STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Case 18-T-0604 - Application of Deepwater Wind South Fork, LLC for a Certificate of Environmental Compatibility and Public Need for the Construction of Approximately 3.5 Miles of Submarine Export Cable from the New York State Territorial Waters Boundary to the South Shore of the Town of East Hampton in Suffolk County and Approximately 4.1 Miles of Terrestrial Export Cable from the South Shore of the Town of East Hampton to an Interconnection Facility with an Interconnection Cable Connecting to the Existing East Hampton Substation in the Town of East Hampton, Suffolk County.

JOINT PROPOSAL

By:

Deepwater Wind South Fork, LLC PSEG Long Island Win with Wind Montauk United Concerned Citizens of Montauk The Group for the East End, Inc. Deborah Foster Michael Hansen Cathy Rogers

Dated: September 17, 2020 Albany, New York

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DRAFT JOINT PROPOSAL

This Joint Proposal, which includes Appendices A through L attached hereto and incorporated herein, is made as of this 17th day of September, 2020, by and among the following parties (collectively referred to herein as the "Signatory Parties"): Deepwater Wind South Fork, LLC ("DWSF" or "Applicant"), PSEG Long Island ("PSEG-LI") on behalf of and as an agent for the Long Island Power Authority ("LIPA"), Win With Wind, Montauk United, Concerned Citizens of Montauk, the Group for the East End, Inc., Deborah Foster, Michael Hansen, and Cathy Rogers,¹ pursuant to Rule 3.9 of the Procedural Rules of the New York State Public Service Commission (the "Commission"), 16 NYCRR § 3.9 (2018).

INTRODUCTION

On September 14, 2018, DWSF filed an application ("Application") for a Certificate of Environmental Compatibility and Public Need ("Certificate") to construct, operate, and maintain the South Fork Export Cable ("SFEC"), a 138 kilovolt ("kV") alternating current ("AC") electric

¹ The Trustees of the Freeholders and Commonality of the Town of East Hampton ("Trustees") plan to vote on whether they will become a Signatory Party to the Joint Proposal after the document has been filed with the Secretary to the Public Service Commission. In the event such vote is in favor of signing the Joint Proposal, the Trustees' signature page will be filed separately in this proceeding.

cable that will connect the South Fork Wind Farm ("SFWF")² to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments, as described below.

Project Description

The SFEC includes the SFEC-NYS, SFEC-Onshore, and SFEC-Interconnection Facility, each of which is described below. The SFEC-NYS, SFEC-Onshore, and SFEC-Interconnection Facility are hereafter collectively referred to as "the Project." For purposes of the Joint Proposal, "Project Area" is defined as the area in which the Applicant is authorized to construct, operate, maintain, repair, and decommission the Project, including any marshalling yards and laydown areas, pursuant to any permanent and/or temporary easements, leases, licenses, right of way agreements, or other land use authorizations it receives. The Applicant shall further detail the Project Area in the Environmental Management and Construction Plan ("EM&CP").

SFEC-New York State

The SFEC-New York State ("SFEC-NYS"), is the proposed submarine segment of the export cable buried beneath the seabed within state territorial waters from the boundary of New York State waters (three nautical miles offshore) up to, and inclusive of, a sea-to-shore transition vault located in the Town of East Hampton ("Town") on Long Island, Suffolk County, New York. The SFEC-NYS corridor crosses into New York State territorial waters south of Wainscott Beach,

² The SFWF and the portion of the SFEC located in the Outer Continental Shelf ("SFEC-OCS") are situated within federal waters and are thus outside the scope of the instant proceeding. However, in order to provide the Commission with context in this proceeding, there are references to the Construction and Operations Plan ("COP") that is being considered in the SFWF siting proceeding pending before the Bureau of Ocean Energy Management ("BOEM"). Accordingly, concurrent with the filing of this Joint Proposal, Applicant is filing a motion requesting that the Commission incorporate by reference the COP as filed with BOEM in accordance with 16 NYCRR § 85-2.7.

East Hampton, New York at a point three nautical miles ("nm") offshore in the North Atlantic Ocean. The SFEC-NYS corridor is approximately 3.5 miles (3.1 nm) long from the New York State territorial waters boundary to the point where the sea-to-shore transition begins.

The SFEC-NYS also includes the sea-to-shore transition where the SFEC-NYS will be connected to the SFEC-Onshore. The sea-to-shore transition will include a new onshore transition vault where the offshore and onshore cables will be spliced together. The vault will be located underground within the existing pavement of Beach Lane (at least 500 feet from the southern edge of the beach/pavement boundary) with a manhole cover at the surface. The sea-to-shore transition corridor starts at the offshore exit point of the horizontal directional drilling ("HDD") (approximately 1,750 feet offshore from Mean High Water Line ("MHWL") in 25 to 40 feet of water) and terminates at the onshore transition vault located at the south end of Beach Lane within the public road right-of-way ("ROW").

SFEC-Onshore

The SFEC-Onshore is the proposed terrestrial underground segment of the export cable from the sea-to-shore transition vault to the SFEC-Interconnection Facility where the SFEC will interconnect with the Long Island Power Authority ("LIPA") electric transmission and distribution system in the Town of East Hampton. The entire SFEC-Onshore corridor is approximately 4.1 miles long. The SFEC-Onshore begins at the sea-to-shore transition vault within the Beach Lane road ROW and continues to the northwest for approximately 0.7 miles until the intersection with Wainscott Main Street. From the intersection of Beach Lane and Wainscott Main Street, the SFEC-Onshore turns northeast along Wainscott Main Street for 0.06 miles and subsequently northwest on Sayre's Path for 0.04 miles. The SFEC-Onshore then turns generally north as it travels along Wainscott Stone Road for approximately 0.2 miles. The SFEC-Onshore turns on to Wainscott Northwest Road and travels approximately 1.1 miles, generally northwest past Montauk Highway/State Route 27 to the Long Island Rail Road ("LIRR"). From there, the SFEC-Onshore continues in a generally east direction within a portion of the LIRR ROW south of the railroad tracks, past Daniels Hole Road, Stephen Hands Path, and Buckskill Road. The SFEC-Onshore extends along the southern portion of the LIRR ROW for approximately 2.0 miles, at which point it reaches the location of the SFEC-Interconnection Facility.

SFEC-Interconnection Facility

In addition to the SFEC, DWSF is proposing to construct, operate, and maintain the SFEC-Interconnection Facility. The SFEC-Interconnection Facility is a new onshore facility, primarily consisting of a transformer and a 69 kV interconnection cable connecting to the 69 kV bus in the existing LIPA East Hampton Substation, on Cove Hollow Road in the Town of East Hampton, New York. The SFEC-Interconnection Facility is located adjacent to the existing East Hampton Substation, on the same parcel in the Town of East Hampton's Commercial Industrial zoning district. The property is owned by National Grid Generation, LLC, and the existing facilities are operated by other utilities (e.g., LIPA). The SFEC-Interconnection Facility consists of an approximately 2.7-acre work area corridor adjacent to the existing East Hampton Substation and a corridor for the 69 kV interconnection cable along the southern edge of the existing East Hampton Substation facilities (approximately 642 feet long by 24 feet wide). Within the 2.7 acre work area corridor, the SFEC-Interconnection Facility will be surrounded by a maintenance road and an exterior perimeter wall. The footprint of the SFEC-Interconnection Facility is anticipated to be approximately 228 feet by 313 feet, including the road and wall (approximately 1.6 acres), oriented roughly on a north-south axis.

Procedural Background

On December 14, 2018, DWSF received a letter from the Secretary of the New York Public Service Commission ("Secretary") notifying it of certain deficiencies in its Application ("Deficiency Letter"). DWSF filed additional information in response to the Deficiency Letter on January 22, 2019. On March 20, 2019, DWSF received a letter from the Secretary notifying it that the Application had been deemed in compliance with Public Service Law ("PSL") Section 122.

Public statement hearings regarding the Project were held before Administrative Law Judge ("ALJ") Anthony Belsito at 3:00 P.M. and 7:00 P.M. on Tuesday, June 11, 2019 at the East Hampton Firehouse. Each public statement hearing was preceded by a public information session. A procedural conference of the active parties was held before ALJ Belsito in Albany, New York on June 14, 2019.

After exploratory discussions among the parties, a Notice of Impending Settlement Discussions ("Initial Notice of Settlement") was sent to all active parties and other interested persons on September 24, 2019 scheduling the initial settlement meeting for October 8, 2019. In response to the objections of several parties, DWSF filed a Notice Cancelling Settlement and Requesting Appointment of a Settlement Judge with the Secretary on October 7, 2019. ALJ Gregg Sayre was appointed as Settlement Judge on October 16, 2019, and on October 23, 2019, DWSF sent a Revised Notice of Impending Settlement Negotiations to all active parties and other interested persons. Settlement conferences were held in person or by telephone on November 8, 2019, November 20-21, 2019, December 13, 2019, December 18, 2019, January 8-9, 2020, January 22-23, 2020, February 5-6, 2020, February 28, 2020, March 4-6, 2020, March 10, 2020, March 30-31, 2020, April 7 and 9, 2020, April 17, 2020, April 21, 2020, May 7, May 8, May 19,

and May 27, June 8, June 23, 2020, and July 28, 2020. Electronic communications were also utilized to facilitate settlement discussions.

After thorough discussion of the issues, the Signatory Parties recognize that the parties' various positions could be addressed through settlement and agree that settlement is feasible. As detailed in this Joint Proposal, the Signatory Parties will work toward the objective of recommending that the Commission issue the Certificate, as early as practicable, in order for construction to commence in accordance with the Certificate.

TERMS OF JOINT PROPOSAL

I. General Provisions

- It is understood that each provision of this Joint Proposal is in consideration and support of all the other provisions of this Joint Proposal and is expressly conditioned upon approval of the terms of this Joint Proposal in full by the Commission. If the Commission fails to adopt the terms of this Joint Proposal in full, or adds additional terms, the Signatory Parties to the Joint Proposal shall be free to accept the Commission's terms or to individually pursue their respective positions in this proceeding without prejudice.
- 2. The Signatory Parties agree to submit this Joint Proposal to the Commission along with a request that the Commission adopt the terms and provisions of this Joint Proposal as set forth herein. The Signatory Parties agree that construction, operation, and maintenance of the Project in compliance with the Joint Proposal and with the Proposed Certificate Conditions set forth in Appendix D, attached hereto, will comply with PSL Article VII and with the substantive provisions of applicable state law referenced in the Proposed Commission Findings set forth in Appendix C attached hereto.

- 3. All Signatory Parties fully support approval of the Joint Proposal in its entirety. The Signatory Parties recognize that certain provisions of this Joint Proposal contemplate actions to be taken in the future to effectuate fully this Joint Proposal, including the review under the National Environmental Policy Act ("NEPA"), which must be completed in order to allow Federal agencies to issue permits and approvals necessary in order to allow construction of the SFWF, SFEC-NYS, SFEC-Onshore and SFEC-OCS to proceed. Accordingly, the Signatory Parties agree to cooperate with each other in good faith in taking such actions and to refrain from taking any action(s) or position(s) in these or any other federal proceedings relating to the siting or other environmental impacts of the Project, SFWF, SFEC-NYS, SFEC-Onshore, or SFEC-OCS that would conflict with the construction and operation of the Project as agreed to in this Joint Proposal, with the exception that the authority and responsibilities of the New York State Department of State ("NYSDOS") pursuant to Article 42 of the Executive Law and the federal consistency review requirements of the Coastal Zone Management Act (16 U.S.C. sections 1451 et seq.) 15 C.F.R. Part 930 subparts D and E are not affected by this provision. In addition, if a federal regulatory agency from which permits or approvals are required for the SFWF, SFEC-NYS or SFEC-OCS issues a permit that requires a change to the Certificate Conditions that will result in an increase to the adverse environmental impacts or is directly related to contested issues decided by the Administrative Law Judge or the Commission during this proceeding the Signatory Parties to the Joint Proposal shall be free to accept the proposed change or to individually pursue their respective positions in this proceeding without prejudice.
- 4. This Joint Proposal shall not constitute a waiver by the Applicant of any rights it may otherwise have to apply for additional or modified permits, approvals, or certificates from the Commission or any other agency in accordance with relevant provisions of law.

- 5. Nothing in this Joint Proposal shall be construed as either waiving or expanding in any way the authority of any state agency to enforce the laws and regulations that are the subject of its jurisdiction.
- This Joint Proposal is being executed in counterpart originals and shall be binding on each Signatory Party when the counterparts have been executed.
- 7. Appendix A attached hereto lists the testimony, affidavits, and exhibits that constitute the evidence agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding (collectively, the "Evidentiary Record"). The Evidentiary Record includes all responses to information requests ("IRs") produced in this proceeding, which the Signatory Parties believe contribute accurate, material, and relevant information to the Evidentiary Record in support of the Project described in this Joint Proposal.

II. Description of the Project

8. The Signatory Parties agree that the Description and Location of Project set forth in Appendix B, attached hereto, accurately describes the location, configuration, and ownership of the Project as they recommend it be approved by the Commission (the "Project"). Appendix B includes a detailed description of the components of the Project that would be constructed, owned, and operated by DWSF.

III. Environmental Compatibility and Public Need

9. The Commission must consider the totality of all relevant factors in making its determination of environmental compatibility and public need. The relevant factors include, without limitation, and in no order of priority, the basis of the need, cost, environmental impact, availability and impact of alternatives, conformance to long-range plans, electric system reliability, state laws and local laws, and the public interest, convenience, and necessity.

A. Need for the Project

- 10. As described in Exhibit 3 of the Application, the purpose of the Project is to transmit electricity generated by the SFWF to the existing East Hampton Substation. The Project, in conjunction with the SFWF, addresses the need identified by LIPA in its 2015 technology-neutral competitive bidding process ("South Fork RFP") for new sources of power generation that could cost-effectively and reliably supply the South Fork of Suffolk County, Long Island. Further, the SFEC will help LIPA achieve its renewable energy goals.
- 11. In 2015, PSEG Long Island established the South Fork Supply and Load Relief Project to defer new transmission needed on the South Fork until the year 2022 and to defer transmission needed east of the Buell substation until 2030. It developed the South Fork RFP to:
 - Acquire additional local power production and/or load reduction resources in the South Fork to meet projected load growth and thereby defer the need for new transmission infrastructure;
 - b. Support load demand to avoid overload of existing transmission assets during transmission outages that limit transmission capacity to the South Fork load area; and
 - c. Support system voltage to avoid voltage collapse during a transmission outage.
- 12. The SFWF, along with other proposals, was selected as a portfolio because it most costeffectively meets these needs as established by PSEG Long Island. On February 6, 2017, LIPA and DWSF executed a power purchase agreement ("PPA") for the SFWF that requires energy from the SFWF to be delivered to the LIPA 9EU-East Hampton Substation. The SFEC is required to interconnect the SFWF to the East Hampton Substation pursuant to the PPA.
- 13. The Project is needed to interconnect and reliably deliver the output of the SFWF to the transmission system. The Project, along with the SFWF, will serve the public interest by, *inter*

alia, contributing to State energy policy goals in the State Energy Plan and Clean Energy Standard, diversifying the State's electric generation mix and lowering greenhouse gas emissions. In addition, from the standpoint of electric reliability, the New York Independent System Operator, Inc. ("NYISO") performed a System Impact Study which showed that the interconnection of the Project will not adversely impact the New York bulk electric system.

B. Cost

14. DWSF provided the estimated total capital costs of the Project as part of Confidential Application Exhibit 9. Such costs include, but are not limited to: (i) land acquisition; (ii) licensing, permitting, and legal fees; (iii) interest during construction; (iv) materials and equipment: (v) sales tax; (vi) utility labor; (vii) construction labor; (viii) engineering; (ix) consultants; (x) access roads; (xi) contingencies; and (xii) inspection costs.

C. Environmental Impact

- 15. The Evidentiary Record describes the nature of the probable environmental impacts of the Project. These include potential impacts to land uses, visual and aesthetic resources, cultural resources, commercial and for-hire fisheries (hereinafter referred to as "NYSDEC-Licensed Fishermen") and recreational fishing, terrestrial and aquatic wildlife, and habitat including fisheries, wetland and water resources, topography and soils, transportation, noise, communications, and electric and magnetic fields, which are briefly summarized below.
- 16. The Signatory Parties agree that the Project, as described in this Joint Proposal and the accompanying Appendices, including the proposed Certificate Conditions, will be designed, constructed and operated in a manner that avoids or minimizes to the extent practicable any significant adverse impacts to environmental resources, considering the state of available

technology and the nature and economics of the various alternatives and other pertinent considerations.

- 17. Categorized by type of impact, the following sections address the potential for environmental impacts to result from the proposed construction and operation of the Project.
 - i. Land Use
- 18. Existing land use along the SFEC-NYS corridor is entirely vacant underwater land, with the exception of the sea-to-shore transition that traverses the beach. The existing land uses along the majority of the SFEC-Onshore corridor and the sea-to-shore transition corridor are predominantly low-medium residential (all single-family residences) and vacant land (undeveloped land not reserved as a community preservation area or a nature preservation area). To a lesser extent, the area also includes commercial, transportation (*e.g.*, land associated with the East Hampton Airport), industrial, agricultural, institutional/community facilities (including schools, libraries, fire departments, police stations, religious centers, and recreational facilities), recreational uses (*parks* and recreational clubs), and open space. The area surrounding the public road ROWs (*i.e.*, Beach Lane, Wainscott Main Street, Sayre's Path, Wainscott Stone Road, Wainscott Northwest Road and Montauk Highway) consists of predominantly single-family residential uses, with areas of agricultural uses (on Beach Lane), and vacant land.
- 19. As the SFEC-Onshore corridor crosses Montauk Highway/State Route 27 and continues on Wainscott Northwest Road, land uses vary, but is mostly comprised of commercial, institutional, open space, and industrial uses. Where the SFEC-Onshore corridor transitions from utilizing existing public road ROWs to the LIRR ROW, the nearby land uses become Railroad-Transportation. Specifically, there are industrial, commercial,

institutional/community facilities, recreational, vacant land, open space, single-family residential and utility/transportation uses in this segment of the SFEC-Onshore corridor to the SFEC-Interconnection Facility.

- 20. The SFEC-Interconnection Facility will be located adjacent to the existing East Hampton Substation, on the same parcel in the Town of East Hampton's Commercial Industrial zoning district.
- 21. The SFEC-NYS and SFEC-Onshore will be installed beneath the seabed or underground; therefore, after construction is completed, the Project will not adversely impact visual or other environmental resources that may affect land use patterns. With the exception of the HDD exit pit, the maximum temporary limit of disturbance during construction is 180 meters wide along the cable corridor. At the HDD exit pit, due to the anchorage needs of the barges, the maximum temporary limit of disturbance is 500 meters wide. The maximum permanent limit of disturbance will be significantly less than the temporary maximum limits of disturbance.
- 22. Construction of the Project will result in short-term, minor, and localized impacts to land use. The SFEC-Onshore and the sea-to-shore transition will be constructed entirely underground, with the SFEC-Onshore cable located within existing State and Town-road ROWs and along the LIRR ROW. Any areas temporarily disturbed during installation of the SFEC-Onshore and the sea-to-shore transition corridor will be restored to pre-construction conditions. The Applicant will perform construction activities in accordance with local zoning requirements or other regulatory approvals as discussed in Application Exhibit 7.³ Therefore, the Project will not conflict with current land uses or future planned land uses within, adjacent, or proximate to the Project Area.

³ Except as discussed in Section G, *infra*.

- 23. While construction activities will temporarily disturb ground surfaces within locations mapped as flood hazard areas along portions of the Project, the cable will ultimately be an underground facility, with limited or no new associated impervious surfaces, and will not increase the base flood elevation in any flood hazard area. Furthermore, the SFEC-Interconnection Facility is located within an area of minimal flood hazard and, therefore, will not impact base flood elevations.
- 24. The Project is not anticipated to impact agricultural land uses in the Agricultural Districts, as the SFEC-Onshore will be installed underground within existing public road ROWs and along the LIRR ROW. At the sea-to-shore transition location,⁴ the SFEC-Onshore will be installed beneath Beach Lane, which is not an agricultural use or within an Agricultural District. Installation work within the Town-road ROW is not anticipated to disrupt agricultural operations at the Agricultural District properties abutting Beach Lane and Wainscott Main Street. During construction, the Applicant will minimize potential impacts on adjacent agricultural land by limiting vegetation clearing and ground disturbance to the construction corridor. There is a farm stand located at the intersection of Beach Lane and Wainscott Main Street and the proposed Certificate Conditions require the Applicant to maintain access to and parking for the farm stand (36[e]).⁵ The SFEC-Onshore will continue to the SFEC-Interconnection Facility which is also not an agricultural use or within an Agricultural District.
- 25. The Project is not anticipated to impact parks and recreational resources, as the SFEC-Onshore will be underground, entirely below grade within public road ROWs and the LIRR ROW, and the SFEC-Interconnection Facility will be installed adjacent to the existing East Hampton

⁴ The sea-to-shore transition is part of the SFEC-NYS.

⁵ All numbered references in parentheses refer to proposed Certificate Conditions as set forth in Appendix D.

Substation. The sea-to-shore transition will also be installed underground, and low impact HDD will be utilized to limit potential impacts to Beach Lane and Wainscott Beach for the installation of the sea-to-shore transition corridor. Except as needed for delivery and setup of HDD equipment and delivery and installation of the sea-to-shore transition vault, the Applicant will maintain continual pedestrian and vehicular use of the Beach Lane parking area and access to Wainscott Beach. The proposed Certificate Conditions require the Applicant to provide in the EM&CP a Highway Work Plan (49) and a Maintenance and Protection of Traffic Plan (36[e]) that will include details regarding maintaining vehicular access on roadways, including Beach Lane. Moreover, the proposed Certificate Conditions limit construction on Beach Lane to the period of October 1 through April 30, with a limited exception allowing construction through May 15 under specific conditions (69). This construction window further mitigates any temporary construction impacts to the use of Wainscott Beach resulting from construction of the Project. Accordingly, it is anticipated that the duration of disturbance will be limited to the construction period and there will be no permanent impact upon parks and recreational resources.

26. The Project will be consistent with the 2016 New York State Open Space Conservation Plan ("Conservation Plan") as the SFEC-NYS and SFEC-Onshore will not impact access to New York State territorial waters. The SFEC-Onshore will be located underground within public road ROWs and the LIRR ROW, thereby not affecting preserved open space as identified in this plan. The SFEC-Onshore will not impact land that is identified as proposed to be acquired in the Conservation Plan. Moreover, the Project is also consistent with local land use plans and policies in Suffolk County, and in the Town of East Hampton. These local plans were considered when designing the route and configurations of the Project to promote compatibility with existing and future land use.

ii. Visual Resources

- 27. As discussed and demonstrated in Exhibit 4 of the Application, the long-term visual impacts of the Project are anticipated to be minor as the only component of the Project that will be visible after construction, other than cable vault manhole covers at ground elevation, is the SFEC-Interconnection Facility.
- 28. Visual impacts during construction are anticipated to be minor and short-term. During construction, there will be a temporary increase in truck traffic on area roadways in the vicinity of the Project. Local residents, commuters, and visitors may experience views of these conventional construction vehicles on roadways and/or see them at work on site. During construction, the site will have a comparable appearance to a typical construction project. Construction of the SFEC-Interconnection Facility will be initiated by clearing woody vegetation from the site. Trees cleared from the work area will be removed and disposed of offsite. This will be a relatively small, but permanent, loss of forest habitat, as well as the visual screening it provides. Clearing will be limited to the minimum needed for safe construction and operation of the interconnection facility, and measures to avoid or minimize damage to trees not cleared will be implemented. Following construction activities, temporarily disturbed areas around the periphery of the SFEC-Interconnection Facility will be seeded (and stabilized with mulch and/or straw if necessary) to reestablish vegetative cover in these areas per the approved Stormwater Pollution Prevention Plan, as well as planting of vegetation screening, which will be detailed in the Project EM&CP.

29. Once installed, the potential visibility of the SFEC-Interconnection Facility will be generally limited to a few areas within approximately a quarter mile of the site. Where visible, it is expected that views of the SFEC-Interconnection Facility from most of these areas will be limited to the uppermost portions of the lightning masts. The proposed Certificate Conditions require that the design basis for the lightning masts will be forty-five (45) feet or less (12[b]). Due to the relatively small size and modest height of the SFEC-Interconnection Facility, and because the site is largely surrounded by forest, long distance views, and views from visually sensitive resources have largely been avoided. Existing vegetation that will remain following construction also minimizes visual impact from adjacent sites (including residences). A wall will be constructed at the SFEC-Interconnection Facility that will provide additional visual screening as well as noise reduction. The proposed Certificate Conditions require that the wall be 12 feet in height or less (12[c]) (depending on final equipment and facility design, to minimize noise at residential receptors) and further require the Applicant to consult with the Town of East Hampton Architectural Review Board regarding the design of the wall (56). In addition, the proposed Certificate Conditions require the Applicant to include a Lighting Plan in the EM&CP that will include exterior lighting designed to avoid off-site lighting effects which will further avoid and minimize visual impacts from the SFEC-Interconnection Facility (39). Moreover, the SFEC-Interconnection Facility is sited adjacent to existing utility infrastructure, thereby avoiding the potential introduction of utility-related visual elements in areas where such facilities are not currently part of the landscape. The SFEC-Interconnection Facility will not be visible from, or will have a negligible visual effect on, the aesthetic resources of the East Hampton Scenic Areas of Statewide Significance within the study area. By selecting this location for the SFEC-Interconnection Facility, the siting of the Project will

not impair scenic beauty and will be consistent to the maximum extent practicable with the scenic policies of the Town of East Hampton Local Waterfront Revitalization Program in accordance with Executive Law § 912(1) and Executive Law § 915(8). As a result, operation of the SFEC-Interconnection Facility is not anticipated to result in significant changes to the existing visual character or scenic quality of the visual study area.

- 30. Maintenance impacts are anticipated to be similar to impacts during the construction phase, except at a smaller scale as described in Paragraph 37, *infra*.
 - iii. <u>Transportation</u>
- 31. The Project is expected to minimize impacts on roadway, bus, railroad, and air travel, as well as navigable waterways, to the maximum extent practicable. The SFEC-Onshore corridor is entirely within existing public road ROWs and the LIRR ROW from the sea-to-shore transition vault located at the Beach Lane landing site to the SFEC-Interconnection Facility located off of Cove Hollow Road. The SFEC-Onshore crosses 16 roadways, as described in Application Exhibit E-6, three of which occur along the LIRR ROW, in the Town of East Hampton in Suffolk County, New York. The road crossings do not include any major roadways (defined as three or more lanes). All road crossing in Town owned roads will be performed using an open trench method. The road crossing technique used to cross the New York State Department of Transportation ("NYSDOT") owned Montauk Highway/Route 27 will be performed in accordance with an NYSDOT highway work permit which the Applicant will apply for in accordance with applicable NYSDOT regulations (17) and may be performed using an open trench method or by using HDD.
- 32. Construction of the Project will result in short-term, minor impacts to the roadways presented in Exhibit E-6 of the Application. The proposed Certificate Conditions limit ground disturbing

construction activities along public road ROWs to the period from October 1 through April 30 and, as such, will occur outside of the tourist season (69). During the period of onshore construction in NYSDOT owned highways rights-of way there will be no lane closures and traffic will be shifted as necessary to maintain one 12-foot lane in each direction (50[a]) In other non-NYSDOT owned highways rights-of way, DWSF will use, and will cause its contractors to use, best efforts to maintain at least one travel lane of traffic in the section(s) of the Town or non- NYSDOT owned highways rights-of way in which its crews are working; however, during certain portions of the work, temporary road closures may be necessary. To ensure traffic moves safely, traffic control measures, such as signage and traffic flaggers, will be used wherever necessary and implemented within applicable Maintenance and Protection of Traffic Plans ("MPT"), to be included in the EM&CP and as described below.

- 33. All work within state highway and local road ROWs will be designed and performed in accordance with all applicable safety and traffic standards, including the requirements contained in 17 New York Codes, Rules, and Regulations Part 131 Accommodation of Utilities within State Highway Right-of-Way; applicable standards from the American Association of State Highway and Transportation Officials; the Manual of Uniform Traffic Control Devices; the Highway Design Manual; the Policy and Standards for Entrances to State Highways; the Accommodation Plan; and NYSDOT 2018 Standard Specifications. Best Management Practices, as detailed in the EM&CP, will be employed to limit the amount of disturbance to only what is necessary to construct the Project and to prevent the placement of materials onto local roadways.
- 34. MPT plans will be developed to provide a safe work area for construction crews within the roadway, while facilitating the safe and orderly flow of all road users throughout the work zone

(36, 127). The MPTs will be developed in accordance with the NYSDOT's *Work Zone Traffic Control Manual* and will be subject to the approval of the East Hampton Town Highway Department and the Police Department. The Metropolitan Transportation Authority ("MTA")/LIRR will be also be consulted for areas where the SFEC-Onshore installation exists within the LIRR ROW. Traffic control measures will be described in greater detail in the MPT plans within the Project EM&CP.

- 35. A Highway Work Permit ("HWP") from the NYSDOT is required per 17 NYCRR § 131 to install utilities within or adjacent to New York State highway ROWs. Following final design and preparation of the Project EM&CP, the Applicant will obtain HWP(s) from the NYSDOT for all applicable road crossings. The Applicant will fully comply with all permit conditions defined in the HWP(s) (17) as well as other applicable NYSDOT requirements (36[d]).
- 36. At the SFEC's transition point from sea-to-shore along Beach Lane, HDD will be utilized. The use of HDD will allow the SFEC-NYS and the sea-to-shore transition vault to be constructed entirely underground, minimizing impacts to local traffic on Beach Lane. The HDD operations and the transition vault will be positioned in order to allow open beach access during construction and installation.
- 37. All construction-related impacts to roadways will be restored to pre-construction conditions in accordance with NYSDOT Standard Specifications for Construction and Materials and in coordination with Town of East Hampton Highway Department Specifications. Because the SFEC-Onshore will be installed entirely underground, it is not anticipated that operation of the Project will have an impact on local traffic during operation. Additionally, the SFEC-Onshore is designed such that inspection and maintenance during operations will not be required unless a fault or failure occurs. Failures onshore are only anticipated because of damage from outside

influences, such as unexpected digs from other parties. In the unlikely event of such a case, impact on existing daily traffic volumes will be short-term and negligible.

- 38. The SFEC-Onshore will parallel the LIRR Montauk Branch beginning at Wainscott Northwest Road and will follow the LIRR ROW until its terminus at the SFEC-Interconnection Facility. Construction and operation of the SFEC-Onshore along LIRR ROW will be performed in accordance with longitudinal agreements made between DWSF and the LIRR and will be discussed in greater detail within the Project EM&CP.
- 39. Installation and operation of the SFEC-Onshore is not anticipated to impact normal LIRR operations. The railroad will not be used to transport equipment or construction materials. The SFEC-Onshore will be installed parallel to the existing railroad route. The SFEC-Onshore duct bank will be installed at a minimum 12.5 feet from the LIRR centerline, and all construction activities will conform to applicable safety practices designated by the MTA and will be further detailed within the Project EM&CP. Throughout construction, open trenches will be secured with barricades, and the active work areas within the LIRR ROW will be fenced off. Flashing lights may also be required as directed by the MTA. An inter-track barrier system will also be implemented to prevent track fouling, pursuant to the requirements of Title 49 Part 214 of the Code of Federal Regulation. Because the SFEC-Onshore installation along the LIRR will be entirely underground, it is not anticipated that operation of the Project will have an impact on train service or the communications systems of the MTA/LIRR. Failures onshore are only anticipated because of damage from outside influences, such as unexpected digs from other parties. In the unlikely event of such a case, impacts on the train service from the associated repairs are anticipated to be short-term and negligible.

- 40. There are two airports and one heliport within the vicinity of the Project. The construction, operation, and maintenance of the Project will have no impact on air transportation or communications. No transmission towers will be constructed, and the terrestrial portion of the sea-to-shore transition corridor and the SFEC-Onshore will be installed entirely underground. Construction of above-ground facilities associated with the SFEC-Interconnection Facility has been designed as to not interfere with air traffic or communications, per industry standards regarding electrical interference.
- 41. All work associated with the SFEC-NYS will take place within the Project corridor in or immediately adjoining New York State territorial waters in the North Atlantic Ocean. The North Atlantic Ocean contains navigational channels, anchorages areas, and federal channels for use by commercial shipping, recreational boating, recreational fishermen, and NYSDEC-Licensed fishermen. There are no existing ferry routes within New York State territorial waters in the vicinity of the SFEC-NYS corridor. Additionally, there are no Aids to Navigation, anchorage areas, or cables or pipelines present in the SFEC-NYS corridor, though it is possible that uncharted submarine pipelines or cables are present. All Project construction activities will be closely coordinated with the United States Army Corps of Engineers ("USACE"), United States Coast Guard ("USCG") Sector New York, and USCG Sector Long Island.
- 42. The SFEC-NYS runs through nearshore waters along the coast in an area of Long Island that is used for both commercial and recreational marine vessel traffic. The majority of vessels navigating within the vicinity of SFEC-NYS will be commercial or recreational fishing vessels and private recreation vessels (*e.g.*, sailboats). Commercial shipping in the area may utilize tug boats, tow boats, or cargo vessels (including tankers) in the vicinity of the SFEC-NYS corridor.

- 43. The proposed Project design, construction schedule, and construction techniques will minimize impacts to navigable waterways from the construction of the SFEC-NYS. This includes requirements that: (i) if a temporary cofferdam is used during construction of the HDD exit pit, it will be fully removed (83); and (ii) in-water activities be undertaken in a manner that minimizes the potential for interference with navigation, and preexisting uses of the area, including but not limited to fishing (82), as discussed in further detail in Section xiii, *infra*.
- 44. Additionally, the SFEC-NYS is designed such that maintenance during operations will not be required unless a failure or fault occurs. The proposed Certificate Conditions include a cable monitoring plan with a robust post-construction inspection schedule (132), and the cable will include remote monitoring capabilities and fiberoptic technologies to immediately detect and act on any cable faults. Failures are only anticipated because of damage from outside influences, such as boat anchors. In the unlikely event of such a case, impact on navigation activities from vessel traffic associated with repair will be short-term and negligible.
- 45. Regarding pedestrian traffic, there is one public bike path along Montauk Highway that intersects the SFEC-Onshore at Wainscott Northwest Road, which along with the Suffolk County Transit bus stop, may experience short-term, minor impacts from construction activities. Additionally, construction activities along roadways with sidewalks and near the beach may temporarily impact pedestrian traffic. At the sea-to-shore transition, HDD will be utilized to allow the transition vault to be constructed entirely underground, minimizing impacts to pedestrian traffic along Beach Lane. The transition vault will be positioned in order to allow open beach access during installation. Appropriate construction practices, such as signage, temporary barricades, and fencing will be used to direct pedestrians to use signed and protected cross walks away from construction zones.

46. There are no other public pedestrian paths or multi-purpose trails that have been identified as potentially traversing the Project corridor. If paths or multi-purpose trails are identified during the development of the Project EM&CP that could be impacted by construction, DWSF will implement appropriate construction safety practices, such as temporary barricades and fencing, to detour pedestrians away from construction work zones and avoid conflicts with pedestrian traffic during construction. Specific details on measures to be used to avoid pedestrian traffic conflicts during construction will be detailed with the Project EM&CP.

iv. Communications

- 47. The Project is expected to have negligible impact on communications (*e.g.*, television and radio), because it will be installed primarily underground. The Project is anticipated to produce minor electric fields that will have negligible impacts on communication signals transmitted through the air. Likewise, negligible impacts on underground communication cables will occur because separation and signal isolation (shielding) will maintain electromagnetic fields to levels within the noise tolerance levels of nearby communication and control systems. Fiber optic communication cables will not be affected by the Project. The Project will comply with applicable sections of the latest version of the National Electrical Safety Code related to appropriate spacing between power and communication cables. As part of the final design of the Project, the routing and design information will be provided to third parties that may have underground communication cables along or near the same path (*e.g.*, AT&T, LIPA, LIRR) to confirm appropriate clearances are achieved.
- 48. A review of the Federal Communications Commission ("FCC") databases revealed that there are 120 registered commercial towers located within five miles of the Project. These towers include FM radio tower licensees, microwave tower licensees, cellular telephone tower

licensees, paging tower licensees, land to mobile transmission tower licensees (private, commercial, or broadcast), TV station transmitter licensees, and antenna structures in the FCC databases. During final design of the Project, any additional communication facilities will be identified. If DWSF receives any complaints of suspected interference with radio, television, or other communication systems from the Project, DWSF will resolve any confirmed interference.

- 49. The SFEC-Onshore and SFEC-NYS are not expected to be sources of radio and television interference due to the underground installation and the design characteristics of the conductors, including cross linked polyethylene ("XLPE") insulation, as described in in Exhibit E-3 of the Application. The SFEC-Interconnection Facility will also be designed to minimize the generation of corona discharge. Therefore, negligible radio or television interference is anticipated as a result of construction and operation of SFEC-Interconnection Facility.
- 50. Power line carrier ("PLC") interference can occur from electric transmission lines in the form of noise. The Project is not expected to be a source of PLC interference due to underground installation of fiber optic cables. Additionally, the Project has been designed to avoid noise impacts to the existing AC electrical system to the maximum extent practicable. If DWSF receives any complaints of suspected interference with power line services, it will resolve any confirmed interference.
- 51. Analog telephone and data line interference can occur from the installation of a new electrical transmission line in the form of harmonic distortion. Analog telephone and data line interference is not expected from the Project due to underground installation and Project design

to minimize harmonic distortion. If DWSF receives any complaints of suspected interference with telephone services from the Project, it will resolve any confirmed interference.

v. <u>Electric and Magnetic Fields</u>

- 52. Under the Commission's September 11, 1990, "Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities," ("EMF Policy") the peak field at the edge of the ROW as measured at one meter above ground when the circuit phase currents are equal to the winter normal conductor rating shall not exceed 200 milligauss ("mG"). The Electromagnetic Field ("EMF") Calculations Report (Appendix P of the Application) indicates that the maximum levels at the edge of the Proposed ROW are below the levels recommended in the EMF Policy. Since the SFEC will be shielded, buried, or covered with protective measures, the electric field levels are expected to be negligible.
- 53. At the assumed maximum output (132 MW) of the SFWF, the calculated magnetic-field levels are 30 mG or less at the seabed and 13 mG or less at 1 meter above the seabed for an assumed 6-foot burial depth. If the SFWF could exceed its rated capacity, magnetic-field levels would be slightly higher (1 to 2 mG higher) because the capacity of the cable is slightly higher than the capacity of the SFWF. Over small areas where the cables may potentially be laid on the seabed and covered by protective mattresses or alternative cable protection measures, the magnetic-field levels would be higher, but would decrease very quickly with distance. For distances beyond 25 feet from the cable centerline, the magnetic-field levels calculated for the mattress-covered configuration fall to within <0.5 mG of the fields calculated when the SFEC is buried to a depth of 6 feet.
- 54. At the SFEC sea-to-shore transition where HDD will be used, the magnetic-field levels are calculated to be far lower than elsewhere along the route due to the very deep burial depth of

the cable. The maximum calculated magnetic-field level (directly above the HDD cable) is 0.3 mG at a burial depth of 62 feet, 1.8 mG at a burial depth of 22 feet, and 11 mG at a burial depth of 7 feet. As stated in Paragraph 127 *infra*, the conduit for the SFEC sea-to-shore transition will be installed at a minimum depth of 30 feet below the current profile of the beach. Accordingly, it is expected that the magnetic-field above the HDD cable at the sea-to-shore transition will be less than 1.8 mG.

