construction and operation (e.g., redacted landowner agreements, easements, or "good neighbor" agreements) shall be filed with the Secretary.

41. A copy of the Interconnection Agreement between NYISO, NYSEG, and the Certificate Holder shall be filed with the Secretary. Any updates or revisions to the Interconnection Agreement shall be submitted to the Secretary throughout the life of the Project.

    Additionally, except in the event of an emergency, if any equipment or control system with different characteristics is installed throughout the life of the Project, the Certificate Holder shall, at least three months 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.

42. All Facilities Studies issued by NYSEG and the NYISO and any updated facilities agreements will also be filed with the Secretary throughout the life of the Facility.

43. 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.

44. The following information shall be filed in the Compliance Filing:

    a. Details and specifications of the selected turbine model (including cut sheets, and blade details (including length and thickness; pad-mounted transformers and

metering equipment), including third-party certification documenting that the turbine model meets international design standards and certification showing turbines are compatible with existing Project conditions); the technical/safety manual for the turbine; foundation drawings (including plan, elevation, and section details); and manufacturer spec sheet and warranty that the selected turbine model does not exceed the total height and sound level output of the turbines presented in the Application;

b. Description of the wind turbine blade installation process, 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. Details showing typical laydown space required for installation will be provided;

c. Maps showing the location for the selected operations and maintenance building. If an existing building is not utilized, the Certificate Holder shall provide the final operations and maintenance building details and construction drawings; and

d. If an on-site concrete batch plant is to be utilized during construction, the Certificate Holder shall provide:

(i) Final details of the concrete batch plant layout, location, and access;

(ii) Temporary lighting that avoids offsite light trespass;

(iii) Copies of required permits;

(iv) Initial concrete batch plant set-up plan with references of conformance to ACI (American Concrete Institute), ASTM (American Society for Testing and Materials); and

(v) Plan or description of the Certificate Holder's monitoring and testing of concrete in conformance

with the Building Code of New York State, ACI, ASTM, and any other applicable specifications;

45. Final plan for the collection substation and collection line circuits' configuration and location map, indicating locations of overhead and underground installations and the number of required circuits per circuit-run shall be submitted in the Compliance Filing. A breakdown of the number of miles per installation shall be included as a legend (including installation distances for single, double, triple, etc.).

46. Final details of any single and multiple-circuit overhead 34.5 kV electric collection line layouts shall be submitted in the Compliance Filing. Each Project circuit layout (single, double, triple, etc.) shall include, if applicable, the following drawings:

    a. "Right-of-Way Clearing Diagram";

    b. "Riser Dead-End Structure Diagram";

    c. "Tangent Structure Diagram";

    d. "Angle Structure Detail"; and

    e. "Clearing Diagram-Adjacent to Roadway Detail".

    The above listed drawings shall include final layout details of any required guy support systems.

47. For the final design and details of single and multiple electric circuit underground collection lines to be submitted in the Compliance Filing, each Project circuit layout (single, double, triple, etc.) shall include a cross-section and clearing and ROW widths needed for accommodating circuit installations.

48. Maps showing all locations where anticipated alternative installation methods (i.e., alternative to the "rip" method, including subsurface bores/horizontal directional drilling) shall be utilized during construction of underground collection lines; alternative methods will be

identified in the plans. To the extent the contractor determines, during construction activities, that installation methods should differ from that which is depicted on the maps, such change shall be permitted following on-site consultation with, and verbal approval by, the DPS Staff representative and the Environmental Monitor. Such changes must be consistent with federal and State regulations and will be subject to filing a notification of change with the Secretary within 48 hours from the agreement to make the change in installation method.

Environmental

49. A Frac-Out Risk Assessment and Contingency Plan shall be submitted in the Compliance Filing if and where horizontal directional drilling is proposed. Biodegradable drilling solutions shall be used for horizontal directional drilling (HDD) to minimize harm to aquatic species in the event of a drilling frac-out. Exit and entry points shall be located a minimum of 50 feet from the edge of the stream or wetland to minimize disturbance to the extent practicable. At a minimum, the plan shall include procedures to address inadvertent surface returns (frac-out), a response procedure, and a list of spill response equipment to be maintained on-site. All equipment and provisions of the plan shall be readily accessible at the locations where HDD technology is used during construction. If inadvertent drilling fluid surface returns occur in wetlands or streams, the NYSDEC's Division of Environmental Permits, Chief of the Major Project Management Unit and DPS Staff shall be notified within 2 hours or as soon practicable, considering internet and cell phone coverage in the area and a written monitoring report describing the location, estimated volume, and cleanup efforts shall be submitted within 24 hours of the occurrence.

50. Dust Control Procedures Plan for minimizing the amount of dust generated by construction activities, consistent with the Standards and Specifications for Dust Control, as outlined in the *New York State Standards and Specifications for Erosion and Sediment Controls*, shall be submitted in the Compliance Filing.

51. A final Unanticipated Discovery Plan, establishing procedures in the event that resources of cultural, historical, or archaeological importance are encountered during Facility construction shall be submitted in the Compliance Filing. 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, subject to the provisions of Condition 3 herein.

52. Site-specific plans for management of priority invasive species within the Project Area (including autumn olive, Canada thistle, ragweed, Japanese knotweed, and common reed) identified in the Invasive Species Control Plan shall be included in the Final ISCP to be submitted in the Compliance Filing.

53. The Certificate Holder shall file with the Secretary a notice confirming that no wind turbine is sited within 100 feet of an existing water supply well and identifying any instances where environmental or engineering constraints require siting of any other Project facilities within 100 feet of an existing water supply well. For those wells so identified, the Certificate Holder shall perform pre- and post-construction testing of the potability of water wells within 100 feet of construction disturbance before commencement of construction and after completion of construction shall be performed by a qualified third party, to ensure the wells are not impacted. Should the third party conclude that the Facility Construction has an impact on the potability of a water well based on the test results, the Certificate Holder shall cause a new water well to be constructed, more than 100 feet from a collection line or access road.

54. A final DEC-approved Storm Water Pollution Prevention Plan (SWPPP) shall be filed with the Secretary. Impacts to soil resources shall be minimized by adherence to best management practices that are designed to avoid or control

erosion and sedimentation and stabilize disturbed areas. Erosion and sedimentation impacts during construction shall be minimized by the implementation of an erosion and sedimentation control plan developed as part of the State Pollution Discharge Elimination System General Permit for the Facility. Erosion and sediment control measures shall be constructed and implemented in accordance with the SWPPP.

55. A final Spill Prevention, Containment and Counter Measures (SPCC) Plan to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Facility construction and operation shall be filed in the Compliance Filing. The SPCC Plan shall be applied to all relevant construction activities and contain 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), methods of disposal of contaminated materials in the event of a discharge, and spill reporting information. Any spills shall be reported in accordance with State and/or federal regulations.

56. A Final Complaint Resolution Plan for both construction and operation phases (a separate plan will be submitted for operational noise), shall be developed in consultation with the Towns and submitted to the Towns as part of the Compliance Filing. 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 for:

    a. Registering a complaint;

    b. Notifying the public of the complaint procedures;

    c. Notifying Town officials of complaints as they are received and responded to, and informing Town officials of the manner of response and actions taken;

d. Responding to and resolving complaints in a consistent and respectful manner;

e. Logging and tracking of all complaints received and resolutions achieved;

f. Reporting to the Towns and DPS Staff any complaints not resolved within 60 days of receipt;

g. Complaints not resolved within 60 days may be brought by the complainant to the PSC and will be subject to PSC complaint resolution procedures;

h. Providing an annual report of complaint resolution tracking to DPS Staff that shall also be filed with the Secretary; and

i. 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. Should this prove ineffective, cable television hookups shall, at the Certificate Holder's expense, be provided (in areas where cable service is available), or in areas where cable service is not available or not practical, direct broadcast satellite reception systems to any affected resident so desiring this compensation.

Miscellaneous

57. A detailed Facility Exterior Lighting Plan shall be filed in the Compliance Filing. The Lighting Plan shall address:

a. Security lighting needs at the collection substation and the facility Operations and Maintenance building site;

b. Plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement at the substation;

c. Lighting should be designed to provide safe working

conditions at appropriate locations; and

d. Exterior lighting design shall be specified to avoid off-site lighting effects, by:

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

(ii) For lighting other than turbine door safety lighting, if any, 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.

e. Lighting of the wind turbine nacelles shall be implemented as per the current requirements of the Federal Aviation Administration (FAA) Advisory Circular 70/7460- IL, Chapter 13 (Marking and Lighting Wind Turbines) or as updated, as of the time of Compliance Filing submittal. Revised Determinations of No Hazard to Air Navigation addressing final facility design shall be provided as supporting documentation. The Certificate Holder shall include in the Compliance Filing an evaluation of the feasibility of installing Radar-activated aviation hazard warning lights as a possible measure to further minimize visual and wildlife impacts to the maximum extent practicable.

f. The Certificate Holder shall provide shielding or blocking measures (such as landscape plantings or window treatments) for receptor locations that submit complaints for exposures to the turbine nacelle lighting that is implemented as required by the FAA, as discussed in the preceding subparagraph, and which complaints are not resolved through the Complaint Resolution Process required by Certificate Condition 56.

58. Post-construction wildlife monitoring will be conducted and include direct impact fatality studies,

habituation/avoidance studies, and breeding bird surveys. A Post Construction Avian and Bat Monitoring and Adaptive Management Plan shall be filed in the Compliance Filing. The details of the post-construction studies (i.e., the start date, number and frequency of turbine searches, search area, bat monitoring, duration and scope of monitoring, methods for observational surveys, reporting requirements, etc.), will be described in the Post-construction Avian and Bat Monitoring and Adaptive Management Plan and based in part on NYSDEC's June 2016 *Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects.* The Guidelines will be adapted as needed to design a work plan for surveys capable of adequately detecting rare events and impacts to listed species. The work plan will be developed, through consultation between the Certificate Holder, USFWS, and NYSDEC, and a final plan will be approved by NYSDEC and be in place prior to the start of Project operation. As the Project will be permitted to directly or indirectly impact state-listed threatened and endangered species, post-construction monitoring must be properly designed to evaluate mortality and displacement impacts, and, therefore monitoring shall be conducted for three (3) non-consecutive years during the first ten (10) years of operation of the Project at intervals to be determined in the Post Construction Avian and Bat Monitoring and Adaptive Management Plan. In years 8, 16 and 25 following commencement of commercial operation of the Project, the Certificate Holder shall submit to DPS Staff a status report on any new, commercially available technologies, that are designed to reduce migratory bat mortality beyond the curtailment required in this Certificate, that in the sole judgment of Certificate Holder, would be feasible and cost effective to install at the Project, and would not be more expensive to Certificate Holder than the mitigation and curtailment regime required in Conditions 33-34 of this Certificate.

59. The Certificate Holder shall file with the Secretary within 60 days of 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.

60. The Certificate Holder shall file in the Compliance Filing an Operation and Maintenance Plan(s) for the Facility, including emergency procedures and list of emergency contacts. The Certificate Holder shall file annually with the Secretary an updated copy of its emergency procedures and list of emergency contacts and with documentation of any modifications.

61. 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 will provide effective protection.

62. As-built drawings in both hard and electronic copies shall be filed with the Secretary within six months following the commercial operation date of the Facility. Drawings will include final locations of all Project components, final grading, elevation plan of switchyard and collection substation, and a profile of the final collection line locations.

63. A Vegetative Management Plan shall be prepared, filed in the Compliance Filing and shall address specific standards, protocols, procedures and specifications for the vegetative management of onsite overhead collection systems, access roads and turbine sites:

    a. Vegetation management recommendations based on on-site surveys of vegetation cover types and growth habits of undesirable vegetation species;
    b. Herbicide use and limitations, specifications and control measures;

c. 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. Landowner notification procedures.

64. The Certificate Holder shall file in the Compliance Filing:

a. Final drawings and details of the Wind Generating Facility, including pad mounted transformers and metering equipment, as well as final construction drawings incorporating any appropriate changes to the design and details, including:

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

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

(iii) proposed grading and turbine ground elevations.

b. 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; and

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) TS 61400-11 standard, and Technical Specification TS61400-14 2005-1st Edition), if available. Sound Power Information will be reported associated with wind speed magnitudes, angular speed of the rotor, and rated power to the extent this information is available. The Sound Power Information will include specifications for Noise Reduced Operations or Low-Noise Trailing Edges if these are available or required to meet the noise conditions of this Certificate;

(ii) Sound Power levels from the turbines at any wind speed at hub height shall not exceed 106.0 dBA overall (108.0 dBA with the 2 dBA uncertainty factor), 122 dBZ at the 16 Hz full octave band, 119 dBZ at the 31.5 Hz full octave band, and 117 dBZ at the 63 Hz full octave band and measured with the IEC 61400-11 Standard plus a 2-dB uncertainty factor. Noise reduction operations (NROs') may be applied at any turbine, including the alternate turbines, in the Certificate Holder's sole judgment; provided, however, Alternative Turbine 3 is eliminated from the final design. The Certificate Holder shall exercise reasonable efforts to obtain timely agreements from non-participating landowners that will include them as participating land owners in the Project on terms equivalent to existing participating landowner agreements. NROs' would be used in the Compliance Filing analyses only if the Certificate Holder could not obtain the aforementioned agreements, with the goal of preserving NROs' for any mitigation that may be required after operation commences. Turbine 15 is converted to alternative status re-designated as New Alternative Turbine 3. Alternative Turbines 1, 2 and 4 are available for use in the Certificate Holder's sole judgment. New Alternative Turbine 3 is available for use subject to the provisions of Certificate Condition 73. The Certificate Holder will test at

locations where NROs' were applied in the Compliance Filing at the most impacted receptor(s) to determine whether lower, same or greater NROs' should be used during operation to comply with applicable Certificate Conditions. The testing will follow applicable Certificate Conditions and the Sound Testing Compliance Protocol, appended hereto as Appendix A, after operation has commenced. These tested locations shall be counted towards the total number of the locations specified in said Protocol.

d. Revised sound modeling using the same or a more conservative methodology as in the Application but with the specifications of the wind turbine model selected for construction to demonstrate that the project is modeled to meet the substantive provisions of the Local Laws on Noise for the Towns of Greenwood and West Union and the regulatory limits of Conditions 73(a), 73(b), 73(c), 73(d) and 73(f). The revised sound modeling will also show conformance with the design goals listed below. Conformance with items i, ii, and iii below will be demonstrated utilizing updated sound modeling and sound contours:

(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 sound level from the Facility outside any existing participating residence;

(iii) 55 dBA L-8-hour across any portion of a non-participating property except for portions delineated as wet lands; and

(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.

65. Compliance with Certificate Conditions for the Facility

shall be evaluated by the Certificate Holder by following the provisions and procedures for post-construction noise performance evaluations indicated in the Sound Testing Compliance Protocol (Appendix A, appended hereto).

66. At least two sound compliance tests conforming to the compliance protocol required by the Certificate Conditions shall be performed by the Certificate Holder after the commercial operation date of the Facility: One during the "leaf-off" season and one during the "leaf- on" season.

a. Within the first seven (7) months of the commercial operations date of the Facility, the Certificate Holder shall perform and complete the first Sound Compliance Test and the results shall be submitted to the 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 (8) 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; and

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 67(a), but no later than thirteen (13) months after the commencement of operations of the Facility.

