

**NEW YORK STATE BOARD ON ELECTRIC GENERATION  
SITING AND THE ENVIRONMENT**

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In the Matter of the Application of

Bluestone Wind LLC

Case No.: 16-F-0559

for a Certificate of Environmental Compatibility  
and Public Need Pursuant to Article 10 to  
Construct a Wind Energy Project.

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**DIRECT TESTIMONY OF  
JEAN FOLEY**

Habitat Protection Biologist  
Division of Fish and Wildlife  
New York State Department of Environmental Conservation

June 7, 2019

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**WITNESS INTRODUCTION**

**Q. Will you please state your name, employer, title and business location?**

A. My name is Jean Foley. I am employed by the New York State Department of Environmental Conservation (NYSDEC or Department), Division of Fish and Wildlife, as a Habitat Protection Biologist in the NYSDEC Region 7 Sub-office in Cortland, New York.

**Q. Will you please describe your educational background and professional certifications?**

A. Please see a copy of my resume marked as Exhibit NYSDEC-F-1.

**Q. What are your responsibilities in your position at the Department?**

A. In my position, I am responsible for programmatic oversight of the State’s statutory and regulatory Freshwater Wetland Protection and Protection of Waters programs in five counties. In this capacity, I oversee the implementation of Article 15 of the Environmental Conservation Law (ECL) (Article 15) and associated State regulations, Article 24 of the ECL (Article 24) and associated State regulations, and, as applicable, State water quality standards applicable to section 401 of the Federal Water Pollution Control Act (CWA) and associated State regulations. Included in this oversight is my responsibility to review Article 15 and 24 and CWA permit applications, for projects that involve potential impacts to protected waters of the State, delineating wetland boundaries, as well as compliance with the requirements for Articles 15 and 24 and their implementing regulations for projects reviewed under Article 10 of the Public Service Law (Article 10).

1 **Q. Will you please summarize your experience regarding wetlands and**  
2 **waterbodies and review of proposed wind farm projects?**

3 A. I have conducted stream surveys and reviewed many permit applications for  
4 activities in and near streams. I have delineated a considerable number of wetlands and  
5 reviewed the permit applications for activities in and near wetlands that were associated  
6 with such delineations. I have reviewed several wind farm projects that required Article 15  
7 or 24 permits, and/or a State water quality certificate, or must meet the corresponding  
8 statutory and regulatory standards, in order to be constructed. Such projects include those  
9 subject to Article 10, such as the Bluestone Wind project (Project) and those which were  
10 reviewed pursuant to the State Environmental Quality Review Act (SEQR).

11 **Q. What do you mean by a “delineated boundary” of a wetland or stream?**

12 A. A “delineated boundary” is a boundary that Department Staff has determined will  
13 accurately represent the actual extent of the wetlands and/or streams. This should not be  
14 confused with the extent of wetlands shown on the Department’s freshwater wetlands maps  
15 or on the National Wetlands Inventory Maps, which is a comprehensive master  
16 geodatabase of the nation’s wetlands maintained by the United States Fish and Wildlife  
17 Service; or the Department’s surface water maps in 6 NYCRR Chapter X. The  
18 Department’s freshwater wetlands maps approximate the extent of the wetlands and inform  
19 landowners, potential applicants, and the public regarding the approximate extent of  
20 wetlands regulated under Article 24. The maps were developed using 1970’s-era aerial  
21 photography and were not intended to depict actual wetlands boundaries to the extent

1 provided by on-site inspection or delineation. In fact, I have seen many situations where  
2 the actual extent of wetlands was underestimated by the maps. Surface waters, including  
3 streams that are regulated under Article 15, are shown on maps within 6 NYCRR Part 815  
4 (Delaware River Drainage Basin). Field inspections are always required for projects such  
5 as this to refine the approximations shown on wetland and stream maps and to accurately  
6 determine the extent of wetlands and streams near proposed projects. A surveyed boundary  
7 of field-delineated wetlands must be included on project plans. Without such information  
8 on the precise location of wetlands, Department Staff cannot determine the full extent of  
9 proposed project impacts on identified State-regulated wetlands and streams.