- 55. Finally, for the SFEC-Onshore and the SFEC-Interconnection Facility cable, the magneticfield level ±50 feet from the duct bank centerline at a height of 1 meter above ground will be a maximum of 4.7 mG, far below the NYPSC's 200-mG limit.
- 56. To establish the correlation between wind farm output and EMF level, the proposed Certificate Conditions require the Certificate Holder to conduct a pre- and post-commercial operation EMF study to correlate the relationship between EMF level and wind farm output (131). The EMF study will include a tabular summary of the known biological sensitivities of marine species common in the Project area in order to observe whether there are any impacts of EMF on marine resources.
 - vi. <u>Noise</u>
- 57. Construction noise associated with the Project will be temporary in nature and impact and will vary according to the construction equipment used and the existing background or ambient noise at given times and locations. Residents and businesses could be temporarily affected by noise from construction activities but will not be exposed to significant noise levels for an extended period.
- 58. HDD will be planned outside the summer months. Underwater noise from the operation of vessels and installation of the SFEC-NYS, including HDD, should be temporary and localized.

As a way to mitigate noise impacts to rare, threatened, and endangered species during construction of the SFEC-NYS both at the sea-to-shore transition and underwater, the proposed Certificate Conditions require the Applicant to conduct in-water construction activities between November 15 and April 30 of each year (with some exceptions described in further detail herein and in condition 72[a]), and also prohibit the Applicant from performing construction activities within 500 feet of the southern edge of the beach/pavement boundary from April 1 to November 1 (72[b]).] Additional discussion regarding noise impacts and mitigation measures can be found in Paragraphs 85, 90, 92, 110, 134 and 135 *infra*.

- 59. The construction of the SFEC-Interconnection Facility will occur during the daytime, and will meet all applicable construction noise criteria (75).
- 60. SFEC-Onshore cable installation is expected to take approximately nine to 12 months of work and the work will occur during daytime hours. Nevertheless, as set forth below, the Applicant has requested that the Commission refuse to apply the Town noise level time of day restrictions for certain limited construction activities that must occur on a continuous basis once they commence.
- 61. To minimize impacts to residents from nighttime construction, the Applicant will adhere to a Construction Noise Control Plan (12[a]), which, *inter alia*, includes nighttime noise limits and sets forth noise monitoring requirements. The scope of work for the Noise Control Plan is attached hereto as Appendix J.
- 62. To minimize noise during operations, the proposed Certificate Conditions require the Applicant to include proposed noise control features and design requirements of the SFEC-Interconnection Facility in the EM&CP, which as stated in Paragraph 28, *supra*, include a wall to be constructed at the SFEC-Interconnection Facility.

vii. Cultural and Historic Resources

- 63. The Applicant prepared a Historic Architectural Resources Survey report which is included as Appendix C of the Application. Construction of the Project will not require the demolition or physical alteration of any State or National Register of Historic Places ("S/NRHP")-eligible or S/NRHP-listed properties. No direct physical impacts to historic resources will occur because of construction or operation of the Project. A potential indirect effect of the Project on a given historic property will be a change in the property's visual setting resulting from the introduction of new electrical transmission infrastructure. Therefore, the area of potential effect ("APE") for indirect (visual) effects on historic resources includes those areas where the Project will be visible and where there is a potential for change in the visual setting associated with historic properties as a result of Project visibility. The SFEC-Interconnection Facility is the only above-ground facility that will be built as part of the Project and is therefore the only part of the Project with the potential to cause visual impacts to historic resources. Therefore, the APE for indirect effects is restricted to areas where the SFEC-Interconnection Facility will be potentially visible.
- 64. In addition, the Applicant prepared a Phase 1 Archaeological Survey report for the sea-to-shore transition corridor, the SFEC-Onshore, and the SFEC-Interconnection Facility. The Project's potential effect on a given terrestrial archaeological resource would be physical disturbance to the resource during construction. The APE for direct effects from the onshore construction and installation are the areas where soil disturbance is anticipated to occur, including the sea-to-shore transition corridor, the SFEC-Onshore corridor, and the SFEC-Interconnection Facility footprint.

- 65. The Applicant also prepared a *Marine Archaeology Resources Assessment* report for federal permitting of activities on the OCS (Gray & Pape, 2018). The marine archaeological survey evaluates the potential for direct effects caused by the SFEC-NYS construction and installation. Most portions of the APE for direct effects evaluated in the marine archaeological survey are in federal waters.
- 66. Potential impacts to historic resources are only considered for the SFEC-Interconnection Facility, because the SFEC-Interconnection Facility is the only part of the Project that will be visible. Given the density of vegetation and standing structures in the existing landscape, visibility of the SFEC-Interconnection Facility from further than one mile (2 km) away will be negligible.
- 67. The Applicant conducted an archaeological survey for the sea-to-shore transition corridor, the SFEC-Onshore corridor, and the SFEC-Interconnection Facility in order to evaluate potential direct effects of Project construction and installation to archaeological resources. No previously recorded archaeological sites are located within or adjacent to the sea-to-shore transition study area. No pre-contact Native American or post-contact period artifacts were recovered from the shovel tests excavated within the APE. Additionally, no features, structures, or artifacts were noted during pedestrian survey of the beach front.
- 68. The Applicant evaluated the archaeological sensitivity of the portions of the SFEC-Onshore corridor within public road ROWs by reviewing historic maps and aerial photos, historical sources, previous archaeological surveys, an interview with the Superintendent of Highways for the Town of East Hampton, mapped soils data, topographic survey, light detection and ranging data, mapping of buried utilities, and on-site survey. Within the LIRR ROW, the SFEC-Onshore will be installed below ground in a trench adjacent to the existing railroad

tracks within the previously disturbed LIRR ROW. The Phase 1 archaeological survey report included a review of the history of the portions of the LIRR ROW within the APE for direct effects, review of previous archaeological surveys within/adjacent to the LIRR ROW, a site survey to review existing conditions, and an evaluation of archaeological sensitivity. No previously recorded archaeological sites are located within or adjacent to the SFEC-Interconnection Facility site. Archaeologists excavated 33 shovel tests at 50-feet (15 m) intervals within the SFEC-Interconnection Facility footprint. No artifacts or other indications of an archaeological site were recovered or identified in the shovel tests excavated within the APE.

- 69. No evidence of historic maritime infrastructure, such as wharves, docks, or piers was identified during archival research for the SFEC-NYS corridor.
- 70. The Project has been designed to minimize impacts to cultural resources. Potential visibility and visual effects resulting from construction and operation of the SFEC-Interconnection Facility has been avoided and minimized through careful site selection. Due to the relatively small size and modest height of the SFEC-Interconnection Facility, and because the site is largely surrounded by forest, the SFEC-Interconnection Facility will not be visible from historic properties. Existing vegetation that will remain following construction also minimizes visual impact from adjacent sites (including residences). SFEC-Interconnection Facility lighting will be designed and operated in accordance with the Lighting Plan that will be included in the EM&CP. In addition, the SFEC-Interconnection Facility is sited adjacent to existing utility infrastructure, thereby avoiding the potential introduction of utility-related visual elements in areas where such facilities are not currently part of the landscape.

- 71. The SFEC-Onshore will be sited within previously disturbed public road and railroad ROWs and will be installed completely underground. The selection of a buried cable (as opposed to an overhead transmission line) avoids potential visual impacts (including visual impacts to historic properties). The Applicant has elected to site the SFEC-Onshore buried cable within previously disturbed areas, including paved roadway (where practicable) and the LIRR ROW, which avoids potential impacts to adjacent undisturbed soils and helps to minimize the risk of encountering undisturbed archaeological deposits.
- 72. Additionally, no marine archaeological resources have been identified within the SFEC-NYS corridor. The selection of a buried cable (as opposed to an overhead transmission line) avoids potential visual impacts (including visual impacts to historic properties).
- 73. Construction of the SFEC-Interconnection Facility will not require the demolition or physical alteration of any S/NRHP-eligible or S/NRHP-listed buildings. In addition, no temporary effects to historic properties resulting from construction activities are anticipated. The SFEC-Interconnection Facility will not be visible from any historic properties. Furthermore, potential visibility of the SFEC-Interconnection Facility will be limited to areas immediately adjacent to the substation. Views of the SFEC-Interconnection Facility will be limited to the uppermost portions of the lightning masts, which even if visible, will be difficult to distinguish on the horizon due to their narrow profile and gray color. Construction of the SFEC-Interconnection Facility will be designed and operated in accordance with the Lighting Plan that will be included in the EM&CP. Therefore, the SFEC-Interconnection Facility will not have a significant effect on the visual setting associated with historic resources.

- 74. Based on the results of the Phase 1 archaeological survey, no terrestrial archaeological sites are located at the sea-to-shore transition corridor, the SFEC-Interconnection Facility or along the LIRR ROW. The SFEC-Onshore within road ROWs will be constructed within existing paved roadway sections to the extent practicable. Given that existing roadways include some degree of prior ground disturbance, siting the SFEC-Onshore site within roadways helps to minimize the risk of encountering undisturbed archaeological deposits.
- 75. Operation of the SFEC-Interconnection Facility will not result in any direct impacts, including demolition or alteration, to any S/NRHP listed- or eligible- buildings, nor any other potential historic architectural resources. In addition, as described previously, the SFEC-Interconnection Facility will not be visible from, nor affect the visual or audible setting of historic properties. In addition, operation of the Project is not anticipated to result in potential impacts to archaeological sites.
- 76. Proposed Certificate Conditions address appropriate requirements to preclude construction in areas where cultural resource evaluations have not been concluded and accepted by the State Historic Preservation Officer pursuant to review under National Historic Preservation Act \$106; to require implementation of appropriate resource protection measures, and to address unanticipated resource discoveries during Project construction, including cultural artifacts and the handling of human remains. These include a requirement to stop work in and secure areas where unanticipated discoveries of archaeological resources and/or human remains are made and consult with New York State Department of Public Service ("DPS") Staff and the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP") (156, 157).

viii. Geology and Soils

- 77. No permanent significant impacts related to geology or soils are anticipated. The method(s) for installing the SFEC-Onshore will be set forth in the EM&CP (91). In areas where grading and the excavation of previously disturbed soils are required, existing drainage patterns will be maintained. Temporary erosion control measures (*e.g.*, straw bale and/or silt fence barriers and the protection of soil stockpiles), as outlined in the Project EM&CP and the Municipal Separate Storm Sewer System("MS4") approved Stormwater Pollution Prevention Plan ("SWPPP"), and in compliance with the State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activities, will be used (46, 139). Following the installation of the SFEC-Onshore along road ROWs, disturbed areas of more moderate slopes will be restored to pre-construction conditions and, as such, the existing topography along the road ROWs will be maintained (73).
- 78. The SFEC-Interconnection Facility will be located on undeveloped land adjacent to the existing East Hampton Substation. Existing topography within this area is relatively flat. The construction of the SFEC-Interconnection Facility will include general site preparation and excavation for the installation of the underground SFEC-Onshore duct bank, as well as for the installation of all aboveground structures including transformers, switchgears, and cable systems. As part of the construction of the SFEC-Interconnection Facility, temporary erosion control measures, as outlined in the Project EM&CP and the SWPPP, will be used. No significant impacts are anticipated to existing topography as a result of the construction of the SFEC-Interconnection Facility.
- 79. The installation of the SFEC-Onshore, as well as excavation activities associated with the SFEC-Interconnection Facility, will not encounter bedrock, therefore no blasting is proposed.

As such, construction of the SFEC-Onshore, the sea-to-shore transition corridor, and the SFEC-Interconnection Facility will have no significant impact on geology.

- 80. No significant impacts on soils are anticipated as a result of construction of the Project. The clearing of previously disturbed soils within the SFEC-Onshore corridor will be limited to areas of trenching along the Project corridor. Prior to the start of construction activities, temporary erosion control measures, outlined in the Project EM&CP and SWPPP (e.g., straw bale and/or silt fence barriers and the protection of soil stockpiles) will be utilized to reduce the risk of soil erosion, fugitive dust from exposed soils, and siltation (46, 101). Following the installation of the Project, disturbed areas will be stabilized, and excavated soils will be examined to determine their suitability for reuse on-site and, where reuse is not possible, excavated soils will be disposed of at a New York State Department of Environmental Conservation ("NYSDEC") permitted facility. If any contaminated soils are discovered during Project excavation, steps will be taken to minimize further contamination and properly dispose of contaminated material, which will be detailed in the Final Hazardous Waste and Petroleum Work Plan, which will be prepared in accordance with the Initial Hazardous Waste and Petroleum Work Plan, attached hereto as Appendix H, and Certificate Condition 51. To determine whether Per- and Polyfluoroalkyl Substances ("PFAS") and other contaminants are present along the SFEC-Onshore route and at the SFEC-Interconnection Facility, the Initial Hazardous Waste and Petroleum Work Plan (Appendix H) and Final Hazardous Waste and Petroleum Work Plan require the Applicant to perform testing of soil and groundwater (52).
- 81. Construction activities associated with the installation of the SFEC-Interconnection Facility will include general site preparation and excavation for the installation of the underground and aboveground structures. Temporary erosion control measures outlined in the Project SWPPP

and EM&CP will be utilized during construction of the SFEC-Interconnection Facility to reduce the risk of soil erosion, fugitive dust from exposed soils, and siltation. Permanent stormwater management measures will be required for the SFEC-Interconnection Facility, due to the increase in impervious area and increase in stormwater runoff. The permanent stormwater management measures will be described in the Project EM&CP, MS4-approved-SWPPP, and 5-acre waiver, if required.⁶

82. Dewatering will likely be required in some areas to control surface and subsurface water to allow the Applicant to perform necessary construction activities. A Dewatering Plan will be included in the EM&CP (44). Any dewatering that is required in excavated and/or trenched areas will be properly managed by appropriate control measures and the Applicant will ensure that the appropriate dewatering measures will be implemented during construction. Prior to filing the EM&CP, as part of the Initial Hazardous Waste and Petroleum Work Plan, the Applicant must test groundwater where it is anticipated to be encountered during construction for PFAS and other contaminants that may be present (Appendix H). This will assist in preparation of the Final Hazardous Waste and Petroleum Work Plan and Dewatering Plan. The Dewatering Plan will also set forth the manner in which Applicant must handle and test groundwater encountered during dewatering operations for PFAS and other contaminants (44, 151). Further, the Dewatering Plan will provide for methods to dispose of contaminated water safely.

⁶ Due to concerns over timing of the MS4 approval delaying the ability of the Applicant to file the EM&CP, the Signatory Parties have agreed that the Applicant will design the EM&CP in accordance with the SWPPP requirements in the SPDES General Permit in effect at the time of the filing of the EM&CP. Once the MS4 approval is received, prior to EM&CP approval, the MS4 approval and any EM&CP updates will be filed with the Secretary (38).

83. Where the Applicant must site the SFEC-Onshore within one hundred (100) feet of an existing, active drinking supply well, the proposed Certificate Conditions require the Applicant to perform pre- and post-construction turbidity testing on the well water, and where certain requirements are met, construct a new drinking water well for the property owner (23).

ix. <u>Terrestrial Vegetation and Wildlife</u>

84. Construction-related impacts to terrestrial vegetation and wildlife are anticipated to be minor and short-term. Impacts to terrestrial ecological communities and vegetation within the seato-shore transition corridor will be avoided due to the utilization of HDD technology. This construction method will eliminate the need for surficial ground disturbance and vegetative clearing within shoreline communities that would otherwise occur with traditional cable burial methods. Impacts to vegetation within road ROWs of the SFEC-Onshore corridor will be avoided or minimized, since cable installation will occur within existing paved portions of the road ROWs, where practicable. The construction workspace will be kept to the minimum width necessary to accommodate space for safe equipment passage, materials staging, open trenching, and other activities associated with the SFEC-Onshore installation. Cable burial within the LIRR ROW portion of the SFEC-Onshore corridor will occur within unvegetated areas, to the largest extent possible, to avoid impacts to vegetated communities. Vegetation impacts will be limited to the minimum necessary to accommodate open trenching and other work activities. Clearing will occur to construct the SFEC-Interconnection Facility. Paragraph 91, *infra*, sets forth avoidance and minimization measures with respect to Northern Long-eared Bats ("NLEB"). However, vegetation impacts will be limited to the minimum necessary to accommodate open trenching and other work activities.

- 85. Work within the road ROWs of the SFEC-Onshore corridor will be confined largely to paved surfaces and the adjacent road shoulders. As such, potential impacts to the limited wildlife and fauna of these areas are expected to be minor and short-term, due to noise and activity associated with construction. HDD will be utilized within the sea-to-shore transition corridor to avoid/minimize impacts to shoreline wildlife habitats and resident wildlife, including least tern and piping plover habitats, as discussed below.
- 86. Clearing, grubbing, and/or trimming of vegetation within the vegetated communities of the LIRR ROW will result in a minor reduction of available foraging and breeding habitat for local wildlife. The overall impacts to wildlife populations are expected to be minor and limited to common species adapted to the disturbed conditions that occur at this location due to the adjacent LIRR. Construction of the SFEC-Interconnection Facility will result in a minor reduction of available foraging and breeding habitat for local wildlife. The overall impacts to wildlife populations are expected to be minor and limited to the disturbed conditions that occur at this location due to the adjacent LIRR. Construction of the SFEC-Interconnection Facility will result in a minor reduction of available foraging and breeding habitat for local wildlife. The overall impacts to wildlife populations are expected to be minor and limited to common species adapted to the disturbed conditions that occur at this location due to the adjacent existing East Hampton Substation.
- 87. To minimize the spread of invasive species as a result of Project construction, the proposed Certificate Conditions prohibit the use of hay (166) and require the Applicant to create an Invasive Species Control and Management Plan as part of the EM&CP (165). A work plan for the Invasive Species Control and Management Plan is attached hereto as Appendix K.
- x. <u>Threatened and Endangered Species</u>
- 88. The Applicant will take all necessary measures consistent with this Joint Proposal, the proposed Certificate Conditions, and the EM&CP, as well as specific measures described below, to avoid or minimize impacts to threatened and endangered species.

- 89. To avoid the risk of an incidental take of Atlantic sturgeon, no in-water work will occur May 1 to June 30 and September 1 to November 15 (72[a]). However, the Applicant may undertake limited seabed disturbing work, such as diver clearance and maintenance of the HDD exit pit and backfill of the HDD exit pit May 1 through May 15 and November 1 through November 15. If the Applicant decides to use a temporary cofferdam, it will be installed and removed between November 15 and May 1 to avoid the risk of an incidental take of Atlantic sturgeon. To further minimize the risk to Atlantic sturgeon, if the Applicant needs to perform backfilling of the HDD exit pit between May 1 and May 15 or November 1 and November 15, the Applicant must abide by an Atlantic Sturgeon Monitoring and Mitigation Plan created in accordance with 6 NYCRR Part 182, which will be included as part of the EM&CP (72[a]).
- 90. As discussed in Section vi, *supra*, to alleviate concerns that noise and other temporary construction and maintenance activities may deter or otherwise impact nesting or migrating shorebirds, including least tern and piping plover, no construction or maintenance activities will occur within 500 feet of the southern edge of the beach/pavement boundary between April 1 and November 1. This avoids the potential for a direct take of these species (72[b]).
- 91. To avoid construction and maintenance impacts to the NLEB, tree clearing activities at the SFEC Interconnection Facility shall be performed between December 1 and February 28 (72[c]). Prior to any proposed clearing activities outside of the December 1 through February 28 window, roosting tree surveys shall be conducted in accordance with an NLEB Monitoring and Impact Minimization Plan. A Roosting Tree Survey Plan will be developed for the SFEC-Interconnection Facility Site and SFEC-Onshore in the Project area, and will be included as part of the EM&CP. Specific requirements for the roosting tree survey plan are included in the proposed Certificate Condition 72[c].

92. To minimize the potential for in-water work to impact threatened and endangered marine species, including sea turtles and the North Atlantic Right Whale, the proposed Certificate Conditions require the Applicant to comply with BOEM and National Oceanic and Atmospheric Administration ("NOAA") requirements for noise mitigation (167) and mitigation, monitoring, and reporting for protected species (168). Further, any sightings of North Atlantic Right whales must be reported to NOAA as soon as possible (169). Additionally, there will be an environmental monitor with stop work authority present during in-water activities to minimize any potential harm to protected species (122(a)). Additional discussion on noise mitigation is discussed in Section vi, *supra*.

xi. Wetlands and Waterbodies

93. There are no National Wetlands Inventory ("NWI") wetlands located within 500 feet of the SFEC-Onshore corridor or at the SFEC-Interconnection Facility. According to NWI wetland mapping available for the Project, three NWI wetlands associated with the Atlantic Ocean are crossed by the SFEC-NYS corridor. According to NYSDEC tidal wetland map data, a littoral zone ("LZ") tidal wetland is crossed by the sea-to-shore transition corridor. This tidal wetland boundary of the SFEC-NYS is located within the sea-to-shore transition corridor. Therefore, the sea-to-shore transition cable installation using HDD will avoid tidal wetlands and adjacent areas (300 feet). No other mapped NYSDEC tidal wetlands occur at or within 300 feet of the Project. According to NYSDEC freshwater wetland map data, a NYSDEC Freshwater Wetland is located approximately 400 feet to the east of the SFEC-Onshore corridor. The wetland is associated with Georgica Pond. No other mapped NYSDEC freshwater wetlands occur at or within 300 feet of the SFEC-Onshore. Additionally, no streams were identified during field surveys and no mapped NYSDEC-protected streams are crossed by the Project.

The Signatory Parties agree that the actual limit of federal and state wetland and waters of the U.S. jurisdiction along the SFEC-Onshore corridor or at the SFEC-Interconnection Facility is subject to field verification by the USACE and NYSDEC, respectively.

- 94. Impacts to LZ tidal wetlands will be minimized, since this portion will be crossed using HDD technology. This construction method will eliminate the need for surficial ground disturbance within shoreline communities and adjacent areas that will otherwise occur with traditional cable burial methods.
- 95. Temporary disturbance will occur at the HDD exit pit during HDD operations. If a cofferdam is used, there will be temporary disturbance during the installation of the cofferdam. The disturbance will be localized and minor in nature, primarily due to short-term bottom disturbance and increased water column turbidity. To further minimize impacts from the HDD operations, the Applicant will include an Inadvertent Returns Plan in the EM&CP, which is discussed in further detail in Paragraph 125, *infra* (87).
- 96. NYSDEC Freshwater Wetland EH-25 is located approximately 400 feet to the east of the SFEC-Onshore, beyond residential properties and woodlands that adjoin Wainscott Stone Road. Given the distance from the SFEC-Onshore, no construction or operational impacts to this wetland are expected, and the Project is located well beyond the respective USACE and New York State wetland jurisdictions based on the Applicant's desktop and field surveys. Actual limit of federal and state jurisdiction is subject to field verification by the USACE and NYSDEC, respectively. The Project is adjacent to two Town-regulated freshwater wetlands, one approximately 125 feet east of Wainscott Stone Road and the other approximately 50 feet east of Stephen Hands Path. To minimize impacts to wetlands, the proposed Certificate Conditions require the Applicant to create a Wetland Impact Minimization and Mitigation Plan

(146) and delineate the boundary of any regulated freshwater and tidal wetlands prior to construction (63). Further, to prevent discharge into wetlands or State-regulated wetland adjacent areas, the proposed Certificate Conditions require the Applicant to adhere to three hundred (300) (for tidal) and one hundred (100) (for freshwater) foot wetland setbacks for certain activities, including siting of concrete batch plant operations and concrete washout areas (148), locating equipment and machinery (149), repairing and refueling mobile equipment (149, 150, 182), locating fuel tanks and hazardous chemical storage (180), and mixing chemicals (182). As such, no other potential wetland impacts are expected. Moreover, disruptions to streams, waterbodies and wetlands would be minimized during SFEC construction, operation and maintenance through measures detailed in Proposed Certificate Conditions set forth in Appendix D, attached, as well as in the EM&CP.

- xii. Onshore Water Quality
- 97. No permanent or long-term impacts on water quality from cable installation are expected. In addition, no impacts are expected to occur during cable operation unless cable repair is required. If cable maintenance or decommissioning is required such activities will be performed in accordance with the proposed Certificate Conditions to avoid or minimize water quality impacts.
- 98. To preserve water quality during construction and operation of the Project, proposed Certificate Condition 170 mandates that the water quality standards set forth in 6 NYCRR Parts 701, 702, 703 and 704, and sections 301, 302, 303, 306, and 307 of the federal Clean Water Act (see 33 USC Parts 1311, 1312, 1313, 1313a, and 1317) will not be contravened. Further, the Applicant will comply with any conditions contained in a Water Quality Certification issued pursuant to section 401 of the Federal Clean Water Act.

- 99. The proposed Certificate Conditions set forth total suspended solids ("TSS") limits to which the Applicant must adhere (171). The Applicant must include its TSS monitoring plan for offshore and onshore activities in a Suspended Sediment and Water Quality Monitoring Plan as part of the EM&CP (172).
- 100. A Spill Prevention, Control and Countermeasures ("SPCC") Plan will be filed as part of the EM&CP and implemented during construction to avoid or minimize potential impacts to sediments and water quality that could result from spills of fuels, oils or other substances associated with aquatic installation vessels and construction equipment (183).

xiii. Fisheries

101. Potential impacts to commercial and recreational fishing were discussed extensively among the Signatory Parties as well as other parties participating in the settlement discussions. Potential impacts to the fishing industry include temporary displacement of fishermen during construction, maintenance, and decommissioning activities and fishing gear losses during the survey, construction, operation, maintenance, and decommissioning of the Project. However, the SFEC-NYS is not expected to have significant long-term impacts to benthic and shellfish resources during any of the Project phases. Moreover, as discussed in Paragraph 101, the proposed Certificate Conditions will avoid or minimize, to the extent practicable, significant potential impacts to fishing operations during all phases of the Project. If a cofferdam is used at the HDD exit pit, the Applicant will identify in the EM&CP the type of cofferdam to be used (sheetpile cofferdam or gravity cell cofferdam) (83). Regardless of whether a cofferdam is used, the impact to recreational and commercial fishing will be the same because no non-construction vessels will be allowed in the construction area irrespective of the presence of a

cofferdam. Further, upon completion of construction, the cofferdam will be fully removed so it does not pose hazard to fishing and navigation.

- 102. As a result of the discussions on impacts to commercial and recreational fishing, the Signatory Parties agreed on many proposed Certificate Conditions that will avoid or minimize, to the extent practicable, significant potential impacts to fishing operations. These proposed Certificate Conditions include:
 - a. a minimum cable burial depth of 6 feet (78) (where achievable, subject to conditions described in Paragraph 105, *infra*), exclusive of the section of the cable from the sea to shore transition to the HDD exit pit, which will be buried using HDD deeper than 6 feet and enclosed in conduit. The 6-foot burial depth will avoid or minimize the potential for cable exposure and accordingly reduce the potential for interaction with fishing gear;
 - a requirement to relocate any boulders that cannot be microsited around within 65 feet of the proposed centerline of the cable (78) and notify mariners, recreational fishermen, and NYSDEC-Licensed Fishermen of the relocation if the boulder is larger than one meter in diameter (66);
 - c. a requirement to bury cable protection at the HDD exit pit with at least 3 feet of cover (90[e]). This requirement will also avoid or minimize the potential for interaction with fishing gear at the HDD exit pit;
 - d. a requirement to not use cable protection unless it is necessary to protect the integrity of the cable (80) (Cable protection is discussed further in Paragraph 105, *infra*). Limiting the use of cable protection measures also will avoid or minimize the potential for fishing gear to interact with such cable protection measures. The Applicant has also

committed to using best efforts to remove the cable protection measures during decommissioning (80); a requirement to include in the EM&CP a cable monitoring and management plan (the "SFEC-NYS Maintenance Plan") (132). The SFEC-NYS Maintenance Plan must include: (i) a method to determine actual cable location and burial depth; (ii) a method used to determine what, if any, reburial or added cable protection measures may be required; (iii) a requirement to inspect the HDD exit pit annually for the first 5 years following commercial operation of the SFWF; (iv) a postconstruction monitoring survey that must be completed annually for the first 3 years following Commercial Operation of the SFWF, and where any three consecutive surveys show that the SFEC-NYS does not pose a hazard to public safety, navigation, or marine resources, the Applicant shall perform monitoring surveys every five (5) years thereafter for the operational life of the Project. Where any survey shows that the SFEC-NYS poses a hazard to public safety, navigation, or marine resources, the Applicant shall perform annual surveys after corrective action is completed, until three consecutive surveys show there is no such risk; (v) post construction monitoring after severe weather events that may have directly impacted the SFEC-NYS; (vi) a plan for remedying cable exposures; (vii) a description of methods to maintain cable burial depth; (viii) a plan for marking the location of cable exposures; (ix) and a plan for monitoring cable burial depth and suitable measures to maintain or restore cable depth to at least 30 feet beneath the surface of Wainscott Beach after any significant coastal erosion event that both (i) causes a loss of more than five feet of beach elevation over the portion of the SFEC sea-to-shore Transition installed at Wainscott Beach; and (ii) results in a cable burial depth of less than 30 feet at that point at Wainscott Beach.

These conditions will avoid or minimize the potential for fishing gear to interact with the cable;

- e. a requirement to include in the EM&CP a Fisheries Compensation Plan (55). This plan is required to include provisions for compensating fishermen for commercial fisheries gear losses during all phases of the Project including survey, construction, operation, maintenance, and decommissioning, and to provide reimbursement for any temporary displacement of commercial fishing directly resulting from Project construction or maintenance activities, including cable burial activities, or decommissioning activities. This plan will minimize any potential adverse impacts to the commercial fishing industry that result from any interaction with the SFEC-NYS;
- f. a requirement to include in the EM&CP a Fishing Community Outreach Program to communicate with commercial, recreational, and for-hire (charter) fishing regarding the Project (54). This Program will inform the fishing community of Project activities and as such avoid or minimize the potential for fishing operations to be impacted by the construction, operations, or maintenance of the cable;
- g. a requirement to provide notice to mariners, recreational fishermen, and NYSDEC-Licensed Fishermen of construction activities (64). Providing this notice will avoid or minimize impacts to the fishing community from construction activities; and
- h. a requirement to fully remove the temporary cofferdam, if used, so it does not pose a hazard to fishing and navigation after construction has completed (83).
- to prevent the potential for interactions with fishing gear, a requirement to notify the public, including mariners and fishermen of the location of the temporary cofferdam (if used), all cable protection measure locations, the location(s) of any relocated

boulders over one meter in diameter or any other potential obstructions caused and/or created by the Project, and any areas where the identified burial depth of the cable is less than 2 feet (66, 78, 83).

- 103. In addition to the foregoing comprehensive set of conditions that are intended, in large part, to avoid or minimize significant impacts to fishing, the Applicant has agreed to conduct Fisheries Studies, in consultation with Subject Matter Experts and scientists, to analyze the effects of marine fish and invertebrates in the SFEC-NYS cable route (137).
- 104. Moreover, the Signatory Parties, as well as other parties, engaged in extensive discussions regarding the potential impacts of cable burial depth and cable protection measures on fishing. The Applicant proposed in the Application to seek to achieve a cable burial depth of 4-6 feet for the SFEC-NYS. The Signatory Parties have now agreed on a proposed certificate condition requiring the SFEC-NYS to be installed a minimum burial depth of six (6) feet below the existing seabed (78). The proposed Certificate Conditions require that if the 6-foot burial depth cannot be achieved during the initial pass of the cable installation tool, the Applicant will perform up to two additional passes with the installation tool unless such additional passes risk causing damage to the cable or the installation tool or due to geologic obstructions additional passes would not increase the burial depth or risk causing cable exposure. The Applicant agrees to use an installation tool that is best suited for achieving minimum burial depth given the substrate along the SFEC-NYS route. The Applicant also is required to use best efforts to micro-site the cable within the cable corridor to achieve the 6-foot burial depth and to avoid boulders identified in pre-construction surveys. Where the cable cannot be micro-sited around boulders, the Applicant agrees to relocate the boulder within 65 feet of the proposed centerline of the cable and notify mariners, recreational fishermen, and NYSDEC-Licensed Fishermen

of the new location of any boulders over one meter in diameter (66). By requiring a deeper cable burial depth than initially proposed and taking steps to minimize the potential for fishing gear interactions, the proposed Certificate Conditions will avoid or minimize significant impacts to fishing and other pre-existing uses of the area and significantly reduce the possibility of cable exposure.

105. Based on preliminary geotechnical surveys, it is expected that the Applicant will be able to achieve the 6-foot burial depth for most of the SFEC-NYS. However, the final burial depth of the SFEC-NYS may be impacted by the presence of geologic obstructions along the SFEC-NYS route. Therefore, the Signatory Parties agree that there may be limited areas where burial depth cannot be achieved. Where the cable cannot be micro-sited around an unforeseen boulder, the Applicant has agreed to relocate the boulder within 65 feet of the proposed centerline of the cable. The proposed Certificate Conditions require that the Applicant not leave any portions of the cable exposed on the seabed without cable protection measures (80). The Signatory Parties extensively discussed the use of and type of cable protection measures and the potential impact of such measures on fishing. In order to further minimize or avoid the impact of cable protection measures on fishing, cable protection measures are only anticipated to be used, at a maximum, for two percent of the SFEC-NYS's length. Further, the proposed Certificate Conditions require the Applicant to use best efforts to avoid the use of cable protection if the actual burial depth achieved provides adequate protection (80). Moreover, the Applicant is required to install and maintain any necessary cable protection measures in a manner that is consistent with the objectives of maintaining overtrawlability, minimizing shifting over time, and avoiding creation of a discernable berm on the seafloor. In addition, the proposed Certificate Conditions require the Applicant to include in the EM&CP

a written evaluation of the efficacy of alternative cable protection measures that may be required at each site and justification for why the selected cable protection method is preferred, including to the extent available technical documentation from cable protection manufacturers and an evaluation of a range of cable protection measures with respect to their ability to maintain overtrawlability, minimize shifting over time, and avoid creating a discernable berm on the seafloor (48[f]). Further, the Applicant will notify mariners, recreational fishermen, and NYSDEC-Licensed Fishermen of the location of any such measures (64 and 66). At a minimum, such notification will include a USCG Local Notice to Mariners and posting on the Project website. These proposed Certificate Conditions will further avoid or minimize the impact of the use of cable protection measures on navigation, and preexisting uses of the area, including, but not limited to, fishing.

xiv. Benthic Resources and Offshore Water Quality

- 106. Construction, installation, operation, and maintenance activities associated with the SFEC-NYS have the potential to cause both direct and indirect impacts on benthic resources and shellfish. However, the SFEC-NYS is not expected to have long-term impacts to benthic resources and shellfish during any of the Project phases. Impacts are largely expected to be negligible to minor, localized, and short-term in nature. During construction of the SFEC-NYS, three activities may affect benthic resources and shellfish: seabed disturbance, noise, and sediment suspension and deposition.
- 107. Seabed disturbance is expected to produce minor, direct, or indirect impacts to species depending on the mobility of the benthic and shellfish species. These impacts include mortality to benthic species that are within the area where the seabed is disturbed. The impacts would result from clearing and leveling of the seabed, including pre-lay grapnel runs, HDD exit pit

excavation, installation of the SFEC-NYS and vessel anchoring. Benthic species are expected to recolonize the impact area following construction activities and this may occur within months or one to three years of disturbance. Communities well adapted to disturbance within their habitats (*e.g.* sand sheets) are expected to quickly recolonize a disturbed area, while communities not well adapted to frequent disturbance may take upwards of a year to begin recolonization, resulting in minor, long-term, direct impacts. Impacts to benthic resources will be limited to the area of direct disturbance.

- 108. Installation of the SFEC-NYS will result in minor to negligible, short-term direct effects to benthic species. Installation of the SFEC-NYS will occur via a mechanical/hydro-jet plow. Compared to open cut dredging/trenching, this method will minimize sediment disturbance and alteration of habitat. Sessile and slow-moving benthic species, including infaunal species that cannot get out of the way of the mechanical/hydro-jet plow, may be subject to mortality and injury to individuals. Because of the slow speed of equipment and limited size of the impact area, it is expected that most mobile benthic species, such as Atlantic rock crab and horseshoe crab, will be able to move out of the way and not be subject to mortality, but may experience minor, short-term, direct impacts. Sessile and slower moving species, such as clams, may be subject to mortality and/or injury if within the impact area.
- 109. The effects associated with vessel anchoring are similar to those expected for seabed preparation. Direct effects are expected to be minor and short-term from the mortality and or injury of slow-moving or sessile species directly in the impact area of the anchor or area swept by the anchor chain. During jet trencher operations, the proposed Certificate Conditions require the use of midline buoys or alternative measures to minimize sediment disturbance caused by cable sweep (85[b]).