67. If the results of the first or the second Sound Compliance Tests, or any subsequent Compliance test performed by the Certificate Holder or any tests performed by DPS, in compliance with the Sound Testing Compliance Protocol, or any test performed by the Certificate Holder or DPS, or any test performed by DPS or the Certificate Holder in response to complaints, all in compliance with said Protocol, upon reasonable notice to the Certificate Holder, and after a reasonable period has elapsed for discussions between DPS and the Certificate Holder's acoustical consultant has elapsed, indicate that the Facility, related facilities and ancillary equipment do

not comply with all Certificate Conditions on noise contained in this Certificate, the Certificate Holder 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 non-compliance or violation of Certificate Conditions on noise of this Certificate:

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

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

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

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

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

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

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.

68. If, after five years, post-construction, all wetland performance standards have not been achieved, the Certificate Holder must evaluate the likely reasons for these results in consultation with NYDEC and submit a "Wetland Mitigation Remedial Plan" to the Secretary for approval. The "Wetland Mitigation Remedial Plan" must describe the likely reasons for not achieving performance standards, describe the actions necessary to correct the situation to ensure a successful mitigation, and the schedule for conducting the remedial work. Once approved, the "Wetland Mitigation Remedial Plan" will be implemented according to the approved schedule.

69. If, after five years, post-construction, all invasive species control requirements have not been achieved, the Certificate Holder must evaluate the likely reasons for these results in consultation with NYDEC and submit an "Invasive Species Remedial Plan" to the Secretary for approval. The "Invasive Species Remedial Plan" must describe the likely reasons for not achieving NYDEC requirements, describe the actions necessary to correct the situation, and the schedule for conducting the remedial work. Once approved, the "Invasive Species Remedial Plan" will be implemented according to the approved schedule.

70. Prior to installation of any permanent road/stream crossings, a site specific "Stream Crossing Plan" shall be submitted in the Compliance Filing. The "Stream Crossing Plan" must include detailed site-specific plans that describe and illustrate the layout and alignment of each crossing, and the proposed crossing method. At a minimum, the plan must include:

    a. The alignment of roads, bridges, and culverts;

    b. The location, quantity, and type of any fill associated with construction;

    c. The location and installation details of any dewatering measures; and

    d. A description of the dry crossing methods that will be used to install the crossing.

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

IV. Requirements Prior to Operation

72. The final Facility design shall incorporate 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. White or off-white color of wind turbines, towers and blades (as required by the FAA to avoid the need for daytime aviation hazard lighting) shall be utilized; 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;

this condition is subject to the Board's decision concerning the evaluation of the feasibility to install RADAR-activated aviation warning lights, addressed in a condition herein, which evaluation is to be submitted in the Compliance Filing);

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

e. Non-specular conductors shall be used for overhead portions of the electric collection system; and

f. Facility decommissioning program funds shall be established to assure removal of visible components.

V. Noise and Vibration

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

a. Comply with a maximum noise limit of 42 (dBA) Leq (8-hour) at any permanent or seasonal non-participant residence existing as of the issuance date of this Certificate and 52 dBA Leq (8-hour) for any participant residence existing as of the issuance date of this Certificate;

b. Not produce any audible prominent tones, as defined under ANSI S12.9 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 73(a);

c. Comply with a maximum noise limit of 65 dB Leq 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 S12.9- 2005/Part 4 Section D.2(1) (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 of evaluation of human exposure to vibration in Buildings;" and

e. Comply with a limit of 40 dBA Leq(1-hour) at the outside of any non-participating residence from the collector substation equipment, if subject to the tonal penalties of sub-condition 73(b).

Emergency situations are exempt from any of these limits in (a) – (e).

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

a. The Certificate Holder is required to maintain a log of complaints received relating to noise and vibrations caused by the operation of the Facility, related facilities and ancillary equipment. The log shall include name and contact information of the person that lodges the complaint, name of the property owner(s), address of the residence where the complaint was originated, the date and time of the day underlying the event complained of, and a summary of the complaint;

b. The Certificate Holder shall provide the Towns of Greenwood and West Union 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. As with complaints about other issues that are being processed through the Complaint Resolution Plan, the Towns' designated representatives shall be notified of noise- related complaints as they are received and responded to, and informed as to the manner of response and actions taken;

d. All complaints received shall be reported to the Siting Board, or the Commission after the Board's jurisdiction

has ceased, monthly during the first three years of commercial operation and quarterly thereafter, by filing with the Secretary during the first 10 calendar days of each month,(or the first 10 calendar days of each quarter after three years) 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.

e. The Certificate Holder shall investigate all other noise and vibration complaints by following the appended Complaint Resolution Plan (Appendix B, hereto) and, consistent with the limits imposed by, these Certificate Conditions.

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

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

a. Comply with the substantive provisions of all local laws regulating construction noise except for the construction time/hour limits which the Board is refusing to apply, as provided in Condition 7 herein;

b. Maintain functioning mufflers and all required emission

control systems on all transportation and construction machinery;

c. Require that contractors not leave generators idling when electricity is not needed and not leave diesel engines idling when equipment is not actively being used; and

d. Respond to noise and vibration complaints according to the Complaint Resolution Plan established herein.

77. The Certificate Holder shall designate in a Compliance Filing which of the four alternate turbine locations will be employed in the following order of preference, Alternate Turbine 1, Alternate Turbine 4, Alternate Turbine 2 and New Alternate Turbine 3. If an alternate turbine location is deemed necessary, the Certificate Holder will select Alternate Turbine locations 1 and/or 4, then 2 and as a last resort, New Alternate Turbine 3.In the event New Alternate Turbine 3 is selected, the Certificate Holder will also submit in the Compliance Filing justification for using New Alternate Turbine 3 and demonstrate the extent New Alternate Turbine 3 could be moved south-southeast on participating landowner property, without violating noise restrictions, setback requirements, or other constraints, to minimize visibility from Marsh Creek. If the aforementioned move south-southeast is not acceptable to DPS Staff, the Certificate Holder will submit in a Compliance Filing proposed improvements or sponsorship opportunities at Marsh Creek, to promote fishing activities there, at the Certificate Holder's expense.

VI. Threatened and Endangered Species

78. Excluding bald eagles (*Haliaeetus leucocephalus*), northern harriers (*Circus hudsonius*), short-eared owls (*Asio Flammeus*), and upland sandpipers (*Bartramia longicauda*), if at any time during the life of the Project a nest of any federally, or State, listed threatened or endangered bird species is discovered within areas of active construction, ground clearing, grading, or maintenance of the site, the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625

Broadway, Albany and the NYSDEC Region 8 Natural Resource Supervisor (NRS) will be notified within twenty-four (24) hours of discovery, and the nest site will be marked. 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 at that site is authorized by the Region 8 NRS.

79. If at any time during the life of the Project a nest of a northern harrier, short-eared owl or upland sandpiper is located, or if any of these species are observed in the Project area exhibiting breeding behavior, the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, Albany, NY and the Region 8 NRS will be notified within twenty- four (24) hours of discovery or observation, and the nest site will be marked. An area of at least six hundred sixty (660) feet in radius from the nest(s) of northern harrier, short-eared owl and upland sandpiper, will be posted and avoided until notice to continue construction, ground clearing, grading maintenance or restoration activities at that site is authorized by the Region 8 NRS. The nest(s) or nest tree(s) will not be approached under any circumstances unless authorized by the Region 8 NRS.

80. If at any time during the life of the Project, including construction, a nest of a bald eagle is located, the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY 12233-1750 and the NYSDEC Region 8 NRS will be notified within twenty-four (24) hours of discovery, and the nest will be marked. An area of one quarter (1/4) mile in radius from the nest will be posted and avoided if no visual buffer exists between the nest and the construction activity, until notice to continue construction, ground clearing, grading, maintenance or restoration activities at that site is authorized by the Region 8 NRS. If a visual buffer exists between the construction activity and the nest, an area of at least six hundred sixty (660) feet in radius from the nest shall be posted and avoided, until notice to continue construction, ground clearing, grading, maintenance at that site is authorized by the Region 8 NRS. The nest(s) or nest tree(s) will not be approached under any circumstances unless authorized by the Region 8

NRS.

81. During construction, maintenance, and operation of the Facility, the Certificate Holder shall maintain a record of all observations of New York State threatened or endangered (TE) species as follows:

a. Construction: During construction the onsite environmental monitors and environmental compliance manager identified in the Environmental Compliance Manual shall be responsible for recording all occurrences of TE species. All occurrences shall be reported in the bi- weekly monitoring report submitted to the NYS DPS and DEC and shall include the information described below. If a TE avian species is demonstrating breeding behavior it should be reported to the Natural Resources Supervisor and the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625 Broadway, Albany within twenty-four (24) hours;

b. Post-construction: During post-construction wildlife monitoring inspections, the environmental contractor shall be responsible for recording all occurrences of TE species. Occurrences of TE during wildlife surveys shall be reported as required in the construction monitoring and adaptive management plan;

c. Operation and Maintenance: During operations and maintenance the Certificate Holder shall be responsible for training operations and maintenance staff to focus on identifying the following bird species: bald eagle, golden eagle (*Aquila chrysaetos*), short-eared owl (*Asio flammeus*), northern harrier (*Circus cyaneus*) and upland sandpiper (*Bartramia longicauda*). The Certificate Holder shall report all occurrences to the Region 8 NRS, NYS DPS and NYSDEC Division of Environmental Permits, Chief of the Major Project Management Unit in Albany within one week of the event;

d. Reporting Requirements: All reports of TE species shall include the following information: species, observation date(s) and time(s); GPS coordinates of each individual observed (if operations and maintenance staff do not have GPS available the report should 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 or maintenance activity; and

e. If at any time during the life of the Project any dead, injured or damaged federally or State-listed TE species, or their parts, eggs, or nests are discovered within the Project Area (defined for the purpose of this condition as leased land or property parcels containing Project components) by the Certificate Holder, its designated agents, or a third party that reports to the Certificate Holder, the certificate holder shall immediately (within twenty-four (24) hours) contact the Region 8 NRS (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: species, the date of discover of the animal or nest; condition of the carcass or state of the animal, if live; the GPS coordinates of the location(s) of discovery, the name(s) and contact information of the person(s) involved with the incident(s) and find(s); weather conditions for the previous forty-eight (48) hours; photographs, including scale, of sufficient quality to allow for the later identification of the animal or nest; and, if known, an explanation of how the mortality/injury/damage occurred. Each record shall be kept with the container holding the specimen(s) and given to the NYSDEC or USFWS at the time of transfer. If the discovery is followed by a non-business day, the Certificate Holder shall ensure all the information listed above is properly documented and stored with the specimen(s). Unless otherwise directed by NYSDEC or USFWS, after all information has been collected in the field, the 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.

f. All temporary disturbance or modification of grassland habitat that occurs as a result of construction activities will be restored to preexisting grassland

habitat conditions by re- grading and re-seeding with an appropriate native seed mix after construction activities are completed. These areas shall include, but are not limited to temporary roads, material and equipment staging and lay-down areas, crane and turbine pads, and electric line ROWs.

VII. Wetlands and Streams, Vegetation and Invasive Species

82. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the Project.

83. The Certificate Holder shall submit a Notice of Intent to Commence Work to the Region 8 Supervisor of Natural Resources, DEC Region 8 Headquarters, 6274 E. Avon-Lima Road, Avon, NY 14414-9519, the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625 Broadway, Albany , and NYS DPS at least 72 hours in advance of the commencement of construction and shall also notify them within 10 business days in writing of the completion of work.

84. All construction activity, including operation of machinery, excavation, filling, grading, clearing of vegetation, disposal of waste, street paving, and stockpiling of material, is to occur within the Project site as depicted on Project plans. No construction activity is authorized to occur within areas to be left in a natural condition or areas not specifically designated by this certificate. Staking and/or flagging construction limits (i.e., ROW, off- ROW access roads, and extra work areas) shall occur prior to any ground disturbance.

85. During construction, erosion control devices including but not limited to straw bales or silt fences shall be installed to prevent erosion of excavated material or disturbed soil along with other measures as described in the SWPPP. All erosion control devices, shall be installed in accordance with construction techniques described in 2016 New York State Standards and Specifications for

Erosion and Sediment Control (Blue Book), including placing the straw bales and silt fence in a shallow trench, backfilling the toe of the silt fence and securing the straw bales with stakes. All erosion and sediment control practices shall be installed prior to any grading or filling operations, or other ground disturbance, to the extent practicable. They shall remain in place until construction is completed and the area is completely restored to pre-existing conditions. Use of hay bales is strictly prohibited to minimize the risk of introduction of invasive species. All disturbed soils within regulated freshwater wetlands and the associated adjacent areas must be seeded with a native seed mix.

86. All equipment and machinery shall be stored and safely contained more than 100 feet landward of any regulated wetland or water body at the end of each work day. This will serve to avoid the inadvertent leakage of deleterious substances into the regulated area.

87. Fuel or other chemical storage tanks shall be contained and located at all times in an area more than 300 feet landward of any regulated wetland or waterbody. If the above requirement cannot be met by the Certificate Holder, then the storage areas must be designed to completely contain any and all potential leakage. Such a containment system must be approved by DEC staff in writing prior to equipment, machinery or tank storage.

88. All mobile equipment, excluding dewatering pumps, must be fueled in locations that are a minimum of 100 feet from the top of stream bank, wetland, or other waterbody. Dewatering pumps operated closer than 100 feet from the stream bank, wetland, or waterbody, must be on an impervious surface with absorbents capable of containing any leakage of petroleum products.

89. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the NYS DPS and DEC's Spill Hotline (1-800-457-7362) within two hours according to the DEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. In an emergency situation, the contractor will work (to the extent practicable) to contain the impacted material until

appropriate emergency spill response services arrive.

90. All equipment used within bed or banks of streams or in regulated wetlands and 100-foot adjacent areas must be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if found to be free of any leakage. A spill kit must be on hand at the immediate work site and any equipment observed to be leaking must be removed from the work site, and leaks must be contained, stopped and cleaned up immediately.

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

92. Trenchless methods for installing buried cables through wetlands will be considered where practicable. Where trenchless methods are not practicable, trench construction through unprotected streams and wetlands will include excavating for installation purposes and backfilling in one continuous operation. Detailed trenching operations are outlined below:

    a. Before trenching occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of possible turbid trench water from entering the stream or wetland;

    b. Trench breakers/plugs shall be used at the edges of wetlands as needed to prevent wetland draining during construction;

    c. 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 are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been approved by the agency staffs;

d. Only the excavated wetland topsoil and subsoil shall be utilized as backfill;

e. In wetland areas, the topsoil shall be removed and stored separate from subsoil; and

f. When backfilling occurs, the subsoil shall be replaced as needed, and then covered with the top soil, such that the restored top soil is the same depth as prior to disturbance.

93. Turbid water resulting from dewatering operations, including water that has infiltrated the construction site, shall not be discharged directly to or allowed to enter any wetland, stream or water body within the Project area. Turbid water resulting from dewatering operations shall be baffled or otherwise discharged directly to settling basins, filter bags, or other approved device or to an upland vegetated area prior to discharge to any wetland, stream or other water body within the Project area. All other necessary measures shall be implemented to prevent erosion and any visible increase in turbidity or sedimentation downstream of the work site.