10 **Q. What is the purpose of your testimony today?**

11 A. The purpose of my testimony is to provide an overview of the Department's  
12 implementation of Articles 15 and 24 and the State water quality program pursuant to  
13 section 401 of the CWA, including the associated regulations found at Title 6 of the Official  
14 Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Parts  
15 608, 663, 664, 701 702, 703, 704 and 750. In that context, I will discuss: (i) the factors the  
16 Department considers in making regulatory determinations pursuant to the applicable  
17 statutes and regulations; (ii) how these factors apply to the Project; and (iii) whether the  
18 Project has met the applicable State standards. I am advised by Department Counsel that  
19 the wetlands and stream programs, with each respective attendant statutory and regulatory  
20 authority, as well as State water quality standards, apply to the Project, as proposed, and to  
21 the New York State Board on Electric Generation Siting and the Environment's (Siting

1 Board's) deliberations pursuant to Article 10. Accordingly, my testimony discusses how  
2 the Siting Board must apply the State's statutory and regulatory (i) protection of waters  
3 program, (ii) wetlands program and (iii) the CWA, as implemented by the above-  
4 referenced State statutes and regulations, to its deliberations and required findings under  
5 Article 10 to ensure the Project's compliance therewith, should it decide to approve the  
6 Project.

7 **Q. What information has provided the basis for your testimony?**

8 A. My testimony is based on the Project application (Application), submitted by  
9 Bluestone Wind, LLC (Applicant) on September 18, 2018, specifically Exhibits 22 and 23  
10 and corresponding Appendices, together with a supplemental filing on December 10, 2018  
11 and an application update filed on April 19, 2019 (collectively the "Application"). I have  
12 also (i) reviewed the Applicant's responses to Interrogatory Requests DEC-1 and DEC-2  
13 relating to stream crossing details for access roads and utility crossings, marked as Exhibits  
14 NYSDEC-F-2 and NYSDEC-F-3, respectively and (ii) conducted a site visit of the Project  
15 site on October 26, 2018. I have reviewed all the above-referenced materials in the context  
16 of compliance with above-referenced statutory and regulatory programs.

17 **Q. Is there any information the Applicant has not provided that you believe is**  
18 **necessary to conduct a thorough review of the Project in order to assess its**  
19 **environmental impacts prior to preparing this testimony?**

20 A. Yes. Specific plans for each stream crossing are needed for a proper evaluation, along  
21 with the specific details on the wetland crossing and "jack and bore" of Oquaga Creek. On

1 March 12, 2019, the Department submitted Interrogatory/Document Requests (IR),  
2 identified as DEC-1 and DEC-2, to the Applicant seeking stream crossing details for  
3 proposed access roads and utility crossings. While the Applicant submitted a response on  
4 March 28, 2019, as set forth in Exhibits NYSDEC-F-2 and NYSDEC-F-3, the response  
5 was incomplete since it said that the final site-specific crossing details would be provided  
6 in the Site Engineering and Environmental Plan (SEEP). Without this information, I cannot  
7 comprehensively assess the environmental impacts of all the proposed access road and  
8 utility stream crossings.

9 **STATUTORY AND REGULATORY OVERVIEW**

10 **Q. Can you describe the Department's policy with respect to protection of the**  
11 **State's waters?**

12 A. Yes. The policy of New York State, set forth in Article 15, recognizes that New  
13 York is rich with valuable water resources, and directs us as stewards of the environment  
14 to preserve and protect certain lakes, rivers, streams, and ponds. These rivers, streams,  
15 lakes, and ponds are necessary for fish and wildlife habitat; drinking and bathing; and  
16 agricultural, commercial and industrial uses. In addition, New York's waterways provide  
17 opportunities for recreation; education and research; and aesthetic appreciation. Certain  
18 human activities can adversely affect, even destroy, the delicate ecological balance of these  
19 important areas, thereby impairing the uses of these waters.