- 110. Direct impacts associated with noise during construction of the SFEC-NYS may occur during installation of the SFEC-NYS (DPV thrusters), or from vessels. Effects associated with noise are expected to be minor and short-term with benthic resources returning to the area after the noise-generating activity has been completed. Vessel noise may cause temporary behavioral changes; however, this is not expected to be different than what currently occurs when vessels transit the area. In addition, any noise impacts due to HDD operations are anticipated to be minor, localized, and short-term in nature.
- 111. Increases in sediment suspension and deposition during construction of the SFEC-NYS can result from seabed disturbance caused by grapnel runs, vessel anchoring, installation and removal of the temporary cofferdam (if used), installation of the SFEC-NYS, and limited excavation required at the HDD exit pit (measures to avoid or mitigate impacts during excavation are discussed in Paragraph 112, *infra*). These activities have the potential to cause localized increases in sediment suspension and deposition in adjacent areas as the sediment suspension settles out of the water column. As described in further detail in Appendix H of the Application, pre-application suspended sediment modeling performed by the Applicant indicated that sediment plumes that arise during Project-related trenching or dredging activities are transient, and the TSS concentrations are predicted to return to ambient levels approximately within one to two hours of the completion of the construction activity. The orientation of the predicted sediment plume oscillates with the tide at each of the scenario locations. The plume associated with the SFEC-NYS installation is oriented in a northeast/southwest configuration, reflecting the tidal current patterns near the site, which are aligned with the nearshore topography. Modeled TSS concentrations are predicted to meet the limited concentrations at the edge of the mixing zone during the installation set forth in

proposed Certificate Condition 171. Direct impacts associated with increased sediment suspension and deposition are expected to be minor to short-term for sessile species and species with limited mobility and negligible and short-term for mobile species. Minor, long-term, direct impacts associated with habitat loss through sediment deposition in surrounding areas are anticipated. Vessel mooring or anchoring activity resulting in sediment suspension and deposition is expected to be limited to areas of the seabed immediately adjacent to the anchors.

- 112. There are several proposed Certificate Conditions that require the Applicant to follow certain procedures and use specific equipment to minimize impacts to benthic and marine species. The objective of these conditions is to limit sediment disturbance and restore benthic habitats so as to limit impacts to benthic species. These requirements include, *inter alia*,
 - a. using clamshell buckets, to avoid any sediment release during excavation (90);
 - b. storage of excavated material on a barge for later use as native backfill (90);
 - c. avoiding sensitive benthic habitats, such as hard bottom habitats (81); and
 - d. backfilling the HDD exit pit with three feet of native material (89).
- 113. Levels of TSS could also reach lethal or sub-lethal levels for benthic species; however, given the limited extent and duration of the elevated Project-related TSS concentrations, this is anticipated to be a minor impact to the benthic population. Sand sheet and mobile sands found near the SFEC-NYS are often more dynamic in nature; therefore, they are quicker to recover than more stable environments, such as fine-grained habitat and rocky reefs. Species found in more dynamic and sandy areas are often adapted to deal with more dynamic habitats and handle increases in sedimentation associated with wind and waves. Several Certificate Conditions were included to monitor and mitigate any potential impacts as a result in changes in TSS levels, and such conditions are also set forth in the Proposed Water Quality Certification

attached hereto as Appendix F. The proposed Certificate Conditions set forth TSS limits that must be observed (171), and to ensure adherence to those TSS Limits, the Certificate Holder is required to conduct jet trencher trials (Conditions 84 and 85) to calibrate the cable installation tools to minimize turbidity, complete a Suspended Sediment and Water Quality Monitoring Plan (172, 177, and 178), and stop work if the excavation or backfill of the HDD exit pit exceeds standards at the edge of the 1,500 foot mixing zone until corrective actions are taken (176). Further, visual observations of turbidity will be conducted to ensure compliance with the narrative water quality standard in 6 NYCRR § 703.2 (173).

- 114. Water quality monitoring for TSS and turbidity will be conducted daily throughout the duration of in-water activities, including HDD exit pit excavation and backfilling activities, prelay grapnel runs, jet trencher trials and jet trenching activities (172).
- 115. A modeling analysis of the EMF anticipated to be produced during operation of the SFEC-NYS was performed and results are included in Appendix P of the Application. These modeling results were compared to published studies available in the scientific literature on the sensitivity of marine species to EMF. Exposure to EMF could be short- or long-term, depending on the mobility of the species. Mobile species are likely to pass through the area and be temporarily exposed. Sessile species, which are unable to move, will be exposed for the entire duration that the SFEC-NYS cable is energized. For aquatic crustaceans, including crab and lobster species, the ability to detect geomagnetic fields, however, is likely integrated with other environmental cues, including slope, light, currents, and water temperature. The potential for direct impacts to mobile species are also expected to be minimized as the electrical field will be limited in size by a magnetic sheath on the cable, and by burying the cable a

minimum of 6 feet below the sediment surface. It is anticipated that EMF will have a negligible long-term impact on sessile species.

- 116. The operational phase of the SFEC-NYS is anticipated to have insignificant impacts to benthos, fish, and shellfish resources. Potential impacts include exposure to EMF and habitat conversion due to cable protection (*e.g.*, concrete mattresses, etc.). As discussed above, the proposed Certificate Conditions require the Certificate Holder to conduct a pre- and post-commercial operation EMF study to correlate the relationship between EMF level and wind farm output, to determine whether there are any sensitivities within benthic species (131).
- 117. Habitat conversion, due to the use of cable protection measures (*e.g.*, concrete mattresses, etc., as permitted by Condition 80), is expected to cause a long-term, minor, indirect impact resulting in a shift in species assemblages towards those found in rocky reef/rock outcrop habitat. The impact is expected to be minor because cable protection is only anticipated to be used, at a maximum, for two percent (approximately 300 feet) of the SFEC-NYS length. Based on the geotechnical and geophysical sampling that has been undertaken by the Certificate Holder, it is expected that the sandy sediment will be conducive to achieving a 6-foot burial depth, thus minimizing the need for secondary cable protection. To further reduce impacts to marine life and fishermen, at the HDD exit pit the proposed Certificate Conditions require the Certificate Holder to bury the cable protection with at least 3 feet of cover (90).
- 118. The proposed Certificate Conditions require the Applicant to complete a Benthic Sampling Plan in accordance with Appendix G hereto. The purpose of the Benthic Sampling Plan is to (i) establish baseline benthic conditions prior to cable installation within New York state waters, and (ii) subsequently monitor post-installation benthic conditions to assess any effects resulting from installation activities and operation of the SFEC. Appendix G sets forth a

sampling protocol that requires (i) pre-cable installation benthic sampling survey prior to construction along the proposed centerline of the SFEC-NYS cable corridor from the shore to the territorial limits of NYS waters; and (ii) at least two post-cable installation benthic sampling surveys for the area along the SFEC-NYS from the HDD exit pit to the territorial limits of NYS waters. As part of the Benthic Sampling Plan, salinity levels will also be monitored (136). In addition, the Applicant will collect temperature data at the water/sediment interface, to ascertain if there is a temperature gradient from the location of the cable to adjacent areas (136).

119. Maintenance of the SFEC-NYS is considered a non-routine event and is not expected to occur with any regularity. Impacts associated with maintenance of the SFEC-NYS are expected to be similar but less frequent to those described for the construction/installation phase.

xv. SFEC-NYS Construction

- 120. Installation of the SFEC-NYS will not result in any effects on tide and current conditions in the vicinity of the Project because the SFEC-NYS will be installed below the seabed. Mechanical/hydro-jet plow, and the HDD, may have a minor impact to the physical and chemical conditions in the vicinity of the Project; however, the duration and extent of these activities and their effects will be short-term and localized.
- 121. To minimize impacts to residents, businesses, and threatened and endangered species, all drilling operations associated with the SFEC-NYS HDD will be confined to the period November 1 through April 30 of the succeeding year (71 and 72), except in accordance with proposed Certificate Condition 69. Further, to minimize impact to Atlantic sturgeon, diver

clearance and backfill of the HDD exit pit will be limited to November 1 to April 30 as well (72[a]).

- 122. The Applicant will install the SFEC-NYS, exclusive of the HDD, using either simultaneous lay and burial or pre-lay and post-burial processes (79). The following processes may be used, individually or in combination, to install the SFEC-NYS, exclusive of the HDD: mechanical cutter, mechanical plow (which may include a jetting system), jet sled, jet trencher and/or controlled flow excavation. These technologies were selected for their potential to achieve target burial depth and minimize permanent disturbance to the seafloor. If jet trenching technology is used to lay the SFEC-NYS, the Applicant will conduct jet trenching trials to ensure compliance with TSS threshold limits as defined in the proposed certificate conditions (171). The Applicant will include in the EM&CP and implement a Suspended Sediment and Water Quality Monitoring Plan which will be prepared in accordance with the Suspended Sediment and Water Quality Monitoring Plan Scope of Study attached as Appendix I to this Joint Proposal. The Applicant also will include a Jet Trencher Trial Plan in the EM&CP in accordance with proposed Certificate Condition 84. The Applicant will operate the jet trencher in accordance with the operating conditions determined through the trials to maintain the suspension of in-situ sediments within the TSS limits (85[a]) and take corrective action if such limits are exceeded (85[c]). These proposed Certificate Conditions will ensure that impacts to water quality that result from installation of the SFEC-NYS are avoided or minimized to the extent practicable.
- 123. HDD will be used to install a conduit in the SFEC sea-to-shore transition through which the SFEC will be installed from an onshore transition vault to the HDD exit pit. The HDD exit pit will be located a minimum of 1,000 feet seaward of Mean Low Water, and at a Mean Low

Water depth of no less than 15 feet, and otherwise is required to be compliant with the substantive provisions of 6 NYCRR Part 505 of Coastal Erosion Management Regulations. Locating the HDD exit pit at this distance will avoid the Coastal Erosion Hazard Area and the nearshore biologically active zone. The proposed Certificate Conditions require the Applicant to identify in the EM&CP whether it will use a cofferdam at the HDD exit pit and, if so whether it will use a pile-driven or gravity cell cofferdam. Although the Applicant does not anticipate that it will need to use a cofferdam, the ultimate decision on whether to use a cofferdam and how to design it will be based on seabed conditions. Where a cofferdam is used, it will not be left in place for more than one construction season, and it will be fully removed.

124. The proposed Certificate Conditions set forth the material that may be used to back fill the HDD exit pit (89) and provide conditions that must be applied to minimize sediment released into the water column during excavation and backfilling of the HDD exit pit (89). During HDD, fluids are pumped into the borehole to lubricate it, stabilize the bore hole wall and aid in the return of drilled sediments. These fluids must be water-based unless otherwise approved by DPS in consultation with DEC (87[d]). If a polymer-based additive is proposed, it must be included in the EM&CP with the corresponding SDS containing eco-toxicity information and NYSDEC Water Treatment Chemical Form (87[d]). Petroleum-based additives are prohibited (87[d]). The proposed Certificate Conditions also require that uncontaminated drill cuttings and drilling muds from drilling processes which utilize only air, water, or water-based drilling fluids be disposed of at either construction and demolition debris landfills or at municipal solid waste ("MSW") landfills (181). Drill cuttings from drilling processes which utilize polymer-based mud containing mineral oil lubricant are considered contaminated and can only be

disposed of at MSW landfills (181). Dewatered drilling muds, including polymer-based mud, containing mineral oil lubricant can only be disposed of at MSW landfills (181).

- 125. In addition, the Applicant is required to include in the EM&CP an Inadvertent Returns Plan that provides for the detection and correction of accidental releases of drilling fluids to mitigate and minimize the impact of any such releases (86). The Applicant also must use best efforts to recover and dispose of HDD drilling fluids and cuttings. Further, the Applicant cannot intentionally release drilling fluids or cuttings outside of the HDD operation and must use best efforts to prevent inadvertent release of same (87). The Applicant anticipates that approximately 90% of drilling fluids will be recovered.
- 126. The proposed Certificate Conditions include provisions to minimize the release of sediment into the water column during excavation and backfilling of the HDD exit pit and to avoid or minimize impacts from such activities (90). In addition, if material is not contaminated it is required to be put on a barge and used as native material for backfill if the backfill of the HDD exit pit occurs prior to May 15 of the first year of construction that HDD work is commenced (89). If the backfill of the HDD exit pit cannot occur by such date the Certificate Holder may use clean material of similar grain size to the dredged material, and consult with NYSDEC, NYSDOS, and DPS Staff on the source of such fill prior to use. This Certificate Condition will ensure that proper material is used as backfill that is comparable to the existing sediment conditions to support benthic organisms and minimize impact to the benthic community. To ensure that all contaminated material is disposed of properly, the Applicant must comply with the requirements of Certificate Condition 89, which requires the Applicant to identify the final dredged material disposal location, including a letter from the permitted disposal facility

verifying that they will accept the material, and follow the requirements of 6 NYCRR Part 360 *et seq.*

- 127. The sea-to-shore transition cable conduit will be installed at a minimum depth of 30 feet below the current profile of the Wainscott Beach (86). The nearshore area is a dynamic environment with frequently shifting sands. In addition, storm surges and other severe weather events can lead to greater levels of nearshore erosion. Installing the conduit at this depth below the beach will avoid or minimize the possibility of exposure of the conduit in this area. The onshore transition vault will be located underground within the existing Beach Lane right-of-way with a manhole cover at the surface.
- 128. During operation of the SFEC-NYS, it is anticipated that the main source for potential impacts to the off-shore environment in the vicinity of the cable corridor would occur in the event of cable damage and subsequent repair. The impacts that would occur during a repair operation are like those described for the original installation but much smaller in duration and extent (*e.g.*, use of smaller vessels). Because the SFEC-NYS does not contain a coolant fluid, there is no potential for fluid release in the event of such damage.

xvi. <u>Finfish</u>

129. The Construction of the SFEC-NYS is not expected to have significant long-term effects on finfish. Many of the species possibly present along the SFEC-NYS have a completely pelagic lifestyle, and many other species have pelagic early life stages and are not dependent on benthic habitat. As such, modification or disturbance of the substrate is expected to have a negligible adverse impact on the habitat of pelagic species, if present. There is a potential for adverse impacts to finfish habitat of demersal species resulting from the Project, but because of the small acreage relative to the total area of surrounding finfish habitat, these are expected to be negligible to minor, localized, and short-term in nature.

- 130. During construction of the SFEC-NYS, three activities may affect finfish: seabed disturbance, noise, and sediment suspension and deposition. Impacts resulting from discharges and debris are expected to be negligible. Seabed disturbance is expected to produce minor, direct, or indirect effects to species, depending on the life stages present for each species. For seabed preparation activities during construction demersal early life stages of species that have suitable habitat at the SFEC-NYS will experience minor, short-term, direct effects from seabed preparation and will most likely be subject to injury or mortality. While some mortality could occur to demersal early life stages, this impact is considered minor given the small area of impact. Demersal later life stages will experience minor to negligible, short-term, direct effects because older life stages are more mobile and more likely to leave the area during seabed preparation. However, individuals of these species may also experience limited injury or mortality. These effects are only expected for finfish species that have demersal life stages associated with sand sheets, and sand with mobile gravel. Those that are associated with finegrained sediments (silt and clay), or patchy cobble and boulder on sand habitats are expected to have negligible effects as these are not expected to occur or only occur occasionally in the area. In accordance with the proposed Certificate Conditions, areas with patchy cobble and boulder on sand habitat must be avoided during construction activities (81).
- 131. Pelagic early and later life stages are generally more mobile and reside higher in the water column, so direct effects associated with seabed preparation are expected to be negligible and short-term. These species are expected to either temporarily vacate the area or will drift through the area with limited potential to be present in the direct impact area. Finfish are

expected to move back into the area following the disturbance. Indirect effects associated with feeding may also occur; however, this will be dependent upon species. Feeding by some species may be disrupted as they will temporarily avoid the area; this will have some effect on pelagic species. Other species may be attracted to the disruption and prey on dislodged benthic species or other species injured or flushed during seabed preparation. This is expected to be a short-term, minor, indirect effect.

- 132. Installation of the SFEC-NYS will result in minor to negligible, short-term, direct effects to demersal early and later life stages. Installation of the SFEC-NYS will occur via a mechanical/hydro-jet plow. Compared to open cut dredging/trenching, this method will minimize sediment disturbance and alteration of demersal finfish habitat. SFEC-NYS installation is also expected to produce negligible to minor, short-term, direct effects to pelagic early life stages, and pelagic later life stages of smaller species because they may become impinged or entrained on the water pumps that will operate the mechanical/hydro-jet plow. Although the circulated seawater is released back into the ocean, it is assumed that all entrained eggs, larvae, and zooplankton will be killed. However, total estimated losses of zooplankton and ichthyoplankton related to entrainment from installation of the SFEC-NYS are expected to be negligible to minor and short-term.
- 133. Effects associated with vessel anchoring during construction of the SFEC-NYS are expected to be similar to those discussed above. Direct effects are expected to be minor and short-term and associated with mortality and or injury of demersal early life stage species and demersal later life stage species with limited mobility. Faster moving demersal species and pelagic species will be expected to temporarily vacate the impact area associated with the anchor or the area swept by the anchor chain. The extent of the effects will vary depending on

the vessel type, number of vessels, and duration onsite. However, to minimize the sediment disturbance caused by cable sweep, midline buoys or other alternative measures must be used in accordance with the proposed Certificate Conditions (85).

- 134. The potential for noise to be generated during construction of the SFEC-NYS is the result of vessel use during activities such as grapnel runs, HDD pit excavation, HDD operations, temporary cofferdam installation (if applicable), and cable installation. These sources of noise are expected to have negligible effects. Effects associated with noise are expected to be short-term and minor with finfish returning to the area after the noise-generating activity has been completed. Elevated noise levels are expected to cause some fish species to temporarily vacate the area, causing a short-term disruption in feeding, mating, and other essential activities. Less mobile species and benthic early life stages will be expected to be more susceptible to noise effects than more mobile species as they will not be able to leave the area as quickly. However, impacts of this magnitude are expected to be minor, and short-term. Further, as discussed in Paragraph 88, *supra*, construction activities will have time of year restrictions to avoid impacts to sturgeon.
- 135. Generally, the noise from mechanical/hydro-jet plow equipment is expected to be masked by louder sounds from vessels. Also, as most noise generated by these pieces of equipment will be below the sediment surface and associated with the high-pressure jets, noise levels are not expected to result in injury or mortality to finfish, but may cause finfish to temporarily vacate the area. Minor, short-term, direct impacts are expected from mechanical/hydro-jet plow installation noise.
- 136. As discussed in Paragraph 88, *supra*, to minimize impacts to Atlantic Sturgeon, the proposed Certificate Conditions provide that only limited seabed disturbing work may take

place May 1 through May 15 and November 1 through November 15, and where backfilling of the HDD exit pit must occur May 1 to May 15 or November 1 to November 15, the Applicant must create and follow an Atlantic Sturgeon Monitoring and Mitigation Plan in accordance with 6 NYCRR Part 182, which will be included as part of the EM&CP (72[a]). Increases in sediment suspension and deposition during construction of the SFEC-NYS will result from seabed disturbance caused by vessel anchoring, mechanical/hydro-jet plow installation of the SFEC-NYS, and limited excavation at the HDD exit pit. Direct effects associated with increased sediment suspension and depositions are expected to be negligible to minor and short-term in nature and will be mitigated by the proposed Certificate Conditions, which require the use of midline buoys or alternative measures to reduce sediment disposition due to anchor sweep (85[b]), and also prohibit sidecasting during HDD pit construction and require excavated material to be placed on a barge for potential reuse as backfill during the same construction season (90). Indirect impacts associated with increased suspended sediment and deposition include changes in habitat and species composition after sediments have settled out. These impacts are expected to result in negligible to minor, long-term, indirect impacts for benthic early and later life stages and negligible, short-term indirect impacts for pelagic early and later life stages as described in more detail below. Vessel mooring or anchoring activity resulting in sediment suspension is expected to be limited to areas of seabed immediately adjacent to the anchors. Given the localized extent of sediment deposition predicted the resulting impacts on benthic communities and habitat quality are expected to be negligible to minor and long-term for benthic early and later life stages. Sediment deposition is expected to result in no impact to pelagic early or later life stages.

- 137. A modeling analysis of the magnetic fields and induced electric fields anticipated to be produced during operation of the SFEC-NYS was performed and results are included in Appendix P of the Application. These modeling results were compared to published studies available in the scientific literature on the sensitivity of marine species to EMF. The modeling results and scientific literature analysis indicates that the EMF associated with the operational buried SFEC-NYS is not likely to be detected by bony fish, elasmobranch, or invertebrate species. Given that the calculated values are below the thresholds of detection reported in the scientific literature, behavioral effects impacting regional abundances and distributions of such species are not expected.
- 138. Operational impacts from EMF are expected to be negligible on finfish along the SFEC-NYS, due to the 6-foot burial depth and shielding of the SFEC-NYS, as well as the results presented in Appendix P of the Application. Habitat conversion, due to the use of cable protection (*e.g.*, concrete mattresses, etc.), may result in minor, indirect impact resulting in a shift in species assemblages towards those found in rocky reef/rock outcrop habitat. As discussed in Paragraph 104, the impact is expected to be minor because cable protection is only anticipated to be used in limited sections of the SFEC-NYS's length.
- 139. Maintenance of the SFEC-NYS is considered a non-routine event and is not expected to occur with any regularity. Impacts associated with maintenance of the SFEC-NYS are expected to be similar but less frequent to those described for the construction/installation phase.
- 140. In accordance with the proposed Certificate Conditions, as described in Paragraph 55, *supra*, the Applicant will complete an EMF study prior to and post commercial operation of the SFWF that includes a post-installation EMF Study of the SFEC-NYS, which will consist

of measurements of the frequency and strength of the EMF measured immediately above the SFEC-NYS cable (131). The EMF study will include a tabular summary of the known biological sensitivities of marine species common in the Project area, including finish, in order to determine whether there are any potential or known impacts of EMF on these species.

- 141. The Applicant will also be required to take an EMF reading at the SFEC-NYS sea-to-shore transition in the event of cable exposure.
- 142. Additional EMF measurements will be taken when the Applicant performs postconstruction cable monitoring surveys, as described in Paragraph 101(d), *supra*.
 - D. Availability and Impact of Alternatives
- 143. The Application and exhibits agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding describe the availability and impact of alternatives to the Project and are briefly summarized below. Considering all factors, the Signatory Parties agree that the Project as described in Appendix B is preferable, on balance, to any of the alternatives considered. The selected route has been designed to minimize impacts to wetlands, traffic, and local residents and businesses, and also because it will maintain access to the Wainscott Beach, an issue that has been prioritized by the Signatory Parties. Further, the selected SFEC-Onshore Route will be located entirely underground within road and railroad rights-of-way, and the selected Interconnection Facility location is adjacent to an existing substation, and thus the proposed route and configurations will avoid or minimize impacts to existing land uses.
- 144. As set forth in Exhibit 3 to the Application, the Applicant considered various options to connect the SFWF to the existing transmission grid, including different locations for: (1) SFEC-NYS routing in New York State territorial waters; (2) the onshore landing site; (3) the SFEC-Interconnection Facility site and routing of the interconnection cable to the existing East

Hampton Substation; and (4) the SFEC-Onshore route, between the onshore landing site and the SFEC-Interconnection Facility.

- 145. With respect to routing of the SFEC-NYS in New York State territorial waters, the Signatory Parties considered and rejected the Northern Shore Route described in Application Exhibit 3. The Northern Shore Route is less desirable than the Southern Route for several reasons, including engineering constraints (e.g., significant portions of shallow water), the presence of heavily utilized fishing grounds, and the presence of a municipal aquaculture lease. In addition, the Northern Shore Route runs into Napeague Bay which, as a more sheltered coastal embayment, has high ecological sensitivity and supports more significant populations of finfish and shellfish. The Southern Shore Route presented fewer engineering and environmental constraints as compared to the Northern Shore Route. Although there is commercial fishing activity along the Southern Shore Route including fixed and mobile gear, there are no known aquaculture lease areas. The subtidal coastal habitat along the South Shore is subjected to higher wave action and, thus, has coarser sandy deposits. The benthic community along the Southern Shore will recover faster from any potential impacts caused by the Project as compared to the Northern Shore Route. Given these results, the Signatory Parties selected the Southern Shore Route as the preferred route.
- 146. Regarding the onshore landing site, the Signatory Parties evaluated and rejected the HitherHills and Napeague Lane sites, which are described in Application Exhibit 3.
- 147. The Napeague Lane landing site was deemed nonviable due to the fact that the State Historic Preservation Office identified it as archaeologically sensitive. The Hither Hills landing site was ultimately rejected due to the fact that it is located alongside 0.13 acres of the 100-foot adjacent area for mapped NYSDEC freshwater wetlands, the proximity of a State

Park campground and other non-residential structures, the presence of hard-bottom habitats offshore, construction feasibility concerns, impacts to traffic, businesses and the community, and impacts to historic properties. Additionally, by comparison, the Beach Lane landing site will have minimal impact on the environment, non-residential structures, and historic properties.

- 148. The Signatory Parties considered three potential Interconnection Facility locations Cove Hollow Road Facility, Airport West Facility, and Airport East Facility, and two substation interconnection cable routes – Substation Interconnection Cable – Route A, and Substation Interconnection Cable – Route B, ultimately selecting the Cove Hollow Road Facility and Substation Interconnection Cable – Route A. Additional information about these alternatives is available in Application Exhibit 3, Section 3.7.
- 149. The Airport East Facility and Airport West Facility sites were determined to be non-viable and were removed from consideration due to issues relating to site control and other potential development constraints, including height restrictions, based on proximity to the East Hampton Airport. The Cove Hollow Road Interconnection Facility was selected as the preferred SFEC-Interconnection Facility location due to its proximity to the existing East Hampton Substation and its compatibility with existing zoning. Additionally, the site is adjacent to existing utility infrastructure, thereby avoiding the potential introduction of utility-related visual elements in areas where such facilities are not currently part of the landscape. Further, the Applicant's contractual agreement with LIPA requires that the Project interconnect at the existing East Hampton Substation. The Cove Hollow Road Interconnection Facility location minimizes the distance of the interconnection cable route from the new SFEC-Interconnection Facility to the existing East Hampton Substation.

- 150. Substation Interconnection Cable Route A was selected as the preferred interconnection route due to the fact that it has greater work space and is a greater distance from the Long Island Railroad than Route B.
- 151. Finally, the Signatory Parties reviewed the Application evaluation of seven SFEC-Onshore Routes, Beach Lane Routes A - D and Hither Hills Routes A-C, and basis for adoption of the Beach Lane Route as the preferred route. The Signatory Parties recommend approval of the Beach Lane – Route A as the preferred route after analyzing the land use, environmental (wetlands, habitat, etc.), and cultural resource GIS data, reviewing field surveys, considering issues relating to development, and analyzing engineering factors, including impacts to onshore traffic and heavily traveled roadways. Beach Lane - Route A is 4.1 miles long and located primarily within Town of East Hampton roadways and LIRR ROW, outside of any public parks or conservation lands. Additionally, no Village of East Hampton lands are The route crosses Montauk Highway/State Route 27 and will be crossed and crossed. constructed in accordance with NYSDOT requirements to minimize traffic disruption on this heavily traveled road. The roadways and LIRR ROW, in which Beach Lane - Route A will be constructed, are primarily adjacent to developed land and forested complexes. Impacts to wetlands, historical and cultural resources from the construction and operation of Beach Lane - Route A are anticipated to be avoided or minimized. For example, Beach Lane-Route A does not impact any federal or NYSDEC-regulated wetlands. Beach Lane - Route B, Beach Lane -Route C, and Beach Lane - Route D were removed from consideration as viable routing alternatives. These routes required obtaining property rights from additional entities such as the Village of East Hampton or private homeowners, which is a significant risk to development. In addition, of the four Beach Lane variants investigated, Beach Lane - Route

C and Beach Lane - Route D did not minimize impacts to traffic or wetlands. The Hither Hills routes were deemed less desirable than the Beach Lane variants for several reasons, including the fact that the route variants from the Hither Hills landing site range from 11.4 to 12.8 miles, which are all considerably longer than the three potential routes from the Beach Lane landing site, which range from only 3.5 to 4.1 miles. Further, based on information available from the National Wetlands Inventory maps and New York State Freshwater and Tidal Wetlands Maps, there were greater potential impacts to both federally- and NYSDEC-regulated wetlands and NYSDEC freshwater and NYSDEC tidal wetland adjacent areas along the three potential Hither Hills Routes. Hither Hills – Route A runs along 51 federal wetlands and NYSDEC freshwater and NYSDEC tidal wetland adjacent areas, totaling 14.19 acres and along 0.3 acres of NYSDEC freshwater wetlands, 9.0 acres of NYSDEC freshwater wetland adjacent areas, and 0.3 acres of NYSDEC tidal wetlands and 3.5 acres of NYSEC tidal wetland adjacent areas. Hither Hills – Route B runs along 35 federal wetlands, totaling 19.96 acres, 1.0 acres of NYSDEC freshwater wetlands, 18.0 acres of NYSDEC freshwater wetland adjacent areas, and 8.6 acres of NYSDEC tidal wetland adjacent areas. Finally, Hither Hills – Route C runs along 1.0 acre of NYSDEC freshwater wetlands, 18.0 acres of NYSDEC freshwater wetland adjacent areas, and 8.6 acres of NYSDEC tidal wetland adjacent areas.

152. The Signatory Parties recognize that a no-action alternative is not a viable option. DWSF was selected by PSEG Long Island to increase the local generation of poweron the South Fork, while contributing to LIPA's clean energy goals.

E. Conformance to Long Range Plans for Expanding the Electric Power Grid

- 153. The Project conforms to the requirements and planning objectives of the NYISO. Further, the Project was selected by PSEG Long Island in its RFP competitive bidding process to resolve transmission constraints in the South Fork of Long Island.
- 154. Additionally, the Project will contribute toward helping New York State achieve its energy and environmental targets set forth in the newly-enacted Climate Leadership and Community Protection Act ("CLCPA"). Under the CLCPA, New York must achieve an 85 percent reduction in greenhouse gas emissions by 2050 (from 1990 levels) and 70 percent of the State's electricity must be generated by renewable energy resources in 2030. To help the State achieve these overarching goals, the CLCPA also requires the State to procure 9,000 MW of offshore wind energy by 2035. The Project unequivocally aligns with the goals of the CLPCA. Therefore, refraining from constructing the Project is not being considered as a viable option.
 - F. System Reliability Impact Study
- 155. The System Reliability Impact Study ("SRIS"), which was provided as Confidential Appendix Q to the Application, was issued May 16, 2018. The SRIS and was performed under the applicable NYISO Tariff provisions in Attachment P, Transmission Interconnection Procedures ("TIP"), of the NYISO Open Access Transmission Tariff. The NYISO has indicated that LIPA's existing transmission facilities will require upgrades and expansions to accommodate the Project. LIPA is the only transmission owner whose facilities are affected by the Project.
 - G. State and Local Laws
- 156. The Signatory Parties agree that the Project, as proposed in this Joint Proposal, fully complies with the substantive provisions of all applicable state laws, including without limitation the PSL, the Public Authorities Law, and the Environmental Conservation Law.

- 157. Exhibit 7 of the Application identifies every substantive local legal provision (ordinance, law, regulation, standard, and requirement) potentially applicable to the Project, as well as every such local legal provision that DWSF requests that the Commission not apply because, as applied to the Project, such local legal provision is unreasonably restrictive in view of the existing technology, factors of costs or economics, or the needs of consumers. Except for those provisions the Applicants specifically requested that the Commission refuse to apply, DWSF will comply with, and the location of the Project as proposed conforms to, all substantive local legal provisions that are applicable to the Project. Due to the preemptive effect of PSL Section 130, procedural requirements to obtain any approval, consent, permit, certificate or other condition for the construction or operation of the Project do not apply.
- 158. The following are examples of local laws that the Applicants request the Commission not apply, as well as the corresponding justifications for such requests:
 - Noise level time of day restrictions, on the grounds that for safety and engineering reasons, certain limited construction activities must occur on a continuous basis once they commence;
 - b. parking and vehicle length and weight restrictions on the grounds that these requirements are technically impossible or impracticable to abide by given the equipment and technology available or for safety reasons; and
 - c. maximum height requirements, because compliance does not enable impact minimization and is also not feasible for safety reasons.
- 159. The Signatory Parties agreed that the justifications set forth in Certificate Condition 12 provide sufficient basis for the Commission to refuse to apply the identified ordinances. Certificate Condition 12 narrows the scope of the waivers to only what is necessary for

construction, operation, and maintenance of the Project, and requires the Certificate Holder to take additional actions to maintain public health and safety, such as complying with a Construction Noise Control Plan for activities taken after 8:30 PM on Beach Lane and coordination with the local fire department to preserve access to fire hydrants on Beach Lane. Except for those provisions of local laws that Applicant specifically request that the Commission refuse to apply, the Applicant will comply with, and the location of the Project as proposed, conforms to, all substantive local legal provisions applicable thereto.

H. Public Interest, Convenience, and Necessity

- 160. The Project is needed to interconnect and reliably deliver the output of the SFWF to the transmission system. The Project, along with the SFWF, will serve the public interest, convenience, and necessity by, *inter alia*, contributing to State energy policy goals in the State Energy Plan and Clean Energy Standard, diversifying the State's electric generation mix and lowering greenhouse gas emissions. In addition, from the standpoint of electric reliability, the NYISO performed a System impact Study which showed that the interconnection of the Project will not adversely impact the New York bulk electric system.
- 161. DWSF conducted substantial public outreach and information efforts in support of the Project. Public Notices were published in the *Newsday*, a daily publication in Suffolk County, and the *East Hampton Star*, a weekly publication in the Town of East Hampton, for two consecutive weeks prior to filing the Application. In addition, copies of the Application were provided to the following libraries for public inspection: Amagansett Free Library, East Hampton Library, Hampton Central Library, Montauk Library, and Springs Library. Owners of property abutting the preferred and viable alternative routes identified in the Application were mailed a notice that described the Project and provided information for accessing the

Project website for those interested in learning more about the Project. DWSF conducted informational meetings prior to the Commission's Public Statement Hearings held on June 11, 2019, and representatives of DWSF familiar with all aspects of the Project were available to informally address questions and concerns from the public. As described in the Certificate Conditions, DWSF will provide notification to local municipalities, residents, and business prior to construction commencement. Such notice will include a safety message and the toll-free phone number that can be used to obtain additional information.

IV. Proposed Findings

162. The Signatory Parties agree that the record in this proceeding supports the Proposed Commission Findings set forth in Appendix C, attached hereto.

V. Proposed Certificate Conditions

163. The Signatory Parties agree that the Proposed Certificate Conditions set forth in Appendix D, attached hereto, are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of the Project.

VI. Environmental Management and Construction Plan

164. The Signatory Parties agree that the specifications for the development of the EM&CP, set forth in Appendix E, attached hereto, and the specifications for the plans to be included as part of the EM&CP, as set forth in Appendices H through K, attached hereto, are acceptable and appropriate for application to the Project as described herein.

VII. Water Quality Certification

165. The Signatory Parties agree that the record in this proceeding supports the water quality

certification substantially in the form of Proposed 401 Water Quality Certification set forth in

Appendix F, attached hereto.

APPENDICES

Appendix A – List of Documents in the Evidentiary Record

Appendix B – General Description of the Project

Appendix C – Proposed Findings

- **Appendix D Proposed Certificate Conditions**
- **Appendix E EM&CP Specifications**
- Appendix F Proposed 401 Water Quality Certification

Appendix G – Benthic Sampling Plan

- Appendix H Initial Hazardous Waste and Petroleum Work Plan
- Appendix I Suspended Sediment and Water Quality Monitoring Plan Scope of Study
- **Appendix J Noise Control Plan Scope of Work**
- **Appendix K Invasive Species Control Plan Specifications**
- Appendix L Specifications for Noise Modeling and Tonal Assessment

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Dated:

September 17, 2020

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PSEG Long Island LLC on Behalf of and as Agent for the Long Island Lighting Company d/b/a LIPA

By: Jeffrey R. Greenblatt, Esq.