94. Visibly turbid discharges from blasting, land clearing, grading or excavation and construction activities, or dredging operations shall not enter any surface water body. All necessary measures shall be implemented to prevent any visible increase in turbidity or sedimentation downstream of the work site, including but not limited to the use of:

a. Appropriately maintained upland settling basins;

b. Crushed stone, sand, straw bales, or silt screening (maximum opening size of U.S. Sieve Number 20) to filter turbid waters;

c. "Silt-bags" or similar pre-constructed structure designed to remove silt and sediment particles before they are discharged, or;

d. Grassy upland areas at a sufficient distance from the

receiving water body to prevent a visually discernible turbid discharge to the receiving water.

95. Markers used to delineate/define the boundary of regulated freshwater wetlands and streams, and also the demarcated limits of disturbance for the Project shall be left in place and remain undisturbed until completion of construction activities and restoration of the impacted area.

96. All areas of temporary disturbance to regulated freshwater wetlands and their 100-foot adjacent areas, as applicable, must be restored and appropriately graded upon completion of temporary work items.

97. A minimum of 85% vegetative cover across all disturbed soil areas must be established by the end of the first full growing season following construction.

98. All regulated freshwater wetlands, and associated State regulated 100-foot adjacent areas, as applicable, disturbed due to construction activities shall be restored to pre-existing conditions and documented cover type to the extent practicable and in accordance with the following requirements:

    a. Restoration to pre-construction contours must be completed within 48 hours of final backfilling of the trench within regulated freshwater wetland boundaries and any State regulated 100-foot adjacent area boundaries, as applicable. Immediately upon completion of grading, the area shall be seeded with native vegetation at densities as existed prior to construction. Seeding with an appropriate native wetland species mix such as an Ernst Wetland Mix (OBL-FACW Perennial Wetland Mix, OBL Wetland Mix, Specialized Wetland Mix for Shaded OBL-FACW, or equivalent) shall be completed to help stabilize the soils;

    b. Restored areas shall be monitored for the longer of 5 years or until an 85% cover of native species has been reestablished over all portions of the replanted area, unless the invasive species baseline survey indicates a

smaller percentage of native species existed prior to construction;

c. In areas dominated by trees and shrubs, monitoring for woody vegetation establishment will take place during the growing season and over a 5-year period. Random sample points will be established within temporarily disturbed, regulated freshwater wetlands and State regulated 100-foot adjacent areas, as applicable. At each sample point, absolute cover for each plant species present within a one-by-one-meter plot will be visually estimated and recorded. Cover estimates for woody species will then be totaled for each sample plot. Cover data collected at these sample plots will be averaged and extrapolated to the entire area of temporary disturbance within a given regulated freshwater wetland and State regulated 100-foot adjacent area, as applicable. Vegetation reestablishment will be considered successful if impacted areas are restored to substantially the same amount of cover of woody species that existed prior to Project construction activities. If at the end of the fifth year the aforementioned reestablishment goal is not achieved, then the Certificate Holder must evaluate the reasons for these results and submit an approvable "Wetland Planting Remedial Plan" for NYS DPS and DEC approval. The "Wetland Planting Remedial Plan" must describe the reasons for not achieving the goal, describe the actions necessary to correct the situation to ensure a successful restoration, and the schedule for conducting the remedial work. Once approved by the agencies, the "Wetland Planting Remedial Plan" will be implemented according to the approved schedule;

d. These replanted areas shall also be monitored for invasive species to ensure there is zero percent net increase (or other "reasonable definition" as agreed upon following the baseline survey) in areal coverage of invasive species compared with pre- construction conditions. If at any time during the monitoring the invasive species criteria above are not met, the Certificate Holder shall take immediate action to ensure control of the invasive species. Such actions shall be part of an invasive species control plan approved by

the PSC after consultation and approval by the DEC; and

e. If at the end of five years the restored areas do not meet the above criteria for success, then monitoring and corrective action shall continue until the criteria are met.

99. Overhead interconnects located in NYS-regulated freshwater wetlands or regulated 100-foot adjacent areas, as applicable, shall be constructed in accordance with the following requirements:

a. Swamp mats must be used in any regulated freshwater wetlands for construction activities;

b. Prior to installation in NYS-regulated freshwater wetlands and regulated 100-foot adjacent areas, as applicable, swamp mats must be cleaned of invasive species following protocols described in the final "Invasive Species Monitoring and Control Plan";

c. Swamp mat removal must be conducted from adjacent mats (i.e., removal equipment always stationed on a mat) as soon as practicable, but no later than four months following installation of the overhead line. The Environmental Monitor shall provide notification to the DEC Region 8 Natural Resources Supervisor and the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY when compliance with this condition has been achieved.

d. Disturbed areas will be monitored for 5 years following the installation of overhead lines or interconnects to assure an 85% cover of native species, unless the invasive species baseline survey indicates a smaller percentage of native species exists prior to construction. If after one complete growing season the pre-construction percentage of native species is not achieved, the Certificate Holder must, consult with DEC and evaluate the reasons for these results, obtain DEC's approval for remediation steps, and submit a "Wetland Planting Remedial Plan" to the Secretary for review and approval. The "Wetland Planting Remedial Plan" must describe the reasons for the achieved level of survival,

describe the actions necessary to correct the situation to ensure a successful restoration, and the schedule for conducting the remedial work. Once approved, the "Wetland Planting Remedial Plan" will be implemented according to the approved schedule.

100. Any construction debris (e.g., building materials, excess sediment, refuse from the work site) from the Project shall be completely removed prior to completion of restoration from the regulated freshwater wetland and State regulated 100-foot adjacent area (upland), as applicable, and disposed of at a permitted waste disposal facility authorized to receive such material. No debris shall remain in regulated freshwater wetlands and/or State regulated 100-foot adjacent areas.

101. Cleared vegetation and slash from regulated freshwater wetlands and NYS-regulated 100-foot adjacent areas will not be burned or buried within the regulated freshwater wetland and any applicable regulated 100-foot adjacent areas. Logs and large branches cannot be deposited into regulated freshwater wetland and any applicable NYS-regulated 100-foot adjacent areas from outside of the regulated 100-foot adjacent area, however, small branches (slash) that are cut in a drop and lop method or piled within wetland and adjacent areas may be left in place.

102. Permanent alteration of wetland hydrology is prohibited.

103. Disturbance to NYS-regulated freshwater wetlands and/or regulated 100-foot adjacent areas is prohibited until the "Wetland Mitigation Plan" has been approved by the Board in a Compliance Filing. All measures and requirements included in the approved "Wetland Mitigation Plan" shall be enforceable conditions of the Certificate.

104. To control the spread of invasive insects during facility site clearing and timber removal, the Certificate Holder will:

    a. Pursuant to a Timber Salvage Plan to be submitted in the Compliance Filing, which will include, subject to landowner preferences coordinating with logging contractors for sale and use of the merchantable timber;

and provide unmerchantable timber as firewood to landowners or the general public pursuant to the DEC's firewood restrictions to protect forests from invasive species found in 6 NYCRR Part 192.5; and

b. Make sure crews are trained to identify the Asian Longhorned Beetle and the Emerald Ash Borer and any other insects that the DEC identifies as a potential problem in accordance with 6 NYCRR Part 575, Prohibited and Regulated Invasive Species. If these insects are found, they must be reported to the DEC regional forester.

105. On-site waste concrete containment from concrete truck clean out activity and/or any wash water from trucks, equipment or tools, must be contained in a manner that will prevent it from escaping into water-bodies, water channels, streams, and wetlands. If a discharge occurs, DEC Region 8 Supervisor of Natural Resources shall be contacted within 2 hours. Disposal of waste concrete or wash water is prohibited within 100 feet from any waterbody or wetland or to any area that drains to a waterbody or wetland.

106. If a one-time crossing of a stream occurs as part of an installation of a temporary bridge (if not spanning the bed and banks), the following restrictions apply:

a. The temporary bridge must follow the contour of the streambed and allow for a low flow channel and not change the flow path of the streambed; and

b. The temporary bridge shall be removed immediately after the equipment crossing occurs.

107. In-stream work shall only occur in dry conditions or by trenchless methods or dewatering measures (e.g., dam and pump or flume) must be used. If approved measures fail to divert all flow around the work area, in-stream work must immediately stop until dewatering measures are in place and properly functioning again.

108. 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.

109. If any trees and shrubs growing within 50 feet of streams need to be cut in the process of constructing overhead power line crossings, they shall be cut off with at least two feet of the stump remaining. Stumps and root systems shall not be damaged to facilitate stump sprouting. Trees shall not be felled into any stream or onto the immediate stream bank. All trees and shrubs cut within the 50 feet of the stream shall be left on the ground.

110. Clearing of natural vegetation shall be limited to that material which poses a hazard or hindrance to the construction activity. Snags which provide shelter in streams for fish shall not be disturbed unless they cause serious obstructions, scouring or erosion. Trees shall not be felled into any stream or onto the immediate stream bank.

111. Installation of buried cables under streams with water quality classifications of C(T/TS) or above must be conducted using trenchless crossing methods, such as horizontal directional drilling (HDD), to avoid impacts on water quality, habitat, and stream bed stability. If trenchless methods are not constructible or not feasible, the Certificate Holder shall file in the Compliance Filing a "Site-Specific Constructability Assessment." The "Site-Specific Constructability Assessment" shall be conducted by an experienced and qualified, professional engineer licensed in New York State and shall include a detailed analysis of the site-specific conditions that lead to the conclusion that all trenchless crossing methods are not constructible or not feasible at the particular stream crossing. If, based on results of the "Site-Specific Constructability Assessment," the Board approves stream crossings using trenched methods, all stream crossings shall be done in the dry. Trenches shall be opened for the installation and backfilled in one continuous operation. Before trenching through stream banks occurs, upland sections of the trench shall be backfilled or plugged to prevent drainage of possible turbid trench water from entering the stream. Intermittent and ephemeral streams

must be crossed during times of no flow, while perennial streams must be crossed using a temporary water control device such as a dam and pump or cofferdam to isolate the work area and redirect the water around the work site. Temporary water control devices/cofferdams for perennial streams must adhere to the following:

a. Specifications: Any temporary cofferdam shall be constructed of clean materials such as sheet piling, jersey barriers, inflatable dams, or sandbags that will not contribute to turbidity or siltation of the waterbody or wetland, and non-erodible materials, so that failure will not occur at Q2 or higher flow conditions. Where practicable, an upstream or interior membrane shall be installed to control percolation and erosion. Sandbags shall be of the filter fabric type, double bagged and individually tied to prevent sand leakage and only clean sand (e.g. free of debris, silt, fine particles or other foreign substance) shall be used as fill. They shall be placed and removed manually to prevent spillage. Straw bale sediment control basins are prohibited;

b. Fill materials must not come from the waterbody or wetland;

c. The water control structure/cofferdam shall not impair downstream water flow in the waterbody or water flow into and/or out of a wetland;

d. If exposed for an extended period of time, excavated or temporarily stockpiled soils or other materials should be covered and protected to reduce runoff of fines which may cause a turbidity problem and to prevent rainwater from soaking the materials and rendering them unsuitable for backfill;

e. The work area shall remain isolated from the rest of the stream or wetland until all work in the streambed or bank, or wetland is completed, concrete is thoroughly set and the water clarity in the coffered area matches that of the open water;

f. If a dam and pump diversion is used as part of a dry open-cut crossing, the pump and diversion must be monitored continuously from time of installation until crossing is completed, streambed restored, and diversion is removed;

g. Dewatered sections of stream cannot exceed 50 linear feet (measured from the inside edges of the cofferdams) for each stream crossing unless the Certificate Holder has prior written approval from the DEC Region 8 Supervisor of Natural Resources, which approval shall not be unreasonably delayed, conditioned or withheld and shall be subject to the terms of the dispute resolution procedures contained in Condition 3 herein;

h. All temporary water control structures shall be removed in their entirety upon completion;

i. All fish trapped within the cofferdam shall be netted and returned, alive and unharmed, to the water outside the confines of the cofferdam, in the same stream, before the dewatering process;

j. Dewatering within the coffer(s) shall be performed so as to minimize siltation and turbidity. Water taken from the coffered area will be passed through settling basins, filter bag, or well-vegetated upland areas more than 100 feet from the stream bank to prevent the discharge of turbid water into any wetland, stream or river. The pump discharge must be directed against a solid object (concrete slab, stone or steel container), or other effective method to prevent erosion by dissipating energy;

k. Depth of buried cables must be sufficient to prevent exposure during future high flow events. A Vertical Adjustment Potential (VAP) analysis, or similar analysis, shall be performed on each stream crossing and submitted in the Compliance Filing to determine the appropriate site-specific depth for installation of buried cables under the stream;

l. Erosion and sediment control will be used at the point

of Horizontal Directional Drilling (HDD), so that drilling fluid shall not escape the drill site and enter streams or wetlands. The disturbed area will be restored to original grade and reseeded upon completion of directional drilling;

m. Drilling fluid circulation for HDD installations shall be maintained to the extent practical. If inadvertent surface returns occur in upland areas, the fluids shall be immediately contained and collected. If the amount is not enough to allow practical collection, the affected area will be diluted with freshwater and allowed to dry and dissipate naturally. 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. 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 as described in the Frac-Out Risk Assessment and Contingency Plan. Drilling operations must be suspended if the surface returns pose a threat to the resource or to public health and safety. Removal of released fluids from environmentally sensitive areas will take place only if the removal does not cause additional adverse impacts to the resource. If inadvertent drilling fluids surface returns occur in an environmentally sensitive area the DEC Region 8 Supervisor of Natural Resources 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; and

n. While conducting HDD operations under wetlands, 100-foot adjacent areas, and streams, the Certificate Holder will maintain close monitoring for possible “frac-outs” that would result in the release of drilling fluids to sensitive areas as described in the Frac-Out Risk Assessment and Contingency Plan. The Certificate Holder will maintain and HDD spill response plan and the necessary response equipment will be kept on-site for the duration of the drilling. All releases of drilling fluids to sensitive areas (e.g., wetlands, State-regulated 100-foot adjacent areas, waterbodies)

shall be reported to the DEC Region 8 Supervisor of Natural Resources and DPS Staff within 2 hours or as soon as practicable considering internet and cell phone coverage in the area.

112. To reduce thermal impacts to exposed streams, native woody plants will be planted at stream crossings. Plant cover will be restored to its pre-construction condition. For stream crossings that are disturbed by construction activities that have, pre-construction, a 50% woody plant cover, a minimum of 50% woody plant cover will be established on such stream banks disturbed by Project construction by the end of the two full growing seasons following construction. Planting may be done at top of bank and/or among rocks along toe of slope. Restoration of these select riparian areas will be monitored along the same time frames as the Invasive Species Control Plan by the appointed Environmental Monitor to document the proper establishment of cover, survivorship of species, and mitigate any unforeseen issues with the revegetation effort.

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

114. 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. 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. Destroyed bank vegetation shall be replaced with shrub willow or silky dogwood planting, native trees, or other suitable species.