20 **Q. How is Article 15 implemented with respect to stream protection?**

1 A. To implement this policy, the Department created the Protection of Waters program  
2 (*see* 6 NYCRR § 608) to prevent undesirable activities on water bodies by establishing and  
3 enforcing regulations that: (1) are compatible with the preservation, protection and  
4 enhancement of the present and potential values of the water resources; (2) protect the  
5 public health and welfare; and (3) are consistent with the reasonable economic and social  
6 development of the State. The objectives of the Department’s Protection of Waters  
7 Program are to (i) minimize the disturbance of streams and water bodies and (ii) prevent  
8 unreasonable erosion of soil; increased turbidity of the waters; irregular variations in  
9 velocity; temperature and level of waters; the loss of fish and aquatic wildlife; the  
10 destruction of natural habitat; and the danger of flood or pollution. The activities regulated  
11 under this Program include, but are not limited to, modification or disturbance of the bed  
12 or banks of “protected streams” (6 NYCRR § 608.2) and excavation and fill in navigable  
13 waters or wetlands adjacent to and contiguous to the navigable waters (6 NYCRR § 608.5).

14 **Q. What are considered protected streams?**

15 A. Protected streams are defined in 6 NYCRR § 608.1(aa) as streams or portions of  
16 streams that have any of the following water quality classifications or standards (in  
17 declining order of water quality): AA, AA (TS), AA(T), A, A(TS), A(T), B, B(TS), B(T),  
18 C(TS), or C(T). The designation of “T” means that the waters provide habitat in which  
19 trout can survive and grow; “TS” means that the waters provide conditions in which trout  
20 eggs can be deposited, fertilized, develop, hatch, and grow.

1 **Q. What are considered navigable waters or wetlands adjacent to and contiguous**  
2 **to the navigable waters?**

3 A. Navigable waters or wetlands adjacent to and contiguous to the navigable waters  
4 are defined in 6 NYCRR § 608.1(1) as all lakes, rivers, streams and other bodies of water  
5 which are navigable in fact or upon which vessels with a capacity of one or more persons  
6 can be operated notwithstanding interruptions to navigation by artificial structures,  
7 shallows, rapids or other obstructions, or by seasonal variation in capacity to support  
8 navigation. It does not include waters that are surrounded by land held on single private  
9 ownership at every point in their total area. Article 15 wetlands are defined in 6 NYCRR  
10 608.5 as wetlands that are adjacent to and contiguous at any point to any of the navigable  
11 waters of the state, and that are inundated at mean high water level.

12 **Q. What are the standards applicable to proposed activities that would impact**  
13 **State waters, including wetlands adjacent to navigable waters?**

14 A. Part 608.8 requires a determination that the proposed activity is in the public  
15 interest, in that the Applicant has shown that the proposal:

- 16 1) is reasonable and necessary;
- 17 2) will not endanger the health, safety, and welfare of the people of the State of New  
18 York; and
- 19 3) will not cause unreasonable, uncontrolled or unnecessary damage to the natural  
20 resources of the State, including soil, forests, water, fish, shellfish, crustaceans, and  
21 aquatic and land-related environment.

1 The State must consider the following factors in reviewing each proposal:

- 2 a) the environmental impacts of the proposal, including effects on fish and wildlife
- 3 habitat, water quality, hydrology, and watercourse and water body integrity;
- 4 b) the adequacy of project design and construction techniques;
- 5 c) operational and maintenance characteristics;
- 6 d) safe commercial and recreational use of water resources;
- 7 e) the water dependent nature of a use;
- 8 f) the safeguarding of life and property; and
- 9 g) natural resource management objectives and values.