/s/ Michael B. Gerrard Win With Wind

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Deb FOSTER Deb Foster Sept. 1,2020

D. Michaelfansen D. Michael Hansen

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APPENDIX A

LIST OF TESTIMONY, AFFIDAVITS AND EXHIBITS TO BE ADMITTED

Testimony

Direct Testimony of:

- A. William Bailey, sponsoring Exhibit 4, Section 4.14 (Exhibit 4 to the Application) and Exhibit 31 (Appendix P to the Application) (DMM Item No. 1 filed September 14, 2018)
- B. Mary Jo Barkaszi, sponsoring Exhibit 4, Section 4.11 (Exhibit 4 to the Application) (DMM Item No. 1 filed September 14, 2018)
- C. Drew Carey, sponsoring Exhibit 4, Sections 4.9 and 4.10 (Exhibit 4 to the Application); Exhibit 24 (Appendix I to the Application), and Exhibit 25 (Appendix J to the Application) (DMM Item No. 1 – filed September 14, 2018)
- D. Kevin Dwarka, sponsoring Exhibit 6 (Exhibit 6 to the Application) (DMM Item No. 1 filed September 14, 2018) (adopted by John Stewart, Kenneth Bowes, Melanie Gearon, and Jennifer Garvey)
- E. Jennifer Garvey, sponsoring Exhibit 33 (Appendix R to the Application) (DMM Item No. 1 filed September 14, 2018)
- F. Melanie Gearon, sponsoring Exhibit 2 (Exhibit 2 to the Application (adopted by Kenneth Bowes, Corey Kelkenberg, and Demetrios Sakellaris); Exhibit 3 (Exhibit 3 to the Application) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg); Exhibit 4, Sections 4.1 and 4.8 (Exhibit 4 to the Application); Exhibit 8 (Exhibit 8 to the Application); Exhibit 26 (Appendix K to the Application); Exhibit 28 (Appendix M to the Application) (adopted by Kenneth Bowes, Ryan Winter, Rob Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris) (DMM Item No. 1 – filed September 14, 2018)
- G. David Grassbaugh, sponsoring Exhibit 9 (Exhibit 9 of the Application) (adopted by John Stewart, Kenneth Bowes, Jennifer Garvey, and Melanie Gearon) (DMM Item No. 1 – filed September 14, 2018)
- H. Patrick Heaton, sponsoring Exhibit 4, Sections 4.4 (Exhibit 4 of the Application); Exhibit 18 (Exhibit D to the Application); Exhibit 19 (Appendix D to the Application); and Exhibit 35 (Appendix T to the Application) (DMM Item No. 1 filed September 14, 2018) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg) (DMM Item No. 1 filed September 14, 2018)

- I. Susan Herz, sponsoring Exhibit 4, Section 4.9 (Exhibit 4 of the Application) and Exhibit 24 (Appendix I of the Application) (DMM Item No. 1 filed September 14, 2018) (update filed with the Commission on May 15, 2020) (DMM Item No. 113 filed May 15, 2020)
- J. Corey Kelkenberg , sponsoring Exhibit 7 (Exhibit 7 to the Application); Exhibit 10 (E-1 to the Application); Exhibit 11 (Exhibit E-2 to the Application); Exhibit 12 (Exhibit E-3 to the Application) (adopted by Kenneth Bowes, Ryan Winter, Robert Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris); Exhibit 13 (Exhibit E-4 to the Application); Exhibit 14 (Exhibit E-5 to the Application) (adopted by Kenneth Bowes, Ryan Winter, Robert Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris); Exhibit 15 (Exhibit E-5 to the Application) (adopted by Kenneth Bowes, Ryan Winter, Robert Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris); Exhibit 15 (Exhibit E-5 to the Application) (adopted by Kenneth Bowes, Ryan Winter, Robert Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris); and Exhibit 32 (Appendix Q to the Application) (DMM Item No. 1 filed September 14, 2018)
- K. Aileen Kenney, sponsoring Exhibit 1 (Exhibit 1 to the Application) (adopted by Kenneth Bowes, Jennifer Garvey, and John Stewart); Exhibit 2 (Exhibit 2 to the Application) (adopted by Kenneth Bowes, Jennifer Garvey, Melanie Gearon, and John Stewart); Exhibit 3 (Exhibit 3 of the Application) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg); and Exhibit 33 (Appendix R to the Application) (adopted by Kenneth Bowes, Jennifer Garvey, John Stewart, and Melanie Gearon) (DMM Item No. 1 filed September 14, 2018)
- L. David Kennedy, sponsoring Exhibit 4, Sections 4.6, 4.7. and 4.11 (Exhibit 4 to the Application); Exhibit 16 (Appendix A to the Application); and Exhibit 35 (Appendix T to the Application) (DMM Item No. 1 filed September 14, 2018) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg)
- M. Sean McCormick, sponsoring Exhibit 2 (Exhibit 2 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, and Demetrios Sakellaris); Exhibit 3 (Exhibit 3 to the Application); Exhibit 4, Sections 4.1 and 4.13 (Exhibit 4 to the Application); Exhibit 29 (Appendix N to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, and Demetrios Sakellaris); Exhibit 30 (Appendix O to the Application); Exhibit 34 (Appendix S to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Demetrios Sakellaris); and Exhibit 35 (Appendix T to the Application) (DMM Item No. 1 – filed September 14, 2018)
- N. Susan Moberg, sponsoring Exhibit 4, Sections 4.2 and 4.5 (Exhibit 4 to the Application); Exhibit 21 (Appendix F to the Application); and Exhibit 35 (Appendix T to the Application) (DMM Item No. 1 – filed September 14, 2018) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg)
- O. Gordon Perkins, sponsoring Exhibit 4, Section 4.3 (Exhibit 4 to the Application); and Exhibit 17 (Appendix B to the Application) (DMM Item No. 1 filed September 14, 2018)

- P. Jose Restrepo, sponsoring Exhibit 5 (Exhibit 5 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, Demetrios Sakellaris); Exhibit 10 (Exhibit E-1 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Demetrios Sakellaris); Exhibit 11 (Exhibit E-2 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, and Demetrios Sakellaris); Exhibit 12 (Exhibit E-3 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, Demetrios Sakellaris); Exhibit 13 (Exhibit E-4 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, and Demetrios Sakellaris); Exhibit 14 (Exhibit E-5 to the Application) (adopted by Kenneth Bowes, Corey Kelkenberg, Dominic Brown, and Demetrios Sakellaris); Exhibit 15 (Exhibit E-6 to the Application) (DMM Item No. 1 – filed September 14, 2018)
- Q. Jason Ross, sponsoring Exhibit 4, Section 4.12 (Exhibit 4 to the Application), Exhibit 7 (Exhibit 7 to the Application); and Exhibit 35 (Appendix T to the Application) (DMM Item No. 1 filed September 14, 2018) (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg)
- R. Kevin Smith, sponsoring Exhibit 4, Sections 4.8 and 4.9 (Exhibit 4 to the Application), Exhibit 22 (Appendix G to the Application); and Exhibit 24 (Appendix I to the Application) (DMM Item No. 1 – filed September 14, 2018)
- S. Christopher Van Beek, sponsoring Exhibit 9 (Exhibit 9 to the Application) (DMM Item No. 1 – filed September 14, 2018) (adopted by Kenneth Bowes, Jennifer Garvey, Melanie Gearon, and John Stewart)
- T. Nathan Vinhateiro, sponsoring Exhibit 4, Section 4.8 (Exhibit 4 to the Application) (adopted by Daniel Mendelsohn); and Exhibit 23 (Appendix H to the Application) (adopted by Daniel Mendelsohn) (DMM Item No. 1 filed September 14, 2018)
- U. Stephanie Wilson, sponsoring Exhibit 27 (Appendix L to the Application) (DMM Item No. 1 filed September 14, 2018)
- V. David Zeddies, sponsoring Exhibit 4, Section 4.12 (Exhibit 4 to the Application) and Exhibit 20 (Appendix E to the Application) (DMM Item No. 1 filed September 14, 2018)

Affidavits:

Affidavits of witnesses will be filed at a later date.

Exhibits:

Exhibit 1:	The Application, and General Information (Exhibit 1 to the Application) (DMM Item No. 1 – filed September 14, 2018)
Exhibit 2:	Location of Facilities (Exhibit 2 to the Application) (DMM Item No. 1 – filed September 14, 2018)

- Exhibit 3: Alternatives (Exhibit 3 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 4: Environmental Impacts (Exhibit 4 to the Application) (DMM Item No. 1 filed September 14, 2018) (updated May 15, 2020) (DMM Item No. 113 – filed May 15, 2020)
- Exhibit 5: Design Drawings (Exhibit 5 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 6: Economic Effects of Proposed Facility (Exhibit 6 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 7: Local Ordinances (Exhibit 7 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 8: Other Pending Filings (Exhibit 8 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 9: (CONFIDENTIAL) Cost of Proposed Facilities (Exhibit 9 to the Application) (Filed in its entirety with the Department of Public Service Records Access Officer on September 14, 2018) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 10: Description of Proposed Transmission Facilities (Exhibit E-1 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 11: Other Facilities (Exhibit E-2 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 12: Underground Construction (Exhibit E-3 to the Application) (DMM Item No. 1 filed September 14, 2018) (update filed with the Commission on May 15, 2020) (DMM Item No. 113 filed May 15, 2020)
- Exhibit 13: Engineering Justification (Exhibit E-4 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 14: Effect on Communications (Exhibit E-5 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 15: Effect on Transportation (Exhibit E-6 to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 16: Biological Resources Report (Appendix A to the Application) (DMM Item No. 1 filed September 14, 2018) (update filed with the Commission on May 15, 2020) (DMM Item No. 113 filed May 15, 2020)

- Exhibit 17: Visual Resource Assessment (Appendix B to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 18: Historic Architectural Resources Survey (Appendix C to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 19: (REDACTED) Phase 1 Archaeological Survey (Appendix D to the Application) (Confidential portions filed with the Department of Public Service Records Access Officer on September 14, 2018) (DMM Item No. 1 – filed September 14, 2018)
- Exhibit 20: Sound Study Technical Reports (Appendix E to the Application) (DMM Item No. 1 filed September 14, 2018) (updated filed with the Commission on May 15, 2020) (DMM Item No. 113 filed May 15, 2020)
- Exhibit 21: Phase I Environmental Site Assessments (Appendix F to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 22: Geotechnical and Geophysical Data Reports (Appendix G to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 23: Hydrodynamic and Sediment Transport Modeling Results (Appendix H to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 24: Essential Fish Habitat Assessment (Appendix I to the Application) (DMM Item No. 1 – filed September 14, 2018) (update filed with the Commission on May 15, 2020) (DMM Item No. 113 – filed May 15, 2020)
- Exhibit 25: Pre-Construction Sediment Profile and Benthic Assessment Report (Appendix J to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 26: Agency Correspondences (Appendix K to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 27: Consistency with New York State Coastal Management Program Policies and Town of East Hampton Local Waterfront Revitalization Program Policies (Appendix L to the Application) (DMM Item No. 1 – filed September 14, 2018)
- Exhibit 28: Local Ordinances (Appendix M to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 29: Environmental Management and Construction Plan Outline (Appendix N to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 30: Preliminary Invasive Species Control Plan (Appendix O to the Application) (DMM Item No. 1 filed September 14, 2018)

- Exhibit 31: Electric and Magnetic Field Assessment Reports (Appendix P to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 32: (CONFIDENTIAL) System Reliability Impact Study Approval Record (Appendix Q to the Application) (DMM Item No. 1 filed September 14, 2018) (Filed in its entirety with the Department of Public Service Records Access Officer on September 14, 2018)
- Exhibit 33: Public Involvement Plan (Appendix R to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 34: (REDACTED) GIS Data (Appendix S to the Application) (Confidential portions filed with the Department of Public Service Records Access Officer on September 14, 2018) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 35: Hither Hills Alternative Mapping and Environmental Data (Appendix T to the Application) (DMM Item No. 1 filed September 14, 2018)
- Exhibit 36: (REDACTED) DWSF Deficiency Response (filed with the Commission on January 22, 2019) (DMM Item No. 9 – filed January 22, 2019) (confidential portions filed with the Department of Public Service Records Access Officer on January 22, 2019)
- Exhibit 37: DWSF Application Update (filed with the Commission on May 15, 2020) (DMM Item No. 13 filed May 15, 2020)
- Exhibit 38: DWSF responses to Information Requests DPS-1
- Exhibit 39: DWSF responses to Information Requests DEC-1 through DEC-17
- Exhibit 40: DWSF responses to Information Requests Trustees-1 (including supplemental responses) (confidential responses to Trustees-1-7 sent to Administrative Law Judge Belsito on September 13, 2019)
- Exhibit 41: DWSF responses to Information Requests CPW-1 through CPW-46 (including supplemental responses)
- Exhibit 42: DWSF responses to Information Requests Kinsella-1 through Kinsella-10, Kinsella-21, and Kinsella-35
- Exhibit 43: DWSF responses to Information Requests Gruber-1
- Exhibit 44: DWSF responses to Information Request HIFI-1 through HIFI-2 (including supplemental response) (confidential response to HIFI-1-3 sent to Administrative

Law Judge Belsito on August 29, 2019; confidential responses to HIFI-2-1 sent to Administrative Law Judge Belsito on September 30, 2019 and October 3, 2019)

Exhibit 45: DWSF responses to Information Requests Cohen-1 through Cohen-2

APPENDIX B

DESCRIPTION AND LOCATION OF PROJECT

The Applicant has identified Project corridors to provide flexibility for siting. The Applicant is proposing to certify these corridors, such that the centerline for the Project will be sited during preparation of the Project Environmental Management and Construction Plan ("EM&CP").

These corridors are described further below and are depicted in the Application at Figure 2.3-1 – Location of Facilities on USGS Mapping, Figure 2.3-2 – Location of Facilities on NOAA Mapping, Figure 2.3-3 – Location of Facilities and Existing Utilities, and Figure 2.3-4 – Aerial Imagery Mapping Figures 2.3-1 to 2.3-4.

SFEC-NYS

The SFEC-NYS corridor crosses into New York State territorial waters south of Wainscott Beach, East Hampton, New York at a point three NM offshore in the North Atlantic Ocean. The SFEC-NYS corridor is approximately 3.5 miles (3.1 NM) long. The SFEC-NYS corridor is 591 feet¹ wide from the New York State territorial waters boundary to the point where the sea-to-shore transition begins. With the exception of the HDD exit pit, the maximum temporary limit of disturbance during construction is 180 meters wide along the cable corridor. At the HDD exit pit, due to the anchorage needs of the barges, the maximum temporary limit of disturbance is 500 meters wide. The maximum permanent limit of disturbance will be significantly less than the temporary maximum limits of disturbance.

¹ This width is equivalent to 180 meters, which is based on seabed site characterization survey guidance from the BOEM (Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585, July 2, 2015), and is consistent with the corridor for the SFEC-OCS.

The SFEC-NYS also includes the sea-to-shore transition where the SFEC-NYS will be connected to the SFEC-Onshore. The sea-to-shore transition will include a new onshore transition vault where the offshore and onshore cables will be spliced together. The vault will be located underground within the existing pavement of Beach Lane with a manhole cover at the surface. The SFEC-NYS cable will be installed using Horizontal Directional Drilling (HDD) under the public road right-of-way (ROW) and the beach.

The sea-to-shore transition corridor is approximately 53 feet wide and starts at the offshore exit point of the HDD (approximately 1,750 feet offshore from Mean High Water Line [MHWL] in 25 to 40 feet of water) and terminates at the onshore transition located at the south end of Beach Lane within the public road ROW.

SFEC-Onshore

The SFEC-Onshore corridor will begin at the sea-to-shore transition vault located onshore along Beach Lane and end at the SFEC-Interconnection Facility. The SFEC-Onshore will be installed within a new underground duct bank in the public road ROW and in a portion of the Long Island Railroad (LIRR) ROW. In the public road ROW, the duct bank will be located, where practicable, within the existing paved section.

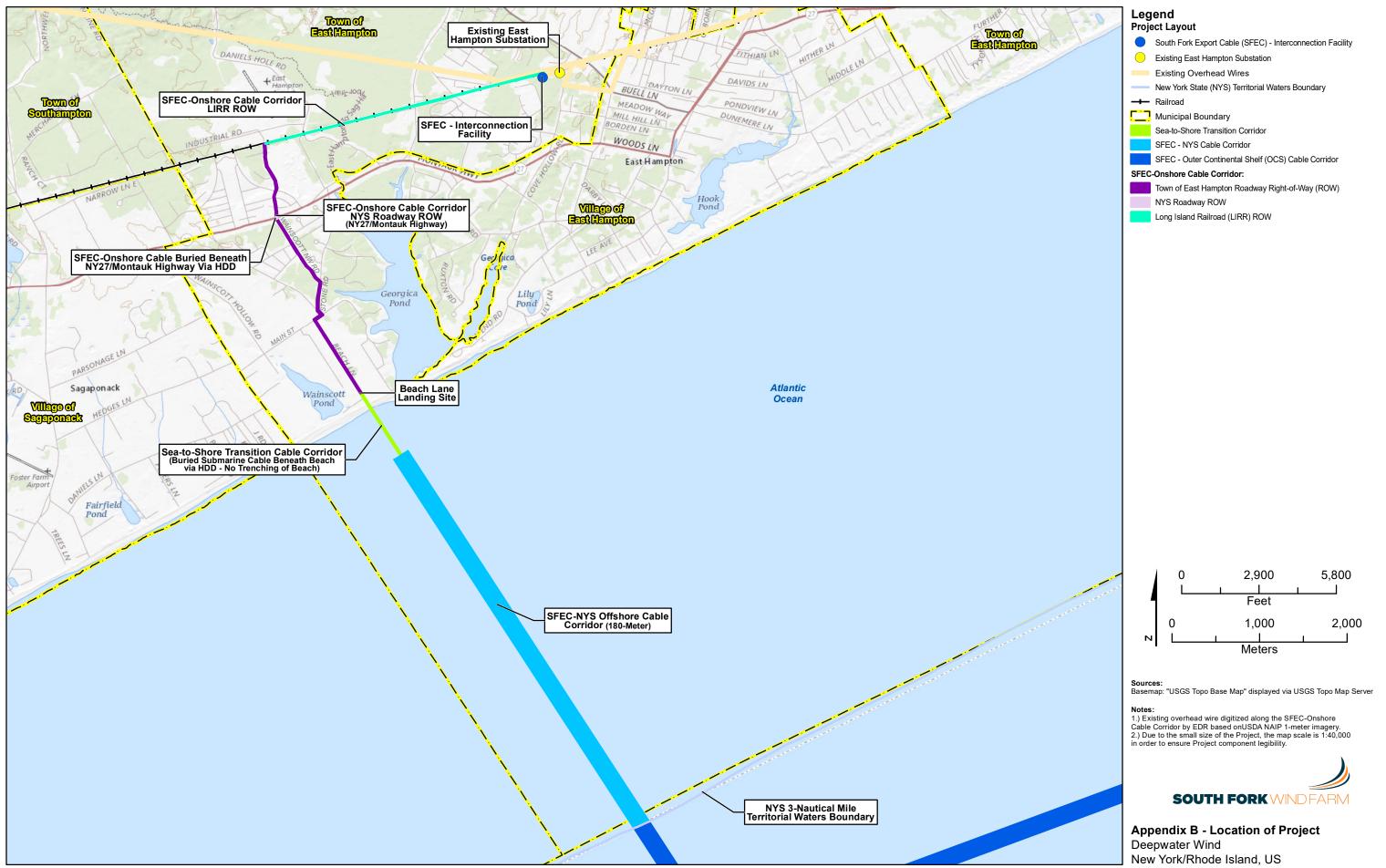
Within the public road ROW, the SFEC-Onshore corridor utilizes the full extent of the ROW (tax property line to tax property line) and ranges in width from 35 feet to 75 feet at various points along the route. Within the LIRR ROW, the SFEC-Onshore corridor is located on the south side of the railroad, bounded by 12.5 feet offset from the center of the tracks and by a one-foot offset from the southern edge of the ROW. The corridor within the LIRR ROW ranges in width from 14 to 41 feet at various points along the route. Temporary work areas on public road ROW at road crossings along the LIRR corridor will accommodate equipment during construction.

The entire SFEC-Onshore corridor is approximately 4.1 miles long. The SFEC-Onshore will begin at the sea-to-shore transition vault within the Beach Lane road ROW and continue to the northwest for approximately 0.7 miles until the intersection with Wainscott Main Street. From the intersection of Beach Lane and Wainscott Main Street, the SFEC-Onshore turns northeast along Wainscott Main Street for 0.06 miles and subsequently northwest on Sayre's Path for 0.04 miles. The SFEC-Onshore then turns generally north as it travels along Wainscott Stone Road for approximately 0.2 miles. The SFEC-Onshore turns on to Wainscott Northwest Road and travels approximately 1.1 miles, generally northwest past Montauk Highway/State Route 27 to the LIRR. From there, the SFEC-Onshore will continue in a generally east direction within a portion of the LIRR ROW south of the railroad, past Daniels Hole Road, Stephen Hands Path, and Buckskill Road. The SFEC-Onshore extends along the southern portion of the LIRR ROW for approximately 2.0 miles at which point it reaches the location of the SFEC-Interconnection Facility.

SFEC-Interconnection Facility

The SFEC-Interconnection Facility will be newly constructed to connect the SFEC with the existing East Hampton Substation, located off Cove Hollow Road. The SFEC-Interconnection Facility will be located adjacent to the existing East Hampton Substation, on the same parcel in the Town of East Hampton's Commercial Industrial zoning district. The property is owned by National Grid Generation, LLC, and the existing facilities are operated by other utilities (*e.g.*, LIPA).

The SFEC-Interconnection Facility consists of a work area corridor adjacent to the existing East Hampton Substation (approximately 2.7 acres) and a corridor for the 69 kV interconnection cable along the southern edge of the existing East Hampton Substation facilities (approximately 642 feet long by 24 feet wide) (Figure 2.4-4). The specific placement of the 69 kV interconnection cable corridor will be defined in the Project EM&CP. Within the 2.7- acre work area corridor, the SFEC-Interconnection Facility will be surrounded by a maintenance road and an exterior perimeter wall. The footprint of the SFEC-Interconnection Facility is anticipated to be approximately 228 feet by 313 feet including the road and wall (approximately 1.6 acres), oriented roughly on a north-south axis. During construction, secure areas inside the 2.7- acre work area will be used for staging.



APPENDIX C

PROPOSED COMMISSION FINDINGS

- 1. Based upon the information provided in Exhibits 13 and 32, supported by the testimony of Corey Kelkenberg and Jose Restrepo (adopted by Kenneth Bowes, Corey Kelkenberg, Demetrios Sakellaris, and Dominic Brown), the purpose of the Project is to transmit electricity generated by the SFWF to the existing East Hampton Substation. The Project, in conjunction with the SFWF, addresses the need identified by PSEG Long Island in its 2015 technology-neutral competitive bidding process ("South Fork RFP") for new sources of power generation that could cost-effectively and reliably supply the South Fork of Suffolk County, Long Island. Further, the SFEC will help LIPA achieve its renewable energy goals, contribute to achieving the State energy policy goals in the State Energy Plan and Clean Energy Standard and to diversifying the State's electric generation mix and will contribute to lowering greenhouse gas emissions. In 2015, PSEG Long Island established the South Fork Supply and Load Relief Project to defer new transmission needed on the South Fork until the year 2022 and to defer transmission needed east of the Buell substation until 2030. It developed the South Fork RFP to:
 - Acquire additional local power production and/or load reduction resources in the South Fork to meet projected load growth and thereby defer the need for new transmission infrastructure;
 - b. Support load demand to avoid overload of existing transmission assets during transmission outages that limit transmission capacity to the South Fork load area; and
 - c. Support system voltage to avoid voltage collapse during a transmission outage.

The SFWF, along with other proposals, was selected as a portfolio because it most costeffectively meets these needs as established by LIPA. On February 6, 2017, LIPA and DWSF executed a PPA for the SFWF that requires energy from the SFWF to be delivered to the LIPA 9EU-East Hampton Substation. The SFEC is required to interconnect the SFWF to the East Hampton Substation pursuant to the PPA.

- 2. Based upon the information provided in Exhibits 2-5, 10-25, 27, 29-31, and 35-37, supported by the testimony of William Bailey, Mary Jo Barkaszi, Drew Carey, Melanie Gearon, Patrick Heaton, Susan Herz, Corey Kelkenberg, Aileen Kenney (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg), David Kennedy, Sean McCormick, Susan Moberg, Gordon Perkins, Jose Restrepo (adopted by Ken Bowes, Corey Kelkenberg, Demetrios Sakellaris, and Dominic Brown), Jason Ross, Kevin Smith, Nathan Vinhateiro (adopted by Daniel Mendelsohn), Stephanie Wilson, and David Zeddies, the Project will be designed, constructed and operated in a manner that avoids or minimizes impacts to environmental resources. The nature of the probable environmental impacts resulting from the Project includes:
 - a. temporary construction impacts, which will be minimized by the use of existing transportation corridors to the maximum extent practicable;
 - b. minimal incremental visual impacts from the construction of the SFEC-Interconnection Facility;
 - c. temporary construction impacts on marine species, which will be minimized by appropriate construction techniques and work windows described in the Certificate Conditions;

- d. selective clearing of vegetation at the SFEC-Interconnection Facility and minimal vegetation clearing along the SFEC-Onshore ROW; because the entire SFEC
 Onshore will be built in or along existing transportation corridors, the amount of clearing is more limited than it would be if new corridors were being created;
- e. temporary disturbance and inconvenience, including noise and debris, associated with construction activities; and
- f. maximum calculated electromagnetic fields that comply with the Commission's guidelines.
- 3. Based upon the information provided in Exhibits 2-5, 10-25, 27, 29-31, and 35, supported by the testimony of William Bailey, Mary Jo Barkaszi, Drew Carey, Melanie Gearon, Patrick Heaton, Susan Herz, Corey Kelkenberg, Aileen Kenney (adopted by Kenneth Bowes, Jeffrey Buckley, Sean McCormick, and Corey Kelkenberg), David Kennedy, Sean McCormick, Susan Moberg, Gordon Perkins, Jose Restrepo (adopted by Ken Bowes, Corey Kelkenberg, Demetrios Sakellaris, and Dominic Brown), Jason Ross, Kevin Smith, Nathan Vinhateiro (adopted by Daniel Mendelsohn), Stephanie Wilson, and David Zeddies, the Project minimizes to the extent practicable any significant adverse environmental impact, and minimizes to the extent practicable any significant adverse impact on active farming operations, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. By utilizing existing transportation corridors to the maximum extent practicable, the effect of the Project on agricultural lands, wetlands, and other environmental resources is minimized.

- 4. The entire Project, except for the SFEC-Interconnection Facility will be located underground.
- 5. Based upon the information in Exhibit 32, supported by the testimony of Corey Kelkenberg, the Project conforms to the requirements and planning objectives of the New York Independent System Operator and LIPA and is consistent with LIPA's long-range plans for the expansion of transmission facilities. The Project serves the goals of the State of New York as stated in the Climate Leadership and Community Protection Act. The Project will serve the interests of electric system economy and reliability.
- 6. Based upon the information provided in Exhibit 7, supported by the testimony of Melanie Gearon (adopted in relevant part by Kenneth Bowes, Ryan Winter, Robert Mastria, Mark Gardella, Jeffrey Buckley, Jason Ross, and Demetrios Sakellaris) the location of the Project conforms to the substantive provisions of the applicable local laws and regulations issued thereunder, except those local laws and regulations which the Commission refuses to apply because it finds, based on the justifications set forth in Exhibit 7, that as applied to the Project, such are unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality.
- 7. Based on the entire record as listed on Appendix A, the Project will serve the public interest, convenience, and necessity.

APPENDIX D

PROPOSED CERTIFICATE CONDITIONS

Case 18-T-0604

Deepwater Wind South Fork, LLC

PROPOSED CERTIFICATE CONDITIONS

The Commission orders:

A. Conditions of the Order

- 1. Subject to the conditions set forth in this Opinion and Order, Deepwater Wind South Fork, LLC ("Certificate Holder") is granted a Certificate of Environmental Compatibility and Public Need ("Certificate") authorizing construction and operation of a 138 kilovolt ("kV") underground electric transmission system consisting of: (i) a single 138 kV electric transmission line submarine segment buried beneath the seabed within New York State territorial waters and beneath the beach up to the sea-to-shore transition vault (the "SFEC-NYS") at Beach Lane; (ii) a terrestrial underground segment (the "SFEC-Onshore"); and (iii) an associated interconnection facility (the "SFEC-Interconnection Facility"). The SFEC-NYS, SFEC-Onshore and SFEC-Interconnection Facility shall collectively be referred to herein as the "Project." The terms of the Joint Proposal, with the additional conditions adopted herein, are adopted in their entirety and incorporated as part of this Opinion and Order. The Certificate and conditions set forth herein shall apply only to the Project located within the jurisdictional boundaries of the State of New York.
- 2. The Project shall be located as shown on the maps included as Appendix B to the Joint Proposal. The Project shall be located within easements, leaseholds, or other interests to be acquired by the Certificate Holder in lands owned by the State of New York, the Trustees of the Freeholders and Commonalty of the Town of East Hampton ("Trustees"), the Town of East Hampton ("Town"), the New York State Department of Transportation ("NYSDOT"), the Long Island Railroad ("LIRR"), and National Grid Generation, LLC ("National Grid"). The route of the SFEC-NYS to the sea-to-shore transition is depicted as a nominal centerline within an approximately 600-foot wide corridor. The SFEC-NYS sea-to-shore transition extends from the horizontal directional drill ("HDD") exit pit to the Sea-To-Shore Transition vault

within an approximately 55-foot wide corridor ("SFEC Sea-to-Shore Transition"). SFEC-NYS route deviations are allowable within this pre-defined corridor.

- 3. For purposes of the Certificate Conditions, "Project Area" shall be defined as the area in which Certificate Holder is authorized to construct, operate, maintain, repair, and decommission the Project, including any marshalling yards and laydown areas, pursuant to any permanent and/or temporary easements, leases, licenses, right of way agreements, or other land use authorizations it receives. The Certificate Holder shall further detail the Project Area in the Environmental Management and Construction Plan ("EM&CP"). The Certificate Holder shall confine construction, operation, maintenance, repair, and decommissioning activities to the Project Area.
- 4. The Certificate Holder shall, within thirty (30) days after the issuance of the Certificate, file with the Secretary of the Public Service Commission ("Secretary") either a petition for rehearing or a verified statement that it accepts and will comply with the Certificate. Failure to comply with this condition shall invalidate the Certificate.
- 5. The Certificate Holder shall notify the Secretary in writing should it decide not to complete construction of all or any portion of the Project within thirty (30) days of reaching such a decision and shall serve a copy of such notice upon all parties to this proceeding.
- 6. The Certificate Holder shall construct the Project in accordance with this Certificate, the approved EM&CP, and any subsequent Public Service Commission ("Commission") orders.
- 7. Except as described in Condition 8, for purposes of this Certificate, "Commencement of Construction" shall be defined as: the beginning of tree clearing, site clearing, ground disturbance, site preparation, and grading activities related to installation of the Project. Commencement of Construction does not include soils or groundwater testing, surveying (such as geotechnical drilling) and similar pre-construction activities to determine the adequacy of the site for construction and the preparation of filings pursuant to this Certificate. Commencement of Construction also does not include other activities, such as limited staging and limited tree cutting, that are required to perform such pre-construction activities.

- 8. If construction of the Project hereby certified is not commenced within eighteen (18) months after the later of approval of the EM&CP by the Commission or receipt of all applicable federal permits and approvals, the Certificate may be vacated by the Commission with notice to the Certificate Holder and all parties. In addition, if all construction activities, excluding HDD, for the Project in Town-owned roads hereby certified are not completed within thirty (30) months after commencement of construction of the Project in Town-owned roads, the Certificate may be vacated by the Commission with prior notice to the Certificate Holder and all parties. The Certificate Holder shall be excused from this requirement during the length of any force majeure event. The Certificate Holder shall diligently pursue completion of construction in Town-owned roads within nine (9) to twelve (12) months once commenced. For purposes of this Condition, "Commencement of Construction" shall not include preparation and/or construction of laydown areas and marshalling yards.
- 9. The Certificate Holder may request an extension of the 18-month commencement deadline and/or thirty (30) month construction completion deadline in Town-owned roads. Any request for an extension must be in writing, must include a justification for the extension, and must be filed with the Secretary at least one (1) day prior to the affected deadline.
- 10. Construction of any part of the Project, whether on land or under water, shall not commence until Certificate Holder has received from the New York State Office of General Services ("NYSOGS"), and, as applicable, NYSDOT, such authorizations as are necessary to permit construction to commence and until Certificate Holder has received such leases and easements from property owners as are necessary to permit construction to commence.
- 11. The Certificate Holder shall follow the following procedures for any proposed amendments to the EM&CP:
 - a. The Certificate Holder shall serve written notice(s) of the filing of proposed changes to the EM&CP: (i) on all parties to this proceeding: (ii) on all statutory parties to this proceeding; (iii) on all persons required to be served with the Application by statute or regulation; (iv) on owners of all properties that abut the right-of-way ("ROW") and all properties on which property rights are required; and (v) on the residents of properties

abutting the line, and shall attach a copy of the notice to each copy of the filing. New York State Department of Public Service Staff ("DPS Staff" or "NYSDPS") will refer any proposed minor changes to the EM&CP only, that will not result in any increase in adverse environmental impacts or are not directly related to contested issues decided by the Administrative Law Judge or the Commission during the proceeding, to the Director of Environmental Certification and Compliance Section ("EC&C") of the Office of Electric, Gas and Water, or his or her designee, for approval. DPS Staff will refer all other proposed changes to the Commission for approval.

- b. The notice shall describe the original conditions and the requested change and include any documents supporting the request. Where DPS Staff refers the proposed change to the Commission, the notice shall also state that persons may comment by writing or calling (followed by written confirmation) to the Commission within twenty-one (21) days of the notification date. Any delay in receipt of written confirmation will not delay Commission action on the proposed change.
- c. The Certificate Holder shall not execute any proposed change until the Certificate Holder has received oral or written approval, except in emergency situations threatening personal injury, property, or severe adverse environmental impact. Any oral approval from DPS Staff will be followed by written approval from the Director of EC&C or the Commission.

B. Laws and Regulations

- 12. Each substantive Federal, State, and local law, regulation, code, and ordinance applicable to the Project shall apply, except to the extent that the Commission has expressly refused to apply any substantive local law or regulation as being unreasonably restrictive. Specifically, the Commission hereby grants Certificate Holder waivers of the following sections of the Town of East Hampton Town Code:
 - a. Noise Standards and Exceptions as set forth in § 185-3 (A)(2) and § 185-3 (B) (2) for the purpose of allowing construction noise to continue after 8:30 PM for: (i) safety reasons; (ii) to protect life and/or property; (iii) to protect the structural integrity of the HDD bore hole or to prevent damage to or loss of the bore hole; (iv) construction activities involving installation of the HDD conduit, HDD cable pulling and laying,

cable joint splicing, and dewatering; (v) other activities reasonably necessary to comply with NYSDOT restrictions on daytime construction in or along roadways or public access areas; and (vi) other activities reasonably necessary to comply with LIRR restrictions. Such activities shall be undertaken in accordance with the Construction Noise Control Plan Scope of Work, attached as Appendix J of the Joint Proposal.

- b. Height as set forth in § 255-11-72 for the purpose of allowing lightning masts at the SFEC Interconnection Facility to exceed thirty-five (35) feet. The design basis for the substation lightning masts will be forty-five (45) feet or less.
- c. Fences and walls as set forth in § 255-11-38 for the purpose of constructing a fence and/or wall greater than ten (10) feet in height at the SFEC-Interconnection Facility. The design basis for the SFEC-Interconnection Facility Wall will be twelve (12) feet or less, depending on the desired noise reduction requirements. The final height, which will minimize noise emissions from the Project, will be included in the EM&CP; and
- d. Vehicles and Traffic as set forth in: (a) § 240-13 for the purpose of allowing commercial vehicles that exceed applicable vehicle weight and length restrictions for the purpose of delivering construction equipment and equipment and facilities to be used for the Project; (b) § 240-14 through § 240-18(b) for the purpose of parking, stopping and standing vehicles to be used for the construction of the Project; and (c) § 240-20 through § 240-25, §240-27.3 (except § 240-27.3(A)(1)(h)), § 240-27.4 § 240-61 for the purpose of parking, standing, stopping, loading and unloading vehicles to be used for the construction of the Project to be used for the construction of the Project. With respect to § 240-27.3(B), Certificate Holder shall coordinate with the East Hampton Fire Department and ensure access to the fire hydrant located within the HDD work zone at all times.
- 13. Certificate Holder acknowledges and agrees to seek and obtain all required road opening permits.
- 14. No State or local legal provision purporting to require any approval, consent, permit, certificate, or other condition for the construction or operation of the Project authorized by the Certificate shall apply, except: (i) those of the Public Service Law ("PSL") and regulations and orders adopted thereunder; (ii) those provided by otherwise applicable State law for the

protection of employees engaged in the construction and operation of the facilities; and (iii) those permits issued under a federally delegated or pursuant to federally approved environmental permitting program, or federal consistency review pursuant to the federal Coastal Zone Management Act. Notwithstanding the foregoing, DWSF acknowledges that it will enter into a Road Use and Crossing Agreement with the Town with respect to Town owned roads; such agreement shall include the usual and customary provisions typically included by the Town in such agreements, including a provision that DWSF will be liable for any damage to Town-owned property caused by DWSF's activities; and that DWSF shall seek approval from the Commission for such agreement pursuant to Section 68 of the PSL.

- 15. The Certificate Holder shall construct the Project in a manner that conforms to all applicable national and international electrical standards. Upon completion of the Project, the Certificate Holder shall file a letter with the Secretary certifying that the Project was constructed in full conformance with the National Electric Safety Code.
- 16. Nothing herein shall preclude the Certificate Holder from voluntarily subjecting itself to applicable State or local approval, consent, permit, certificate, or other condition for the construction or operation of the Project, subject to the Commission's ongoing jurisdiction.
- 17. The Certificate Holder shall apply for a NYSDOT highway work permit ("Highway Work Permit") and use and occupancy agreement pursuant to 17 New York Codes, Rules, and Regulations ("NYCRR") Parts 127 and 131 and NYS Highway Law Section 52 for construction and operation of the SFEC-Onshore in NYSDOT-owned ROW, subject to the Commission's ongoing jurisdiction.
- 18. A copy of each permit or approval, and any amendment or modification thereto, required for construction or operation of the Project shall be filed with the Secretary by the Certificate Holder promptly after receipt by the Certificate Holder and before commencement of construction across the affected area.

- 19. To the extent required in connection with the delivery of oversized components, supplies, or equipment for the Project, the Certificate Holder or its suppliers shall obtain any required permits from applicable State or local agencies, including NYSDOT, subject to Condition 17 hereof and to the ongoing jurisdiction of the Commission. Oversized delivery of cable and other materials for the Project shall be coordinated with NYSDOT and the Town and will occur in accordance with traffic controls specified in the EM&CP to minimize, to the extent practical, disruption of traffic.
- 20. To the extent a disagreement arises regarding the implementation of the Joint Proposal and any of its provisions that cannot be informally resolved by the Signatory Parties: (a) the Signatory Parties shall promptly convene a telephone conference, and in good faith attempt to resolve any such disagreement; and, (b) if any such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter. Certificate Holder shall use best efforts to select a mutually agreeable date for such a telephone conference, and shall file a notice with the Secretary or otherwise take reasonable steps to provide notice to the Signatory Parties that is timely under the circumstances.

C. Public Health and Safety

- 21. The Certificate Holder shall design, engineer, and construct the Project such that its operation shall comply with the electric and magnetic field ("EMF") guidelines and standards established by the Commission in Opinion No. 78-13, issued June 19, 1978, and the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, issued September 11, 1990 or the Commission's most recent electric and magnetic field guidelines and standards in effect at the time the Commission grants the Certificate.
- 22. The Certificate Holder shall engineer and construct the Project to be fully compatible with the operation and maintenance of any nearby electric, gas, telecommunication, water, sewer, and related facilities; details of such other facilities and measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP. The Certificate Holder shall use best efforts to avoid any thermal or capacity derating of any existing or proposed

Long Island Power Authority ("LIPA") transmission and distribution cables along the entire route of the Project.