VIII. Facility Construction

115. At least 60 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).

116. The Certificate Holder shall design, install and maintain ground grids for the wind turbines, coordinating them with the gas transmission pipelines, plastic pipe locator wires and gas wells. Such grounding is to be in full conformance with Institute of Electrical and Electronics Engineers (IEEE) 80 and IEEE 100, unless after consultation with DPS Office of Electric, Gas and Water staff, the Applicant receives affirmative confirmation in writing that DPS Staff has reviewed the turbine manufacturer's grounding requirements and that it accepts such requirements as a suitable substitution for the IEEE standards.

117. The Certificate Holder shall require all contractors, excavators, and operators associated with its facilities to comply with all requirements of the Commission's regulations regarding identification and numbering of above ground utility poles (16 NYCRR Part 217). The Certificate Holder shall be responsible for contractually enforcing such compliance.

118. At least 14 days before the commencement of construction, the Certificate Holder shall hold a pre-construction meeting with DPS Staff, DAM, New York State Department of Transportation (DOT), Town Supervisors and Highway Superintendents, and DEC; NYSEG shall be invited to such meeting. The BOP construction contractor and the environmental compliance monitor shall be required to attend the preconstruction meeting.

119. At least 14 days before the commencement of construction activities affecting facilities owned or to be owned by NYSEG, the Certificate Holder shall hold a pre-construction meeting with NYSEG, and the Certificate Holder's construction contractor and the environmental compliance monitor shall be required to attend such meeting:

a. An agenda, the location, and an attendee list shall be

agreed upon between DPS Staff and the Certificate Holder prior to the meeting;

b. Maps showing designated travel routes, construction worker parking and access road locations and a general project schedule will be available at the meeting for the attendees;

c. The Certificate Holder shall supply draft minutes from this meeting to a representative of DPS Staff, DAM, DOT, Towns and the DEC for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes to all attendees;

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

e. Throughout construction, the Environmental Compliance Monitor will notify the NYSDEC Chief of the Major Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY and the DEC Regional Natural Resource Supervisor of any refinements in the schedule of construction activities in federal and/or NYS-regulated wetlands and NYS-regulated 100-foot adjacent areas as they are identified.

120. Construction work hours shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Sunday, with the exception of wind turbine construction activities which may need to occur during extended hours beyond this schedule on an as-needed basis to address unusual circumstances. Construction work hour limits apply to facility construction, and to construction-related activities including the delivery and unloading of materials, and maintenance and repairs of construction equipment at outdoor locations, since these activities can result in extensive noise, large vehicles idling for extended periods at roadside locations, and related disturbances:

a. The Certificate Holder shall alert the Town and On-Site Monitor when wind turbine construction activities will

be required to occur past 7:00 p.m. DPS Staff shall be notified if such extensions are being considered prior to extending construction work hours; and

b. Notice of planned extra-hours construction shall be provided to residents of areas that may be affected by the noise, traffic or other aspects of construction, and appropriate measures taken to avoid, minimize and mitigate such impacts. Thirty days prior to the commencement of construction, the Certificate Holder shall compile a list cellphone numbers/electronic mail addresses/home phone numbers and addresses, to the extent reasonably available, of residents within 500 feet of the Project boundary lines and will contact the Towns' representative, and affected residents, assuming the aforementioned contact information has been provided to the Certificate Holder, as soon as practicable before the extended hour construction activity is to take place. This list shall not be filed with the Secretary nor in the Compliance Filing nor publicized in any manner except for the use of the Certificate Holder, its employees, its contractors and their respective employees, to implement the requirements of this Condition.

121. Construction in streams protected under Environmental Conservation Law (ECL) Article 15 shall comply with work period restrictions established in consultations with DEC that are protective of fish spawning and migration. In protected streams with the standard of supporting trout species, all instream work, as well as any work that may result in the suspension of sediment, is prohibited during the trout spawning and incubation period commencing October 1 and ending May 31, unless the Certificate Holder receives prior approval from the DEC Region 8 Supervisor of Natural Resources, which approval shall not be unreasonably delayed, conditioned or withheld, shall be subject to the dispute resolution procedures contained herein and shall be finally approved through the Compliance Filing Process.

122. Dates for the seasonal work period restrictions on in-stream work during Facility construction, shall be included in the plans filed in the Compliance Filing and

noted on final construction detail drawings.

123. At least 10 days before construction commences, copies of all necessary transportation permits from the affected State, County, and Town agencies shall be submitted to the Secretary. Such permits shall include, but not be limited to: Highway Work Permit to Work Within Right-of-Way (ROW), Highway Utility Permit to Work Within ROW, Permit to Exceed Posted Weight Limit Roads, Traffic Signal Permit to Work Within ROW, Special Haul Permit for Oversized/Overweight Vehicles, and Divisible Load Overweight Permit.

124. At least 10 days before construction commences, copies of all necessary agreements with local utility companies for raising overhead wires where necessary to accommodate the oversized/overweight delivery vehicles shall be submitted to the Secretary.

125. The Certificate Holder will provide DPS Staff copies of all applicable local code requirements for any applicable building permit or certificate of occupancy for the operations and maintenance building, together with the final plans conforming to such design requirements, at least 10 days before construction commences.

126. The Applicant shall plan, construct and mitigate the Facility consistent with the DAM *Guidelines for Agricultural Mitigation for Wind Power Projects*, dated April 19, 2018, to the maximum extent practicable. This condition also requires the Certificate Holder to locate collection wires and facility components underground in prime agricultural land except where, in consultation with DPS and DAM, the parties agree that subsurface placement is impracticable. The Certificate Holder and/or Environmental Monitor will consult with DAM and DPS Staff during construction when deviation from the Guidelines is necessary. Mitigation measures shall include full restoration of temporarily disturbed agricultural land. Certificate Holder shall file in the Compliance Filing a Drain Tile Repair Plan. The proposed layout for the access road to Turbine 13 is acceptable for construction purposes only but the permanent access road should curl around the edge of the agricultural field so as not to sever the

field into two smaller fields. The Certificate Holder shall consult the landowner on the proposed final layout of the permanent access road. The Certificate Holder also agrees to avoid cutting through the existing tree farm at a diagonal.

127. Post-construction monitoring and remediation of agricultural land impacted by the Facility will be conducted for a period of no less than two years following completion of initial restoration. The monitoring and remediation phase shall be used to identify lingering agricultural impacts associated with construction requiring mitigation and/or follow-up restoration.

128. Impacts to archeological and historic resources shall be avoided or minimized to the extent practicable. Construction, including site 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 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. 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 Phase II investigations or mitigation is warranted. The results of any Phase II investigations and/or identification of mitigation measures will be included in the plans.

129. Except where crossed by permitted access roads or through use of temporary matting, streams shall be designated "No Equipment Access" or similar on the final Facility construction drawings and ROW clearing plans and marked in the field. The use of motorized equipment shall be prohibited in these areas.

130. A buffer zone of 100 feet, referred to as "Restricted Activities Area" or similar on the final Facility construction drawings and ROW clearing plans, shall be established where Facility construction traverses streams, wetlands and other bodies of water. Restricted Activities Areas shall be marked in the field. Restrictions will include: no deposition of slash within or adjacent to a waterbody; no accumulation of construction debris within the area; herbicide restrictions within 100 feet of a stream or wetland (or as required per manufacturer's instructions); no degradation of stream banks; no equipment washing or refueling within the area; no storage of any petroleum or chemical material; and no disposal of excess concrete or concrete wash water.

131. In stream work or restoration authorized by the Certificate, including the installation of structures and bed materials, shall not result in an impediment to passage of native aquatic organisms, including fish, or cause a significant hydraulic restriction. 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. Plans for the creation, modification or improvement of any permanent road/stream crossing shall be included in a Compliance Filing and must meet the following requirements:

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

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

    c. Width of the structure must be a minimum of 1.25 times (1.25X) width of the mean high water channel; and

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

132. Legible "protected area" signs, exclusionary fencing, colored flagging, and/or erosion controls pursuant to the approved Storm Water Pollution Prevention Plan (SWPPP) shall be installed along the approved work area to protect and clearly identify the boundaries of non-work areas associated with wetlands, waterbodies, and wetland/waterbody setbacks (e.g., Additional Temporary Work Space setbacks, refueling restrictions, etc.). This shall be done prior to any disturbance or vehicular traffic through such areas. Signs, fencing, and silt fence must be removed following completion of the project and after all disturbed areas are appropriately stabilized and planted as described in the SWPPP and in certificate conditions.

133. Where underground collection lines will be installed in wetlands by open trenching, the top 12 inches of wetland top soil shall be removed first and temporarily placed onto a geo- textile blanket running parallel to the trench, if necessary. Wide-track or amphibious excavators shall be used for wetland installations. Subsoil dug from the trench shall be sidecast on the opposite side of the trench on another geo-textile blanket running parallel to the trench, if necessary. 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. Trench shall be backfilled with the wetland subsoil and the wetland top soil shall be placed back on top. All excess materials shall be completely removed to upland areas more than 100 feet from the wetland and suitably stabilized.

134. 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. The final road surface shall be covered with a minimum 1-inch depth of gravel in the area of the wetland crossing.

135. Tree and vegetation clearing shall be limited to the minimum necessary for Facility construction. Surrounding trees and vegetation will not be cut down on any property solely to reduce turbulence or increase wind flow to the Facility. To reduce mortality to nesting/roosting birds

and bats, all tree clearing activities (except for hazard tree removal) shall be conducted between November 1 and April 1 and does not include trees less than or equal to 3 inches in diameter at breast height (DBH).

IX. Facility Operation

136. 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.

137. 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 with a copy of the NYISO notice.

138. 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.

139. For purposes of this condition, Good Utility Practice shall mean any of the applicable acts, practices or methods engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability and safety. Good Utility Practice is not intended to be limited to the optimum practice, method, or act, to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted

in the region in which the Company is located. Good Utility Practice shall include, but not be limited to, NERC criteria, rules, guidelines and standards, NPCC criteria, rules, guidelines and standards, NYSRC criteria, rules, guidelines and standards, and NYISO criteria, rules, guidelines and standards, where applicable, as they may be amended from time to time (including the rules, guidelines and criteria of any successor organization to the foregoing entities). When applied to the Certificate Holder, the term Good Utility Practice shall also include standards applicable to an independent power producer connecting to the distribution or transmission facilities or system of a utility. 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.

140. The Certificate Holder shall work with NYSEG engineers and safety personnel on testing and energizing equipment in the authorized collection substation. A testing protocol shall be developed and provided to NYSEG for review and acceptance subject to the provisions of Condition 3 herein. The Certificate Holder shall file with the Secretary a copy of the final testing design protocol within 30 days of NYSEG acceptance.

141. The Certificate Holder shall call the Bulk Electric System Section within one hour to report any transmission related incident that affects the operation of the Facility. The Certificate Holder shall file with the Secretary a report on any such incident within seven days and provide a copy of said 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. The Certificate Holder shall work cooperatively with NYSEG, NYISO, NYSRC, NERC and the NPCC to prevent any future occurrences.

142. 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 Certificate Holder, NYISO and NYSEG agree that such facilities are causing, or have caused, reliability problems to the New York State Transmission System subject to the provisions of Condition 3 herein.

143. If, subsequent to the completion of construction and testing 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.

144. 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. The Certificate Holder shall provide monthly reports to the Secretary and NYSEG on the progress of any repairs. 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, within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months; if the repairs will not be completed within three months, the Certificate Holder shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to be pursued.

145. 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, the Towns' designated representative, and local emergency agencies/responders shall be notified no later than 12 hours following such an event.

146. The Certificate Holder shall conduct yearly ground testing

of all wind turbine ground grids that are within 600 feet of gas lines or gas wells. The Certificate Holder shall provide the test results to the Secretary and the gas line operator. If the test results show that a repair is necessary, the Certificate Holder shall take all reasonable steps to address the situation and will file a report with the Secretary within 15 business days of the repair.

147. The Certificate Holder shall file a Contamination Reporting Plan in the Compliance Filing. The Certificate Holder agrees to seek DEC staff input on the draft plan to assure it is consistent with the requirements of this Certificate before the plan is filed with Secretary. Any DEC staff input shall be provided in writing within 10 days of receipt of the draft Plan.

148. In the event that petroleum-impacted soil is encountered during construction activities (i.e., identified through staining, discoloration, odor, etc.) at the site, the following procedures will be implemented:

a. The Certificate Holder's contractor will immediately suspend ground intrusive work in the vicinity of the impacted material and notify the Certificate Holder Project Supervisor;

b. The Certificate Holder will notify the property owner as soon as practicable;

c. The Certificate Holder will notify the DEC Region 8 Spill Response Engineer and DPS of the impacted material should the property owner not be located in a timely manner (i.e., within 2 hours of the discovery) or if conditions exist at the site which are determined to be immediately dangerous to public safety, health or the environment. In an emergency situation, the Certificate Holder will work (to the extent practicable) to contain the impacted material until appropriate emergency spill response services arrive;

d. In non-emergency situations and under the direction of the Project Supervisor, the excavated impacted material will be segregated and temporarily stored on the site

until the material can be delivered to the disposal facility. Stockpiles will be placed on 20-mil polyethylene sheeting and will be covered with heavy-duty tarps specifically manufactured for this purpose and secured with heavy sand bags. All impacted material will be managed and transported in accordance with applicable laws and regulations, including but not limited to, 6 NYCRR Part 360 and Part 364;

e. Construction equipment which comes in contact with the impacted material will be washed with potable water and a detergent and rinsed with potable water (as necessary) to remove impacted material adhered to the tires, tracks, undercarriage, and other parts of vehicle exteriors. The wash water and solids from the decontamination activities will be collected, contained, tested, removed from the site, and ultimately properly disposed of at a licensed and approved facility. Decontamination will be performed on a decontamination pad specifically set up for that purpose. The pad will be curbed and lined with an impermeable membrane to contain the used cleaning solution, including any overspray, and any impacted debris removed during the cleaning process;

f. Cleaning solution and impacted materials will be collected and transported by a waste hauler with a valid 6 NYCRR Part 364 Waste Transporter Permit;

g. To the extent practicable, the Applicant and Project engineer will adjust ground intrusive construction activities at the site to avoid working within the limits of impacted material discovered during construction. If the limits of impacted material cannot be avoided, the project owner, in consultation with the property owner, will evaluate options for planning and implementing remediation activities, which may be required, including identification or adequate staging areas where impacts soils would be temporarily stockpiled. If the Project owner elects to undertake the remediation activities, the work will be performed under an approved plan with the DEC Region 8 Division of Materials Management;

h. The Applicant and its contractors shall have a decontamination pad in the event that oil or gas infrastructure is encountered;

i. The Certificate Holder shall consult with the DPS Gas Safety Staff if abandoned gas lines are identified as soon as practicable, considering cell coverage and internet service availability in the field. The Certificate Holder will file a report in the Compliance Filing summarizing the drone survey it performed to locate underground gas and oil wells and steps it has taken to avoid any such wells in siting Project facilities, if applicable; and

j. Performance of any site clean-up, including containment or remediation of any existing contamination, to cap, plug, remove or otherwise contain any existing wells or pipelines that it might discover is subject to all applicable laws. Certificate Holder agrees to notify the affected landowner and NYSDEC Region 8 Minerals Manager of the discovery of any unplugged oil or gas well as soon as practicable considering cell coverage and internet service in the field. GPS coordinates for, and access to the newly discovered well location, will be provided by the Certificate Holder, to the DEC Region 8 Minerals Chief Manager, and NYSDEC Division of Environmental Permits, Chief, Major Project Management Unit, subject to the requirements of this Certificate.