10 **Q. In being consistent with the State's Protection of Waters program, what**  
11 **information must an applicant provide for the Siting Board to conduct its review?**

12 A. I have been advised by Department Counsel that, while activities regulated by  
13 Article 10 do not require an Article 15 protection of waters permit, the standards in  
14 subdivision Part 608.8 must be applied by the Siting Board in determining whether to issue  
15 a Certificate of Environmental Compatibility and Public Need pursuant to Article 10.  
16 Detailed information will be needed on the final crossing locations for both collection lines  
17 and access roads. Crossings must be of sufficient size and capacity to not restrict flows  
18 and conform to standard Department requirements. Information will be needed on the types  
19 of crossings proposed for each location along with engineered plans. For each crossing,  
20 drawings must be in both plan view and cross section, showing existing and proposed  
21 conditions, along with appropriate measurements such as existing and proposed bankfull

1 width, and proposed bridge, abutment or culvert width at the bankfull elevation, depth of  
2 embedment for any culverts with bottoms. Culvert outlet scour protection, such as a riprap  
3 outlet apron may be necessary for culverts with bottoms, or methods for retaining stream  
4 bed material and backing water into culverts. Perched culverts will not be acceptable  
5 because they prevent aquatic organism passage.

6 **Q. Can you describe the Department's policy with respect to freshwater**  
7 **wetlands?**

8 A. As articulated in Article 24, the State's policy with regard to wetlands is to preserve,  
9 protect, and conserve freshwater wetlands and the benefits that wetlands provide, to  
10 prevent the despoliation and destruction of freshwater wetlands, and to regulate use and  
11 development of such wetlands to secure the natural benefits of freshwater wetlands,  
12 consistent with the general welfare and beneficial economic, social and agricultural  
13 development of the State. The Department must take this public policy into consideration  
14 with respect to any proposed project that may impact regulated freshwater wetlands, or the  
15 associated regulated adjacent areas (being the area within 100 feet of a State-regulated  
16 wetland). Accordingly, if the Department determines that a project with potential adverse  
17 impacts to freshwater wetlands does not satisfy an economic or social need and does not  
18 meet specific permit issuance standards, the Department may find that the project does not  
19 meet statutory and regulatory standards.

20 **Q. How is Article 24 implemented?**

1 A. The Department's regulations contain the standards that implement the Freshwater  
2 Wetlands Act [*see, e.g.*, 6 NYCRR Parts 663 and 664]. Through Part 663, the Department  
3 has established procedures and standards to guide the review of permit applications for  
4 projects which propose to construct in, or adjacent to, freshwater wetlands. Part 664  
5 contains the mapping and classification standards and procedures of all wetlands protected  
6 under Article 24.

7 **Q. Can you describe how a regulatory review of proposed activities within a**  
8 **State-regulated wetland, or the associated regulated adjacent area, is conducted?**

9 A. In general, the burden is on an applicant to demonstrate that any proposed activity  
10 within a State-regulated wetland, or the associated regulated adjacent area, will comply  
11 with implementing regulations (see above), and all other applicable laws and regulations  
12 (6 NYCRR § 663.5(a)).

13 **Q. In being consistent with the State's freshwater wetlands program, what**  
14 **information must an applicant provide for the Siting Board to conduct its review?**

15 A. I have been advised by Department Counsel that, while activities regulated by  
16 Article 10 do not require an Article 24 freshwater wetlands permit, the standards in  
17 subdivision 6 NYCRR § 663.5(e) must be applied by the Siting Board in determining  
18 whether to issue a Certificate of Environmental Compatibility and Public Need pursuant to  
19 Article 10. In order for the Department to conduct a technical review of any project that  
20 will occur, in part or in its entirety, within a State-regulated wetland, or the associated  
21 regulated adjacent area, an applicant must provide detailed project plans of sufficient scale,