- 23. If environmental or engineering constraints require siting of the SFEC-Onshore within one hundred (100) feet of a known existing, active drinking water supply well, the Certificate Holder shall perform pre- and post-construction water turbidity testing, provided the Certificate Holder is granted access by the property owner. The results of such tests and reports shall be made available to the parties upon request.
 - a. Should New York State Department of Health ("NYSDOH")-certified laboratory testing conclude that the water turbidity from an existing, active drinking water supply well was less than the New York State standard of 5 Nephelometric Turbidity Units for drinking water prior to construction, but failed to meet such standards post-construction, the Certificate Holder shall cause a new water well to be constructed, in consultation with the property owner, at least one hundred (100) feet from the SFEC-Onshore, as practicable given siting constraints and landowner preferences. Such protocols will be included as part of the EM&CP.
- 24. The Certificate Holder shall keep fire department and emergency management services apprised of the presence of on-site hazardous chemicals and waste. Procedures for the handling of any hazardous chemicals and waste are detailed in Section U, below.
- 25. The Certificate Holder shall comply with the requirements for the protection of underground facilities set forth in 16 NYCRR Part 753 "Protection of Underground Facilities."
- 26. The Certificate Holder shall have the right to require that any person seeking to access the Project first be appropriately trained in environmental protection and worksite safety. The Certificate Holder will provide site inspectors and scheduled visitors with appropriate personal protective equipment for any tours of the Project. This may include a properly fitted, currently valid hardhat, safety glasses with side shields, high visibility vest and steel or ceramic-toed boots at any time while on site, unless the visitor is in a vehicle or in a construction trailer. The

Certificate Holder may require site inspectors and scheduled visitors to comply with all safety and security requirements.

- 27. The Certificate Holder will provide periodic, or as needed, training sessions for the East Hampton Fire Department, and any other interested fire department within Suffolk County, to review the procedures and protocols necessary to safely respond to emergency events at the SFEC-Interconnection Facility. The Certificate Holder shall coordinate with PSEG Long Island ("PSEG-LI") to ensure that such training includes procedures and protocols for emergency events at the existing facilities adjacent to the SFEC-Interconnection Facility.
- 28. The Certificate Holder shall require its contractors or subcontractors to give an on-site tailboard safety briefing to site inspectors/visitors prior to any safety inspectors/visitors entering the Project site.
- 29. Certificate Holder shall obtain the services of a professional engineer licensed in the State of New York to inspect the Project prior to the commencement of operation to ensure that it complies with the New York State Uniform Fire Prevention and Building Code. Certificate Holder may seek a variance in accordance with the regulations at 19 NYCRR Part 1205 adopted in accordance with section 381(1)(f) of the Executive Law.

D. Environmental Management and Construction Plan Process

- 30. The filing and review of the EM&CP may be segmented in order to facilitate construction sequencing and scheduling, provided that with its first EM&CP filing, the Certificate Holder shall identify the remaining EM&CP segments of on-land components of the Project that do not require other permits. In the event that Certificate Holder elects to segment the EM&CP, Certificate Holder shall follow the process and procedures described herein for each segment of the EM&CP.
- 31. The Certificate Holder shall file a copy of the EM&CP with the Secretary for approval by the Commission. Contemporaneously with the submission and service of the EM&CP, Certificate Holder shall provide notice, in the manner specified below, that the EM&CP has been filed

("EM&CP Filing Notice"). In addition, the Certificate Holder shall provide copies of the EM&CP as follows:

- a. Three (3) hard copies and one (1) electronic copy (USB drive) to the Secretary, the Town, and the Trustees;
- b. One (1) hard copy to: (i) the Commissioner of the New York State Department of Environmental Conservation ("NYSDEC"); (ii) the Commissioner of the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"); (iii) the Commissioner of the NYSDOT, (iv) the Secretary of State of the State of New York State ("NYSDOS"); and (v) PSEG-LI;
- c. One (1) electronic (USB drive) and one (1) hard copy to the NYSDEC's Central Office in Albany;
- d. One (1) hard copy to any other New York State agency (and its relevant regional offices) that requests the document;
- e. One (1) hard copy on all parties on the service list for Case 18-T-0604 who request such document; and
- f. One (1) hard copy for inspection by the public in at least one (1) public library or other convenient location in each municipality in which construction will take place.
- 32. The Certificate Holder shall serve a copy of the EM&CP Filing Notice on all parties to this proceeding and on the landowners and/or residents along the Project Route. Further, the Certificate Holder shall contemporaneously publish the EM&CP Filing Notice in a newspaper of general circulation in the vicinity of the Project, including the Town of East Hampton's Newspaper of Record, and a free publication in the vicinity of the Project, such as The Independent.
- 33. The written EM&CP Filing Notice and the newspaper notice(s) shall contain, at a minimum, the following:
 - a. a statement that the EM&CP has been filed;
 - b. a general description of the Project, the need for the Project, and of the proposed EM&CP;

- c. a listing of the locations and website where the proposed EM&CP is available for public inspection;
- a statement that any person desiring additional information about a specific geographical location or specific subject may request such information from the Certificate Holder;
- e. the name, address, email, and telephone numbers of the Certificate Holder's representative;
- f. the email and postal address of the Secretary and the DPS Document Management and Matter system; and
- g. a statement that any person may be heard by the Commission on any matter or objection regarding the proposed EM&CP by filing written comments with the Secretary within forty-five (45) days of the EM&CP filing date or within forty-five (45) days of the date of the newspaper notice, whichever is later. Comments on subsequent revisions to the EM&CP, in response to the aforementioned written comments, shall be permitted within fifteen (15) days of service by electronic means of said revisions.
- 34. The Certificate Holder shall submit to the Secretary a certificate of service with supporting affidavit indicating upon whom all EM&CP documents and EM&CP Filing Notices were served along with a copy of the EM&CP Filing Notice within three (3) business days after the proposed EM&CP is filed, and shall be a condition precedent to approval of the EM&CP. When available, the Certificate Holder shall file with the Secretary proof of newspaper publication of a copy of the EM&CP Filing Notice.

E. Environmental Management and Construction Plan Contents

- 35. The Certificate Holder shall not commence site preparation or construction for any portion of the Project before it has submitted to the Commission and the Commission has approved, an EM&CP that is generally consistent with the guidelines set forth in Appendix E of the Joint Proposal.
- 36. The EM&CP shall be prepared in accordance with the terms of the Certificate for the construction, operation, and maintenance of the Project. Provisions of the Certificate,

EM&CP, and orders approving the EM&CP, shall be incorporated in any design, construction, and maintenance associated with the Project. The Certificate Holder shall provide the following details:

- a. The delineation of certified right-of-way and additional work areas to which Certificate Holder shall confine construction and subsequent maintenance activities, depicting property rights, clearing rights, access rights, and such other matters as appropriate to address the site and environmental conditions and property interests of affected landowners, and relevant conditions and requirements of the EM&CP. The delineation shall include the specific location and acreage of all needed real property or real property rights.
- Details of street work, including provisions for minimizing the duration and extent of open excavation, traffic disruptions, and work within and adjoining public streets and rights-of way;
- c. Drawings delineating the locations for existing and proposed access roads. Proposed access road improvements shall be indicated, including measures for environmental impact minimization and access control;
- d. The information necessary to respond to the requirements of 17 NYCRR Part 131, entitled Accommodation of Utilities Within State Highway Right-of-Way, applicable design standards of the American Association of State Highway and Transportation Officials ("AASHTO"), the Highway Design Manual, the Policy and Standards for Entrances to State Highways, the Requirements for the Design and Construction of Underground Utility Installations within the State Highway ROW and the Accommodation Plan, including the provision of NYSDOT Standard Details and Standard Item Numbers;
- e. A Maintenance and Protection of Traffic Plan ("MPT Plan") for all roadways directly affected by construction activities prepared in conformance with the National Manual on Uniform Traffic Control Devices ("MUTCD") and NY State Supplement. The MPT Plan shall include provisions to maintain access to and parking for the farm stand located at the intersection of Beach Lane and Wainscott Main Street.
- f. A plan for access to construct the Project in the NYSDOT- owned highway rights-ofway clearly defining all access locations and rights; and

- g. A plan for access to the Project on the NYSDOT-owned highway rights-of-way for operation and maintenance including an MPT Plan in conformance with MUTCD.
- 37. During the preparation of the EM&CP and prior to commencement of construction, the Certificate Holder shall contact NYSDEC, NYS Natural Heritage Program, NYSDOS, National Ocean and Atmospheric Administration ("NOAA"), and United States Fish and Wildlife Service ("USFWS") to check for any updates or changes of known threatened or endangered ("T&E") species or habitat, NYS Significant Coastal Fish and Wildlife Habits, or Significant Natural Communities in the Project Area.
- 38. Prior to the approval of the EM&CP, the Certificate Holder shall file with the Secretary upon receipt: the Stormwater Pollution Prevention Plan ("SWPPP"), Municipal Separate Storm Sewer ("MS4") approval(s), 5-acre waiver (if necessary), and NYSDEC's letter of acknowledgement of the Notice of Intent for coverage under the State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activity ("SPDES General Permit"). The Certificate Holder shall develop the EM&CP in accordance with the SWPPP requirements in the SPDES General Permit in effect at the time of the filing of the EM&CP. If any of the aforementioned documents require modification of the EM&CP, such modifications shall be filed with the Secretary prior to EM&CP approval. Notwithstanding the foregoing, if the MS4 approval has not been obtained by the Certificate Holder prior to the EM&CP being filed with the Secretary.
- 39. The Certificate Holder shall include a Lighting Plan as part of the EM&CP, which shall include:
 - a. security lighting needs at substation and switchyard sites, and any exterior equipment storage yards;
 - b. plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement at the substation site, switchyard site, and any exterior equipment storage yards;

- c. a specification that lighting should be designed to provide safe working conditions at appropriate locations;
- d. a specification that exterior lighting design shall be specified to avoid off-site lighting effects, by:
 - i. using task lighting only as needed and as appropriate to perform specific installation, maintenance, repair, or emergency-response tasks; task lighting shall be designed to be capable of manual or auto-shut off switch activation rather than motion detection;
 - ii. requiring full cutoff fixtures, with no drop-down optical elements (that can spread illumination and create glare) for permanent exterior security lighting;
- e. manufacturer's cut sheets of all proposed lighting fixtures shall be provided.
- 40. The EM&CP shall include details of proposed noise control features and design requirements of the SFEC-Interconnection Facility to achieve design goals, including prominent tone effects, at noise-sensitive receptor locations; and provide testing procedures to demonstrate compliance.
- 41. At least sixty (60) days prior to the start of construction, the Certificate Holder shall file with the Secretary the following:
 - a. Final drawings for the substation, incorporating any changes to the design, including:
 - i. Location of all noise sources and receptors identified with Geographic Information Systems (GIS) coordinates and GIS files;
 - Proposed grading and noise source heights and ground elevations; Site plan and elevation details of substation components as related to the location of all relevant noise sources (e.g. transformers, reactors, HVAC equipment, and emergency generators, if any);
 - iii. Identified mitigations, specifications, and appropriate clearances (e.g., for sound walls, barriers, enclosures);
 - iv. Sound information from the manufacturers for all noise sources (e.g. transformers, reactors, HVAC equipment, emergency generators, if any).
 - b. Revised sound modeling with the final specifications of equipment selected for

construction to demonstrate that the Project is modeled to meet the following sound goals for residences and boundary lines existing as of the date the Order is issued as noted:

- i. 35 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation, outside any residence within the 35 dBA noise contour from any tonal noise sources, (e.g., transformers), on the presumption that a 5 dBA prominent tone penalty applies to a basic design goal of 40 dBA.
- ii. 40 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation outside any residence from any other operational sound sources associated with the substation not included in (b)(i). If the sound emissions from these sources are found to contain a prominent discrete tone at any residence whether through modeling, calculation, or pre-construction field testing, then the sound levels at the receptors shall be subject to a 5 dBA penalty; thus, a reduction in the permissible sound level to 35 dBA Leq-1hour. If no manufacturer's information or pre-construction field tests are available, sounds will be assumed to be tonal for those noise sources.
- iii. 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation across all properties, except for delineated wetlands and utility rights of way. This shall be demonstrated with modeled sound contours and discrete sound levels at worst-case locations. No penalties for prominent tones will be added in this assessment.
- c. Final computer noise modeling and tonal evaluation shall be conducted in accordance with the Specifications for Computer Noise Modeling and Tonal Evaluation, Appendix L. No post-construction noise testing will be required.
- 42. The EM&CP shall identify any water withdrawal activities that the Certificate Holder anticipates will be regulated pursuant to 6 NYCRR §§ 601.3 and 601.6, including dewatering directly from the excavation not meeting the exemption criteria pursuant to 6 NYCRR §§ 601.9(o). The EM&CP shall also provide the information outlined in 6 NYCRR § 601.10 for any such activities. Prior to commencement of such activities, DPS Staff, in consultation with NYSDEC, will determine whether to recommend that the Commission impose any conditions

or restrictions on such activities. Such determination will be based on the substantive portions of the following regulations: 6 NYCRR §§ 601.11, 601.12, 601.16, 601.19, and 601.20.

- 43. The EM&CP shall identify the property locations, if any, where the Certificate Holder anticipates that it will install one or more wells to conduct temporary or permanent dewatering activity for the Project at a total withdrawal capacity of such well or wells on any one property in excess of 45 gallons per minute (with capacity based on the capacity of the pumps to be installed, not on the contemplated draft). The EM&CP shall also provide the substantive information outlined in 6 NYCRR § 602.3(c)-(d) for any such activities. Prior to commencement of such activities, DPS Staff, in consultation with NYSDEC, will determine whether to recommend that the Commission impose any conditions or restrictions on such activities. Such determination will be based on the standards of issuance in Environmental Conservation Law ("ECL") § 15-1527(4).
- 44. Certificate Holder shall provide a Dewatering Plan at least forty-five (45) days prior to filing the EM&CP to DPS Staff, NYSDEC, and NYSDOT for review and comment. The Dewatering Plan shall be filed with the EM&CP and include:
 - a. groundwater sampling results from the Initial Hazardous Waste and Petroleum Work Plan, which is attached as Appendix H of the Joint Proposal;
 - b. evaluation of any known or suspected contaminated sites to determine if proposed dewatering operations will influence or draw in any contamination from the site, and the expected maximum concentrations of the contaminants;
 - c. locations where dewatering will be required, including the anticipated depth of groundwater and the installation depth of the cable and vaults at those locations;
 - d. method of dewatering, including the number and depth of the well points (if applicable);
 - e. pump capacity, rate, and estimated daily pumpage and duration of dewatering for each location requiring dewatering;
 - f. if uncontaminated water from dewatering operations will be discharged to groundwater or surface water, include the following:
 - i. a map showing proposed discharge location points;

- ii. if discharging to a storm drain or recharge basin, verify these systems are designed to handle the proposed rate for the duration of the discharge and the substantive requirements for all State, county, and town approvals are being met for such discharges;
- iii. if discharging to a storm drain, identify the ultimate surface water outfall location;
- iv. if discharging to an existing recharge basin or creating a new recharge basin, evaluate mounding effects to ensure that mounding does not adversely affect any surrounding properties and underground structures; and
- v. best management practices to prevent erosion and sedimentation from dewatering operations;
- g. maps of areas requiring dewatering with wells (if applicable);
- h. verification that dewatering operations conducted using wells are carried out by a well driller duly registered in accordance with ECL § 15-1525;
- i. effluent limits provided by NYSDEC based on applicable regulations, standards, criteria, and guidance values;
- j. treatment and disposal plan for contaminated water generated from the dewatering operations;
- k. sampling plan that will be followed during dewatering operations of influent and effluent; and
- 1. sampling plan that will be followed in the event dewatering is required in locations that were not anticipated.
- 45. NYSDOT shall have the right to terminate or restrict discharge flow conveyed into the NYSDOT drainage system during and after storm event to prevent overburdening of the NYSDOT drainage system. The Certificate Holder shall submit the Dewatering Plan included as part of the EM&CP and the following information to NYSDOT for review and approval prior to any proposed discharge into the NYSDOT drainage system:
 - a. method of conveyance;
 - b. discharge flow rate;
 - c. duration of discharge; and

- d. water sampling.
- 46. The Certificate Holder shall prepare a detailed Soil Handling and Erosion Control Plan to be included in the EM&CP. The Soil Handling and Erosion Control Plan shall include specifications for testing, stockpiling, reuse or removal from site, storage, erosion control, restoration and compaction of backfill in trenches. Such plan shall be consistent with the acknowledged SPDES General Permit and SWPPP.
- 47. After prior consultation with the Town, the Certificate Holder shall provide details in the EM&CP of street work, including provisions for minimizing the duration and extent of open pits within and adjoining public streets and rights-of-way.
- 48. The EM&CP shall address, but not be limited to, the following information:
 - a construction schedule detailing work activities and allowable work windows, which shall be provided to DPS Staff, NYSDEC, NYSDOT, NYSDOS, and the Town at least forty-five (45) days prior to filing the EM&CP for review and comment;
 - An HDD work plan providing planning, installation controls, and site measures (including excavation and backfill of the HDD exit pit) that will be taken in accordance with good engineering practices;
 - a written analysis of alternative HDD exit pit design identifying potential disturbance area and depth below the sediment surface, dredged volume, disposition of dredged material, water quality impacts, benthic impacts, and justification for why the selected HDD exit pit design is preferred;
 - d. a written evaluation of the efficacy of alternative cable protection measures to be used at the HDD exit pit and justification for why the selected cable protection method is preferred;
 - e. the location of the exit pit shall be detailed in the EM&CP. It shall be located a minimum of one thousand (1,000) feet seaward of Mean Low Water, and at a Mean Low Water depth of no less than fifteen (15) feet, and otherwise is required to be compliant with the substantive provisions of 6 NYCRR Part 505 of Coastal Erosion Management Regulations;

- f. cable burial techniques and adjustments, including a detailed graphical representation of anticipated minimum and maximum achievable burial depths based on sediment conditions (e.g., sediment densities, shear strengths, and other limiting factors) at 100foot intervals along the SFEC-NYS, and written evaluation of the likelihood of achieving target burial depths based on the results of the study. Certificate Holder shall also include a written evaluation of the efficacy of alternative cable protection measures that may be required along the SFEC-NYS and justification for why the selected cable protection method is preferred at each site. The analysis shall: (i) include, to the extent available, technical documentation from cable protection manufacturers; and (ii) evaluate a range of cable protection measures (e.g., concrete mattresses with taperedges, dagger boards, self-burying, crushed rock, and rock bags or other appropriate protection method(s)) with respect to their ability to maintain overtrawlability, minimize shifting over time, and avoid creating a discernable berm on the seafloor. The Certificate Holder shall provide this information to DPS Staff, NYSDEC, and NYSDOS at least fourteen (14) days prior to filing the EM&CP for review and comment;
- g. a work plan for dredging activities including specific practices to be used during dredging; any temporary protection and/or additional excavation that may be needed if HDD activities occur across multiple work windows; and proof of the ability to provide proper disposal, which shall be provided to DPS Staff, NYSDEC, and NYSDOS at least forty-five (45) days prior to filing the EM&CP for review and comment;
- h. drawings and specifications of any closed environmental bucket or other dredging equipment, including specifications demonstrating that appropriate design considerations are incorporated in equipment selected for deployment, which shall be provided to DPS Staff, NYSDEC, and NYSDOS at least forty-five (45) days prior to filing the EM&CP for review and comment;
- a Suspended Sediment and Water Quality Monitoring Plan, which shall be provided to DPS Staff, NYSDEC, NYSDOS, and the Town at least forty-five (45) days prior to filing the EM&CP for review and comment and will be consistent with Appendix I of the Joint Proposal, Suspended Sediment and Water Quality Plan Scope of Study, for cable burial activities;

- j. details of cable pulling and splicing plans including locations along the SFEC-Onshore of spare conduits that may be installed within the same HDD bore. The splicing plan shall be provided to DPS Staff, NYSDEC, and NYSDOS at least forty-five (45) days prior to filing the EM&CP for review and comment; and
- k. details on the area and duration of any temporary in-water closures needed during HDD and cable laying activities; how these areas have been minimized; details on how mariners and commercial, recreational, and for-hire (charter) fishermen will be alerted to the presence of the in-water work area, including any Private Aids to Navigation ("PATON") that may be required in State waters; and identification of activities that will be the subject of United States Coast Guard's ("USCG") Local Notice to Mariners.
- 49. A detailed Highway Work Plan governing activities within highway rights-of-way, prepared in coordination with the Town Highway Department, NYSDOT, and DPS Staff, and in compliance with 17 NYCRR Part 131, shall be included in the EM&CP, and shall cover at a minimum:
 - a. a schedule showing the sequence and duration of trenching, drilling and/or pipejacking, cable delivery and laying, backfilling, splicing, and testing;
 - b. a traffic diversion/lane closure plan, which shall identify procedures to be used to maintain traffic and provide a safe construction zone for those activities within the roadway ROW. The plan shall also describe temporary signage, lane closures, placement of temporary barriers and traffic diversion. Flaggers shall always be present when equipment is crossing any road, when equipment is being loaded or unloaded, and where two-lane traffic has been reduced to one lane;
 - c. coordination with planned highway and bridge construction and repair projects;
 - a map showing the location of: the trench with reference to the paved highway surface, lay down and mobilization areas, drilling and exit pits, pipejacking entry and exit pits, and splicing locations;
 - e. trench profile;
 - f. a plan for trench backfilling, marking and protection, and temporary covering;
 - g. a plan for trenching and cable laying in the vicinity of other underground utility lines, conduits and pipes;

- h. a Soil Handling and Erosion Control Plan, including a plan for the handling of any contaminated materials (as described in Condition 46);
- i. a Vegetation Management Plan, that includes, a post-completion assessment of the need for remedial vegetation plantings (as described in Section V);
- j. a plan for minimizing construction-related noise during the hours between 7:00 p.m. and 7:00 a.m., pursuant to Condition 75 ;
- k. a plan for minimizing construction-related lighting impacts on surrounding areas (as described in Condition 39); and
- a plan for minimizing disruption of traffic, pedestrian and recreational use (as described in Condition 36).
- 50. Unless otherwise approved by the NYSDOT, Certificate Holder agrees to abide by the following traffic restrictions in NYSDOT-owned highway rights-of-way, which will be incorporated into the EM&CP:
 - a. No lane closures will be permitted. Traffic shall be shifted as necessary to maintain one (1) 12-foot lane in each direction.
 - b. Unless otherwise permitted by the NYSDOT issued Highway Work Permit, no lane shifts will be allowed on weekends and on the following days:
 - i. from noon on the Friday before Memorial Day through Labor Day;
 - ii. Veterans Day;
 - iii. from noon the day before Thanksgiving Day through the Sunday following Thanksgiving Day;
 - iv. the day before Christmas and Christmas Day; and
 - v. the day before New Year's and New Year's Day.
 - c. Within the following areas where on-street parking and/or traffic signals exist, lane shifts will be permitted between 10:00 PM and 6:00 AM:
 - i. 400' west of Sagg Road to 1500' west of Town Line Road (south);
 - ii. 600' west of Wainscott northwest road to 200' east of Wainscott Stone Road
 - d. At all other locations, lane shifts will be permitted between 10:00 AM and 3:00 PM.
 - e. Prior to night time operations and whenever there is on-street parking within the work zone, the Certificate Holder shall post signs spaced every 200 feet through the work

zone that state: "No parking 10:00 PM to 6:00 AM." The Certificate Holder shall also distribute flyers to all businesses and residents along the work zone at least 72 hours before the implementation of the parking restrictions. Existing parking signs within the work zone, which are conflicting with the night time construction parking restrictions, shall be covered completely with an opaque material, as ordered by the engineer ("A.O.B.E").

- f. The Certificate Holder shall not work on both sides of the roadway in the same area at the same time.
- g. Seven (7) calendar days prior to implementation, the Certificate Holder shall notify the Town engineer, the Suffolk County Highway Department, the Suffolk County Police Department, the Town of East Hampton Police Department, the Town of East Hampton Fire Department, and the NYSDOT Inform Center of all detours, proposed street closings, or any other work that might affect the mobility or access of emergency vehicles. In addition, the Certificate Holder shall ensure that hydrants and alarm boxes are kept clear and available.
- h. The Certificate Holder shall schedule its operations to minimize the interruption of pedestrian traffic. The sidewalk on one side of the roadway shall remain open and passable at all times. During the reconstruction of sidewalks, pedestrian safety and property access must always be maintained to the satisfaction of the engineer. The Certificate Holder shall place all underground appurtenances under the sidewalk first.
- i. Certificate Holder shall use best efforts to coordinate its construction schedule with the East Hampton Public School District to ensure that such that construction operations will not interfere with the district's start and dismissal times.
- 51. The Certificate Holder must comply with the Initial Hazardous Waste and Petroleum Work Plan, attached as Appendix H of the Joint Proposal.
- 52. The Certificate Holder shall provide in the EM&CP a Final Hazardous Waste and Petroleum Work Plan for the entire SFEC-Onshore route for testing and treatment and/or disposal of soil and groundwater, as described in (a)-(d) below. The findings from implementing the Initial Hazardous Waste and Petroleum Work Plan described in Condition 51 will inform the

requirements for the Final Hazardous Waste and Petroleum Work Plan. Certificate Holder shall provide the Final Hazardous Waste and Petroleum Work Plan at least forty-five (45) days prior to filing the EM&CP to DPS Staff and NYSDEC for review and comment. The Final Hazardous Waste and Petroleum Work Plan must be consistent with NYSDEC guidance as set forth in the Division of Environmental Remediation's Technical Guidance for Site Investigation and Remediation ("DER-10"), or other NYSDEC standards, criteria, or guidance in effect at the time EM&CP is filed with the Secretary, and must include the following:

- a. A report of the Initial Hazardous Waste and Petroleum Work Plan consistent with reporting requirements of DER-10, to be attached as an exhibit;
- b. Provide protocols for sampling to be completed during construction, including sampling if visibly contaminated material is encountered or if groundwater is encountered in areas that were not previously sampled as part of the Initial Hazardous Waste and Petroleum Work Plan;
- c. Identify location(s) where all material exceeding NYSDEC standards, criteria, or guidance values will be disposed; and
- d. Identify source(s) of clean backfill (clean sand, gravel, or soil) to be used wherever contaminated material is encountered and removed.
- 53. For the purposes of the Initial Hazardous Waste and Petroleum Work Plan, and Certificate Conditions 44, 4952, 63, 89, 142, and 181, the following definitions apply:
 - a. "Contaminant" shall include the following: all substances in the full Target Analyte List/Target Compound List; Per- and Polyfluoroalkyl Substances; 1,4-Dioxane; all substances in the EPA Method 624 List; MTBE; Naphthalene; DEET; Dichlorvos; Didealkylatrazine; Imidachloprid; Aldicarb; Dacthal; and Simazine.
 - b. "Contaminated" shall mean the presence of any contaminant above applicable NYSDEC standards, criteria, guidance, or more stringent applicable levels of other authorities or agencies, that are to be determined in consultation with NYSDEC, in any environmental medium, such as soil, surface water, sediment, groundwater, soil vapor, ambient air, or indoor air, along the proposed terrestrial cable route or at the substation.

- 54. The Certificate Holder shall include as part of the EM&CP a Fishing Community Outreach Program that will include communications with mariners, commercial, recreational, and forhire (charter) fishermen as required in Condition 64.
- 55. The Certificate Holder must submit a Fisheries Compensation Plan as part of the EM&CP.
 - a. The Fisheries Compensation Plan shall include:
 - a Fishing Gear Conflict Prevention/Hazard Notification and Claim Procedure for commercial fisheries gear losses during all phases of the Project, including survey, construction, operation, maintenance, and decommissioning for the life of the Project;
 - a reimbursement process for any temporary displacement of commercial fishing directly resulting from the Project's construction and maintenance activities, including any necessary cable reburial activities, and decommissioning activities;
 - iii. a process for claimants to appeal any decision regarding their claims to an independent third-party arbitrator; and
 - iv. a statement that the number of claims submitted by persons or entities pursuant to sections (i) and (ii) of this section and adjudicated by the Certificate Holder shall not be limited;
 - b. The Certificate Holder shall file with the Secretary a summary of all claims filed and/or settled on an annual basis, including the claim type and the impacted fishing activity;
 - c. The Certificate Holder must notify DPS, NYSDEC, and NYSDOS within 30 days any time a fisheries compensation claim is filed and/or settled. The notification must include the claim type, species impacted, and the fishing activity disrupted and/or displaced; and
 - d. The Certificate Holder must not require any fisherman settling a fisheries compensation claim to sign a Non-Disclosure Agreement.

56. Prior to filing the EM&CP, the Certificate Holder shall consult with the Town of East Hampton Architectural Review Board regarding the design of the wall surrounding the SFEC-Interconnection Facility.

F. Notices and Public Comments

- 57. The Certificate Holder will facilitate the submission of comments through the use of a dedicated contact person. The Certificate Holder shall make available to the public a toll-free or local phone number of an agent or employee who will, for the duration of construction of the Project, be available to receive comments from the public about the construction of the Project, and such agent or employee must respond with acknowledgement of receipt to the commenter within one (1) business day. The toll-free or local phone number shall include a recorded outgoing message that will, when a call is not answered by a person, provide the caller with: (i) the number to be called at any time in case of emergency, (ii) the phone number and email address of the Secretary, and (iii) the phone number of the DPS EC&C Section.
- 58. The Certificate Holder's Project website shall provide a means for the public to communicate to the Certificate Holder about the Project (*e.g.*, to register comments or ask questions) through either a direct link to a comment form or email or by providing the contact information (phone and/or email address) of a representative of the Certificate Holder who can respond to communications that include questions and concerns about the Project from members of the public. Certificate Holder shall post construction notices and other publicly relevant information to the Project website. The Project website shall allow users to subscribe (or unsubscribe) to an electronic mailing list for Project update notifications.
- 59. The Certificate Holder shall create a Complaint Management and Resolution Plan to be included as part of the EM&CP. The Complaint Management and Resolution Plan shall:
 - a. Require the Certificate Holder to retain, for a period of five (5) years, electronic copies of: (i) the telephone logs for any calls made to the Project's toll-free number; and (ii) any submission to the Project website. Such records shall be made available to DPS Staff, the NYSDEC, NYSDOS, and the Town upon request.

- b. Require the Certificate Holder to report to DPS Staff, NYSDEC, the Trustees, and the Town every complaint, and describe the actions taken to address the complaint, within ten (10) business days after receipt of the complaint. Where the complainant provides contact information, require Certificate Holder to inform the complainant of actions Certificate Holder is taking to address the complaint.
- 60. The Certificate shall comply with the following Notice of Intent to Commence Work ("Construction NOI") requirements
 - a. No less than fourteen (14) days before commencing construction, the Certificate Holder shall:
 - i. submit the Construction NOI to the NYSDEC Bureau of Energy Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY 12233-1750 and NYSDOT Region 10 Traffic Engineer, 250 Veterans Memorial Highway, Room 6A6, Hauppauge, NY 11788;
 - ii. provide the Construction NOI to local officials, including the Town and Suffolk County Clerk, school districts, and emergency personnel, including local police and fire departments;
 - iii. provide the Construction NOI to LIPA and/or PSEG-Long Island, and any other affected utilities;
 - iv. provide the Construction NOI to the Town and Trustees. Unless otherwise specified herein, where the Certificate Holder is obligated to inform or notify the Town pursuant to this Certificate, the Certificate Holder shall provide such notice to the following Town officials: Town Clerk, Town Supervisor, Town Attorney, Town Natural Resources Department, and Town Planning Department. Similarly, where the Certificate Holder is obligated to inform or notify the Trustees pursuant to this Certificate, such notice shall be provided to the Trustee's Clerk and Attorney.
 - v. provide the Construction NOI for dissemination to local media; and display in the Town Hall and public places, including but not limited to general stores, post offices, community centers, and conspicuous community bulletin boards; and

- vi. provide the Construction NOI to persons who own properties that are crossed by or abut the Project Route, and persons who reside on such properties (if different from the owner). The Certificate Holder shall give such notices by affixing them to the doors of residences or by mailing the notices via United States Postal Service Mail. The Certificate Holder shall file a copy of the generic form of the Construction NOI to the Secretary prior to the commencement of construction and shall post the same to the Project website.
- b. The Construction NOI shall be written in language reasonably understandable to the average person and shall contain:
 - i. a map and a description of the Project;
 - ii. the anticipated date for start of construction;
 - iii. the name, address, local or toll-free telephone number of an employee or agent of the Certificate Holder, and e-mail address;
 - iv. a description off where to get more information about the Project including the Project website address and the location of document repositories; and
 - v. a statement that construction of the Project is under the jurisdiction of the Commission, which is responsible for enforcing compliance with environmental and construction conditions, and which may be contacted at an address and telephone number to be provided in the notice.
- 61. The following pre-construction meeting requirements shall apply to the Certificate Holder:
 - a. At least fourteen (14) days prior to the start of construction, the Certificate Holder shall hold a preconstruction meeting. An agenda, location, and invitation list shall be agreed upon among DPS Staff, the Town, the Trustees, and the Certificate Holder. The Certificate Holder shall consult with NYSDEC prior to finalizing the date of the meeting. The Certificate Holder shall provide notice of the meeting to all invitees at least ten (10) days prior to the meeting date;
 - 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 invitation list shall include at a minimum the contractors, DPS Staff, NYSDEC, NYSDOT, NYSDOS, the Town Supervisor, the Trustees, and Town Highway Superintendent, LIRR representatives, and LIPA/and or PSEG-LI representatives; and
- d. The Certificate Holder shall supply draft minutes from this meeting to all attendees, the attendees may offer corrections or comments, which the Certificate Holder will consider in good faith, and the Certificate Holder shall issue the finalized meeting minutes to all attendees and invitees.
- 62. The Certificate Holder shall provide contractors providing services for construction of the Project with complete copies, including any amendments and modifications, of the Certificate, the EM&CP, the Order(s) approving the EM&CP, any permit issued pursuant to Section 404 of the Federal Clean Water Act, the Section 401 Water Quality Certification, and the federal consistency decision issued pursuant to the federal Coastal Zone Management Act. If, for any reason, the construction contractor cannot finish the construction of the Project, and a new construction contractor is needed, the Certificate Holder shall hold another pre-construction meeting using the same format as outlined above.
- 63. At least fourteen (14) days (or as authorized by DPS Staff) before construction of the SFEC-Onshore begins in any area, the Certificate Holder shall, in such area: (a) delineate both edges of the SFEC-Onshore ROW, as certified; (b) stake and/or flag all ROW access roads and all work pads and pulling pads; (c) where Certificate Holder has a right of access, mark, other than in beach and ocean areas, all environmentally sensitive areas including, but not limited to, wetlands and the one hundred (100) foot adjacent and setback areas associated with regulated freshwater wetlands and the three hundred (300) foot adjacent areas associated with regulated tidal wetlands, threatened or endangered species habitat, contaminated soil areas, etc.; (d) flag any trees to be removed in such area for review and acceptance by DPS Staff, NYSDEC, and the Town; and (e) notify DPS Staff, NYSDEC, the Trustees, and the Town when the above-described field stake-out is complete in such area.

- 64. Certificate Holder shall adhere to the following notice requirements for mariners, recreational fishermen, and commercial and for-hire fishermen licensed by NYSDEC (hereinafter referred to as "NYSDEC-Licensed Fishermen"):
 - a. At least thirty (30) days prior to commencing any activities in New York State waters, the Certificate Holder shall use best efforts to provide mariners, recreational fishermen, and NYSDEC-Licensed Fishermen with an approximate schedule of construction activities in New York State waters. Certificate Holder shall provide additional notice at least seven (7) days prior to commencing each activity in New York State waters; and
 - b. Such notifications shall be provided as follows:
 - Certificate Holder shall submit a request to the NYSDEC Division of Marine Resources Permitting Office to obtain information needed to notify NYSDEC-Licensed Fishermen. In addition, Certificate Holder shall publish such notice on both the USCG's Local Notice to Mariners and on the Project website; and
 - ii. If NYSDEC fails to provide such notification information within five (5) business days of Certificate Holder's request, the Certificate Holder may engage in its construction activities after it announces its activities on the USCG's Local Notice to Mariners and on the Project website.
- 65. During construction, the Certificate Holder shall provide DPS Staff, NYSDOT, NYSDEC, LIPA and/ or PSEG-LI, the Town, and the Trustees with weekly status reports transmitted by electronic mail summarizing construction and indicating construction activities and locations scheduled for the following fourteen (14) days.
- 66. The Certificate Holder shall notify the public, mariners, recreational fishermen, and NYSDEC-Licensed Fishermen of: (i) all cable protection measure locations (including protection type); (ii) if used, the location of the Temporary Cofferdam, as described and defined in Condition 82; (iii) any areas where the identified burial depth is less than two (2) feet; and (iv) any other potential obstructions caused and/or created by the Project (*i.e.*, relocated boulders) on the Project website, which shall include an accessible graphic/geo-referenced repository for all

such information. Certificate Holder shall provide such notice as soon as possible, but no later than five (5) business days of the occurrence of (i) through (iv).

- 67. The Certificate Holder shall file with the Secretary no later than ten (10) days after the date on which the Project has achieved commercial operation, defined as the date on which energy is sold in commercial quantities, excluding test energy, and is transmitted through the Project ("Commercial Operation Date" or "Commercial Operation").
- 68. Final restoration of the Project site may occur in phases in order to comply with required work windows and other restrictions. Where final restoration will not occur until a subsequent construction phase, the area shall be stabilized until final restoration can be achieved. Within ten (10) days of the completion of phase of the final restoration of the Project, the Certificate Holder shall file notice with the Secretary that all restoration for that phase has been completed in compliance with this Certificate and the EM&CP, and shall demonstrate that all other locations have been stabilized until the commencement of the following phase of construction. The Certificate Holder shall periodically monitor the site during the non-construction season to ensure that areas that have not achieved final restoration remain adequately stabilized. The timing of such periodic monitoring shall be described in the EM&CP. Corrective measures shall be implemented as soon as practicable for any locations where stabilization is observed to be inadequate.