149. The Certificate Holder has not demonstrated that the feasibility of the Project relies in any way upon the Certificate Holder exercising the power of eminent domain to acquire permanent or temporary real property rights in specific, identified parcels of land 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, the Siting Board is not making a finding of public need for any particular parcel of land such that a condemnor would be entitled to an exemption from the provisions of Article 2 of the New York State Eminent Domain Procedure Law ("EDPL") pursuant to Section 206 of the EDPL. As a condition of this Certificate, the Certificate Holder shall not commence any proceedings or cause any other entity

having the power of eminent domain to commence any proceedings under the EDPL to acquire permanent or temporary real property rights for the Facility or for any of the access roads or construction staging areas necessary to service the Facility without an express amendment to this Certificate granted by the Siting Board finding a public need for such acquisition.

150. 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.

Appendix A to Certificate Conditions

CASE 16-F-0062, Eight Point Wind

SOUND TESTING COMPLIANCE PROTOCOL

1) SOUND INSTRUMENTATION

a) Sound Level Meters (SLMs): All sound level measurements will be conducted using Type-1 integrating SLMs that meet the requirements of ANSI S1.43-1997(R 2007) "Specifications for Integrating- Averaging Sound Level Meters". Where noted, Type-2 SLMs complying with ANSI/ASA S 1.4-1983(R 2006) or ANSI S1.43-1997(R 2007) can be used. Alternatively, sound level measurements will be conducted using Type-1 integrating SLMs that meet the requirements of ANSI/ASA S1.4-2014 / Part 1 / IEC 61672-1-2013.

b) One-Third Octave Band Analyzers: The instruments will have Class-1, One-third octave- band analyzers that meet ANSI S1.11-2004 (R2009) "Specification for Octave- Band and Fractional-Octave-Band Analog and Digital Filters". Alternatively, the instruments will have Class-1, One-third octave-band analyzers that meet ANSI S1.11-2014/ Part 1 / IEC 61260-1:2014.

c) Acoustical/field Calibrators (Sensitivity checkers): Any acoustical calibrator will be a Type-1 precision calibrator that meets the requirements of ANSI S1.40-2006 (R2011) "Specifications and Verification Procedures for Sound Calibrators". Where noted, Type- 2 precision calibrators can be used.

d) Windscreens: The windscreens, when used, should be clean, dry, in good condition, and of a type recommended by the manufacturer of the meter. The manufacturer's instructions for installation of the windscreen around the microphone should be followed closely. The insertion loss caused by the windscreen as stated by the manufacturer shall not exceed 2 dB at any frequency of interest specified in section 2 (c) of this protocol for sound incidence angles from 0° to ±180°. Measured sound levels will be automatically corrected by the SLMs or manually corrected as relevant for the insertion loss caused by the windscreen. Insertion losses for windscreens will be documented and included as an appendix to the report as specified in section 12(b) of this protocol. 7" diameter wind foam screens or equivalent are preferred.

e) Sound Floor: SLMs will have a sound floor or self-generated noise (combined - electrical and thermal- microphone and preamplifier noise) at least 5 dB below the sound pressure levels that are intended to be measured at each one-third frequency band of interest as specified in section 2(c) of this protocol. Alternatively, SLMs will have self-generated noise levels (Combined-electrical and thermal- microphone and preamplifier noise levels) lower than or equal to 22 decibels for broadband descriptors and lower than or equal to 10 decibels for all one-third frequency bands of interest. Sound floor characteristics should be documented with information from the manufacturer. When this is not available, sound floor characteristics may be documented with the most recent certificates of calibrations, provided the information was obtained and reported by an independent qualified laboratory. If this information is also unavailable, sound floor may be estimated by measuring sound levels with the SLM running in a very quiet condition such as inside an SLM hard case or inside the calibrator with the calibration tone "off," at an indoor quiet location such as inside a quiet room or a car turned off.

f) Dynamic range: The dynamic range of SLMs will be properly selected (manually or automatically) to avoid any noise floor and overload issues.

g) Temperature and Humidity: SLMs will have operating temperature and relative humidity ranges that comply with the standard listed in section 1(a) of this protocol and are expected to cover the estimated temperature and relative humidity conditions of the site during testing. When this is not possible, testing days and times with forecasted temperature and relative humidity values within the range of the SLMs may be selected. SLMs temperature and humidity ranges as reported by the manufacturer will be reported.

h) Tripods: SLMs will be mounted on tripods. Operators will be as far as possible from the sound microphones during testing, at least 1.5 meters (5 feet) away.

2) NOISE DESCRIPTORS, WEIGHTING, RESPONSE, AND OTHER SETTINGS

a) Broadband Descriptors: The sound levels of the Leq, Lmax, L10, L90 and Lmin broadband descriptors at the residential positions shall be recorded and reported in 10 min. intervals.
b) One-Third Octave Band Descriptors: The Leq, Lpeak, Lmax, L10, L90 and Lmin noise descriptors shall also be recorded at selected residential positions for the One-Third Octave Bands of interest (as specified in section 2(c) of this protocol) and included in the sound compliance test report in 10 min. intervals.
c) Frequency Ranges of Interest: All one-third octave band measurements will include the frequencies from 12.5 Hz through 10,000 Hz. Any full octave band measurements will include the frequencies from 16 Hz through 8,000 Hz.
d) Weighting: Broadband sound levels shall be reported by using the A-weighting scale in the frequency range of interest. Full Octave Bands and One-third Octave Band levels shall be reported by using the Z, Linear or un-weighted scale.
e) Statistical Noise Descriptors Response: The response for determination of any statistical noise descriptors will be set to "Fast".
f) Settings: All SLM settings will be reported.

3) CALIBRATION REQUIREMENTS

a) Laboratory Calibration: Each SLM and calibrator will have undergone laboratory calibration within two years prior to its use for any sound compliance test. Copies of the calibration certificates will be included as an appendix to the sound compliance test report.
b) Field Calibration: The SLMs will be acoustically calibrated (sensitivity check) in the field at a minimum immediately before the operational sound testing period, and before and after any background sound testing period, according to the procedures given in the SLM instruction manual.
c) Field calibration differences:

i) If the calibration level after a sound collection differs from the previous calibration level by ±0.5 dB or less, all measurements made with that system shall be adjusted by one-half of the difference. Differences lower than or equal to 0.2 dB are exempt.
ii) Collected data with a difference between the initial and the final calibration exceeding ±0.5 dB will not be used, and sound collections performed showing such difference will be repeated. In such cases, equipment shall be checked.
iii) Any difference between the acoustical calibrator reference sound level and the SLM calibration reading will be reduced to zero by adjusting the SLM sensitivity in the field, prior to any sound collection.
iv) The calibration sound level results will be documented and reported.

4) WEATHER AND TESTING CONDITIONS

a) Wind conditions will be documented with information from the meteorological tower(s). Wind speed at hub heights will be documented.
b) Sky cover and solar radiation or cloud height will be documented with weather information from the most representative (as related to those conditions at the Facility site) National Weather Station or airport's weather advisory service.
c) All meteorological parameters of wind speed, wind direction, temperature, relative humidity, precipitation and atmospheric pressure (optional) will be evaluated at 2 meters +-0.20 meters above the ground at the locations to be tested. A portable weather station will be provided for at a minimum each pair of evaluated positions.
d) Each weather station will be located at the most representative location of each pair of measurement locations as related to wind speed on the ground.
e) Portable weather stations will be located close to the sound microphones, far from any wind obstructions or vegetation that may affect the wind speed measurements.
f) Reasonable efforts will be made to schedule sound tests during a period of time when representative wind conditions (as related to the noise descriptors that need to be evaluated) are forecasted but, in all cases, such tests shall be performed during the weather conditions described in this Protocol.
g) Evaluation of maximum short-term noise limits will be conducted under the worst operational noise emissions (maximum sound power levels) and the most favorable propagation weather conditions including but not limited to downwind conditions and temperature inversions.
h) Evaluation of any long-term noise limits will be conducted under a wide range of operation noise emissions (sound power levels and wind speed at hub height) and weather conditions (downwind, crosswind and upwind), for all time frames of the day (daytime, evening time, nighttime) and for different ranges of wind magnitude and wind direction.
i) Sound testing will not be conducted during adverse weather conditions such as rain, thunderstorms in the vicinity, snow fall, or under wet road conditions. Any data collected under these conditions will be discarded.

5) TESTING POSITIONS

a) Sound testing will be conducted at a minimum at the six (6) most potentially impacted positions: four non-participating and two participating residential positions (on private or public space as applicable) considering anticipated sound impacts from computer noise modeling results, any preliminary measurements and complaints, if any.
b) Three positions to be tested will be selected by the Applicant within 30 days after the start of commercial operations and approved by DPS-Staff within 60 days after the start of commercial operations. Remaining positions will be selected by DPS Staff within 60 days after the start of commercial operations.
c) Sound microphones will be located at a height of 1.5 meters above the ground.
d) Final sound measurement positions will be selected to:
    i) Minimize the influence of traffic noise from local roads. Measurement positions should be no closer than 15 meters (50 ft.) from the center of any roadway, unless it is not possible to obtain permission from property owner(s) to collect sound information within the private property. In this case, measurement positions can be adjacent to the road, in public rights-of-way.
    ii) Avoid or minimize the influence of any mechanical or electrical noise sources from any private or public spaces such as air conditioners, air condensers, heaters, boilers, fans, pumps, transformers,

lighting, etc.

iii) Avoid or minimize the influence of sounds from water streams.

iv) Provide a clear sight view of the turbines where possible and minimize the effect of any sound obstruction.

v) Minimize the influence of reflections of any buildings and other small reflective surfaces as follows:

(1) Sound microphones shall not be located closer than 7.5 meters. (25 ft.) from any reflective surface.

(2) Sound microphones shall not be located closer than 1.5 meters. (5 ft.) from any reflecting object with small dimensions such as small trees, posts, bushes, etc.

(3) The sound level microphone height will be 1.5 ± 0.10 meters above ground elevation.

e) Positions proposed by the Certificate Holders will be identified with satellite pictures and coordinates and forwarded to DPS for review. Upon approval by DPS-Staff of residential positions to be tested, the Certificate Holders will contact the landowner(s)/tenants(s) to request permission to collect outdoor sound readings close to their residences within the private properties. If permission is not granted or obtained, sound measurements can be taken on public space or an alternate proximal residential position, with the approval of DPS-Staff.

f) At its discretion, DPS-Staff can conduct or request the Certificate Holders to conduct sound testing at any existing residential location, prior to or during the test subject to the Certificate Holders' ability to obtain landowner consent (if applicable), and subject to equipment and personnel availability if DPS-Staff's request is made during the test.

6) SEASONS AND TESTING TIMES

a) Pursuant to Certificate Condition 66 of the Order 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.

b) Within the first seven (7) months of the commercial operations date of the Facility, the Certificate Holders shall perform and complete the first Sound Compliance Test and the results shall be submitted to the 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 (8) 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.

c) 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 66 (a), but no later than thirteen (13) months after the commencement of operations of the Facility.

7) MEASUREMENT PROCEDURES:

Procedures will be as follows:

a) Data Collection Procedure for Operational Sound Testing (All Noise Sources Turned ON plus background sounds)[1]:

i) Check SLMs calibration. Set any difference to zero at the beginning of the sound survey.
ii) Verify that all wind turbines from the Wind Generating Facility are turned "ON" and in continuous operation as described in this protocol.
iii) Report the time that the measurement is started. If operators are present external transient background sounds can be excluded by inhibiting data collection as stated in this section. Sound collections can be restarted or continued after the transient sound ceases.
iv) Complete one 10-minute cumulative collection. Record and report the time at which each measurement is concluded.
v) Continue with another 10-minute collection until at least six acceptable 10-min samples are collected (1-hour).
vi) Proceed with testing the facility turned off.

b) Data Collection procedures for background sound test (with All Wind Generating Facility Noise Sources Turned OFF)[2]:

i) Check SLMs calibration. Set any difference to zero.
ii) Verify that all wind turbines from the Wind Generating Facility within a 1.5-mile radius of any position to be tested are turned OFF.
iii) Complete two 10-minute sound collections at each evaluated position within the hour following the end of the operational sound tests (Wind Generating Facility Noise Sources "ON" plus background sounds).
iv) Record and report the time at which each measurement collection is stopped.
v) If operators are present, check SLMs calibration at the end of the measurements. Record results and set any difference to zero.

c) Time and duration of measurements in a day:
Measurements of sound levels during
i) the daytime will be collected between 7:00 a.m. and 6:00 p.m. EST;
ii) the evening time will be collected between 6:00 p.m. and 10:00 p.m. EST; and
iii) the nighttime will be collected between 10:00 p.m. and 7:00 a.m. the next day EST.

d) Duration of measurements per season:
i) Measurements for evaluation of short-time noise descriptors (Leq-8-hour, Leq-1-h at 16 Hz, 31.5 Hz, 63 Hz.) will be collected for at a minimum 48 hours so that all receptors are evaluated at maximum sound power levels from the turbines and downwind conditions;

1 Operation sound testing will be conducted 1-hour before and after a shutdown event. The wind generating facility can continue operating as needed until the next shutdown occurs.

2 Shutdown events can continue as needed but in all cases background sounds will be measured within the first and last 1-hour of a shutdown if it exceeds two-hours.

e) Transient Sounds

i) Transient Sounds: Exclusion of transient sounds is limited to external sound sources other than wind and wind turbine's noise. Transient noises produced within the Wind Generating Facility site will not be inhibited at the time of testing.

ii) Transient sounds can be excluded by operators present or by post processing of the data.

iii) For the purposes of this testing, the following sounds will be considered transient:

(1) Sounds caused by cars, trucks, motorcycles, planes and any means of transportation.
(2) Any sounds caused by human activity (e.g. conversations, shouting, music, use of any sound or mechanical equipment).
(3) Any sounds caused by animals such as dogs, birds, peepers and insects. When animal sounds are unavoidable (such as insect sounds during the summer) instruments may not need to be paused, provided the sounds can be filtered by post-processing as specified in this protocol.
(4) Transient sounds inhibited during operational sound testing will also be inhibited during background sound testing should they occur. SLMs will have means to inhibit data collection whenever a transient background sound occurs. Operators will pause or hold the sound collection while transient sounds occur and reset or continue the measurement after the transient sound has ceased.

iv) If operators are present, trigger cables are preferred so that operator's sounds and reflections are minimized.

v) SLMs with "delete-back" capabilities are also preferred. If SLMs with "delete-back" capabilities are used, the SLMs can be set up to a maximum deletion of a 10- second sound reading interval.

vi) Sound collection can be restarted or continued after the transient sound ceases.

vii) If operators are present, the Certificate Holder will ensure that personnel are qualified and properly trained to exclude transient events as specified in this protocol so that the need for post- processing is avoided or minimized.