1 including, at minimum: (1) a delineated boundary for all wetlands on or near the project  
2 site; (2) the precise location of all temporary and permanent structures; and (3) the extent  
3 of all temporary and permanent disturbances, including clearing and grading. This  
4 information is not exhaustive – on a case-by-case basis, additional project information may  
5 be required for the Siting Board, as well as the Department, to complete their respective  
6 reviews and make regulatory determinations, including whether the project has met State  
7 statutory and regulatory standards. Under the Department’s review process, once all the  
8 needed information has been submitted, the examination of the project continues with a  
9 consultation of the Department’s mapped regulatory wetlands, as well as those unmapped  
10 wetlands that meet State criteria for jurisdiction, and geographical information systems  
11 data to determine if a protected wetland is located within 100 feet of the proposed project.  
12 If a regulated wetland is likely located on or near the project, the Department then considers  
13 the proposed activities associated with the project in relation to the delineated boundary of  
14 the wetlands, the activities listed in 6 NYCRR § 663.4(d), and the standards set forth in 6  
15 NYCRR § 663.5(e), before making an ultimate determination whether the project meets  
16 statutory and regulatory standards.

17 **Q. If it is determined that impacts to wetlands and streams are unavoidable, what**  
18 **information must the Applicant provide regarding mitigation to demonstrate**  
19 **compliance with Department’s requirements?**

20 A. The Wetland Mitigation Plan must include the details outlined in the document  
21 entitled “Appendix A – Guidance for the Development of Site Engineering and

1 Environmental Plan for the Construction of the Bluestone Wind Project” and submitted by  
2 the Applicant on June 6, 2019 (“SEEP Specifications”).

3 **Q. Are there any other applicable standards related to wetlands that would apply**  
4 **to the Project?**

5 A. Yes. The Project will require a Water Quality Certification (WQC) pursuant to  
6 Section 401 of the CWA. State water quality standards are set forth in 6 NYCRR § 608.9,  
7 with related regulations at 6 NYCRR Parts 701, 702, 703, 704 (Qualifications and  
8 Standards) and 750 (State Pollutant Discharge Elimination System (SPDES) Permits).

9 **Q. What are the standards for issuing a Section 401 WQC?**

10 A. The CWA requires that any applicant for a federal license or permit to conduct an  
11 activity that may result in a discharge into navigable waters must obtain a water quality  
12 certification from the State where the activity occurs. The standards for issuing a WQC  
13 are contained in 6 NYCRR § 608.9, with the burden placed on the applicant to demonstrate  
14 compliance with the following:

- 15 1) New York State effluent limitations and standards;
- 16 2) New York State water quality standards and thermal discharge criteria;
- 17 3) New York State new source standards;
- 18 4) New York State prohibited discharges; and
- 19 5) other New York State regulations and criteria otherwise applicable.

1 These standards mandate that the certifying agency require compliance with the  
2 Department's water quality regulations set forth at 6 NYCRR Parts 701, 702, 703, 704 and  
3 applicable provisions of Part 750.

4 **ENVIRONMENTAL IMPACTS**

5 **Q. Can you describe the Project's adverse impacts on wetlands?**

6 A. The Project involves the installation of turbines; construction of temporary and  
7 permanent access roads; and the installation of buried collection lines; which result in  
8 temporary and permanent impacts to the wetlands that are traversed. In general, any  
9 temporary and permanent disturbances of wetlands, including placement of fill or  
10 excavation activities result in the loss of wetland benefits and functions such as wildlife  
11 habitat, stormwater retention and treatment, and groundwater recharge. Permanent impacts  
12 to the wetland may result in changes in hydrology such as draining or increasing water in  
13 a wetland.

14 **Q. Are there State-regulated wetlands within this Project's proposed boundary?**

15 A. Based on my review of the Application, specifically Exhibits 22 and 23, and  
16 corresponding Appendices; the Application Supplement filed on December 10, 2018; the  
17 Application Update filed on April 19, 2019; my field review conducted on October 26,  
18 2018; and my knowledge of the area, no wetlands regulated under Article 24 or their  
19 associated 100 foot adjacent area are located within the Project's boundary. However,  
20 should the Project be revised, an additional evaluation of State-regulated wetlands would  
21 be required. There is one Article 15 regulated wetland, which is adjacent to and contiguous

1 to navigable waters, within the Project area. It is associated with Oquaga Creek and does  
2 not have a specific Department wetland identifier.