G. Construction and Maintenance Windows and Timing

69. Construction and maintenance work along the SFEC-Onshore route, other than: (i) work on the SFEC Interconnection Facility; and (ii) work within the LIRR ROW; shall be confined to the period beginning October 1 and ending on, but inclusive of, April 30 of the succeeding calendar year. Notwithstanding the foregoing, if Certificate Holder expects to complete HDD Construction Work, as defined below, by May 15 of the current calendar year in the event Certificate Holder is allowed to continue such construction up to and including May 15, Certificate Holder is authorized to continue HDD construction work in the "HDD Work Zone," as defined below, through May 15 provided that: (i) notice of Certificate Holder's intention to continue HDD Construction Work beyond April 30 and defining the scope of work to be

performed is provided to the Town, on or before April 1 (the "HDD Work Notice"); (ii) the Town has approved the HDD Work Notice within five (5) business days, provided that such approval shall be granted where the HDD Work Notice conforms to the requirements of this Condition 69; (iii) Certificate Holder has, prior to April 30, delivered to the Town an irrevocable letter of credit, or other form of financial guarantee, in a form acceptable to the Town Attorney, for the sole benefit of the Town, in the amount of two hundred and fifty thousand dollars (\$250,000.00) ("Acceptable Financial Guarantee"); (iv) pedestrian and vehicular access to Wainscott Beach and residences along Beach Lane shall remain open throughout the period of such extended construction; and (iv) Certificate Holder shall demobilize and remove all equipment from the HDD Work Zone by May 15. Construction work between May 1 and May 15 shall not include accessing the splice vaults of the SFEC-Onshore during construction for purposes of splicing, hook-up, testing, repair or energization. Installation of the HDD conduit for the Sea-to-Shore Transition may be performed on a 24x7 basis, subject to any applicable construction date restrictions and any applicable Construction Noise Control Plan, if necessary to prevent damage to or loss of the bore hole. Pulling the cable through the conduit and cable splicing may be performed on a 24x7 basis subject to any applicable construction date restrictions and any applicable Construction Noise Control Plan. In addition to the notice requirements set forth in Condition 60, the Certificate Holder shall provide notice to the Trustees and the Town forty-eight (48) hours prior to the commencement of HDD drilling, installation of the HDD conduit, and pulling of cable through the HDD conduit to the Sea-to-Shore Transition vault.

a. For purposes of this Condition 69, "complete HDD Construction Work" shall mean the HDD work set forth in the HDD Work Notice. The HDD Work Notice shall include HDD drilling and installation of HDD conduit and may include, pulling of cable through the HDD conduit to the Sea-to-Shore Transition vault. HDD Construction Work shall be considered complete pursuant to this Condition 69 if it will not be necessary, except as a result of a force majeure event, for the Certificate Holder or any of its employees or contractors to remobilize HDD equipment for performance of any additional HDD construction work during any following construction season. The "HDD Work Zone" is defined as the area of Beach Lane on which is located (i) equipment for HDD drilling and installation of HDD conduit; (ii) the Sea-to-Shore

Transition vault; (iii) the first onshore cable vault; and (iv) the cable duct bank work area between the Sea-to-Shore Transition vault and the first onshore cable vault.

- b. To the extent Certificate Holder performs HDD Construction Work, under this Condition 69, after April 30 of any calendar year but does not complete the HDD Construction Work on or before May 15, the Town may call or draw on the aforesaid Acceptable Financial Guarantee. In the event that (i) Certificate Holder certifies to the Town that it has completed the HDD Construction Work and removed all equipment from the HDD Work Zone on or before May 15 and no mobilization will be required to complete the HDD Construction Work in the future, and (ii) no further HDD Construction Work shall commence, and no mobilization for such HDD Construction W Work shall occur, during the next-succeeding construction window (*i.e.*, the window beginning the following October 1), Certificate Holder shall be thereafter entitled, upon application to the Town, to release of the aforesaid Acceptable Financial Guarantee.
- 70. All ground disturbing construction activity for the SFEC-Onshore along the public road ROWs shall take place during the period beginning on or after October 1 and ending on or before April 30. Accessing the vault man-holes associated with the SFEC-Onshore cable for purposes of cable installation, testing, repair, splicing, hook-up, or energization shall not be considered a ground disturbing construction activity.
- 71. All Drilling Operations associated with SFEC-NYS HDD shall be confined to the following periods:
 - a. beginning November 1 and ending on, but inclusive of, April 30 of the succeeding year. Between November 1 and November 15, Certificate Holder shall be authorized to position and anchor vessels to be used in connection with HDD Drilling Operations, however the in-water punch out will not occur prior to November 15.
 - b. Drilling Operations are defined as actual drilling of the HDD bore.
 - c. During the periods described above, Drilling Operations will be conducted between 7:00 a.m. and 7:00 p.m., except when necessary: (i) for safety reasons; (ii) to protect

life and/or property; or (iii) to protect the structural integrity of the bore hole or to prevent damage to or loss of the bore hole.

- 72. Species Related Work Restrictions
 - a. Atlantic Sturgeon. No in-water seabed disturbing work, including jet trenching trials, shall occur between May 1 to June 30 and September 1 to November 15 in any year to avoid the risk for incidental take of Atlantic Sturgeon, except that Certificate Holder may be permitted to perform some limited seabed disturbing work activities (*i.e.*, diver clearance and maintenance of HDD exit pit, and backfill of the HDD exit pit) May 1 through May 15 and November 1 through November 15. If backfill of the HDD exit pit occurs May 1 through May 15 or November 1 through November 15, Certificate Holder shall develop an Atlantic Sturgeon Monitoring and Impact Minimization Plan. Such Atlantic Sturgeon Monitoring and Impact Minimization Plan must meet the substantive requirements of 6 NYCRR Part 182, and shall be included as part of the EM&CP. Certificate Holder shall provide the Atlantic Sturgeon Monitoring and Impact Minimization Plan to NYSDEC forty-five (45) days prior to filing of the EM&CP for NYSDEC's review and comment.
 - b. To minimize impacts to threatened and endangered shorebirds, no construction or maintenance activities shall occur within 500 feet of the southern edge of the beach/ pavement boundary between April 1 and November 1.
 - c. Northern Long-Eared Bat. Certificate Holder shall perform tree clearing activities between December 1 and February 28 to avoid potential impacts to Northern Long-Eared Bat ("NLEB"); provided, however, that if any proposed clearing activities are performed outside of the December 1 through February 28 window, roosting tree surveys shall be conducted in accordance with an NLEB Monitoring and Impact Minimization Plan, in coordination with NYSDEC. A Roosting Tree Survey Plan will be developed for the SFEC-Interconnection Facility and SFEC-Onshore in the Project Area, in consultation with NYSDEC, and will be included as part of the EM&CP. As part of the survey, biological monitors shall identify and evaluate any potential roosting trees for the NLEB. Emergence counts will be taken no more than 24 hours before tree removal to confirm that there are no NLEB roosting. This would occur through a

combination of acoustic and visual surveys. If Certificate Holder or NYSDEC identify roosting trees within 150 feet of the Project Area, the Certificate Holder will coordinate with NYSDEC regarding any potential minimization and mitigation measures required to comply with 6 NYCRR § 182 and applicable federal laws and regulations promulgated by the USFWS.

- 73. Following construction, all areas disturbed during construction and installation of the SFEC-Onshore and SFEC-NYS shall be restored to pre-construction contours, as detailed in the EM&CP. Erosion controls and permanent re-vegetation shall be restored as appropriate for those locations. Disturbed pavement, curbs, and sidewalks (if applicable) shall be restored to their original preconstruction condition or better. Certificate Holder shall use best efforts to ensure all restoration activities are completed within one hundred and twenty (120) days of the completion of on-shore construction, exclusive of: (i) construction window restrictions; (ii) other construction restrictions specified herein; (iii) weather conditions that preclude planting activities; and (iv) seasonal restrictions for paving. Notwithstanding the preceding sentence, no restoration activities shall take place between May 1 and September 30 of any year, unless the Certificate Holder files a letter of acceptance from the Town for modification of the timeframe with the Secretary.
- 74. Certificate Holder shall perform restoration and maintenance work on the SFEC-Onshore and SFEC-Sea-to-Shore Transition within Town owned rights-of-way between October 1 and April 30. Should Certificate Holder need to perform such work outside of the window specified, it may seek authorization pursuant to the procedures set forth in Condition 11. The maintenance window specified shall not apply to emergency situations, repairs, or any work performed inside the splice vault.
- 75. Construction activities shall be restricted to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday, except for construction activity in connection with HDD, cable pulling and laying, cable joint splicing, and other activities reasonably necessary to comply with NYSDOT restrictions on daytime construction in or along roadways or public access areas. This restriction shall not require the cessation of construction activities that require a continuous

work effort once started. In such an event, except in cases of emergency, the Certificate Holder shall notify DPS Staff, the Town, and adjacent landowners and businesses. Such notice shall be given at least twenty-four (24) hours in advance unless the construction activities to be performed on a Sunday or after 7:00 p.m. are required for safety reasons that arise less than 24 hours in advance. The Certificate Holder shall implement construction noise mitigation measures set forth in the EM&CP.

- 76. Deliveries related to construction activities shall take place between 7:00 a.m. and 7:00 p.m., except for cable or other oversized deliveries. This condition is not intended to prohibit night time deliveries reasonably necessary to facilitate compliance with NYSDOT restrictions on daytime construction in or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started.
- 77. After consultation with the NYSDEC, NYSDOS, DPS Staff, the Town, and Trustees, the Certificate Holder may petition the Commission for a modification of any construction window limitation by filing such petition with the Secretary. Such petition shall describe the consultation efforts and results of the Certificate Holder and shall include a request for a thirty (30) day public comment period.

H. SFEC-NYS Construction

78. Exclusive of the portion of the cable installed via HDD, the Certificate Holder shall install the SFEC-NYS a minimum burial depth ("Burial Depth") of six (6) feet (measured from top of cable) below the existing seabed. Should the Burial Depth not be achieved during the initial pass of the cable installation tool that is best suited to achieve Burial Depth, the Certificate Holder shall perform up to two (2) additional passes with the installation tool, or other burial tool that complies with the requirements of the Certificate, unless (a) additional passes risk causing damage to the SFEC-NYS or the installation tool; or (b) due to geologic obstructions, additional passes would not increase the burial depth or risk causing cable exposure. Certificate Holder shall use best efforts to micro-route the cable within the cable corridor to achieve Burial Depth during installation. If boulders are not identified during pre-construction surveys, and therefore micro-routing the cable is impracticable, the Certificate Holder shall, if

required to increase the likelihood of achieving Burial Depth, relocate any encountered boulders within sixty-five feet (65) feet of the planned centerline of the cable. Where Certificate Holder has relocated a boulder one (1) meter or more in diameter a distance of two (2) meters or more from the location where it was initially encountered, Certificate Holder shall provide notice to mariners, recreational fishermen, and NYSDEC-Licensed Fishermen in accordance with Conditions 64 and 66, *supra*.

- 79. Certificate Holder shall install the SFEC-NYS, exclusive of the HDD, using either simultaneous lay and burial or pre-lay and post-burial processes.
 - a. The following processes may be used, individually or in combination, to install the SFEC-NYS, exclusive of the HDD: mechanical cutter, mechanical plow (which may include a jetting system), jet sled, jet trencher, and/or controlled flow excavator.
- 80. Certificate Holder will use best efforts to avoid the use of cable protection if the actual burial depth achieved provides adequate protection. In areas where seabed conditions or geologic or topographic features, or utility crossings do not allow Certificate Holder to achieve Burial Depth, Certificate Holder is authorized, but not required, to use cable protection methods. Cable protection may include tapered engineered concrete mattresses, rock bags, crushed rock, or other appropriate protection method(s). Certificate Holder shall install and maintain any necessary cable protection measures in a manner that is consistent with the objectives of Condition 48(f) (*i.e.* ability to maintain overtrawlability, minimize shifting over time, and avoids creating a discernable berm). Certificate Holder shall not leave any portions of the cable exposed on the seabed without cable protection measures. As part of decommissioning, the Certificate Holder shall survey and use best efforts to remove installed cable protection measures that are within two (2) feet of the seabed surface.
- 81. The Certificate Holder must avoid sensitive benthic habitats (*i.e.*, hard bottom habitat, commercial shellfish beds, salt marsh, submerged aquatic vegetation, and corals) when installing the cable in New York State waters.

- 82. In-water activities shall be undertaken in a manner that minimizes the potential for interference with navigation, and preexisting uses of the area, including but not limited to fishing.
- 83. The Certificate Holder may use a temporary cofferdam, gravity cell, or similarly Commission-approved structure (collectively referred to as "Temporary Cofferdam"), or no structure, around the HDD exit pit during construction. Final details regarding whether a Temporary Cofferdam will be used, and, if so, the type, design, and installation method shall be included in the EM&CP. Any Temporary Cofferdam shall be fully removed prior to the Commercial Operation Date, but no longer than 30 days after the installation of the cable in NYS waters. If a Temporary Cofferdam is used, the Certificate Holder shall provide notice of its location to mariners, recreational fishermen, and NYSDEC-Licensed Fishermen in accordance with Condition 66 herein, and any Temporary Cofferdam will be marked in accordance with applicable USCG requirements.
- 84. If any jet trenching technology is used to lay the cable, trials must be conducted within representative sections or areas proximate to the proposed underwater cable route in NYS waters prior to cable installation to ensure compliance with Total Suspended Solids ("TSS") threshold limits as defined in Condition 171. The trial will include approximately one thousand (1,000) feet of jet trenching operations within an area to be specified in the Jet Trencher Trial Plan that will be submitted as part of the EM&CP. The following conditions apply to jet trencher trials:
 - a. A combination of calibrated acoustic ("ADCP") and optical backscatter ("OBS") instruments will be used to measure water column TSS and turbidity on selected transects. Companion water samples will be collected and analyzed by a NYSDOH Environmental Laboratory Approval Program ("ELAP") certified laboratory for TSS and turbidity during jet trencher trials;
 - TSS and turbidity samples will be collected up-current (for baseline) and one thousand five hundred (1,500) feet down-current of the jet plow, at three-interval depths (near surface, mid-depth, and near bottom);
 - c. The Certificate Holder must work cooperatively with DPS Staff and NYSDEC to immediately review the results of the real-time data measurements during the jet

trencher installation trials to evaluate whether the operating conditions result in TSS concentrations that exceed the TSS threshold limit;

- d. If the jet trencher trials demonstrate that the operating conditions result in TSS concentrations that exceed the TSS threshold limit established herein, the Certificate Holder must work with DPS Staff and NYSDEC to evaluate and implement feasible modifications to the jet trencher operating conditions to further reduce in-situ sediment re-suspension associated with the jet trencher installation procedure; and
- e. Jet trencher operations must not proceed until the results of the Jet Trencher Trial Plan is reviewed and accepted by DPS Staff and NYSDEC. Review of this information by DPS and NYSDEC staffs shall not unreasonably delay the commencement of installation of the underwater cable system.
- 85. The following conditions apply if jet trenching technology is used to install the cable:
 - a. The Certificate Holder must operate the jet trencher in accordance with the operating conditions determined through jet trencher trials to maintain the suspension of in-situ sediments within the TSS limits;
 - b. Midline buoys or alternative measures shall be employed to minimize sediment disturbance caused by cable sweep;
 - c. If, during jet trencher installation of the cable, TSS concentrations exceed the TSS limits established in this Certificate, DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor shall be immediately notified and work shall cease, pursuant to Condition 176, herein. The Certificate Holder shall immediately employ one or more of the following measures after consultation with DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor: changing the rate of advancement of the jet trencher; modifying or varying hydraulic jetting pressures; or implementing other reasonable operational controls that may reduce suspension of in-situ sediments, but not in a manner that would materially delay the progress of work to complete the jet trencher installation procedure. Prior to re-commencement of work, DPS Staff, in consultation with NYSDEC, must authorize the jet-trencher operation mitigation measures; and
 - d. During implementation of corrective actions, DPS Staff and NYSDEC may specify additional monitoring until compliance with Water Quality Standards is demonstrated.

Samples shall be collected until resumption of routine monitoring is authorized by DPS Staff in consultation with NYSDEC.

- 86. HDD shall be used to install a conduit in the SFEC Sea-to-Shore Transition through which the SFEC shall be installed at a minimum depth of thirty (30) feet below the current profile of the beach and a minimum of six (6) feet below the seafloor. The SFEC Sea-to-Shore Transition will follow a slope from the HDD Exit Pit to the Sea-to-Shore Transition vault such that the SFEC Sea to Shore Transition is buried at a depth greater than nine (9) feet in the Nearshore Surf Zone. The Sea-to-Shore Transition vault shall be located underground within the existing Beach Lane ROW with a manhole cover at the surface.
 - a. For purposes of these Certificate Conditions, "Nearshore Surf Zone" shall be defined as one hundred (100) feet into the water from the Mean Low Water of Wainscott Beach.
- 87. The following conditions apply to the HDD:
 - a. The Certificate Holder shall include, as part of the EM&CP, an Inadvertent Returns Plan that provides for the detection and correction of accidental releases of drilling fluids, as well as the Safety Data Sheets ("SDS") for the drilling fluids;
 - b. Certificate Holder shall use best efforts to recover and dispose of all HDD drilling fluids and cuttings as specified in Condition 181;
 - c. Certificate Holder shall not intentionally release and shall use best efforts to prevent the inadvertent release, of HDD drilling fluids or cuttings outside the confines of the HDD operation. Certificate Holder shall comply with the Inadvertent Returns Plan described herein to mitigate and minimize the impacts of any such releases; and
 - d. All drilling fluid additives must be water-based unless otherwise approved by DPS in consultation with DEC. If a polymer-based additive is proposed, it must be included in the EM&CP with the corresponding SDS containing eco-toxicity information and approved NYSDEC Water Treatment Chemical Form. Petroleum-based additives are strictly prohibited.
- 88. No changes in the installation technology or Burial Depth shall be allowed without: (i) prior consultation with the Town and Trustees; and (ii): a written statement from NYSDOS stating

that the deviation would not result in coastal effects that differ significantly from the coastal effects reviewed by NYSDOS in Certificate Holder's original federal coastal consistency certification ("Coastal Consistency Certification"). In the event that NYSDOS determines that such deviation would result in coastal effects that differ significantly from those reviewed in the Coastal Consistency Certification, the Certificate Holder shall seek a written concurrence from NYSDOS for any such project changes that would require an amendment to the Certificate Holder's Coastal Consistency Certification. Nothing in this Certificate shall be construed to limit or expand any rights Certificate Holder may have to seek administrative or judicial review of any action or inaction by NYSDOS relating to any such deviation.

- 89. Following excavation of the SFEC-NYS HDD exit pit, the Certificate Holder shall displace the dredged material to a barge. If the dredged material is not contaminated, and if the backfill of the HDD exit pit occurs prior to May 15 of the first year of construction that HDD work is commenced, the dredged material shall be used as the top three (3) feet of backfill for the HDD exit pit. If the Certificate Holder cannot backfill the HDD exit pit by such date, or if dredged material is contaminated, the Certificate Holder may use clean material of similar grain size to the dredged material, shall consult with NYSDEC, NYSDOS, and DPS Staff on the source of such fill prior to use, and shall include the source location in the EM&CP. If material to be dredged is contaminated, prior to dredging, the Certificate Holder shall identify the final dredged material disposal location, including a letter from the permitted disposal facility verifying that they will accept the material. All contaminated material shall be handled in accordance with the Final Hazardous Waste and Petroleum Work Plan and Materials Management Plan submitted as part of the EM&CP. For any excavated material not used as backfill, the final material disposal location shall be submitted to DPS Staff, the Town, Trustees and NYSDEC at least thirty (30) days prior to disposal. Disposal of all material must comply with 6 NYCRR Part 360 et seq.
- 90. The following conditions shall be applied to minimize sediment released into the water column during excavation and backfilling of the HDD exit pit:
 - a. The environmental monitor shall inspect all excavating and backfilling equipment prior to use and shall perform periodic inspections of all such equipment no less than once

per week when in use. The Certificate Holder shall demonstrate to the environmental monitor that the equipment operator has sufficient control over the bucket operation so that the sediment re-suspension from bucket contact with the bottom and bucket over-filling is minimized.

- b. Excavated material shall be recovered to a barge and shall not be sidecasted. The Certificate Holder shall:
 - i. only use barges in good operating condition;
 - ii. not use deck barges, unless modified to allow no barge overflow and as approved by the Environmental Monitor and DPS Staff in consultation with NYSDEC;
 - iii. use barges or scows of solid hull construction or which are sealed;
 - iv. use a closed (*i.e.*, sealed) environmental (*e.g.*, clamshell) bucket with sealing gaskets or an overlapping sealed design at the jaws and seals or flaps positioned at locations of vent openings to minimize sediment suspension;
 - v. ensure that seals or flaps designed or installed at the jaws and locations of vent openings tightly cover these openings while the bucket is lifted through the water column and into the barge;
 - vi. equip the closed environmental (*e.g.*, clamshell) bucket with sensors to ensure complete closure of the bucket before lifting through the water;
 - vii. operate the bucket so as to control the rate of the descent and to maximize the depth of penetration without overfilling the bucket;
 - viii. control bucket retrieval rates to minimize turbidity;
 - ix. lower the bucket to the level of the barge gunwales prior to release of the load and place the excavated material deliberately and in a controlled manner;
 - x. suspend operations until any necessary repairs or replacements are made when a significant loss of water and visible sediments from the bucket is observed;
 - xi. avoid washing the gunwales of the scow except to the extent necessary to ensure the safety of workers;
 - xii. not overflow the barge; and

- xiii. The Certificate Holder shall allow a minimum twenty-four (24) hours of settlement prior to decanting barges. Decanting of barges may not commence until approved by DPS Staff, in consultation with NYSDEC.
- c. The Certificate Holder shall not use a dragline for excavation.
- d. The Certificate Holder shall not use airlift, controlled flow excavation, and/or suction dredging except in instances where bucket excavation would endanger the HDD borehole, the HDD conduit, the SFEC-NYS cable or installation equipment.
- e. Certificate Holder may install permanent concrete mattresses, rock bags, or other alternative means of protection of the conduit and/or cable within the HDD exit pit, provided that the Certificate Holder shall cover such protection measures with three (3) feet of material excavated from the HDD exit pit or similar material from upland sources, in accordance with Condition 89 herein. Additional details regarding such cable protection measures shall be provided in the EM&CP. Prior to filing the EM&CP, Certificate Holder shall consult with DPS, NYSDEC, and NYSDOS regarding cable protection measures.
- f. No later than three (3) months following the Commercial Operation Date, exclusive of the construction windows described herein, Certificate Holder shall backfill the HDD exit pit to ensure that there is no discernible trough.
- g. During excavation and backfill of the HDD exit pit, the Certificate Holder shall provide to DPS Staff, NYSDEC, NYSDOS, the Town, and the Trustees weekly progress reports that demonstrate compliance with Certificate requirements and such other information as determined necessary based on consultation with DPS Staff, NYSDEC, and NYSDOS.

I. SFEC-Onshore Construction

91. The method for installation of the SFEC-Onshore within the NYSDOT ROW will be detailed in the EM&CP and comply with NYSDOT specifications. Prior to filing the EM&CP, the Certificate Holder shall consult with the NYSDOT.

- 92. The SFEC-Onshore may be installed in an underground duct bank consisting of concrete encased conduits, utilizing cable vaults for installation and maintenance access. Each vault will be accessible by a manhole cover visible from the surface.
- 93. Certificate Holder shall instruct its contractors to park in designated areas, which do not interfere with normal traffic, do not cause any safety hazard or interfere with existing land uses.
- 94. Certificate Holder shall use best efforts to minimize vegetation disturbance and removal within the NYSDOT-owned highway ROW and Town-owned ROW.
- 95. The Certificate Holder shall coordinate construction activities with other construction and maintenance activities taking place at the same time and in the same vicinity by the Town, Trustees, and NYSDOT. Except as needed for delivery and installation of the Sea-to-Shore transition vault, the Certificate Holder shall maintain continual pedestrian and vehicular use of and access to Wainscott Beach. Details of construction schedule planning and coordination with the Town, Trustees, and NYSDOT and a design plan for emergency access during local road closures shall be included in the EM&CP.
- 96. The Certificate Holder shall confine construction and subsequent maintenance activities to the locations identified in Appendix B of the Joint Proposal and approved additional work areas, as detailed in the EM&CP.
- 97. Certificate Holder shall design, engineer, and construct the Project in accordance with the applicable and published planning and design standards of the New York Independent System Operator, Inc., New York State Reliability Council, the Northeast Power Coordinating Council, the North American Electric Reliability Corporation, and successor organizations.
- 98. The Certificate Holder shall coordinate with LIPA and/or PSEG-LI to minimize outages.

- 99. The Certificate Holder shall be responsible for inspecting all culverts that convey streams within the Project limits of disturbance as identified in the EM&CP and assuring that they are not crushed or blocked during construction, restoration, and/or decommissioning of the Project. If such culvert is blocked, crushed, or otherwise damaged during construction, restoration, and/or decommissioning, the Certificate Holder shall, where feasible, immediately, repair the culvert or replace it with alternative measures appropriate to maintaining proper aquatic connectivity and stream flow. Where feasible, culvert repairs or replacement must not result in reduced opening width or height.
- 100. The Certificate Holder shall thoroughly clear the areas of debris on the SFEC-Onshore ROW related to underground electric line construction.
- 101. The Certificate Holder shall take appropriate measures, as outlined in the EM&CP, to minimize fugitive dust and airborne debris from construction activities. Except where such activities may create ice, exposed soils and roadways shall be wetted as needed during extended dry periods to minimize dust generation. To the extent practicable, water for dust control shall come from municipal water supplies/sources. If contamination in the ground is detected during construction of the SFEC-Onshore and SFEC-Interconnection Facility, and such contamination is of the kind that will lead to volatilization or off-gassing of such contamination or chemical constituents thereof, the Certificate Holders shall contact NYSDOH, NYSDEC, and DPS Staff prior to further disturbance. Additionally, the Certificate Holder shall conform to practices and procedures described in the DER-10/Technical Guidance for Site Investigation and Remediation and the NYSDOH Generic Community Air Monitoring Plan ("CAMP"), to the extent applicable.
- 102. Following construction, all Project areas shall be restored to pre-construction contours, unless the EM&CP specifies otherwise. Erosion controls and permanent vegetation shall be restored as appropriate for those locations. Disturbed pavement, curbs, and sidewalks (if applicable) shall be restored to their original preconstruction condition or improved.

- 103. The Certificate Holder shall file with the Secretary as-built drawings and shapefiles of the Project certified by a Professional Engineer that is licensed in New York State within one hundred and twenty (120) days following achievement of Commercial Operation.
- 104. Certificate Holder shall, upon completion of construction of the Project:
 - a. Conduct an assessment of the need for additional restoration work and landscape improvements, including vegetation planting, earthwork or installed features to screen or landscape the Project with respect to road crossings, residential areas, switchyards, and substations. Landscape improvement assessments should be conducted in consultation with the Town and landowners where applicable.
 - b. Prepare plans for any visual mitigation found necessary, and, in connection therewith, removal, rearrangement and supplementation of existing landscape improvements or plantings should be considered, as appropriate.
 - c. Present draft assessments and visual mitigation plans to DPS Staff for review and acceptance, and file a final plan with the Secretary within one year after the date the Project is placed in service.
 - d. Install, as appropriate, visual mitigation measures as identified in final plans as identified in (a) through (c), above.

J. Contractors and Contractor Supplies/Materials

- 105. The Certificate Holder shall notify all contractors that the Commission may seek to recover penalties for violation of the Certificate, not only from the Certificate Holder, but also from its contractors, and that contractors may also be liable for other fines, penalties, and environmental damage caused by their actions.
- 106. The Certificate Holder's employees, contractors, and subcontractors assigned to the construction of the Project shall be properly trained in their respective responsibilities.
- 107. At least fourteen (14) days prior to construction, the Certificate Holder shall file a report with the Secretary confirming that required construction materials are available. For purposes of this paragraph, an item of construction material is available: (i) if it is located at a

marshalling yard; (ii) if it is in a Certificate Holder warehouse or other routine Certificate Holder inventory stocking location; or (iii) if it is on order from a vendor with a scheduled delivery date prior to the time scheduled for its use in the Project.

- 108. All equipment shall be located at the marshalling yard(s), laydown area(s), or on the Project ROW, provided, however, that if a local contractor is used for the work, the local contractor's facility shall be considered as a marshalling yard or laydown area.
- 109. If an accident occurs in connection with work on the Project, the Certificate Holder shall report any such accident to DPS Staff as soon as possible, but no later than twenty-four (24) hours after Certificate Holder becomes aware of such accident. A copy of the accident report, if any, shall be provided to DPS Staff and the Town after it has been finalized.
- 110. If a contractor installs materials, structures, or components that do not meet or exceed the specifications for the same described in the EM&CP, the Certificate Holder shall, within thirty (30) days after becoming aware of such deviation, prepare and deliver to DPS Staff, the Trustees, and the Town a summary report detailing the deviation and the steps to be, or that have been, taken to address the deviation.
- 111. The Certificate Holder shall develop a quality control plan ("Quality Control Plan") for inclusion in the EM&CP describing how it will ensure that the transmission line structures and components it purchases for the Project conform to the specification for structures and components described in the approved EM&CP. At a minimum, the Quality Control Plan shall include: (i) the name(s) and qualifications of the individual(s) who will conduct audits under the Quality Control Plan ("Quality Control Audits"); and (ii) the frequency with which the Quality Control Audits will be performed.
- 112. Within ten (10) business days following completion of each Quality Control Audit, the Certificate Holder shall provide to DPS Staff a report of such audit that includes: (i) a description of the results of the audit, particularly with respect to results that identify that one or more structures or components the Certificate Holder purchased for installation in the

Project did not conform to the specifications for structures or components described in the approved EM&CP; and (ii) any notes pertinent to the subject matter of such audit which were made at audit meetings by Certificate Holder personnel and/or contractors who performed the audit.

- 113. If any Quality Control Audit conducted by the Certificate Holder identifies that one or more structures or components the Certificate Holder purchased for installation in the Project did not conform to the specification for structures and components described in the approved EM&CP, the Certificate Holder shall: (i) provide written notification to the Secretary within not more than seventy-two (72) hours of the Certificate Holder's discovery of such non-conformity; and (ii) describe the steps the Certificate Holder will take to correct the non-conformity, including whether any components must be dismantled and returned to the manufacturer.
- 114. The Certificate Holder shall avoid direct disturbance to properties by accessing the Project from existing roadways or off-ROW access roads as identified in the EM&CP. Parking for Project construction workers shall be in designated areas outside of the NYSDOT ROW that do not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses. Certificate Holder shall minimize on-site parking for workers where practicable.

K. Oversight and Supervision

- 115. During construction, the Certificate Holder shall retain at least four (4) individual monitors for Project oversight, as follows:
 - a. One (1) independent, third party environmental monitor assigned full-time to the Project. The Certificate Holder must assign at least one additional environmental monitor(s) for the duration of all in-water work if such work is undertaken simultaneously with SFEC-Onshore and/or SFEC-Interconnection Facility construction activities ("Aquatic Environmental Monitor"). The environmental monitor must be on-site during all construction activities that take place outside of the time period 7:00 a.m. to 7:00 p.m.
 - b. One (1) construction supervisor assigned full-time to the Project;

- c. One (1) safety inspector who will inspect the work site full time; and
- d. One (1) quality assurance inspector who will inspect the work site full time.
- 116. Fourteen (14) days in advance of Project construction, the Certificate Holder shall provide an Environmental Compliance Plan regarding the environmental monitor to DPS Staff and NYSDEC for review and acceptance. Upon acceptance by DPS Staff and NYSDEC, the Certificate Holder shall provide a copy of the Environmental Compliance Plan to the Town and Trustees. The Environmental Compliance Plan must include the following information:
 - a. The environmental monitor(s) responsible for compliance with this condition, including:
 - Names, titles, responsibilities, training, years of relevant experience, and licensing (including, but not limited to, the environmental monitor's qualifications that shall satisfy those of a "Qualified Inspector" pursuant to the SPDES General Permit); and
 - ii. Organization structure, including specific names, duties, and responsibilities.
 - b. Certification confirming the independence of the environmental monitor(s) from the Certificate Holder.
 - c. The procedures established to ensure compliance with the Certificate and the applicable ECL provisions and implementing regulations.
 - d. Environmental compliance tracking and reporting procedures, including:
 - Checklist of matters to inspect for compliance, including specific items or locations to be inspected and acceptability criteria to be applied by the environmental monitor(s);
 - ii. Purpose and frequency of reports;
 - iii. Environmental compliance schedule;
 - iv. Methods of reporting non-compliance with Certificate Conditions and the ECL and implementing regulations; and
 - v. QA/QC procedures for environmental compliance.
 - e. Procedure for the Certificate Holder to respond to and correct problems found by the environmental monitors.

- 117. During periods of relative inactivity on the Project, after consultation with and acceptance from DPS Staff, the Certificate Holder may temporarily decrease the number of hours worked by Project oversight personnel and the extent of their presence at the Project site commensurate with the decline in Project activity. Likewise, during periods of relatively high activity on the Facility, the number of inspectors and the extent of their presence at the Project site may be temporarily increased commensurate with the increase in activity levels. The Certificate Holder shall ensure that the frequency of inspections by the environmental monitor(s) comply with the requirements of the SPDES General Permit.
- 118. Subject to Condition 122, the environmental monitor(s) shall have stop work authority over aspects of the Project that could violate the terms of the Certificate, EM&CP, or § 401 Water Quality Certification.
- 119. The Certificate Holder shall provide to DPS Staff, the Trustees, and the Town the cell phone numbers and weekly schedules of the Certificate Holder's environmental monitor(s), safety inspector, quality assurance inspector, and construction supervisor(s).
- 120. The environmental monitor(s) and construction supervisor(s) shall be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor contractor compliance with the provisions of this Certificate, applicable sections of the PSL, ECL, the EM&CP, every Commission order issued in this proceeding, Town Codes, and the § 401 Water Quality Certification.
- 121. Subject to the requirements of Conditions 26 and 28, NYSDEC field representatives and NYSDOS Staff shall be permitted scheduled visits to the Project site.
- 122. The authority granted in the Certificate and any subsequent order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such order(s):
 - a. The Certificate Holder shall regard DPS Staff representatives (authorized pursuant to PSL § 8) as the Commission's designated 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 or any other order in this proceeding, such DPS Staff representatives may issue a stop-work order for that location or activity.

- b. A stop-work order shall expire in twenty-four (24) hours unless confirmed by a single Commissioner. If a stop-work order is confirmed, the Certificate Holder may seek reconsideration from the confirming Commissioner or all Commissioners. If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or the Commission, the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.
- c. Stop-work authority will be exercised sparingly and with due regard to environmental impacts, economic costs involved, public health and safety, possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, DPS Staff representatives will, wherever practicable, consult with the Certificate Holder representatives 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 immediately brought to the attention of the Certificate Holder, the project manager, and the Director of the EC&C Section of the 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 such safety-related activities as they deem necessary and appropriate under the circumstances. The issuance of a stop-work order or implementation of measures, as described below, may be directed at the sole discretion of the DPS Staff representative during these consultations.
- d. If a DPS Staff representative discovers that a specific activity is a significant environmental threat that is, or may immediately become, a violation of the Certificate, Water Quality Certification, or any other order in this proceeding, the DPS Staff representative may—in the absence of responsible Certificate Holder supervisory personnel or 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 environmentally harmful activity immediately. If responsible Certificate

Holder personnel are not on site, the DPS Staff representative will immediately thereafter inform the supervisor and/or environmental monitor of the action taken. The DPS Staff representative may lift the stop-work directive if the situation prompting its issuance is resolved.

- e. 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 Staff representative, refuse to take appropriate action, direct the Certificate Holder or its contractors to implement corrective measures. The field crews shall comply with the DPS Staff representative directive immediately. The DPS Staff representative will immediately thereafter inform the Certificate Holder's supervisor or environmental monitor of the action taken.
- 123. Certificate Holder shall organize and conduct site compliance audit inspections for DPS Staff, NYSDEC, and the Town as needed, but not less frequently than once per month during the construction and restoration phases of the Project. Inspections shall conclude upon the final sign-off of the SWPPP by the SWPPP inspector.
 - a. The inspection shall include a review of the status of compliance with all certification conditions, requirements, and commitments, as well as a field review of the Project site, if necessary. The inspection shall also include:
 - i. review of all complaints received, and their proposed or actual resolutions;
 - ii. review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies;
 - iii. review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and
 - iv. other items the Certificate Holder or DPS Staff consider appropriate.
 - b. The Certificate Holder shall provide draft minutes of the inspection audit and/or meeting, including resolution of issues and additional measures to be taken, to all attendees for corrections or comments. Thereafter, the Certificate Holder shall issue to

DPS Staff, NYSDEC, and the Town the final written record of the results of the inspection audit as part of its scheduled construction update reports, describing resolution of issues and additional measures to be taken.

124. The Certificate Holder shall retain, at its own cost, the services of a reputable engineering firm ("Highway Work Consultant"), to inspect and monitor the work performed under the Highway Permit. The Highway Work Consultant shall monitor the work of the Certificate Holder and the Certificate Holder's Contractors to ensure that the work performed under the permit is done in accordance with the plans, the standard specifications, and all other requirements of the Highway Permit. As necessary, the Highway Work Consultant will inform, orally and in writing, the Certificate Holder and NYSDOT of deficiencies in workmanship, material quality, Work Zone Traffic Control, Safety, etc.

L. Roads and Transportation

- 125. The Certificate Holder shall coordinate all construction work on the SFEC-Onshore with the appropriate State and municipal officials, including the Town, and shall obtain the required authorization for such work, subject to the Commission's continuing jurisdiction as appropriate. The Certificate Holder shall periodically consult with State and local highway transportation agencies about traffic conditions near the Project site and shall notify each such transportation agency of the approximate date manhole-related work will begin within highways under their respective jurisdictions.
- 126. All work zones shall be compliant with the MUTCD and the NYS Supplement to the National MUTCD. Per the MUTCD, the minimum lane width standard shall be 10 feet on local roads as measured from the near edge of the channelizing devices to the edge of the pavement or the outside edge of the paved shoulder.
- 127. The Certificate Holder, with respect to all work it performs on the SFEC-Onshore, shall coordinate with all appropriate municipal agencies, including the NYSDOT and the Town regarding an MPT that details traffic management of roads under State and municipal jurisdiction. The MPT shall be included as part of the EM&CP. The Certificate Holder shall

consult, not less than weekly, with the state and local transportation agencies about traffic conditions near the Project site, and shall implement appropriate modifications to traffic management protocols as necessary to minimize disruption to traffic circulation during construction.