8) BACKGROUND CORRECTIONS AND ANALYSIS OF RESULTS

No corrections for background sounds (noise sources OFF) are necessary if operational sound test results (with the noise sources ON plus the background sounds) comply with certificate conditions in the Order (See Section 2 of this protocol and the Order).

a) SHORT-TERM NOISE LEVELS AT RESIDENTIAL POSITIONS.

i) The single broadband Leq(A) 10-minute background sound level will be logarithmically subtracted from the single broadband Leq(A) 10-minute operational sound level (Wind Generating Facility sound sources ON plus background) for each measurement position in order to determine the Wind Generating Facility contribution to the total A- weighted sound levels. The "exact equation" (Equation 8), as contained in Note 2 of section 6.9 of ANSI/ASA S12.9-2013/Part 3, will be used and applied to the (A) 10-minute operational

sound levels. If insect, bird, animal and/or leaf rustle sounds were present, they can be excluded from the measurements by correcting the applicable one-third frequency band sound levels at the frequencies where they occurred as appropriate. Overall corrected Leq (A) 10-minute background and operational sound levels will then be recalculated to obtain both background and operational overall Leq (A) 10- minute corrected sound levels. Both raw and corrected data will be reported with explanations.

ii) If the arithmetic difference between the operational sound levels (Wind Generating Facility noise sources turned ON plus background sounds) and the background sound levels (after turning the Wind Generating Facility noise sources OFF) is less than 3 dB, the calculated result will be reported and a "n/a" note will be added.

iii) Leq-1-h levels will be calculated as the energy-based average of six Leq-10-min consecutive samples in one-hour period.

iv) Leq-8-h levels will be calculated as the energy-based average of eight Leq-1-h consecutive samples in an eight-hourperiod.

v) Operational noise levels from the Wind Generating Facility only (Leq 8-h), at the selected residential positions (after background corrections are applied), will then be evaluated for compliance with Certificate Condition 73(a) of the Order.

b) PROMINENT TONES:

i) Prominent tones will be defined as follows: A prominent discrete tone is identified as present if:
(1) The time-average sound pressure level (Leq) in the one-third-octave band of interest exceeds the threshold of hearing (as indicated in Table 1 of this Appendix A); and,
(2) The time-average sound pressure level (Leq) in the one-third-octave band of interest exceeds the arithmetic average of the time-average sound pressure level (Leq) for the two adjacent one-third- octave bands by any of the following constant level differences:

(a) 15 dB in low-frequency one-third-octave bands (from 25 up to 125 Hz);
(b) 8 dB in middle-frequency one-third-octave bands (from 160 up to 400 Hz); or,
(c) 5 dB in high-frequency one-third-octave bands (from 500 up to 10,000 Hz)

ii) Prominent tones will be evaluated by using the Leq-1-min sound level results (linear, Z or un- weighted). All collected data will be reported.

(1) The one-third octave band operational sound levels measured at each residential position will be evaluated, to determine if any prominent tones as defined herein were present during testing and caused by operation of the Wind Generating Facility.

(a) Initially, no correction for background sounds will be applied to the operational sound results for this evaluation.

(b) If any prominent tones are found, the operational sound pressure levels of the 1/3-octave bands containing the tones will be evaluated to determine if they exceed the values listed as hearing thresholds in Table 1 of this Appendix A for the respective frequencies. If they exceed the values, the prominent tones will

be denoted as audible and the opposite will be denoted as inaudible. Operational prominent tones that are found being inaudible will be reported as such and may not require further analysis.

(c) If any prominent tones are found to be audible:

(i) The background sound levels Leq (With all Wind Generating Facility sound sources OFF) will be evaluated to determine if the prominent tone was caused by other sound sources in the background rather than noise sources from the Wind Generating Facility. The results of this evaluation will be reported.

(ii) The operational sound levels will then be corrected by using the exact equation listed in note 2 of section 6.9 (equation 8) of ANSI/ASA S12.9-2013/Part 3 to determine operational sound levels from the Wind Generating Facility sources only (Operational sound levels minus background sound levels). If the difference between an uncorrected operational sound level (Wind Generating Facility sound sources ON plus background sounds) and a background sound level is lower than 3 dB the operational sound level from the Wind Generating Facility sources only (background corrected) will be set equal to -99 dB for subsequent calculations (as recommended by section 6.9 d. 1 of ANSI/ASA S12.9-2013/Part 3) and reported with an "n/a" note. Operational noise levels from the Wind Generating Facility noise sources only (background corrected) will then be evaluated for prominent tones. Results will be reported.

(iii) If any prominent tones are found, the operational sound levels from the Wind Generating Facility sources only (background corrected), will then be re-evaluated to determine whether or not the prominent tones are caused by the application of background corrections. In this case, the operational sound level from the Wind Generating Facility noise sources only (Background corrected) at each one-third frequency band of interest will be evaluated for audibility (as specified in section 11.b.3.ii of this protocol) and if found audible, it will be compared to the arithmetic average of the uncorrected operational noise levels (sources ON plus background sounds) of the two adjacent one third octave bands. Results will be reported.

(2) If any audible prominent tones are found at any evaluated residential positions and if they are found to be produced by the operation of the Wind Generating Facility, broadband Wind Generating Facility operational noise level results for that/those position(s) (Leq (A) -10 minute) will be evaluated for compliance with Certificate Condition 74(c) of the Order.

(3) Comments about whether or not the Wind Generating Facility is found in compliance with the audible prominent tone condition of the Order (Condition 74 (c)) will be included in the report.

c) LOW FREQUENCY NOISE

i) Operational and background low frequency sound level measurements will be conducted at the selected residential testing positions as specified in this protocol. Sound levels at these positions will either be reported as extracted from the SLMs for the 16, 31.5 and 63 Hz full octave bands or calculated based on the sound levels from the 12.5 to 80 Hz one-third octave bands as appropriate and applicable.

ii) The Leq-10-min operational sound levels at the 16 Hz, 31.5 Hz and 63 Hz full- octave bands measured at the selected residential positions will be evaluated to determine if the low frequency noise levels from operation of the Wind Generating Facility (under testing operational conditions) in combination with natural environmental background sounds exceed 65 dB. Initially, no background sound corrections will be made. If operational sound levels (without any background corrections) comply with Certificate Condition 74 (d) further analysis may not be needed.

iii) If other sound sources, not related to Wind Generating Facility operation, created or exacerbated low frequency sound levels during the test, measured background Leq-10-min sound levels (Wind Generating Facility noise sources OFF) can be subtracted from the measured operational sound levels (All Wind Generating Facility noise sources ON plus background sounds) at the same specific one- third octave bands where they occurred in order to determine the Wind Generating Facility contribution to low frequency sounds at those bands. Background noise sources will be identified and described as feasible. The full octave band sound levels will then be recalculated as the energy based of Leq-10-min samples for each one-hour period. The full octave-band results will be reported. Both raw and corrected data will be reported.

iv) Compliance with, or exceedance of, the 65-dB requirement at 16, 31.5 and 63 Hz full octave bands of Certificate Condition 64 (d) at selected residential positions and under tested operational conditions, will be evaluated and reported for all Leq-1-h results.

9) ADDITIONAL TESTING:

This protocol reflects the minimum requirements for the leaf-on and leaf-off compliance sound tests required by the Order. If additional testing is required those tests will be performed by following all the provisions of this protocol except as follows:

a) Testing Positions:
b) If a violation or non-compliance situation is found at any residences not previously evaluated, those positions will be added to the tests.
c) Seasons and testing times: If a violation or non-compliance situation is found in a specific time frame any retest may need to be conducted to cover approximately the times that the violation or non-compliance situation was found.
d) Scenarios to be tested: The Wind Generating Facility will be retested at approximately the same operational and weather conditions where the non-compliance situation or violation was found.

10) ADDITIONAL PROVISIONS:

a) A test plan will be developed as recommended by section 9.1.4 of ANSI S1.13-2005, prior to the test.
b) A final testing schedule will be provided to DPS-Staff after the Wind Generating Facility equipment is set up and conditions are evaluated. DPS-Staff will be notified of any changes to test procedures prior to or during the test, if they occur.
c) To avoid sound interruptions during testing, if communication equipment is used, it will not be operated on speaker/loudspeaker settings and will preferably be set with freehand earphones/microphones. All staff members and personnel will take proper actions to ensure that conversations and communications will not affect the sound collections.

d) All clocks, including any SLMs and weather station meter clocks will be synchronized with the Wind Generating Facility operational time. Any difference between the Wind Generating Facility operational time and the official Eastern Standard Time will be noted and reported.
e) Sound testing will be conducted at each selected residential position over consecutive 10-minute periods at each position, for the operational sound tests and the background sound tests.

11) WITNESSING AND NOTIFICATIONS.

a) At the discretion of DPS, DPS Staff representatives may be assigned to witness any sound test.
b) At the discretion of the DPS, sound collections can be performed by DPS Staff with DPS instrumentation at any time, location and operational condition but must adhere to the same testing protocol as employed by the Certificate Holder, this Sound Testing Compliance Protocol. DPS at its discretion can collect any information related to sounds from the facility and the environment, and weather conditions, including but not limited to any sound levels by using any metric or sound descriptor.
c) If DPS Staff desires to conduct testing of the Wind Generating Facility at a specific operational condition that would require the Certificate Holders to modify the operation of any Wind Generating Facility equipment or setting any Wind Generating Facility equipment online or offline, DPS Staff shall coordinate with the Certificate Holders at least five (5) business days in advance of such testing. This advanced notice and coordination is required so the Certificate Holders can, among other things, ensure: Wind Generating Facility and operational conditions are in- order for testing; that any impact to its customers will be minimal; and that the Certificate Holders, and its customers, can properly staff to accommodate the service interruption, and subsequent restoration, if any. If DPS Staff desire to conduct sound or vibration testing from the Wind Generating Facility and no modification to operational conditions of Wind Generating Facility equipment are required, no prior coordination is required.
d) The Certificate Holders will coordinate with DPS Staff at least five (5) office days in advance of a tentative date for any sound tests.
e) The Certificate Holders will coordinate with DPS Staff on a final date at least two (2) office days prior to any sound tests.
f) The Certificate Holders will notify Town's officials and applicable residents about the final dates and times of the compliance tests.

12) REPORTING AND DOCUMENTATION

A report will be prepared that includes at least the following analyses and documentation:

a) A listing of make and model for each SLM, acoustical calibrator, weather station, weather hand held meter and anemometers (with corresponding serial numbers), and identifying which positions each instrument was used at, along with copies of laboratory calibration certificates for SLMs and calibrators, and any field calibration results (Sensitivity checks). SLMs specifications including type, sound floors, humidity and temperature ranges and settings will be included in the report along with a statement about whether the SLMs and calibrators had undergone laboratory calibration within two years prior to its use in the test. Accuracy for portable weather stations, hand held meters and/or anemometers will be documented along with a statement about whether the portable weather station and the hand-held meters or anemometers used for the tests comply with the accuracy requirements specified in this protocol;
b) The insertion loss of the windscreen as stated by the manufacturer or accredited independent laboratory, for the fractional bands of interest specified in section 2(c) of this protocol, and

whether or not the insertion loss values in dB have been automatically or manually applied to the reported data;

c) The names and qualifications of all personnel who conducted and/or provided direct oversight during the testing. Operators shall be knowledgeable with respect to the operation, performance capabilities and limitations of sound and weather instrumentation, and the specifics of this protocol;
d) All logged A-Weighted (dBA) broadband Leq data measurements and results including an appendix setting forth the Lmax, L10, L90, Lmin values. If results are corrected, filtered or post-processed, both raw and corrected data will be reported;
e) All logged one-third octave band data and full octave band results for the Leq
f) including an appendix setting forth the Lpeak, Lmax, L10, L90 and Lmin sound descriptors (Linear, Z, or Un-Weighted). If results are corrected, filtered or post- processed, both raw and corrected data will be reported;
g) All measured and logged data will be reported in tabular format to the nearest tenth of a decibel, and in graphical format. In addition, database or spreadsheet files will be provided to DPS Staff in storage media or by electronic means upon request;
h) Sound measurements and calculations of sound levels shall be reported to the nearest 1/10 of a dB;
i) Field data sheets and notes;
j) Meteorological conditions during testing: The report shall include the continuous log of all measurements of meteorological conditions collected including average wind speed, average wind direction, ambient air temperature, relative humidity, barometric pressure (Optional) and rain fall (Precipitation). Sky cover and general weather conditions will be reported;
k) Broadband and fractional band results and corresponding wind data;
l) Evaluated residential and any sound monitor positions including GPS coordinates and approximate distances to the closest five turbines along with photos and a description of the state of vegetation and whether or not the closest wind turbines are visible from the sound microphone positions;
m) Height of sound microphones as related to the ground along with photos of the residential locations being evaluated and an identification of the number of stories.
n) Figures depicting the sound testing positions in relation to the Wind Generating Facility, property lines, roads and the existing residences as of the date of the Order that were evaluated with the test. Other existing non-residential buildings will be included for reference only.
o) A complete log of the operational load and operational conditions of the Wind Generating Facility and all its noise sources during testing periods. Statements about whether the operational conditions during testing comply with the requirements of this protocol will be included. Any difference between Wind Generating Facility's and Eastern standard time will be reported; and
p) Intentionally left blank.
q) An analysis of results including overall sound levels, prominent tones and low frequency noise levels and whether they were found to comply or exceed the applicable certificate conditions of the Order at any selected residential position and whether or not additional mitigation measures are necessary to comply with certificate conditions of the Order.

13) TERMS AND DEFINITIONS

a) Sound and Noise: "Noise" is usually defined as unwanted sound. If "Sound" comprises noises and other sounds, "sound" may be a broader designation. Sound sources within the Wind Generating Facility may be referred as both "noise" and/or "sound". Some animal sounds may

be more properly referred to as "sounds" rather than "noise". For the purposes of this protocol the words "sound" or "noise" may be used interchangeably.

b) Background sound: all-encompassing sound associated with a given environment without contributions from the source or sources of interest as specified in this protocol.
c) Continuous background sound: background sound measured during a measurement period, after excluding the contribution of transient background sounds by inhibiting the collection or post-processing. For the purposes of this protocol the term "background sound(s)" is used for both "background sound(s)" and "continuous background sound(s)", interchangeably.
d) Operational sound: Sound that includes both Wind Generating Facility noise sources and background sound unless otherwise noted.
e) Wind Generating Facility sound only: All sounds originated from the Wind Generating Facility without contributions of background sounds as specified in this protocol.
f) Transient background sound: background sound associated with one or more sound events which occur infrequently during the basic measurement period, a measurement interval with or without the source operating, as specified in this protocol.
g) Protocol: Refers to this document, unless otherwise noted.

14) REFERENCES. (References listed in this section are for information purposes only).

a) ANSI S1.4-1983 (R 2006) American National Standard Specification for Sound Level Meters; and Amendment No. 1 in ANSI S1.4A-1985
b) ANSI/ASA S1.11-2004 (R 2009) American National Standard Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters
c) ANSI/ASA S1.40-2006 (R 2011) American National Standard Specifications and Verification Procedures for Sound Calibrators
d) ANSI/ASA S1.43-1997 (R 2012) American National Standard Specifications for Integrating-Averaging Sound Level Meters
e) ANSI/ASA S12.9-2013/Part 3 (Quantities and Procedures for Description and Measurement of Environmental Sound. Part 3: Short-Term Measurements with an Observer Present)
f) ANSI/ASA S12.9-2005/Part 4 (Quantities and Procedures for Description and Measurement of Environmental Sound – Part 4: Noise Assessment and Prediction of Long-term Community Response).
g) ANSI/ASA S12.18-1994 (R 2009) American National Standard Procedures for Outdoor Measurement of Sound Pressure Level.
h) ISO 226: 2003, Acoustics – Normal equal-loudness contours.