3 **Q. Will the Project, as proposed, involve activities regulated by Article 24,**  
4 **including freshwater wetlands and adjacent areas?**

5 A. No, as described previously, as currently proposed, there are no wetlands or  
6 adjacent areas regulated by Article 24 within the Project's proposed boundary.

7 **Q. Will the Project, as proposed, entirely avoid State-regulated wetlands and**  
8 **adjacent areas?**

9 A. No, there is vegetative clearing, filling and excavation proposed in State-regulated  
10 Article 15 wetlands.

11 **Q. Does the Project, as proposed, meet its statutory and regulatory burden under**  
12 **Article 24 and Part 663?**

13 A. Because the Project, as proposed, does not involve activities regulated by Article  
14 24, this is not currently applicable for this Project.

15 **Q. Are there State-regulated waterbodies within the proposed Project site for the**  
16 **Project, as proposed?**

17 A. Yes, based on my review of the initial application materials limits of clearing and  
18 ground disturbance associated with the revised Project layout and the field visit. There are  
19 numerous State-regulated waterbodies within the Project area which will be crossed by  
20 either collection lines or access roads. According to the impact table supplied with the  
21 initial Application, there are impacts to a Class - B(T) stream, approximately eight impacts

1 to Class - C(T) streams, an impact to a Class C-navigable stream, one impact to a Class C  
2 stream and eleven impacts to unclassified streams. Not included in the impact table  
3 submitted by the Applicant, is an impact to a Class A stream and an impact to a Class C(T)  
4 stream. There is a total of 24 crossings according to the Application and NYSDEC desktop  
5 review. A revised table submitted by the Applicant shows impacts will be greatly reduced  
6 on eight streams using trenchless crossing technologies. The listed unclassified streams  
7 need field verifications to determine if they will be assigned the classification of the  
8 receiving waters according to Part 931.2 (i) or (j).

9 **Q. Can you describe the Project's negative impacts on State-regulated**  
10 **waterbodies?**

11 A. Based on my review of the submitted materials, the Applicant is proposing both  
12 permanent and temporary stream impacts. The Applicant has estimated a total of 1,418  
13 linear feet of permanent stream impacts and 1,653 feet of temporary impacts. I understand  
14 this to mean a linear distance following the course of the stream bed. Direct impacts to  
15 streams include: 1) direct placement of fill in surface waters to accommodate road  
16 crossings, causing suspension of sediments and turbidity; 2) installation of culverts which  
17 may over time become perched causing fragmentation of stream habitat and limiting the  
18 upstream downstream movement of fish and other aquatic organisms; 3) potential blockage  
19 of culverts, causing erosion and property damage; 4) disturbance of stream banks and/or  
20 substrates resulting from buried cable installation, which may increase the potential for  
21 erosion; 5) an increase in water temperature and conversion of cover type due to clearing

1 of vegetation; which can disrupt the foodweb and affect insect and fish populations; and 6)  
2 siltation and sedimentation due to earthwork, such as excavating and grading activities,  
3 which can set off streambed headcuts and contribute further sedimentation and  
4 disconnection of the stream from its floodplain, ultimately causing erosion and property  
5 damage. These impacts directly and adversely affect the best usages of a stream, such as  
6 for fish propagation and survival, pursuant to 6 NYCRR § 701.8.