- 128. Neither the Certificate Holder nor any contractors in its employ shall construct, improve, or use any access roads not described in the EM&CP except in the case of emergency situations. A notice of any such emergency shall be promptly filed with the Secretary.
- 129. NYSDOT and the Town shall have authority to place inspectors on site to monitor and observe the Certificate Holder's activities on State Highways and local roads, or to request the presence of state or local police to ensure the safety of highway travelers, at such times and for such periods as NYSDOT deems appropriate. All costs thereof shall be borne by the Certificate Holder.
- 130. The Certificate Holder shall comply with the following provisions for snow and ice removal on all roads on which Project construction is occurring.
 - a. Interference with snow plowing operations by drums, barricades, and other traffic control equipment shall be kept to a minimum. Any devices disturbed or damaged by snow and ice control operations shall be replaced and/or reset as necessary and as soon as possible by the Certificate Holder;
 - b. Excluding the SFEC-Onshore HDD work zone, drainage frames, grates and covers and other castings shall not be adjusted in a travel lane unless the final pavement course is to be placed prior to the onset of snow and ice weather. Steel plates, etc. shall not protrude above the adjacent pavement. If any of these protrusions exist in a non-travel lane prior to a snow and ice condition, then temporary asphalt ramps must be placed so that for every one (1) inch of rise, there is a six (6) (foot run of ramp;
 - c. All pavement cuts shall be restored to the adjacent pavement grade to eliminate recessed areas where snow cannot be plowed or where the plows may snag; and

d. Where the work zone traffic control schemes require installation of single or multiple runs of temporary concrete barrier, the Certificate Holder shall remove any snow remaining along the temporary barrier.

M. Monitoring and Mitigation

- 131. The Certificate Holder shall conduct an off- and on-shore EMF study ("EMF Study") as detailed below and in a plan included as part of the EM&CP. The EMF Study shall occur prior to and during commercial operation of the South Fork Wind Farm and be performed no later than thirty (30) days after the Project has achieved Commercial Operation. The EMF measurements will establish the relationship between EMF level and wind farm output. The Certificate Holder shall file a written report of the results of the EMF Study with the Secretary within six (6) months of the conclusion of the measurements. The written report shall include a tabular summary of the known biological sensitivities of marine species common in the Project Area.
 - a. SFEC-NYS: The Certificate Holder shall conduct a post-installation EMF Study of the SFEC-NYS, which will consist of measurements of the frequency and strength of the EMF measured immediately above the SFEC-NYS cable. Measurements taken during the EMF Study shall consist of transects across the SFEC-NYS cable route at one thousand (1,000) foot intervals along the cable length within NYS territorial waters including habitat types, water depth, cable burial depths, and presence of cable protection devices. In addition, a transect shall be located at the HDD exit pit. Up to ten measurements shall be performed on the beach beginning at the edge of the parking lot and continuing every fifty (50) feet along the beach into the water roughly fifty (50) feet into the nearshore surf zone.
 - b. SFEC-Onshore: Certificate Holder shall conduct an EMF Study of the SFEC-Onshore, which will consist of onshore measurements every one thousand (1,000) feet along the cable route.
- 132. The Certificate Holder shall submit, after prior consultation with DPS Staff, NYSDEC, and NYSDOS, a cable monitoring and management plan ("SFEC-NYS Maintenance Plan") as part of the EM&CP, which shall include, at a minimum:

- a. the method for determining the actual cable location and burial depth of the SFEC-NYS and the timing for undertaking such efforts;
- b. the method to be used to determine, based upon inspection results and time of year restrictions described in parts (e) and (f), below, if and what reburial and/or added protection measures may be required;
- c. a requirement to inspect the HDD exit pit annually for the first five (5) years following Commercial Operation, and the method for performing such inspections;
- d. a post-construction monitoring survey will be completed annually for the first three (3) years following Commercial Operation. As part of these post-construction monitoring surveys, EMF measurements shall be taken at each of the locations identified in Condition 131, *supra*. If any three (3) consecutive surveys show that the SFEC-NYS does not pose a hazard to public safety, navigation, or marine resources, the Certificate Holder shall perform additional monitoring surveys every five (5) years thereafter for the operational life of the Project. The SFEC-NYS Maintenance Plan will include provisions for monitoring the SFEC-NYS following a severe weather event that may have directly impacted the SFEC-NYS to ensure that it does not pose a hazard to public safety, navigation, or marine resources. If any survey shows that the SFEC-NYS poses a hazard to public safety, navigation, or marine resources, Certificate Holder shall perform annual surveys; after corrective action is completed, until three consecutive surveys show there is no such risk.
- e. a plan for remedying cable exposures within time-of-year restrictions;
- f. a plan for remedying exposures outside of time-of-year restrictions that pose a hazard to public safety, navigation, or marine resources, including avoidance and minimization techniques for T&E species;
- g. a requirement to take an EMF reading in the event of a cable exposure at the SFEC-NYS Sea-to-Shore Transition;
- h. a description of methods to maintain burial depth;
- i. a plan for marking the location of any cable exposures;
- j. a plan for monitoring and maintaining cable burial depth after any significant coastal erosion event that both: (i) causes a loss of more than five (5) feet of beach elevation over the portion of the SFEC Sea-to-Shore Transition installed at Wainscott Beach;

and (ii)results in a cable burial depth of less than thirty (30) feet at that point at Wainscott Beach. In tracking beach elevation, the Certificate Holder will pick a point on Wainscott Beach from which the five (5) feet of sand will be consistently measured; and

- k. shall include suitable measures to monitor, maintain, or restore cable depth to at least thirty (30) feet beneath the surface of Wainscott Beach and a minimum of six (6) feet beneath the existing seabed. The design profile of the Sea-to-Shore transition, including anticipated depth along the profile, will be included in the EM&CP. The Certificate Holder shall consult with the Town, Trustees, and NYSDEC regarding restoration activities above the HDD installation and comply with applicable State and federal regulatory requirements.
- 133. The SFEC-NYS Maintenance Plan shall specify that if the Certificate Holder finds or is alerted that the burial depth poses a hazard to public safety, navigation, or marine resources, or the integrity of the SFEC-NYS, the Certificate Holder is authorized to undertake remedial burial and/or protection measures consistent with the Certificate and approved EM&CP. DWSF shall provide a notice describing its immediate and long-term plan of actions to the Town, Trustees, DPS Staff, NYSDOS, and NYSDEC and shall notify mariners, recreational fishermen, and NYSDEC-Licensed Fishermen in accordance with the process set forth in Condition 64, *supra*.
- 134. The Certificate Holder shall be responsible for remedying any exposure of the SFEC Sea-To-Shore Transition component of the SFEC-NYS in accordance with the SFEC-NYS Maintenance Plan. If the Certificate Holder does not begin implementing the SFEC-NYS Maintenance Plan within ten (10) days of the date the Certificate Holder is notified of such SFEC-NYS exposure, or if the Certificate Holder ceases to diligently implement the SFEC-NYS Maintenance Plan with respect to such exposure to the reasonable satisfaction of the Commission, then the letter of credit identified in Condition 193 may be drawn upon pursuant to the terms of Conditions 193 and 194.

- 135. Within one hundred twenty (120) days of Commercial Operation, the Certificate Holder shall submit to DPS Staff, NYSDEC, NYSDOT, NYSDOS, the Town, and Trustees as-built drawings and shapefile data providing final elevations of the cable and seabed and actual burial depth of the cable. To the extent that the drawings and shapefiles contain Critical Energy Infrastructure Information, they shall only be provided to the Commission's Records Access Officer.
- 136. The Certificate Holder shall include as Appendix G of the Joint Proposal, a Benthic Sampling Plan that provides for one additional pre-cable installation benthic sampling survey and at least two (2) post-cable installation benthic sampling survey for the area along the SFEC-NYS from the proposed HDD exit pit offshore to the territorial limit of NYS waters (the "Benthic Sampling Plan"). The Benthic Sampling Plan will specify that:
 - a. pre-construction sampling shall occur between August 1 and October 31, prior to construction, at intervals of one thousand (1,000) feet along the proposed centerline of the SFEC-NYS cable corridor from the shore to the territorial limit of NYS waters;
 - b. the pre-construction survey shall consist of the collection and analysis of at least three (3) replicate paired images from each station collected with a Sediment Profile Imaging/Plan-View Imaging system ("SPI/PV") consistent with the techniques utilized in the Application. At each SPI/PV station a Conductivity, Temperature, Depth sensor will be used to measure the salinity and temperature through the water column to the sediment surface. The SPI/PV sampling will be supplemented with three (3) replicate grab samples collected at intervals of two thousand (2,000) feet. A minimum of three (3) replicate grab samples will be analyzed and results will be summarized with metrics. The variance estimated from these data will be used in a statistical power analysis for the comparison of these metrics between pre- and post-installation time periods. Results of the statistical power analysis and estimation of ecologically meaningful difference will be presented to NYSDEC for review prior to the postconstruction sampling surveys. The post-construction benthic sampling shall occur between August 1 and October 31, within twenty-four (24) months of the Project's commercial operation date, in an area extending approximately one hundred (100) feet on either side of the SFEC-NYS. The Benthic Sampling Plan shall explain that:

- i. during the post-construction benthic sampling, three (3) stations will be sampled with SPI/PV in a transect perpendicular to the SFEC-NYS at the centerline with one (1) station as close as practicable to the centerline and one (1) station approximately one hundred (100) feet on either side at one thousand (1,000) foot intervals from the HDD exit pit offshore to the territorial limit of NYS waters. At each SPI/PV station a Conductivity, Temperature, Depth sensor will be used to measure the salinity and temperature through the water column to the sediment surface.
- c. At each station, a minimum of three (3) replicate images shall be collected and analyzed. The SPI/PV sampling will be supplemented with two (2) grab stations with one (1) station as close as practicable to the centerline and one (1) station approximately one hundred (100) feet on the eastern side of the cable with three (3) replicate grab samples collected at intervals of two thousand (2,000) feet. One of the replicate grab samples will be tested, and the remaining replicates will be archived. Where analysis indicates that there is an ecologically meaningful difference with pre-installation results, the additional replicates will be analyzed. The Benthic Sampling Plan shall require that results of the pre-cable installation SPI/PV benthic sampling event and of the post-cable installation benthic sampling event shall be submitted to DPS Staff, NYSDOS and NYSDEC in a final written report within six (6) months of the completion of each sampling event. The results of the pre-to-the report within nine (9) months of the completion of each sampling event.
- 137. The Certificate Holder shall establish a Fisheries Studies Working Group ("FSWG") for the purposes of designing, conducting, and analyzing: (i) a study of the marine fish and invertebrates along the SFEC-NYS cable route prior to the commencement of construction; and (ii) an effects study of marine fish and invertebrates in the SFEC-NYS cable route for two (2) years post-construction (the "Fisheries Studies"). The Fisheries Studies shall provide for monitoring of the composition of the pre- and post-construction nearshore fish community with a focus on species important to recreational and commercial fisheries along the SFEC-NYS cable route. A final Fisheries Studies Work Plan shall be included as part of the EM&CP.

DWSF shall provide funding for five (5) study years, and shall use best efforts to collect two years of pre-construction data, one year of data during construction, and two years of data following commercial operation of the SFEC.

- a. A draft Fisheries Study Work Plan shall be developed in consultation with a select group of qualified Subject Matter Experts ("SMEs") and scientists utilizing methods that are consistent with methods used by NYSDEC and marine science research institutions (*e.g.* trawl surveys, beach seines, gill nets, acoustic receivers and tagging). The draft Fisheries Study Work Plan shall be presented to the FSWG for review and comment. The FSWG shall consist of representatives from the Certificate Holder, NYSDEC, DPS Staff, NYSDOS, the Trustees, the Town, SMEs from certain marine science research institutions, and the fishing industry ("FSWG Members"). A list of the FSWG Members shall be included in the final Fisheries Studies Work Plan.
- b. The Fisheries Studies will collect data on seasonal composition, abundance, migration patterns, and seasonality of fish stocks common to the area of the SFEC-NYS cable route, including bait fish (such as Atlantic menhaden, sand lances, bay anchovies, Atlantic and river herring, mullet, and longfin squid), and certain other key species (such as striped bass, longfin squid, dogfish, skates, fluke, Atlantic cod, black sea bass, tautog, and weakfish and Atlantic sturgeon).
- c. After one (1) year of data collection, the FSWG shall meet to discuss the collected data.
- d. In all instances, the Fisheries Study data and reporting will be reviewed and analyzed by the SMEs, in consultation with the FSWG members. No more than six (6) months after the completion of two (2) years of post-construction Fisheries Studies data collection, a report analyzing the Fisheries Studies data ("Fisheries Studies Report") will be compiled by the SMEs, in consultation with the FSWG members. The FSWG shall meet to review the results of the Fisheries Studies Report, and discuss potential mitigation measures. The Certificate Holder shall consider any mitigation measures proposed by the FSWG.
- e. During the Fisheries Studies, the Certificate Holder shall also collect the following data: (i) temperature; (ii) salinity; and (iii) conductivity.

138. The Certificate Holder shall make publicly available in raw form survey data collected during the EMF, Benthic, and Fisheries pre- and post- energization studies and surveys.

N. Onshore Erosion Control and Soil Handling

- 139. Prior to start of construction, the Certificate Holder shall install and thereafter inspect daily and repair promptly temporary erosion control devices as indicated in the EM&CP and any storm water and erosion control plans.
- 140. To the extent available, all erosion control fabric or netting used for slope or soil stabilization will be 100% biodegradable natural product (not photodegradable fabric), excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock.
- 141. In all portions of the ROW where these measures may prove beneficial, topsoil shall be removed from the combined width of the subsoil stockpile area, trench, construction assembly and traffic zones. The depth of the topsoil removal shall include all of the "A" horizon down to the beginning of the subsoil "B" horizon, generally not to exceed a maximum of twelve (12) inches. All topsoil shall be stockpiled separate from other excavated materials. The exposed surface of the subsoil shall be the work surface. All topsoil material shall be stripped, stockpiled, and returned in its natural sequence to restore the original soil profile. During the clearing/construction phase, site-specific depths of topsoil stripping shall be monitored by Certificate Holder. Where ROW construction includes cut-and-fill of the soil profile across grades, all topsoil shall be stripped and separately stockpiled, where practical, on the upslope edge of the ROW.
- 142. The Certificate Holder shall comply with the following debris and fill requirements:
 - a. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying or burning of construction debris or excess construction materials will be allowed.
 - b. Except where required to comply with the design specifications, to restore roadway and shoulder surfaces, and to reuse uncontaminated excavated materials, all fill shall consist

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

143. The Certificate Holder shall prepare a "Geotechnical Site Investigation Report," to be included in the EM&CP, verifying subsurface conditions along the approved SFEC-Onshore corridor and characterizing subsurface conditions at sites where HDD is proposed.

O. Water Resources

- 144. Except as otherwise permitted in the Certificate or EM&CP, no construction activities shall occur within any regulated wetlands, including tidal and freshwater wetlands and regulated adjacent areas, and no construction materials, equipment, or vehicles shall be allowed to enter upon such wetlands.
- 145. To avoid impacts to the Coastal Erosion Hazard Area ("CEHA") regulated under ECL Article 34, all offshore construction activities shall be located a minimum of 1,000 feet seaward of Mean Low Water, and at a Mean Low Water depth of no less than fifteen (15) feet. The final location of the proposed HDD exit pit shall be reviewed and accepted by NYSDEC to ensure compliance with ECL Article 34 and associated regulations in 6 NYCRR § 505.
- 146. The Certificate Holder shall perform all construction, operation, and maintenance along the SFEC-Onshore in a manner that avoids or minimizes adverse impacts to waterbodies, wetlands, and: (a) the one hundred (100) foot adjacent area associated with the regulated wetlands; (b) the three hundred (300) foot adjacent area associated with the regulated tidal wetlands: and (c) the one hundred (100) foot adjacent area associated with the Town-regulated Wainscott Stone and Stephen Hands Path wetlands. Any such activities shall be performed in accordance with a Wetland Impact Minimization and Mitigation Plan to be included in the EM&CP.

- 147. The Certificate Holder shall notify DPS Staff, the Town, the Trustees, and NYSDEC within two (2) hours of observing or being made aware of a discharge to a wetland or waterbody by the Certificate Holder or a contractor of the Certificate Holder resulting in a violation of NYS Water Quality Standards.
- 148. The Certificate Holder shall take all necessary precautions to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate, washings from transit mix trucks, mixers, or other devices or any other environmentally deleterious materials associated with the Project. If required, concrete batch plant operations and concrete washout areas shall be located a minimum of three hundred (300) feet away from any wetland or waterbody.
 - a. If concrete batch plant operation(s) are required, the location(s), site plans and appropriate measures for avoiding adverse impacts, restoring sites upon project completion, and complying with local code requirements will be included in the EM&CP.
- 149. The Certificate Holder shall secure and safely contain all equipment and machinery more than one hundred (100) feet landward of any wetland or waterbody and three hundred (300) feet from tidal wetlands, at the end of each work day, unless moving the equipment will cause additional environmental impact.
- 150. All mobile equipment, excluding dewatering pumps, must be fueled, repaired, or maintained in a location at least one hundred (100) feet from wetlands and waterbodies and three hundred (300) feet from tidal wetlands, to the maximum extent practicable or unless moving the equipment will cause additional environmental impact. Dewatering pumps operated closer than one hundred (100) feet from the wetlands or waterbody, or within three hundred (300) feet from tidal wetlands, must be within secondary containment large enough to hold the pump and accommodate refueling.

- 151. The Certificate Holder shall comply with the following conditions for all dewatering operations:
 - a. dewatering operations must be pumped into one or more frac tanks or similar containers;
 - b. if dewatering operations occur in separate locations, a separate container must be used for water from each location;
 - c. a sample of the water from each container must be tested for emerging contaminants according to the most recent version of NYSDEC's Guidelines for Sampling and Analysis of 1,4-Dioxane and PFAS;
 - d. if water from any container is found to contain PFAS, the water from each such container must be treated with granular activated carbon ("GAC") before the water is discharged;
 - e. water generated from dewatering operations that exceeds NYSDEC standards, criteria, or guidance values, or more stringent applicable levels of other authorities or agencies in effect at the time of dewatering operations must be treated and disposed of in compliance with the approved Dewatering Plan; and
 - f. best management practices shall be used to prevent erosion and sedimentation from discharge operations.
- 152. All sampling, disposal, and construction activities must be performed in a manner consistent with NYSDEC standards, criteria, or guidance in effect at the time of such activities, including, but not limited to NYSDEC Part 375 Remedial Program's Sampling Protocol concerning Sampling for 1,4-Dioxane and PFAS.
- 153. Markers used to delineate/define the boundary of regulated freshwater and tidal wetlands, and also the demarcated limits of disturbance for the Project, shall be left in place, or restored if disturbed, until completion of construction activities and restoration of the impacted area.
- 154. The Certificate Holder shall inform the United States Army Corps of Engineers ("USACE") and NYSDOS of any changes in the design of the Project that have the potential

to impact any USACE-issued permit or authorization and shall file a copy of such correspondence with the Secretary.

P. Cultural Resources

- 155. The Certificate Holder shall not undertake construction in previously undisturbed areas where archeological surveys have not been completed until such time as the appropriate authorities, including OPRHP, and DPS Staff, have reviewed the results of any historic properties and archeological surveys that are required. After review by OPRHP and DPS Staff and before the Certificate Holder undertakes construction, the Certificate Holder may grant the Town access to the results of such historic properties and archaeological surveys subject to OPRHP's discretion to withhold, in whole or in part, any information contained in such surveys pursuant to 54 U.S.C.A. § 307103 and Title 9 NYCRR Part 427.8.
- 156. Should archeological materials be encountered during construction, and continuing construction in the immediate vicinity (150 feet) would be incompatible with the objective of preserving the quality and integrity of the resource, the Certificate Holder shall stabilize the area and cease all ground-disturbing activities in the immediate vicinity (150 feet) of the find and protect the find from further damage. The restricted areas would extend from the maximum discernable limit of the archaeological resource. The only earth-moving activities that may occur within the restricted areas prior to notifications are those necessary for immediate stabilization of the exposed archaeological feature or deposit. The Certificate Holder shall flag, fence off, or securely cover with steel plates the archaeological discovery location and take reasonable measures to ensure site security. If unanticipated archaeological discoveries occur during offshore construction, the Certificate Holder shall consult a qualified marine archaeologist to assist in determining the origin of any finds and immediate measures, if appropriate and feasible, to stabilize the archaeological resource. Within twenty-four (24) hours of such onshore or offshore discovery, the Certificate Holder shall notify and consult with DPS Staff and OPRHP to determine the best course of action. Any discovery made on a weekend will be protected until DPS Staff and OPRHP are notified of the discovery. No construction activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated by OPRHP and the need for and scope of

impact mitigation has been determined by DPS Staff in consultation with OPRHP and the Certificate Holder. The Certificate Holder may engage qualified archaeologists to assist in preliminary visual assessments and documentation, consultations with OPRHP and DPS Staff, and development of appropriate treatment/mitigation measures.

- 157. Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be halted immediately for the remains to be protected from further disturbance. Immediately upon any such discovery, the Certificate Holder shall notify and consult with DPS Staff and OPRHP. The Certificate Holder shall ensure that treatment of human remains is done in accordance with the OPRHP's Human Remains Discovery Protocol (dated August 2018).
- 158. The Certificate Holder shall ensure that all archaeological or remains-related encounters and their handling are reported in the status reports summarizing construction activities. The Certificate Holder may grant the Town access to such status reports subject to OPRHP's discretion to withhold, in whole or in part, any information contained in such status reports pursuant to 54 U.S.C.A. § 307103 and Title 9 NYCRR Part 427.8.
- 159. The Certificate Holder shall have a continuing obligation during construction to respond promptly to complaints of negative archeological impacts and, if necessary, to mitigate any actual impacts through on-site design modifications and off-site mitigation techniques developed in consultation with OPRHP.

Q. Terrestrial and Wildlife Resources

160. Certificate NYCRR The Holder shall refer 6 Part 182 and to http://www.dec.ny.gov/animals/7494.html for lists of T&E animal species and with 6 NYCRR Part 193 for T&E plant species. Prior to the commencement of construction of SFEC-Onshore, the Certificate Holder will provide all workers with pertinent information on potential T&E species in the Project Area.

- 161. If any T&E animal or plant species, or associated habitat are observed from the Project ROW, access roads, laydown yards, and any other areas where Project activities authorized in this Certificate are conducted, the Certificate Holder shall immediately notify the environmental monitor to determine the appropriate actions, if any, to protect the identified species or its potentially occupied habitat from immediate harm, and shall also notify DPS Staff and NYSDEC within twenty-four (24) hours.
- 162. If any work results in or is likely to result in an incidental take of an Endangered or Threatened species as defined in 6 NYCRR § 182, the Certificate Holder must stop work where the take occurred or is likely to occur ("Stop Work Area") and must submit an Endangered or Threatened Species Mitigation Plan and Implementation Agreement ("T&E Plan/Agreement") demonstrating proposed mitigation measures that will result in a Net Conservation Benefit to that species. Such T&E Plan/Agreement must be prepared in accordance with 6 NYCRR § 182.11. Work must not recommence in the Stop Work Area until the T&E Plan/Agreement is accepted by NYSDEC and such T&E Plan/Agreement is implemented.
- 163. Except as otherwise specified in Condition 164 regarding bird species, if any T&E species, as defined in 6 NYCRR Part 182 or plant species identified under 6 NYCRR Part 193 are encountered on the SFEC-Onshore ROW, access roads, marshalling yards, and any other areas where Project activities authorized in this Certificate are being conducted:
 - a. The Certificate Holder shall notify NYSDEC, the Town, and DPS Staff within twentyfour (24) hours of the encounter; and
 - b. To protect such T&E species or its habitat from immediate harm from construction activities, the Certificate Holder shall secure the area where rights exist and safely cease construction in that area until DPS Staff, in consultation with NYSDEC and the Town, authorizes recommencement of activities. Prior to the recommencement of construction in the secured area, the Certificate Holder shall provide all workers with pertinent information on the species encountered and indicate measures to minimize risks to the T&E species during construction.

164. Certificate Holder will develop and include as part of the EM&CP an Avian Management Plan for rare, threatened, and endangered ("RTE") avian species in consultation with the appropriate regulatory agencies, including the NYSDEC, to address residual risk to these species.

R. Invasive Species

- 165. The Certificate Holder shall prepare an Invasive Species Control and Management Plan in accordance with the applicable requirements of ECL Article 9 and 6 NYCRR Part 575 and 6 NYCRR Part 663. Forty-five (45) days prior to filing the EM&CP, the Certificate Holder shall submit the Invasive Species Control and Management Plan to DPS Staff, NYSDEC, the Town, and the Trustees for review and comment. The Certificate Holder shall file said Invasive Species Control and Management Plan as part of the EM&CP. The Invasive Species Control and Management Plan shall be developed in accordance with the Invasive Species Control and Management Plan Specifications, which are attached as Appendix K of the Joint Proposal.
- 166. To minimize the risk of introducing invasive species, use of hay is strictly prohibited.

S. Marine Resources

- 167. The Certificate Holder must comply with Bureau of Ocean Energy Management ("BOEM") and NOAA requirements for noise mitigation for protected species in New York State waters as required in the federal Construction and Operations Plan ("COP") approval and Incidental Take Authorization issued for this Project.
- 168. The Certificate Holder must comply with NOAA and BOEM requirements for protected species mitigation, monitoring and reporting as detailed in the federal COP approval and Incidental Take Authorization issued for this project. All protected species reports submitted to BOEM and NOAA will be copied to NYSDEC.
- 169. Sightings of North Atlantic Right whales must be reported as soon as possible to NOAA.

T. Water Quality

- 170. Water quality standards set forth in 6 NYCRR Parts 701, 702, 703 and 704, and sections 301, 302, 303, 306, and 307 of the federal Clean Water Act (see 33 USC §§ 1311, 1312, 1313, 1313a, and 1317) shall not be contravened. Issuance of a Water Quality Certification also implies compliance with standards assuming that conditions placed in the certification are complied with.
- 171. The following limits must be achieved for TSS one thousand five hundred (1,500) feet down current (based on tide direction) of sediment disturbing activities:
 - a. Water Quality Standard: None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages; and
 - b. Guidance Value: 100 mg/L above ambient.

Water quality monitoring shall be conducted during jet trench trials, jet trenching activities excavation of the HDD exit pit, pre-lay grapnel run, cable installation, backfill of the HDD exit pit, and maintenance and decommissioning activities that involve disturbance of sediments. Maintenance and decommissioning activities that result in only minor disturbance of sediments, including: (i) anchor sweep; (ii) anchoring; (iii) placement of jack-up barge; (iv) hand jetting; or (v) other activities as determined by DPS Staff, in consultation with NYSDEC, shall not require water quality monitoring.

- 172. The Certificate Holder shall incorporate within the EM&CP and implement, a Suspended Sediment and Water Quality Monitoring Plan pertaining to offshore and onshore activities. The Certificate Holder must submit a Suspended Sediment and Water Quality Monitoring Plan for review and acceptance by DPS Staff, NYSDEC, and NYSDOS forty-five (45) days prior to the filing of the EM&CP. The Suspended Sediment and Water Quality Monitoring Plan must be prepared in accordance with the "Scope of Study: Suspended Sediment/Water Quality Monitoring" attached as Appendix I of the Joint Proposal. The Suspended Sediment and Water Quality Monitoring Plan must:
 - a. Specify sample location, depth of samples, frequency of sampling, and sampling during various tidal cycles;
 - b. Describe procedures for background sampling;

- c. Include daily sampling during each tidal cycle;
- d. Use an Acoustic Doppler Current Profiler to locate the plume;
- e. Require whole water samples in the vertical water column (from at least 3 depths) along a transect within the plume;
- f. Include an up-current transect outside the influence of HDD exit pit excavation, backfill jetting operations, and pre-lay grapnel run operations;
- g. Require water quality monitoring, which shall include TSS and turbidity monitoring, to be conducted daily throughout the duration of jet trench trials, jet trenching activities, cable installation, excavation of the HDD exit pit, pre-lay grapnel run, backfill of the HDD exit pit. Prior to commencing maintenance and decommissioning activities, the Certificate Holder shall submit for NYSDEC review a water quality monitoring plan for activities that may require such monitoring;
- Identify a procedure whereby, if sampling results indicate consistent compliance with the TSS standards, the Certificate Holder can submit a request in writing to DPS Staff and NYSDEC to reduce the sampling frequency;
- Specify that real-time data must be collected using Acoustic Doppler Current Profiler and Optical Backscatter Sensor instrumentation and by collecting water samples at various depths for laboratory analysis of: TSS according to the methods and method detection limits identified in the Water Quality Monitoring Plan;
- j. Require that monitoring activities must be conducted (i) down-current of the pre-lay grapnel run operations, HDD exit pit excavation, and during jetting operations; and (ii) at a background/control station up-current and out of the influence of the HDD exit pit excavation/jetting operations/pre-lay grapnel operations. TSS samples must be collected at three depth intervals (near- surface, mid-depth, and near bottom); and
- k. Specify that, if activities occur concurrently in multiple locations, each activity that may cause resuspension of bottom sediments must be monitored separately.
- 173. Visual observations of turbidity caused by underwater cable and HDD exit pit installation/backfill activities, pre-lay grapnel run operations, maintenance, and decommissioning activities must be conducted to ensure compliance with the narrative water

quality standard in 6 NYCRR § 703.2, which states, "No increase that will cause a substantial visible contrast to natural conditions."

- 174. All water quality analyses required by this Certificate must be conducted by a laboratory certified by the NYSDOH ELAP.
- 175. Certificate Holder shall use commercially reasonable efforts to request the most expedited turnaround time available for laboratory laboratory samples for locations along the SFEC-NYS. Analytical results must be sent to DPS Staff and NYSDEC as soon as received from the laboratory, but no longer than forty-eight (48) hours of receipt followed by a mailed hard copy. Exceedances must be highlighted.
- 176. During cable installation, excavation of the HDD exit pit, backfill of the HDD exit pit, and pre-lay grapnel run operations, if any TSS standards concentrations are exceeded at the edge of the 1,500-foot mixing zone, work must immediately cease until corrective action is implemented. If corrective action does not restore compliance, that action shall cease until a solution acceptable to DPS staff and NYSDEC is developed.
- 177. Within four (4) months of completion of the excavation of the HDD exit pit, the Certificate Holder must submit a report summarizing the results of the excavation of the HDD exit pit, water quality monitoring, and excavated material management operations. The report shall include:
 - a. Location and extent of excavation;
 - b. Total amount of material excavated;
 - c. Ultimate placement location of excavated material;
 - d. Water quality monitoring results and corrective actions (when needed) taken; and
 - e. Documentation of follow-up testing/observations.
- 178. Within four (4) months of the completion of cable installation, the Certificate Holder must file with the Secretary an analysis comparing the actual water quality monitoring results

obtained during installation with any model predictions previously provided in support of the Project.

179. Certificate Holder shall comply with any conditions contained in a Water Quality Certification issued pursuant to Section 401 of the Federal Clean Water Act, a draft of which is set forth in Appendix F.

U. Handling of Petroleum & Hazardous Substances

- 180. Stationary fuel tanks and hazardous chemical storage must be appropriately contained and shall be located a minimum of three hundred (300) feet from streams, waterbodies and wetlands, unless: (i) the EM&CP provides justification, including that impacts have been avoided or minimized to the maximum extent practicable; or (ii) adequate secondary containment (containing at least 110% of the volume stored), as identified in the EM&CP, is otherwise provided, in which case storage can occur within three hundred (300) feet of such resources.
- 181. Uncontaminated drill cuttings and drilling muds from drilling processes which utilize only air, water, or water-based drilling fluids are considered construction and demolition debris under 6 NYCRR Part 360 (Solid Waste) and can be disposed of at either construction and demolition debris landfills or at municipal solid waste ("MSW") landfills. Drill cuttings from drilling processes which utilize polymer-based mud containing mineral oil lubricant are considered contaminated and can only be disposed of at MSW landfills. Dewatered drilling muds including polymer-based mud containing mineral oil lubricant can only be disposed of at MSW landfills.
- 182. Chemicals and petroleum products will not be stored, mixed, or loaded, nor will equipment be refueled, within three hundred (300) feet of any watercourse or wetland. Requirements for refueling within one hundred (100) feet of wetlands or streams will be allowed under certain circumstances as identified in the EM&CP.
 - a. Refueling of hand equipment will be allowed within one hundred (100) feet of wetlands or streams when secondary containment is used. Secondary containment will be

constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of hand held equipment will be initially filled in an upland location greater than one hundred (100) feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.

- b. Refueling of equipment will be allowed within one hundred (100) feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than one hundred (100) feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. All refueling of equipment within one hundred (100) feet of wetlands or streams will be conducted under the direct supervision of the environmental monitor. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within one hundred (100) feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.
- 183. The Certificate Holder shall comply with the following spill requirements:
 - A Spill Prevention, Control, and Countermeasure ("SPCC") Plan to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Project construction and operation shall be included in the EM&CP;
 - All non-passenger vehicles must be equipped with a spill kit that is appropriate for the volume of fuel carried by the vehicle. Any leaks must be stopped and cleaned up immediately;
 - c. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to NYSDEC's Spill Hotline (1-800-457-7362) within two (2) hours, in

accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance (http://www.dec.ny.gov/docs/remediation_hudson_pdf/1x1.pdf); and

- d. The Certificate Holder shall report all spills encountered, regardless of whether it is the spiller, to both the NYSDEC Spill Hotline and DPS Staff, in accordance with all federal and State regulations, and provide a copy of such notification contemporaneously to the affected property owner.
- 184. Certificate Holder acknowledges that neither the Town nor NYSDOT will undertake or accept financial responsibility for any remediation or similar activity with respect to the removal of hazardous wastes (6 NYCRR Parts 373 and 374) and non-hazardous solid industrial wastes (6 NYCRR Part 360), which under law would not be required at the time but for the accommodation of the Project within the ROW. Certificate Holder shall bear such responsibility and associated costs.

V. Vegetation Management and Herbicide, Fungicide, and Pesticide Use

- 185. The Certificate Holder shall prepare a Vegetation Management Plan as part of the EM&CP. Such Vegetation Management Plan shall include a Tree Protection Plan. Forty-five (45) days prior to filing the EM&CP, the Certificate Holder shall submit the Vegetation Management Plan to DPS Staff, NYSDEC, the Town, and Trustees for review and comment. Prior to submission of the Vegetation Management Plan to the Secretary, the Certificate Holder shall explain in writing why any changes suggested by the Town were not incorporated into the Vegetation Management Plan.
- 186. Certificate Holder shall use best efforts to maximize the use of mechanical vegetation management techniques, and where necessary, shall only use the organic pesticides, fungicides, and herbicides specified in the EM&CP. If the Certificate Holder desires a change to the organic pesticides, herbicides, and fungicides specified in the EM&CP, including mix proportions, additives (with the exception of dyes), or method of application, the Certificate Holder shall submit the proposed change for approval pursuant to Certificate Condition 11.

No change inconsistent with the labeling for such pesticides, herbicides, fungicides shall be approved.

- 187. The Certificate Holder shall comply with the currently effective NYSDEC general permit for vegetation maintenance for pesticide applications in regulated wetlands and -adjacent areas, if available. If no NYSDEC general permit is available for vegetation maintenance for the geographical area or type of wetland resource, the Certificate Holder shall apply for an individual permit to apply pesticides in regulated wetlands and adjacent areas.
- 188. The supervising certified applicator shall be familiar with and understand the applicable provisions of this Certificate and the most recent version of the Certificate Holder's Vegetation Management Plan.
- 189. The Certificate Holder shall coordinate with LIPA and/or PSEG-LI as to vegetation clearing during construction of the Project in the vicinity of existing transmission and distribution lines and substations.
- 190. Unless described otherwise in the EM&CP, all trees over four (4) inches in diameter (measured four (4) feet above ground) or shrubs over four (4) feet in height damaged or destroyed by the Certificate Holder's activities during construction, operation, or maintenance, regardless of where located, shall be replaced by the Certificate Holder with the equivalent type trees or shrubs, subject to the provisions of 6 NYCRR Part 575, Prohibited and Regulated Invasive Species, except where:
 - a. equivalent-type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Project;
 - b. replacement would be contrary to sound ROW management practices or to any approved Vegetation Management Plan applicable to the Project; or
 - c. a property owner on whose land the damaged or destroyed trees or shrubs were located declines replacement (or other recorded easement or license holder with the right to control replacement declines replacement).

191. Clearing of natural vegetation shall be limited to the Commission-accepted Vegetation Management Plan and vegetation that poses a hazard or hindrance to construction activity and/or operation.

W. Restoration Activities

192. Certificate Holder, where necessary shall negotiate for additional temporary easements for construction purposes as identified in the EM&CP and approved by the Commission. Any temporary easement or construction areas not identified in the approved EM&CP may be requested through changes thereto. Unless otherwise specified in the EM&CP, Certificate Holder shall, following restoration, let the temporary construction area revegetate naturally or return to its original land use to the extent that it does not interfere with the inspection, operation, or maintenance of the utility facilities. Except where otherwise specified in the EM&CP, stem-specific removal of trees or side trimming shall be conducted in accordance with long-range ROW management plans, real property rights of the Town and the Trustees, and provisions of any and all host community agreements, easements, leases, and/or license agreements.