Table 1: Thresholds of human hearing for evaluation of audibility of tones

1/3 Octave Band Center Frequency [Hz]	Threshold of Hearing [dB] (most sensitive 95 % of population)
20	68.5
25	58.7
31.5	47.3
40	40.4
50	33.9
63	28.6
80	24.0
100	19.9
125	15.9
160	11.7
200	8.1
250	5.1
315	2.4
400	0.3
500	-1.4
630	-3.0
800	-4.2
1,000	-4.7
1,250	-4.2
1,600	-6.5
2,000	-9.7
2,500	-12.5
3,150	-14.0
4,000	-13.4
5,000	-9.8
6,300	-2.8
8,000	3.1
10,000	3.6

The threshold levels are intended to account for the hearing threshold of 95% of the public. Values from 31.5 Hz to 10,000 Hz inclusive are taken from P05 in Table 2 of Kenji Kurakata, Tazu Mizunami and Kazuma Matsushita, Percentiles of normal hearing-threshold distribution under free-field listening conditions in numerical form, Acoustical Science and Technology Journal (published by Acoustical Society of Japan) Volume 26, Number 5 (2005), pp. 447-449. At 25 Hz the threshold level is 10 dB below the ISO 226:2003 median value and is also believed to account for the hearing threshold of 95% of the public.

EIGHT POINT WIND, LLC

Complaint Resolution Plan,
Including Noise Complaint and Resolution Plan

Eight Point Wind, LLC
Eight Point Wind Energy Center
Steuben County, New York
Dated: April 1, 2019

COMPLAINT RESOLUTION PLAN

Eight Point Wind, LLC (the Applicant), a subsidiary of NextEra Energy Resources, LLC (NextEra) has prepared this Complaint Resolution Plan (the Plan) to establish a consistent method and procedure by which the Applicant will address public complaints during the construction and the operation of the Eight Point Wind Energy Center Project (the Project). All activities will adhere to the requirements of appropriate governing authorities, and will be in accordance with all applicable federal, state and local rules, regulations and agreements.

PROCEDURE FOR FILING COMPLAINTS

Complaints can be made by following any of the following procedures.

1. Call the Applicant at its local office or its headquarters, or call the Construction Manager during construction or the Site Manager once the Project is operational,

2. Meet with local Eight Point Wind employees in person at the local office, the temporary construction office, or at the Operations & Maintenance (O&M) building once the Project is operational,

3. Submit a complaint in writing by mailing a detailed complaint or dropping off a detailed complaint at the local office, or

4. Submit a complaint in writing by emailing a detailed complaint to the Construction Manager during construction or the Site Manager once the Project is operational.

In order for the Applicant to properly and sufficiently address a complaint, the complaint should be as detailed as possible and include the information below.

- Name of complainant
- Date of complaint
- Phone number
- Address
- Location of issue
- Detailed description of complaint (if possible, include date and time the issue occurred, exact location of issue, duration, and any other details that can help pinpoint the issue)

Included in this Plan is a Complaint Resolution Form that can be used to submit a complaint by mail or dropped off at a local office. These forms will also be available at the Applicant's local office, at the temporary construction office and at the O&M building.

The Applicant encourages complainants to submit complaints directly to Eight Point Wind in order to be able to address such complaints in a timely manner. Complaints submitted to local governmental agencies, emergency service providers, NY state agencies or other third parties may not be communicated to the Applicant and therefore may not get addressed.

In circumstances whereby a third party receives a complaint about the Project, the Applicant requests that the third partyrefer the complainant to the Complaint Resolution Plan on the Applicant's website and, if possible, forward the complaint to the Applicant within seven (7) business days. The Applicant will communicate this request to local governmental agencies, emergency service providers, NY state agencies and other third parties that may receive complaints about the Project.

RESOLUTION OF COMPLAINTS

The Applicant will work in good faith to address and/or resolve reasonable complaints as soon as is practicable, however, some complaints will take time to evaluate and determine proper resolution and some complaints cannot reasonably be resolved. Safety and good community relations are among the highest priorities of the Applicant; as such, speedy resolution of legitimate complaints is imperative.

Upon receiving a complaint, the Applicant will enter the complaint into a complaint log, documenting the details and will determine a plan of action to resolve the complaint, if possible to resolve. If necessary, the Applicant will contact the complainant as quickly as possible and in all cases within 72 hours to gather additional information and/or discuss a resolution plan. The Applicant will work in good faith to address and/or resolve complaints as soon as is reasonably practicable and commits to resolving complaints within sixty (60) days, unless circumstances dictate that more time is necessary for evaluation or resolution and the Applicant is working toward a resolution. In instances where resolution will take longer than 60 days, the Applicant will contact the complainant to explain why resolution will take or is taking longer and will provide a timeframe for resolution that is as soon as is practicable.

DISPUTE RESOLUTION AND UNRESOLVED COMPLAINTS

In some instances, the Applicant and a complainant (the parties) may not agree on a resolution to a complaint. In such instances, the Applicant will consult New York State Department of Public Service (DPS) then, if necessary, refer the complaint to a neutral third party, for example, a dispute resolution professional or a retired judge. The recommendation of the neutral third party would be provided to the parties and to the DPS and the recommendation would be implemented, unless arbitrary and capricious.

In other instances, the Applicant may determine that a complaint does not have a reasonable resolution. For such complaints (for example a complaint regarding the aesthetic value of wind turbines or a complaint about the value of wind energy), the Applicant will add the complaint to the complaint log, notify the complainant that no resolution is feasible and recommend the complainant contact the DPS if he or she disagrees. If the DPS suggests that further action is necessary on the part of the Applicant, the Applicant will refer the complaint to a neutral third party and the procedure outlined above be followed.

DOCUMENTATION OF COMPLAINTS

During construction and operation of the Project, the Applicant will keep a complaint log, recording complaints that it receives. The complaint log will include, if available, the date of the complaint, the name of the complainant, contact information for the complainant including address, and a description of the complaint. It will also include a description of the complaint resolution, if resolution is feasible.

The complaint log will be maintained by the Applicant and will be made available to the DPS. Upon request by the DPS, the Applicant will send the complaint log via email within seven (7) business days.

PUBLIC NOTIFICATION OF COMPLAINT PROCESS

No less than two (2) weeks prior to the commencement of construction, the Applicant will publish a summary of the Complaint Resolution Plan in such newspapers, including local community and general circulation newspapers, as will serve substantially to inform the public of such Complaint Resolution Plan. The summary will include contact information including phone numbers, email and physical addresses. The Plan will be provided to the Greenwood Township and the West Union Township Town Boards. The Plan will also be posted on the Applicant's website and will be available to the public at the Applicant's local office, temporary construction offices and at the O&M building.

COMPLAINT FORM

Name: _____

Date: _____

Phone #: _____

Address: _____

Description of Complaint:*

_____

_____

_____

_____

_____

_____

_____

_____

_____

*If possible, include date and time the issue occurred, exact location of issue, duration, weather conditions and any other details that can help pinpoint the issue.

NOISE COMPLAINT AND RESOLUTION PLAN

The steps outlined in this noise complaint resolution plan ensure that the community has a method to register their noise complaints or concerns in a timely manner, and also provide checks so the process is not abused. This plan is in effect upon commencement of construction and will be in effect for the life of the project.

Complaint Response – Construction

If the Sound Complaint location is more than one (1) mile from active construction activity, the complaint will be logged but no action will be taken.

If the Sound Complaint is less than one (1) mile from active construction activity, the following steps will be taken:

- A representative from the construction firm will visit the site of the complaint during construction activity to listen and observe.
- Construction personnel will try to determine if any equipment is not functioning properly and thus creating unusual sound. If so, this equipment will be repaired or replaced as soon as practical.

Complaint Response – Operations

If the Sound Complaint represents a residence within one mile of any turbine, and based on monitoring and/or modeling, there appears to be a reasonable possibility that the sound levels induced by the Project exceed any Certificate Condition of the Order or are within 5 dBA of any applicable noise limit specified in a Certificate Condition at the complainant's location, and the sound is not related to Project maintenance or abnormal operational conditions, then Eight Point Wind will investigate the incident as follows:

- Determine whether the sound level at the complaint location is likely to be greater than any limit specified in the applicable Certificate Conditions of the Order or are within 5 dBA of any applicable noise limit by reviewing the pre-construction sound modeling or any preliminary readings.
- Eight Point Wind is not required to conduct sound testing if:
  - the modeled sound level is lower than 5 dBA below any applicable noise limit.
  - the complaint has occurred as a result of abnormal operation. In this case, Eight Point Wind shall make necessary repairs.

Eight Point Wind shall conduct sound monitoring if:

- The complaint location is further than 0.5 miles from any post-construction sound compliance monitoring locations, or the location is closer than 0.5 miles of a previously evaluated monitoring location, and the modeled or measured sound levels are higher or expected to be higher than the positions previously evaluated.
- If there is a reasonable possibility that conditions have changed that affect wind turbine sound levels, or
- The issue is different than the one previously evaluated, or
- The last sound monitoring was conducted more than three years ago.

Eight Point Wind will not, as a result of additional complaints, repeat sound monitoring in a previously evaluated location during any three-year period following the first monitoring for that receptor, unless changes in system operation or turbine maintenance can be reasonably assumed to have resulted in higher turbine sound levels.

Sound monitoring in response to complaints will be addressed as part of the ~~r~~elevant and applicable portions of the Sound Monitoring Protocol, Appendix A to the Certificate Conditions.

Eight Point Wind may request that a Complainant maintain a written log of potentially offending sound events over some reasonable period of time, in order to assist in identifying influences that may affect the sound from the turbines. If the identified factors demonstrate that follow-up sound monitoring is warranted, Eight Point Wind shall make reasonable efforts to conduct such monitoring under conditions similar to those existing at the time the complaint arose. Eight Point Wind may have access to a sound level meter within 24 hours of request. This meter may be used to perform "spot checks" of sound levels at the area of complaint.

Eight Point Wind shall inform a resident when it intends to conduct any exterior sound monitoring and cooperate with the resident to determine an appropriate location for the monitoring equipment. If Eight Point Wind determines that a Sound Complaint is the same and not valid for two separate instances at the same location, then any future complaint, beyond the first two, may requires that complainant to pay the cost of sound testing.

Reporting

If any complaint-based sound monitoring is conducted by Eight Point Wind, the results of the testing shall be submitted in a report within 45 days of the completion of that monitoring. This report shall go to the complainant, NYS DPS, as specified in the Order, and, if requested, to the Town Clerk of West Union and the Town Clerk of Greenwood. The report shall include the following information during the monitoring period:

- Ground-level wind speed and direction
- Operational status of the wind turbines (including wind speed, wind direction, power and NRO if applied)
- Summary of sound levels, and
- Raw sound level data as logged by the sound level meter during the program.

If, as the result of a complaint resolution, it is determined that the sound level at any non-participating residence, attributable to the Project, does not comply with any Certificate Condition of the Order, Eight Point Wind will proceed with subsequent steps as specified in the Order.

This protocol will be updated to address the final Order and Certificate Conditions. This protocol shall not be used to request an amendment of the Certificate. Any change that should in fact be a request for amendment to a Certificate will be addressed as specified in Part 1002 of Article 10 regulations (Compliance Filings).

NYS DEPARTMENT OF PUBLIC SERVICE SEEP SPECIFICATIONS

APPENDIX C TO CERTIFICATE CONDITIONS – REQUIREMENTS FOR THE DEVELOPMENT OF SITE ENGINEERING AND ENVIRONMENTAL PLAN COMPLIANCE FILINGS

Reference 16 NYCRR Section 1002.3

New York State Official Compilation of Codes, Rules and Regulations 16 NYCRR Section 1002.3 indicates compliance filing procedures and requires that compliance filings provide:

(a) A description of and citation to the requirement in a certificate or an order for which compliance is to be demonstrated;

(b) A description of how the applicant will comply with the requirements of the certificate or order; and

(c) Final maps, plans, diagrams, drawings, studies, reports or other documents demonstrating compliance.

Section A of the following Site Engineering and Environmental Plan (SEEP) specifications addresses the minimum requirements for development of facility final engineering details; site plans for construction, restoration, and environmental control measures applicable; plan and profile drawings of the development site and all facility components; and maps of facilities sites and the overall facilities settings as appropriate to demonstrate compliance with applicable regulations and conditions of a Certificate of Environmental Compatibility and Public Need.

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. If any particular requirement of these specifications is not applicable, so indicate and briefly explain.

A. SEEP COMPLIANCE FILING: SITE PLAN AND PROFILE DRAWINGS AND MAPS

Plan sheets will be submitted showing the site and details of facility location and design for all facilities components, including: linear facilities such as electric collection lines, transmission lines and associated access roads, communications lines, fuel gas lines, water and wastewater or sewer

interconnection lines; and all temporary and permanent access roads. Plans shall also indicate sites of all major structures, features and buildings including generation sites, 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. The Compliance Filing 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 models and other Facility components, excluding linear facilities, the Certificate Holder shall provide site plans, profiles, and detail drawings, profiles, and site plans (scale minimum 1 inch = 200 feet)[1] showing:

a. A copy of the American Land Title Association (ALTA) survey showing locations of existing utility infrastructure.
b. Details and specifications of the selected turbine model(s) (including cut sheets and blade details such as length and thickness).
c. Foundation drawings including plan, elevation, and section details for each foundation type proposed; if multiple foundation designs are to be utilized for a Project, the foundation type at each turbine location shall be specified on site plans; applicable criteria regarding foundation design shall be listed and described in the drawings and details.
d. Description of the wind turbine blade installation process will be included as a general note on the site plans, identifying the anticipated installation method for each wind turbine and indicating which wind turbine site locations will require the use of the entire rotor laydown area.
e. Details showing limits of clearing, temporary and permanent grading, and laydown space required for wind turbine installation; details of SWPPP should be indicated.
f. The location and boundaries of any areas proposed to be used for fabrication, designated equipment parking, staging, access, lay-down, conductor pulling and splicing; concrete batch plant or other materials preparation or processing sites; operations and maintenance buildings,

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

yards and equipment storage areas. Indicate any planned fencing, surface improvements or screening of storage and staging areas. Demonstrate setback distances appropriate to facility design; and conformance with applicable requirements of the Certificate or local requirements.

g. If an on-site concrete batch plant will be utilized during construction, the Certificate Holder shall provide the following:
    i. final details and site plan of the concrete batch plant location, 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. 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.
h. The locations or description of locations for concrete chute washout and any other cleaning activities (e.g., equipment cleaning for control of invasive species).
i. Maps showing the location for the selected operations and maintenance (O&M) building. If an existing building is not utilized, 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.