7 **Q. Has the Applicant demonstrated that the Project, as proposed, meets the**  
8 **applicable statutory and regulatory standards described above?**

9 A. Yes, with the following exceptions, the Applicant has demonstrated that the Project,  
10 as proposed, meets the applicable statutory and regulatory standards described above, so  
11 long as, in any Article 10 Certificate ultimately issued for the Project, the Siting Board  
12 includes the proposed Certificate Conditions as set forth in the document entitled “Final  
13 Proposed Conditions” and submitted by the Applicant on June 6, 2019 (“Final Proposed  
14 Conditions”) and the SEEP Specifications:

15 • The Applicant has agreed to prepare site-specific Stream Crossing Plans for each  
16 underground utility crossing where a trenchless crossing is not practicable,  
17 however, the applicant has not agreed to provide any analyses conducted by a  
18 Professional Engineer licensed in New York State. To determine if the selected  
19 crossing method is reasonable and necessary and will not cause unreasonable,  
20 uncontrolled or unnecessary damage to the natural resources of the State, including  
21 water, fish and the aquatic environment, an alternative analysis should include a

1 detailed explanation of the site-specific conditions that lead to the conclusion that  
2 a trenchless crossing method is not constructible or feasible at the given stream  
3 crossing.

- 4 • The Applicant has agreed to conduct an analysis of the proposed collection line  
5 crossings of Oquaga Creek, including an analysis of vertical and lateral profiles for  
6 Oquaga Creek, however the applicant should conduct an analysis for all of the  
7 underground stream crossings to determine the proper site-specific separation  
8 distances between the top of the buried cable and the stream bed to prevent  
9 exposure of the cable from both vertical and horizontal stream erosion and  
10 movement. The analyses must be conducted and certified by a professional  
11 engineer licensed in New York State and must include all calculations associated  
12 with analyses as well as a definitive statement by the engineer that the separation  
13 will prevent exposure of the line at each stream crossing as a result of stream  
14 erosion for the expected life of the cable.

15 **Q. What must the Applicant provide to demonstrate compliance with Article 15**  
16 **and Part 608?**

17 **A.** In order to ensure compliance with Article 15 and Part 608, the Applicant must  
18 provide all of the information required in Section B-17 – Wetlands and Waterbodies of the  
19 SEEP Specifications, in addition to the exceptions listed above.

20 **PROPOSED CERTIFICATE CONDITIONS**

1 **Q. What would your recommended Proposed Certificate Conditions include with**  
2 **respect to State-regulated freshwater wetlands and streams?**

3 A. Based on the foregoing, to ensure compliance with the applicable State statutory  
4 and regulatory standards I previously described in my testimony, and subject to the  
5 Applicant avoiding and/or minimizing impacts to State-regulated streams and wetlands to  
6 the maximum extent practicable, I recommend the Siting Board include both the Final  
7 Proposed Conditions and SEEP Specifications related to State-regulated streams and  
8 wetlands and State water quality standards in any Article 10 Certificate ultimately issued,  
9 with the following exceptions:

- 10 • Certificate Condition 113 shall read, “Bridges shall be installed wherever a new  
11 permanent crossing is required. If a bridge is not practicable, a culvert crossing will  
12 be utilized for stream crossings and shall meet the following NYSDEC and/or U.S.  
13 Army Corps of Engineers requirements as outlined in Section B of the Appendix  
14 A, “Guidance for the Development of Site Engineering and Environmental Plan for  
15 the Construction of the Bluestone Wind Project”.
- 16 • Certificate Condition 129 shall read, “Any in-stream habitat structures placed in a  
17 stream must not create a drop height greater than 6 inches”.
- 18 • In order to be consistent with the Final Proposed Conditions, SEEP Specification  
19 B-18(a)(iii) shall read, “A postconstruction monitoring program (MP) shall be  
20 conducted in year 1, year 3 and year 5, following completion of construction and

1 restoration. The MP shall collect information to facilitate evaluation of ISCP  
2 effectiveness”.

3 **Q. Do you hold your opinions to a reasonable degree of scientific certainty?**

4 A. Yes, I do.

5 **Q. Does this conclude your direct testimony on these topics at this time?**

6 A. Yes, it does.