<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 centerline; for electric lines (whether above ground or underground) plans shall include the

NYS DEPARTMENT OF PUBLIC SERVICE SEEP SPECIFICATIONS

Line[2] Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet) showing:

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

k. 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.

l. 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.

m. 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 site or street within which the Certificate Holder will obtain additional rights.

n. 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.

o. Each facility site 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

[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.

individual sites.

p. Existing utility and non-utility structures on or adjoining the Facility site, 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 overhead electric transmission or distribution lines and communications lines.

q. 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 nearby fence lines; roads; railways; airfields; property lines; hedgerows; fresh surface waters; wetlands; other water bodies; significant habitats; associated facilities; water springs; nearby 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. Approval documentation (including a statement that Project 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 Proposed Project components (including Project construction equipment crossings of existing utilities). Approvals shall be required for each co-location and crossing of existing utility location;

   iii. Details of existing utility owner approved crossing plans (crossed by Project components) showing methods, separation of existing utility and Project 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;

r. The location and design details, site plan and architectural configuration 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 latest version of 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).

3. Vegetation Clearing and Disposal Methods

Identify on the plan and profile drawings:

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

[3] Preferably 1” = 50’ scale with 2-foot contour lines.

e. any geographical area bounded at each end by areas requiring distinctly different cut-vegetation methods due to site conditions such as land use differences, population density, habitat or site protection, soil or terrain conditions, fire hazards, or other factors;
f. site specific vegetation treatment or disposal methods, including any property-owner required details such as log storage or wood chip piling areas, or “no-herbicide” zones;
g. areas requiring “danger tree” removal; 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

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 site 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 site of 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. Wetlands

a. All Federal and State regulated wetlands and wetland 100-foot adjacent areas ("adjacent areas") located within the Facility Area or crossed by or adjacent to any access road to be constructed, improved, used or maintained for the Facility shall be depicted on plan drawings. Each wetland will be identified by 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 site or any temporary access road, as determined by site investigation and delineation.
c. Indicate type and location of measures (e.g., mats) to be taken to protect all wetlands, associated drainage patterns and wetland functions.

7. Land Uses

a. Agricultural Areas:
    i. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland. Designations and descriptions will be those in current use by the NYS Department of Agriculture and Markets (Ag&Mkts.)
    ii. Indicate the location of any 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 land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies.

v. Designate the site-specific techniques to be implemented to minimize or avoid construction-related impacts to agricultural resources.

b. Sensitive Land Uses and Resources:

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

c. Geologic, Historic, and Scenic or Park Resources:

Indicate the locations of nearby geologic, historic, and existing or planned scenic or park resources and specify measures to minimize impacts to these resources (e.g., specified setback distances, vegetation protection, fencing, signs).

d. Recreational Areas:

Indicate the locations where existing or planned 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 workpads.

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

Show the locations of noise-sensitive areas adjacent to the facility site. Identify locations and specifications of measures to mitigate construction noise as required by the Certificate of Environmental Compatibility and Public Need (Certificate).

10. Ecologically and Environmentally Sensitive Areas

a. Indicate the general locations of any known ecologically and environmentally sensitive sites (e.g., archaeological sites; fish and wildlife habitat; rare, threatened, and endangered

species or habitats; forest and vegetation; open space; areas of important aesthetic or scenic quality; deer winter yards, etc.), within or nearby the Facility site or along the general alignment 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 site shall be indicated on the final site plans. The mapped locations of all identified archaeological sites within 100 feet of proposed Facility-related impacts shall be identified as "Environmentally Sensitive Areas" or similar on the final Facility construction drawings and marked in the field by construction fencing with signs that restrict access.

11. Invasive Species 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 construction.

12. Vegetation Controls and Herbicides

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

B. DESCRIPTION AND STATEMENT OF OBJECTIVES, TECHNIQUES, PROCEDURES AND REQUIREMENTS

The narrative portion of the SEEP Compliance filing for the Facility shall include, but need not be limited to, all of the following information:

1. Facility Location and Description

Describe the location and limits of the Facility site and explain the need for any additional rights. For each wind turbine structure type, provide manufacturer's specifications applicable to final design of the facility and site. For each facility structure type, indicate the GSA—595A Federal standard color designation or manufacturer's color specification to be used for painted structures.

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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. Stormwater Pollution Prevention

a. The acknowledged SWPPP and any MS-4 review.
b. In any areas of coastal erosion hazard, include plans to demonstrate compliance with the standards for coastal erosion hazard protection as required by 6 NYCRR Part 505 - Coastal Erosion Management.

3. Vegetation Clearing and Disposal Methods

a. Describe the specific methods and rationale for the type and manner of cutting and disposition or disposal methods for cut vegetation.
b. Detail specific measures employed to avoid damage to: specimen tree stands of desirable vegetation; rare, threatened and endangered species and significant habitat areas; important screening trees, and hedgerows. Provide additional site-specific plan details as-needed to demonstrate work-area limits and protection measures that will be applied during construction and maintenance of the Facility.
c. Provide vegetation specifications and resource protection measures associated with vegetation removal during site clearing or restoration.
d. Indicate specifications and standards applicable to salvage, stockpiling or removal of material.
e. Identify ownership of cleared vegetation based on landowner agreements (as applicable).
f. Describe methods of compliance with 6 NYCRR Part 192 – Forest Insect and Disease Control, any applicable DEC quarantine orders, and Ag&Mkts regulations.

4. Building and Structure Removal

Indicate the locations of any buildings or structures to be acquired, demolished, moved, or removed. Provide the rationale for the acquisition and removal of buildings or structures. Provide copies of approvals, demolition permits needed, control measures and standards for restoration, handling of hazardous or flammable materials, and environmental controls.

5. Waterbodies

a. Describe 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.

b. Indicate the procedures that were followed to inventory such resources and provide copies of any resulting data sheets and summary reports.

c. Provide a table listing all waterbodies located on or adjacent to 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.

6. Wetlands

a. For each State-regulated wetland, federal §404 wetland and tidal wetlands within or adjacent to the construction limits of the facility site, provide a table to indicate the following: town (location); facility site location (site plan and profile drawing sheet number and reference location; wetland field designation; NYSDEC classification code; wetland type; total area of temporary disturbance/impact; total area of permanent disturbance (sq. ft.); by Facility (sq. ft.) and the nature of the said disturbance; and conversion of State-regulated forested wetlands (sq. ft.).

b. Describe all activities that will occur within §404 wetland, tidal wetland and State wetlands. 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). Describe how impacts to wetlands, adjacent areas, associated drainage patterns and wetland functions will be avoided, and how impacts will be minimized. For §404 wetlands

provide individual or nationwide permits with a discussion of the site-specific avoidance and minimization measures used to protect wetlands.

c. 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.
d. Provide 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.

7. Horizontal Directional Drilling

Provide a *Frac-Out Risk Assessment and Contingency Plan* showing all locations where horizontal directional drilling (HDD) is proposed. The plan shall assess potential impacts from frac-outs at the proposed drilling locations and require the following:

a. Biodegradable drilling solutions shall be used to minimize harm to aquatic species in the event of a drilling frac-out.
b. Exit and entry points shall be located a minimum of 20 feet from the edge of the stream or wetland to minimize disturbance to the extent practicable.
c. All equipment and provisions of the plan shall be readily accessible at the locations where HDD technology is used during construction.
d. If inadvertent drilling fluid surface returns occur in wetlands or streams, the DEC and DPS Staff shall be notified immediately and a written monitoring report describing the location, estimated volume, and cleanup efforts shall be submitted within 24 hours of the occurrence.

8. Land Uses

a. Agricultural Areas:
    i. Describe programs, policies, and procedures to mitigate agricultural impacts such as soil compaction. Explain how construction plans either avoid or minimize crop production losses and impacts to vulnerable soils. Provide standards for exclusion of livestock grazing from facility site until appropriate site stabilization and restoration have been demonstrated.
    ii. Indicate specific techniques and references to appropriate agricultural protection measures recommended by Ag&Mkts.
b. Sensitive Land Uses:

Describe the sensitive land uses (e.g., hospitals, emergency services, sanctuaries, schools, residential areas, as applicable to facility site) that may be affected by construction of the Facility and associated sites, or by construction-related traffic, and specify measures to minimize the impacts on these land uses.

c. Geologic, Historic and Scenic or Park Resources:

Describe the geologic, historic, and scenic or park resources that may be affected by construction of the Facility or by construction-related traffic and specify measures to minimize impacts on these resources. Indicate the procedures that were followed to identify such resources and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze such sites that are not included in the description shall be made available to Staff upon request.

d. Recreation Areas:

Explain how proposed or existing recreation areas will be avoided or accommodated during construction, operation, and maintenance of the Facility.

8. Access Roads, Lay-down Areas and Workpads

a. Discuss the necessity for access to and within the facility site, including the areas where temporary or permanent access is required; and the nature of access improvements based on natural features, equipment constraints, and vehicles to be used for construction and maintenance, and the duration of access needs through restoration and the maintenance of the Facility.

b. Discuss the types of access roads or paths that will be used and the rationale for employing that type of access including consideration of:

   i. temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile underlayment, gravel surface, etc.);

   ii. permanent installations (e.g., cut and fill earthen road, geotextile under-layment, gravel surface, paved surface, etc.);

   iii. use of existing roads, driveways, farm lanes, rail beds, etc.; and,

   iv. other access, e.g., helicopter or barge placement.

c. For each temporary and permanent access type, provide a figure or diagram showing a typical installation (include 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.).

d. 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.
e. 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) for each crossing device and rationale for their use. Stream crossing methods and design may include but not be limited to:
    i. timber mat;
    ii. culverts including headwalls;
    iii. bridges (either temporary or permanent); and,
    iv. fords.
f. All diagrams and specifications should include material type and size to be placed in streams and on stream approaches.
g. If access and workpad areas cannot be limited to upland areas, provide justification for any access and workpad areas which are proposed to be located in a wetland or stream or waterbody.
h. Provide a traffic control plan that identifies the delivery route(s) for oversize or over length

equipment or materials and the route(s) for delivery of earthen materials and concrete. The plan shall describe the delivery of materials to the facilities site. This plan will demonstrate that all municipalities, NYS Department of Transportation, NYS State Police Barracks, County Department of Public Works, County Sheriffs and local Police department have been contacted. The plan shall identify weight limited bridges in the area to be avoided. The plan shall indicate mitigation measures to manage traffic during construction and operation. Copies of all permits associated with the delivery of such equipment and materials shall be provided.

9. Noise Sensitive Sites

Specify procedures to be followed to minimize noise impacts related to facility site clearing, construction, and operation 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.

10. Ecological and Environmentally Sensitive Sites

a. Indicate the procedures that were followed to identify ecological and environmental resources (e.g., archaeological sites; fish and wildlife habitat; rare, threatened, and endangered species (RTE) or habitats; forest and vegetation; open space; areas of important aesthetic or scenic quality; deer winter yards) and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze sites involving RTE shall be marked confidential and submitted for confidential handling.

b. Provide 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.

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 Phase II investigations or mitigation is warranted. The results of any Phase II investigations and/or identification of proposed mitigation measures where complete avoidance of archaeological sites cannot be achieved, based on consultations with NYSOPRHP and DPS Staff.

11. Invasive Species of Special Concern

Provide an *Invasive Species Prevention and Management Plan (ISPMP),* prepared in consultation with DPS, DEC and Ag&Mkts, based on the pre-construction invasive species survey of invasive species within the Project Area.

a. The ISPMP shall include 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).
b. Control measures shall include construction materials inspection and sanitation, invasive species treatment and removal, and site restoration.
c. A post-construction monitoring program (MP) shall be conducted in year 1 and year 2 following completion of construction and restoration. The MP shall collect information to facilitate evaluation of ISPMP effectiveness.
d. At the conclusion of the MP, a report shall be submitted to DPS Staff, Ag&Mkts, and DEC, and filed with the Secretary, that assesses how effective the ISPMP was during construction.
e. If the report concludes that ISPMP goals are not met, the Certificate Holder shall meet with DPS Staff, Ag&Mkts, and DEC to consider why initial control measures were ineffective and the probability of successful additional treatment measures without the need for perpetual treatments.

12. Herbicides

Include a facility vegetation management and herbicide use plan for all vegetation clearing that:

a. 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.

b. Provides lists of desirable and undesirable vegetation species.
c. 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 near the ROW.

13. Fugitive Dust Control

Specify appropriate measures that will be used to minimize fugitive dust and airborne debris from construction activity.

14. Petroleum and Chemical Handling Procedures

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

a. 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), methods of disposal of contaminated materials in the event of a discharge, and spill reporting information. Any spills shall be reported in accordance with State and/or federal regulations.
b. Storage, handling, transportation, and disposal of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances which may be used during, or in connection with, the construction, operation, or maintenance of the Facility.
c. Avoiding spills and improper storage or application in the vicinity of any wetland, river, creek, stream, lake, reservoir, spring, well, or other ecologically sensitive site, or existing recreational area along the ROW and access roads.
d. Reporting, responding to and remediating the effects of any spill of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances in accordance with applicable State and Federal laws, regulations, and guidance, and include proposed methods of handling spills of petroleum, fuels, oil, chemicals, hazardous substances, and other

potentially harmful substances which may be stored or utilized during the construction and site restoration, operation, and maintenance of the Facility.

15. Health, Safety, and Security

Copies of the following final plans shall be included in the narrative, or otherwise appended to, the SEEP compliance filing:

a. The *Final Emergency Action Plan* that shall be implemented during Facility construction, operation, and decommissioning. 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.

b. The *Final Site Security Plan* for Facility Construction and Operations. Copies of the final plan 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;
   ii. working with local law enforcement officials in an effort to prevent trespassing;
   iii. identifying construction and material details of gates and berms; and
   iv. identifying existing and proposed gate locations on the Plan and Profile drawings.

   Final determination of locations of gates and berms shall be made during a post-construction assessment of the Project, in consultation with DPS Staff.

c. The *Final Health and Safety Plan* that shall be implemented during Facility construction, operation, and decommissioning.

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.

16. Environmental Supervision

a. Describe 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 the titles and qualifications of personnel proposed to be responsible for ensuring minimization of environmental impact throughout the demolition, clearing, construction and restoration phases, and for enforcing compliance with environmental protection provisions of the Certificate and the compliance filings. Indicate the amount of time each supervisor is expected to devote to the project.
c. Specify responsibilities for personnel monitoring all construction activities, such as clearing, sensitive resource protection, site compliance, change notices, etc.
d. Explain how all environmental protection provisions will be incorporated into contractual specifications and communicated to those employees or contractors engaged in demolition, clearing, construction, and restoration.
e. Describe the procedures to "stop work" in the event of a Certificate violation.
f. Identify the company's designated contact including 24/7 emergency phone number, for assuring overall compliance with Certificate conditions.

17. 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:
        (a) species mixes and application rates by site;
        (b) site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures); and
        (c) acceptable final cover % by cover type.
    ii. planting installation specifications and follow-up responsibilities;
    iii. a schedule or projected dates of any seeding and/or planting; and,
    iv. plans to prevent unauthorized access to and along the Facility site.

18. Visual Impact Mitigation

Provide details of screening or landscape plans prescribed at roadsides, storage areas, or other specified locations, and for participating, adjacent or nearby property owners. Discuss existing or proposed landscape planting, earthwork, or installed features to screen or landscape substations and other Facility components.

19. ROW Encroachment Plan

Provide plans and procedures for identifying and resolving land use or development encroachments at or adjoining the Facility site.