X. Decommissioning

193. The Certificate Holder shall prepare a Decommissioning Plan, for inclusion in the EM&CP. Certificate Holder shall provide the Decommissioning Plan to the Town, Trustees, DPS Staff, NYSDEC, NYSOGS, NYSDOT, and NYSDOS at least forty-five (45) days prior to filing the EM&CP for review and comment. The Decommissioning Plan shall include: (i) the anticipated life of the Project; (ii) estimates of the decommissioning costs (in current dollars) for each of: (a) that portion of the SFEC-NYS from the boundary of New York State territorial waters to the mean high water line (the "New York State Area"); and (b) that portion of the SFEC-NYS from the mean high water line to the SFEC Sea-to-Shore transition vault, the SFEC-Onshore and the SFEC-Interconnection Facility (the "Local Area"); (iii) the method of ensuring that funds will be available for decommissioning and restoration as provided in the Plan; (iv) an analysis of the options for decommissioning the Project, including any cable protection measures used, and restoring the Project Area, including any decommissioning

methods and potential impacts to the environment and fishermen for each option; (v) if applicable, how the Certificate Holder will address impacts of leaving any portion of the Project in place, including but not limited to, potential impacts to fishermen, fisheries, and other environmental resources, etc.; and (vi) procedures and timeframes for notifying landowners along the route about decommissioning activities.

- a. The decommissioning estimates contained in the Decommissioning Plan shall be updated by a qualified independent engineer licensed in the State of New York, and shall reflect inflation and any other changes after one year of Project operation, and every fifth year thereafter. Such updates shall be filed with the Secretary. No offset for projected salvage value is permitted in the calculation of the estimates.
- b. The Certificate Holder shall work with the Town and Trustees, in consultation with DPS Staff, to craft a letter of credit that will establish a right for the Town and Trustees to draw on an irrevocable letter of credit in the event of the Certificate Holder's failure to timely decommission the facilities located in the Local Area and restore that area o in accordance with the Decommissioning Plan (the "Local Area Letter of Credit"). The Local Area Letter of Credit shall state on its face that it is held by and for the sole benefit of the Town and Trustees jointly, unless the Town, the Trustees, and the Certificate Holder agree on separate irrevocable letters of credit.
- c. The Certificate Holder shall work with DPS Staff, and/or the NYSOGS to craft a letter of credit that will establish a right for the Commission and/or NYSOGS to draw on an irrevocable letter of credit in the event of the Certificate Holder's failure to timely decommission the facilities located in the New York State Area and restore that area in accordance with the Decommissioning Plan (the "New York State Area Letter of Credit"). The New York State Area Letter of Credit shall state on its face that it is held by and for the sole benefit of the Commission and/or NYSOGS.
- d. Prior to the commencement of construction, the Certificate Holder shall file with the Secretary proof that the Local Area Letter of Credit and the New York State Area Letter of Credit (collectively, the "Letters of Credit") have been obtained in the amount of the decommissioning estimates as calculated pursuant to the Commission's Order in this proceeding The Letters of Credit shall remain in place for the life of the Project, until it is decommissioned.

- e. Certificate Holder shall engage the services of a trustee and enter into Standby Trust Agreements for the administration of the funds from the Letters of Credit. The form of the Standby Trust Agreements shall be included as part of the EM&CP.
- f. The Letters of Credit shall provide that the beneficiaries thereof may, subject to the cure provisions set forth in Condition 194, exercise their right to draw on it following the occurrence of any of the events set forth in subsections (i) through (iv) hereof:
 - i. If the Certificate Holder provides notice to the Commission of its intent to decommission the Project and either (i) does not within twelve (12) months of the date of such notice begin implementing the Decommissioning Plan, or (ii) ceases to diligently implement the Decommissioning Plan; or
 - ii. If the Project ceases commercial operation for twelve (12) months and the Certificate Holder does not within such twelve (12) month period provide notice to the Commission of Certificate Holder's intent to decommission the Project or to restore commercial operations; or
 - iii. For the Local Area Letter of Credit if the Certificate Holder does not address a SFEC Sea-to-Shore Transition exposure as required by Condition 134; or
 - iv. If the Commission vacates the Certificate and Certificate Holder has not provided the Commission a notice of intent to decommission the Project.
- 194. Prior to exercising the right to draw on a letter of credit, the beneficiaries thereof shall provide the Certificate Holder written notice by certified mail of their intent to draw on a letter of credit. If within ninety (90) days of the date of such written notice Certificate Holder has documented to the beneficiaries' reasonable satisfaction that Certificate Holder is, as applicable: (i) diligently implementing the Decommissioning Plan; (ii) diligently acting to restore commercial operations; or (iii) diligently addressing the subject cable exposure, then the letters of credit shall not be drawn upon. If, after ninety (90) days, the beneficiaries thereof determine that the Certificate Holder has not met the requirements set forth in (i) through (iii), above, the beneficiaries shall, at their sole individual discretion, draw on the letters of credit. In the event that a letter of credit is drawn upon, Certificate Holder shall have no further liability relating to the activities for which the letter of credit was drawn.

Y. Preservation of Rights/No Preemption

195. Certificate Holder shall not assert, argue, or claim, in any action or proceeding or before any court, commission, agency, mediator, or other tribunal, that the New York State Public Service Law, any federal law applicable to the Project, any regulations promulgated under any such State and/or federal laws, this Certificate, and/or any condition of this Certificate preempts, supersedes, nullifies, or renders unenforceable in whole or in part any right under, or provision of, any contract, easement, lease, or other agreement that the Town and/or Trustees have entered into, or may enter into in the future, with Certificate Holder, or with any entity affiliated or associated with Certificate Holder or the Project.

APPENDIX E

ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN SPECIFICATIONS

APPENDIX E

SPECIFICATIONS FOR THE DEVELOPMENT OF ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

Section A of the Specifications for the Development of Environmental Management and Construction Plan ("Specifications") addresses the development of the plan and profile drawings, and maps portion of the Environmental Management and Construction Plan ("EM&CP").

Section B addresses the description and statement of objectives, techniques, procedures, and requirements, *i.e.* the textual portion of the EM&CP. A table of contents will be included for the EM&CP and each section, appendix or exhibit containing ten or more pages.

If any particular requirement of the Specifications is not applicable, so indicate and briefly explain.

In the event that the EM&CP is filed with the Public Service Commission in segments, each segment of the EM&CP will include the information specified in this Appendix E to the extent applicable.

A. EM&CP Plan and Profile Drawings and Maps

The EM&CP maps, charts, photostrip maps, and illustrations shall include, but need not be limited to, the following information:

1. <u>Plan and Profile Details (Onshore and Offshore)</u>

A Line¹ Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch $= 200 \text{ feet})^2$ showing:

- a. The boundaries of any new, existing, and/or expanded right-of-way $("ROW")^3$
- b. The location of any proposed new or expanded interconnection facility (attach plan⁴ plot, grading, drainage, and electrical and elevation views

¹ For underground project design, show relation of project to final surface grade, indicating design depth-of-cover.

² Contour lines (preferably at 5-foot intervals) are desirable on the photostrip map if they can be added without obscuring the required information.

³ The term "right-of-way" in these *Specifications* includes property, whether owned in fee or easement, to be used for substations, disposal sites, underground terminals, storage yards, and other associated facilities. Where such properties cannot reasonably be shown on the same plan or photo-strip, maps, or plan drawings used for the transmission line, additional maps or drawings at convenient scales should be used.

⁴ Preferably 1'' = 50' scale with 2-foot contour lines.

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 any plans for water service and sewage and waste disposal; details of noise control features including perimeter wall and other structural features to minimize off-site noise emissions based on final facility design, equipment selection (low-noise transformer(s) and reactor equipment), and location of noise sensitive receptors. (Final noise analysis and noise control plan shall be provided to demonstrate noise control design will be effective in minimizing complaints based on design goals.)

- c. The relationship of the Project to nearby fence lines; roads; railways; property lines; driveways; utility poles and overhead wires; underground utility lines; fire hydrants; surface waters; wetlands; other water bodies; and potable water wells (based on publicly available water well data or other publicly available sources);
- d. The location and boundaries of any areas whether located on- or off- ROW proposed to be used for fabrication, designated equipment parking, staging, access, lay-down, and conductor pulling. Indicate any planned fencing, surface improvements, and screening of storage and staging areas.
- e. The locations for ready-mix concrete chute washout and any other cleaning activities (*e.g.*, control of invasive species).
- f. All locations, both on- and offshore, where horizonal directional drilling ("HDD") or other trenchless installation methods are proposed.

2. <u>Stormwater Pollution Prevention (Onshore Only)</u>

- a. Include on the plan and profile drawings the acknowledged Storm Water Pollution Prevention Plan ("SWPPP") details. Include the locations of soil erosion and sediment control measures developed in accordance with the latest version of the New York Standards and Specifications for Erosion and Sediment Control (*e.g.*, stabilized construction entrances, silt fences, check dams, and sediment traps) and applicable MS4 requirements.
- b. Include on the plan and profile drawings the approved SWPPP locations of all permanent stormwater management controls that are required based on site-specific conditions or conditions of the Certificate.
- c. Provide diagrams and specifications (including plan and side view with appropriate dimensions) for each erosion control feature to be used.

3. <u>Vegetation Clearing and Disposal Methods (Onshore Only)</u>

- a. Identify on the plan and profile drawings:
 - i. the locations of sites requiring trimming or clearing of vegetation and the geographic limits of such trimming or clearing;

- ii. the specific methods for the type and manner of cutting and disposition or disposal method for cut vegetation (*e.g.*, chip; cut and pile; salvage merchantable timber, etc.);
- iii. the methods for management of vegetation to be cut or removed at each site;
- iv. any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods;
- v. 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;
- vi. different property-owners requesting specific vegetation treatment or disposal methods;
- vii. areas requiring (off-ROW) danger tree removal; and
- viii. the locations of any areas where specific vegetation protection measures will be employed and the details of those measures to avoid damage to specimen tree stands of desirable species, important screening trees, or hedgerows.

4. Building and Structure Removal (Onshore Only)

a. Indicate the locations of any buildings or structures to be acquired, demolished, moved, or removed

5. <u>Waterbodies (Onshore Only)</u>

- a. Indicate the name, water quality classification and location of all rivers and streams, (whether perennial, intermittent or ephemeral⁵) and drainages crossed by the proposed ROW or any off-ROW access road constructed, improved, or maintained for the Project.
- b. On the plan and profile drawings, show:
 - i. riparian buffers and stream protection zones in which construction activities will be restricted to the extent necessary to minimize waterbody impacts;
 - ii. any designated floodways or flood hazard areas to be traversed by the Project or access roads, or otherwise used for Project construction or the site of associated facilities.
- c. Show the location of all potable water sources, including springs and wells on the ROW within 100 feet of the ROW as, shown on publicly-available water well data or other publicly available sources, access roads, and limits

⁵ The term "perennial streams" in these specifications includes any continuous flowing natural stream. The source of flowing water is usually smaller upstream waters and groundwater. "Intermittent streams" are seasonal streams that flow only during certain times of the year. During dry periods, intermittent/seasonal streams may not have flowing surface water. "Ephemeral streams" or precipitation-dependent streams are those streams that contain flowing water as a result of surface runoff (*e.g.*, snowmelt) and recent precipitation.

of disturbance, indicating, on a site-by-site basis, precautionary measures to be taken to protect each water source.

6. <u>Wetlands (Onshore Only)</u>

- a. All wetlands (delineated in accordance with NYSDEC and U.S. Army Corps of Engineers (USACE) methodology), vernal pools, and 100- and 300-foot wetland adjacent areas (adjacent areas), and Town-regulated wetlands located within the ROW or crossed by the ROW or any off-ROW access road constructed, improved, or maintained for the Project shall be depicted on EM&CP drawings. Delineated wetlands that are contiguous with mapped State wetlands are jurisdictional and must be labeled accordingly. Include low lying, seasonally inundated areas along existing access roads that are contiguous with delineated wetlands as wetland areas, even if lacking hydrophytic vegetation due to frequent and recurring disturbance. The plan and profile drawings shall delineate the wetland "protective or buffer zone" in which construction activities will be restricted to the extent necessary to minimize wetland impacts.
- 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 ROW or any access road, as determined by site investigation and delineation.
- **c.** Indicate type and location of precautionary measures (*e.g.*, silt fence) to be taken to protect all wetlands, associated drainage patterns, and wetland functions.

7. Land Uses (Onshore Only)

- a. Agricultural Areas
 - i. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland.
 - ii. Indicate the location of any unique agricultural lands including maple sugarbushes, organic muckland and permanent irrigation systems, as well as areas used to produce specialty crops such as vegetables, berries, apples, and grapes.
 - iii. Indicate the location of vulnerable soils in agricultural areas that are more sensitive than other agricultural soils to construction disturbance due to slope, soil wetness, and 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
 - i. Indicate the location and identification of sensitive land uses and resources that may be affected by construction of the Project or by

construction-related traffic (*e.g.*, hospitals, emergency services, sanctuaries, schools, and residential areas).

- Geologic, Historic, and Scenic or Park Resources
 - i. Indicate the locations of geologic, historic, and existing or planned scenic or park resources and specify measures to minimize impacts to these resources (*e.g.*, fencing, signs).
- d. Recreational

c.

i. Indicate the locations where existing or planned recreational use areas, would affect or be affected by the Project location, construction or other ROW preparation. Specify measures to minimize impacts to these resources, including the Beach Lane public parking area, beach and beach access path areas.

8. Access Roads, Lay-down Areas and Workpads (Onshore and Offshore)

a. Indicate the locations of temporary and permanent on- and off-ROW access roads, lay-down areas and workpads. Provide construction type, material, and dimensions. Indicate provisions for upgrading any existing access roads.

9. <u>Noise Sensitive Sites (Onshore Only)</u>

a. Show the locations of noise-sensitive areas along the proposed ROW.

10. <u>Ecologically and Environmentally Sensitive Areas</u>

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 ("RTE") species or habitats; forest and vegetation; open space; areas of important aesthetic or scenic quality;), within or nearby the proposed or existing ROW or along the general alignment of any access roads to be constructed, improved or maintained for the Project. Specify the measures that will be taken to protect these resources (*e.g.*, fencing, flagging, signs that say, "Sensitive Environmental Areas, No Access"), without specifically identifying the exact location of protected resources such as RTE species and archeological sites or the specific RTE species.

11. <u>Invasive Species of Special Concern (Onshore Only)</u>

a. Identify the location(s) of invasive species of special concern and the prescribed method to control the spread and/or eradicate the identified species in accordance with site-specific Invasive Species Control and Management Plan ("ISCMP").

12. <u>Herbicide (Onshore Only)</u>

a. On the plan and profile drawing notes, indicate areas where organic herbicides will be used during site preparation or construction. Only organic herbicides will be used.

B. Description and statement of objectives, techniques, procedures and requirements

The textual portion of the EM&CP for the Project shall include, but need not be limited to, all of the following information.

1. <u>Plans (Onshore and Offshore)</u>

- a. The following plans will be included as part of the EM&CP:
 - (i) Highway Work Plan (Certificate Condition 49);
 - (ii) Complaint Management and Resolution Plan (Certificate Condition 59);
 - (iii) a Noise Control Plan (Certificate Condition 12);
 - (iv) Quality Control Plan (Certificate Condition 111);
 - (v) Maintenance and Protection of Traffic Plan (Certificate Condition 36);
 - (vi) a Lighting Plan (Certificate Condition 39);
 - (vii) Dewatering Plan (Certificate Condition 44);
 - (viii) Wetland Impact Minimization and Mitigation Plan (Certificate Condition 146);
 - (ix) Soil Handling and Erosion Control Plan (Certificate Condition 46);
 - (x) Vegetation Management Plan (Certificate Condition 185);
 - (xi) Invasive Species Control and Management Plan (Certificate Condition 165);
 - (xii) Suspended Sediment/Water Quality Monitoring Plan (Certificate Condition 172);
 - (xiii) HDD Work Plan (Certificate Condition 48);
 - (xiv) Jet Trencher Trial Plan (Certificate Condition 84);
 - (xv) Inadvertent Returns Plan (Certificate Condition 87);
 - (xvi) Final Hazardous Waste and Petroleum Work Plan (Certificate Condition 52);
 - (xvii) Fishing Community Outreach Program (Certificate Condition 54);
 - (xviii) Fisheries Study Work Plan (Certificate Condition 137);
 - (xix) Fisheries Compensation Plan (Certificate Condition 55);
 - (xx) SFEC-NYS Maintenance Plan (Certificate Condition 132);
 - (xxi) EMF Study (Certificate Condition 131);
 - (xxii) Benthic Sampling Plan (Certificate Condition 136);
 - (xxiii) Roosting Tree Survey Plan (Condition 72);
 - (xxiv) Avian Management Plan (Certificate Condition 164);
 - (xxv) Atlantic Sturgeon Monitoring and Impact Minimization Plan (Certificate Condition 72);
 - (xxvi) Northern Long-Eared Bat Monitoring and Impact Minimization Plan (Certificate Condition 72); and

(xxvii) Decommissioning Plan (Certificate Condition 193).

2. <u>Project Location and Description (Onshore and Offshore)</u>

a. Describe the location and limits of the site or ROW and explain the need for any additional rights.

- b. For each structure type, indicate the GSA-595A Federal standard color designation or manufacturer's color specification to be used for painted structures.
- c. 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 Project.

3. <u>Stormwater Pollution Prevention (Onshore Only)</u>

a. Include the information included in the MS4 approved SWPPP.

4. <u>Vegetation Clearing and Disposal Methods (Onshore Only)</u>

- a. Include a Vegetation Management Plan that shall:
 - i. Include a Tree Protection Plan
 - ii. Describe the specific methods and rationale for the type and manner of cutting and disposition or disposal methods for cut vegetation.
 - iii. Detail specific measures employed to avoid damage to specimen tree stands of desirable vegetation; RTE species; important screening trees; and hedgerows.
 - iv. Identify the factors such as the attributes of the site, outcome of landowner negotiations, and attributes of the logs, upon which Certificate Holder's removal of the merchantable logs resulting from clearing the ROW for the Project will be based.
 - v. Describe methods of compliance with 6 NYCRR Part 192 Forest Insect and Disease Control, applicable New York State Department of Environmental Conservation ("NYSDEC") quarantine orders, 6 NYCRR Part 575 – Invasive Species Spread Prevention and New York State Department of Agriculture and Markets ("NYSDAM") regulations.

5. <u>Building and Structure Removal (Onshore Only)</u>

a. 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.

6. <u>Waterbodies (Onshore Only)</u>

- a. Describe the measures to be taken (if applicable) to protect stream bank stability, stream habitat, and water quality including, but not limited to: vegetation restoration measures and other site-specific measures to minimize impacts, protect resources, and manage Project construction.
- b. Indicate the procedures that were followed to inventory such resources and provide copies of any resulting data sheets and summary reports.
- c. Develop a table of waterbodies within the Project Area and include (if applicable): Field/Map Identification Name; Perennial, Intermittent or Ephemeral; New York Stream Classification; Water Index Number, Fishery Type; GPS coordinates.

7. <u>Wetlands (Onshore Only)</u>

- a. For each State-regulated wetland and regulated adjacent area, indicate the following: NYSDEC wetland class, NYSDEC wetland ID (alphanumeric code); SFEC milepost; proposed structure and/or impact type; area of temporary disturbance/impact (sq. ft.); area of permanent disturbance/impact (sq. ft.); area of conversion of forested or scrub-shrub wetlands (sq. ft.); wetland cover type; wetland functions and values; and amphibian breeding areas.
- b. Describe all activities that will occur within wetlands or regulated adjacent areas (*e.g.*, construction, filling, grading, vegetation clearing, and excavation) and assure that the activity is consistent with the weighing standards set forth in 6 NYCRR 663.5(e) and (f).
- c. Describe how impacts to wetlands (and wetland functions and values) and regulated adjacent areas, associated drainage patterns, amphibian breeding areas, and wetland functions will be avoided.
- d. Describe the precautions or measures to be taken to protect all other wetlands (*e.g.*, town, federal wetlands) associated drainage patterns, and wetland functions.
- e. Describe procedures to remove all excess fill materials to upland areas greater than 300 feet from tidal wetlands and 100 feet from all others.
- f. Include a Wetland Impact Minimization and Mitigation Plan that complies with the substantive requirements of ECL §§ 24 and 25 and 6 NYCRR Parts 661 and 663 to address wetlands mitigation, for all permanent impacts to State-regulated wetlands and Federally- regulated wetlands, if prescribed by the USACE, including, but not limited to, the permanent conversion of forested or scrub-shrub wetlands to scrub-shrub or emergent wetlands. If such proposal is to prepare a detailed mitigation plan for State-regulated freshwater wetlands, it shall separately address impacts to each of the wetlands' benefits described in ECL § 24-0105(7). Plans shall provide for wetland mitigation in the same watershed to the maximum extent possible.
 - i. The Wetland Impact Minimization and Mitigation Plan, intended to compensate for unavoidable loss of wetland functions and values must meet the standards set forth in 6 NYCRR Parts 661 and 663 and include, at minimum, the following for State-regulated wetlands:
 - a) The creation of a compensatory mitigation plan developed in consultation with NYSDEC.
 - b) A construction timeline for the mitigation activities
 - c) Construction details for meeting all requirements contained in the proposed certificate conditions
 - d) Performance standards that meet State and Federal requirements for determining wetland mitigation success
 - e) Provisions for post-construction monitoring for a period of five years after completion of the wetland mitigation
 - f) After each agreed-upon monitoring period, the Certificate Holder must take corrective action for any areas that do not

meet the above-referenced performance standards to increase the likelihood of meeting the performance standards after five years

g) If, after five years, monitoring demonstrates that the wetland mitigation is still not meeting the established performance standards, the Certificate Holder must submit a Wetland Mitigation Remedial Plan ("WMRP"). The WMRP must include an evaluation of the likely reasons for not achieving performance standards, a description of corrective actions to ensure a successful mitigation, and a schedule for conducting the remedial work. Once approved by DPS Staff and NYSDEC, the WMRP must be implemented according to an approved schedule.

8. <u>Offshore Construction (Offshore Only)</u>

- a. Describe in detail the following construction requirements for underwater cable installation:
 - i. Pre-lay grapnel run along the installation route
 - ii. Installation methods (including but not limited to mechanical cutter, mechanical plow [which may include a jetting system], jet sled, jet trencher, and/or controlled flow excavator) and locations at which each method is expected to be employed;
 - iii. Alternative HDD exit pit design analysis;
 - iv. Alternative HDD exit pit cable protection measure efficacy;
 - v. The location of the exit pit;
 - vi. Dredging and dredged material management plan including suspended sediment monitoring and control measures, backfill requirements, and locations (mapped) where dredging is anticipated;
 - vii. Cofferdam design and installation methods;
 - viii. A Suspended Sediment and Water Quality Monitoring Plan (Joint Proposal Appendix I) that sets forth the sampling and monitoring procedures to be followed during construction activities, such as pre-lay grapnel run activities and HDD exit pit excavation, as well as maintenance and decommissioning activities that involved disturbance of sediments.
 - ix. An Inadvertent Returns Plan that establishes measures for minimizing the risk of adverse impacts to nearby environmental resources and includes procedures for the handling and use of drilling fluid and procedures to be implemented in the event of a detected release of fluid. The Inadvertent Returns Plan shall including the following:
 - a) Material Safety Data Sheets ("SDS") for drilling fluids;
 - b) protocols for recovery of inadvertent releases, handing and disposal;

- c) measures for suspension of drilling operations until returns can be properly managed;
- d) immediate notification to agencies with monitoring report summarizing the location of surface returns;
- e) estimated quantity of fluid and cleanup efforts;
- f) suspension of drilling operations if the surface returns pose a threat to the resource or to public health and safety; and
- g) removal of released fluids from environmentally sensitive areas if the removal does not cause additional adverse impacts to the resource.
- x. Transition methods for HDD to underwater cable;
- xi. Cable-laying methods including barge positioning, midline buoys, and use of spuds or anchors, if necessary
- b. Include an HDD work plan providing planning, installation controls, and site measures (including excavation and backfill of the HDD exit pit and handling of any contaminated materials) that will be taken in accordance with good engineering practices;
- c. Include a Jet Trencher Trial Plan that requires:
 - i. A combination of calibrated acoustic ("ADCP") and optical backscatter ("OBS") instruments will be used to measure water column TSS and turbidity on selected transects. Companion water samples will be collected and submitted to a NYSDOH Environmental Laboratory Approval Program ("ELAP") certified laboratory for TSS and turbidity analysis during jet trencher trials;
 - a) TSS and turbidity samples will be collected up-current (for baseline) and 1500 feet down-current of the jet plow, at three-interval depths (near surface, mid-depth, and near bottom);
 - b) The Certificate Holder must work cooperatively with DPS Staff and NYSDEC to immediately review the results of the real-time data measurements during the jet trencher installation trials to evaluate whether the operating conditions result in TSS concentrations that exceed the TSS threshold limit; and
 - c) If the jet trencher trials demonstrate that the operating conditions result in TSS concentrations that exceed the TSS threshold limit established herein, the Certificate Holder must work with DPS Staff and NYSDEC to evaluate and implement feasible modifications to the jet trencher operating conditions to further reduce in-situ sediment resuspension associated with the jet trencher installation procedure.

9. <u>Electromagnetic Fields</u>

a. Include an off- and onshore Electromagnetic Field (EMF) Study plan that specifies that:

- i. The EMF Study shall occur prior to and during commercial operation of the South Fork Wind Farm and be performed no later than thirty (30) days after the Project has achieved Commercial Operation.
- ii. The purpose of the EMF Study will be to establish the relationship between EMF level and wind farm output.
- iii. The Certificate Holder shall file a written report of the results of the EMF Study with the Secretary within six (6) months of the conclusion of the measurements. The written report shall include a tabular summary of the known biological sensitivities of marine species common in the Project Area.
- iv. For the SFEC-NYS: The Certificate Holder shall conduct a postinstallation EMF Study of the SFEC-NYS, which will consist of measurements of the frequency and strength of the EMF measured immediately above the SFEC-NYS cable. Measurements taken during the EMF Study shall consist of transects across the SFEC-NYS cable route at one thousand (1,000) foot intervals along the cable length within NYS territorial waters including habitat types, water depth, cable burial depths, and presence of cable protection devices. An additional transect will be located at the HDD exit pit. Up to ten measurements shall be performed on the beach beginning at the edge of the parking lot and continuing every fifty (50) feet along the beach into the water roughly fifty (50) feet into the nearshore surf zone.
- v. For the SFEC-Onshore: Certificate Holder shall conduct an EMF Study of the SFEC-Onshore, which will consist of onshore measurements every one thousand (1,000) feet along the cable route.

10. <u>Quality Control</u>

a. Include a Quality Control Plan that explains how the Certificate Holder will ensure that the transmission line structures and components it purchases for the Project conform to the specification for structures and components described in the approved EM&CP. The Quality Control Plan must include:

(i) the name(s) and qualifications of the individual(s) who will conduct audits under the Quality Control Plan ("Quality Control Audits"); and (ii) the frequency with which the Quality Control Audits will be performed.

11. Hazardous Waste (Onshore and Offshore)

- a. Include a Final Hazardous Waste and Petroleum Work Plan that is consistent with NYSDEC guidance including, but not limited to, the Division of Environmental Remediation's Technical Guidance for Site Investigation and Remediation ("DER-10"), and includes the following:
 - i. A report of the Initial Hazardous Waste and Petroleum Work Plan consistent with reporting requirements of DER-10, to be attached as an exhibit; Protocols for sampling to be completed during construction, including sampling if visibly contaminated material is

encountered or if groundwater is encountered in areas that were not previously sampled as part of the Initial Hazardous Waste and Petroleum Work Plan;

- ii. Identify location(s) where all material exceeding NYSDEC standards, criteria, or guidance values may be disposed; and
- iii. Source(s) of clean backfill (clean sand, gravel, or soil) to be used wherever contaminated material is encountered and removed.

12. Land Uses (Onshore Only)

- 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.
- b. Sensitive Land Uses
 - i. Describe the sensitive land uses (*e.g.*, hospitals, emergency services, sanctuaries, schools, residential areas) that may be affected by construction of the Project or by construction-related traffic and specify measures to minimize the impacts on these land uses.
- c. Geologic, Historic and Scenic or Park Resources
 - i. Describe the geologic, historic, and scenic or park resources that may be affected by construction of the Project or by constructionrelated 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 shall be made available to Department of Public Service ("DPS") Staff upon request.
- d. Recreation Areas
 - i. Explain how proposed or existing recreation areas will be avoided or accommodated during construction, operation, and maintenance of the Project.

13. <u>Access Roads, Lay-down Areas, Marshalling Yards, and Workpads (Onshore and Offshore)</u>

- a. Discuss the necessity for access to the ROW, 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 Project.
- b. Discuss the types of access which 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 roads, driveways, farm lanes, rail beds, etc.; and,
- iv. other access, *e.g.*, helicopter or ship/barge placement. For each temporary and permanent access type, provide a figure or diagram showing a typical installation (include top view, cross section, and side view with appropriate distances and dimension). Where existing access ways will be used, indicate provisions for upgrading to meet appropriate standards.
- c. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:
 - i. staked straw bale or 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.

14. <u>Noise Sensitive Sites (Onshore Only)</u>

- a. Specify procedures to be followed to minimize noise impacts related to ROW clearing, and construction and operation of the Project. Indicate the types of major equipment to be used in construction or Project 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 Project operation.
- b. Include a Construction Noise Control Plan that complies with the requirements of the Construction Noise Control Plan Scope of Work (Joint Proposal, Appendix J).

15. Fishing (Offshore Only)

- a. Include: (i) a description of a fisheries study of the marine fish and invertebrates along the SFEC-NYS cable route prior to the commencement of construction; and (ii) an effects study of marine fish and invertebrates in the SFEC-NYS cable route for two years post-construction.
- b. Include a Fishing Community Outreach Program that details communications with mariners, commercial, recreational, and for-hire (charter)
- c. Describe a Fisheries Compensation Plan, which shall include:

- i. a Fishing Gear Conflict Prevention/Hazard Notification and Claim Procedure for commercial fisheries gear losses during all phases of the Project, including survey, construction, operation, maintenance and decommissioning for the life of the Project.
- ii. a reimbursement process for any temporary displacement of commercial fishing directly resulting from Project's construction and maintenance activities, including any necessary cable reburial activities, and decommissioning activities.
- iii. a process for claimants to appeal any decision regarding their claims to an independent third-party arbitrator.
- iv. a statement that the number of claims submitted by persons or entities pursuant to sections (c)(i) and (c)(ii) of this section and adjudicated by the Certificate Holder shall not be limited.
- v. requirements that the Certificate Holder must:
 - a) Notify the Secretary a summary of all claims filed and/or settled on an annual basis, including the claim type and the impacted fishing activity.
 - b) Notify DPS, NYSDEC, and NYSDOS within 30 days any time a fisheries compensation claim is filed and/or settled. The notification must include the claim type, species impacted, and the fishing activity disrupted and/or displaced
 - c) Not require any fisherman settling a fisheries compensation claim to sign a Non-Disclosure Agreement.

16. <u>Ecological and Environmentally Sensitive Sites (Onshore and Offshore)</u>

a. Indicate the procedures that were followed to identify ecological and environmental resources (*e.g.*, archaeological sites; fish and wildlife habitat; RTE species 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 such sites shall be identified, and made available upon request.

17. <u>Rare, Threatened and Endangered Species (Onshore and Offshore)</u>

- a. Include an Avian Management Plan for RTE species.
- b. Include an Atlantic Sturgeon Monitoring and Impact Minimization Plan that meets the substantive requirements of 6 NYCRR Part 182, which shall include:
 - i. Real-time acoustic monitoring; and
 - ii. Outreach in the form of signs (information about reporting Atlantic sturgeon sightings to NYSDEC) and pamphlets (general information about Atlantic sturgeon and how to help conserve them). Certificate Holder will collaborate with NYSDEC on the distribution and placement of outreach materials.
- c. Include a Northern Long-eared Bat Monitoring and Impact Minimization Plan that complies with comply with 6 NYCRR § 182 and applicable federal

laws and regulations promulgated by the United States Fish and Wildlife Service.

- d. Include a Roosting Tree Survey Plan for the SFEC-Interconnection Project and SFEC-Onshore.
- e. Identify procedures for reporting observations of Threatened and Endangered (T&E) species and species of special concern (SSC) including but not limited to:
 - i. Maintaining a record of all observations of T&E species and SSC during construction, maintenance and operation, which includes the following information: Species; number of individuals; age and sex of individuals (if known); observation dates(s) and time(s); GPS coordinates of each individual observed to the nearest accuracy within the Certificate Holder's property rights (if GPS not available, the nearest pole number and/or crossroads is acceptable; behavior(s) observed; identification and contact information of the observer(s); and the nature of and distance to any project construction, maintenance, or restoration activity.
 - ii. Submitting bi-weekly monitoring reports submitted NYSDEC and DPS Staff.
 - iii. Outlining a procedure for reporting T&E or SSC avian species demonstrating breeding behavior, or their nests or roosts, to NYSDEC and DPS within 24 hours and for maintaining species-appropriate avoidance buffers until notice to continue activity at the site is granted by NYSDEC and DPS Staff.

18. <u>Invasive Species (Onshore Only)</u>

a. Include an Invasive Species Management and Control Plan prepared in accordance with Appendix K - Invasive Species Control and Management Plan Specifications of the JP.

19. <u>Herbicides (Onshore Only)</u>

- a. Specify the locations where organic 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. Describe the procedures that will be followed during 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. Specify that only organic herbicides shall be used.

20. <u>Dewatering (Onshore Only)</u>

- a. Submit a Dewatering Plan that includes:
 - i. groundwater sampling results from the Initial Hazardous Waste and Petroleum Work Plan, which is attached as Appendix H of the Joint Proposal;

- ii. evaluation of any known or suspected contaminated sites to determine if proposed dewatering operations will influence or draw in any contamination from the site, and the expected maximum concentrations of the contaminants;
- iii. locations where dewatering will be required, including the anticipated depth of groundwater and the installation depth of the cable and vaults at those locations;
- iv. method of dewatering, including the number and depth of the well points (if applicable);
- v. pump capacity, rate, and estimated daily volumes and duration of dewatering for each location requiring dewatering;
- vi. if uncontaminated water from dewatering operations will be discharged to groundwater or surface water, include the following:
 - a) a map showing proposed discharge location points;
 - b) if discharging to a storm drain or recharge basin, verify these systems are designed to handle the proposed rate for the duration of the discharge and the substantive requirements for all state, county, and town approvals are being met for such discharges;
 - c) if discharging to a storm drain, identify the ultimate surface water outfall location;
 - d) if discharging to an existing recharge basin or creating a new recharge basin, evaluate mounding effects to ensure that mounding does not adversely affect any surrounding properties and underground structures; and
- vii. best management practices to prevent erosion and sedimentation from dewatering operations;
- viii. maps of areas requiring dewatering with wells (if applicable);
- ix. verification that dewatering operations conducted using wells are carried out by a well driller duly registered in accordance with ECL § 15-1525;
- x. effluent limits provided by NYSDEC based on applicable regulations, standards, criteria, and guidance values;
- xi. treatment and disposal plan for contaminated water generated from the dewatering operations;
- xii. sampling plan that will be followed during dewatering operations of influent and effluent; and
- xiii. sampling plan that will be followed in the event dewatering is required in locations that were not anticipated.

21. <u>Fugitive Dust Control (Onshore Only)</u>

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

22. <u>Petroleum and Chemical Handling Procedures (Onshore and Offshore)</u>

- a. Include plans for the 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 Project both for onshore and offshore construction. Address how to avoid spills and improper storage or application in the marine environment and 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
- b. Include plans for 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 Project. All offshore construction vessels contracted to conduct any work associated with all phases of the project will have an Environmental Protection Agency, United States Coast Guard, and Bureau Of Ocean Energy Management compliant Oil Spill Response Plan ("OSRP") for accidental releases of petroleum, fuels, oil, chemicals, hazardous substances into the marine and coastal environment, Spill Prevention, Control, and Countermeasure ("SPCC") Plan(s) to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Project construction and operation, including in the marine environment, shall be included in the EM&CP.

23. <u>Environmental Supervision (Onshore and Offshore)</u>

- 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. 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, EM&CP 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.
- g. Include an Environmental Compliance Plan that includes the following information:

- i. The environmental monitor(s) responsible for compliance with this condition, including:
 - a) Names, titles, responsibilities, training, years of relevant experience, and licensing (including, but not limited to, the environmental monitor's qualifications that shall satisfy those of a "Qualified Inspector" pursuant to the SPDES General Permit); and
 - b) Organization structure, including specific names, duties and responsibilities.
- ii. Certification confirming the independence of the environmental monitor(s) from the Certificate Holder.
- iii. The procedures established to ensure compliance with the Certificate and the applicable ECL provisions and implementing regulations.
- iv. Environmental compliance tracking and reporting procedures, including:
 - a) Checklist of matters to inspect for compliance, including specific items or locations to be inspected and acceptability criteria to be applied by the environmental monitor(s);
 - b) Purpose and frequency of reports;
 - c) Environmental compliance schedule;
 - d) Methods of reporting non-compliance with Certificate conditions and the ECL and implementing regulations; and
 e) QA/QC procedures for environmental compliance.
- v. Procedure for the Certificate Holder to respond to and correct problems found by the environmental monitors.

24. <u>Soil Handling and Erosion Control (Onshore Only)</u>

a. Include a Soil Handling and Erosion Control Plan that shall include specifications for testing, stockpiling, reuse or removal from site, storage, erosion control, handling of any contaminated materials, restoration and compaction of backfill in trenches. Such plan shall be consistent with the acknowledged SPDES General Permit and MS4-approved SWPPP.

25. <u>Clean-up and Restoration (Onshore Only)</u>

- a. Describe the Certificate Holder's program for ROW clean-up and restoration, including:
 - i. the removal of any temporary roads; restoration of 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;
 - ii. plans, standards and a schedule for the restoration of vegetative cover; including, but not limited to, specifications to address:
 - iii. design standards for ground cover:
 - a) species mixes and application rates by site;

- b) site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures);
- c) acceptable final cover % by cover type;
- iv. planting installation specifications and follow-up responsibilities;
- v. a schedule or projected dates of any seeding and/or planting; and,
- vi. plans to prevent unauthorized access to and along the ROW.

26. <u>Visual Impact Mitigation (Onshore Only)</u>

- a. Provide details of screening or landscape plans prescribed at: (i) identified locations; (ii) locations where vegetation was inadvertently damaged during construction; or (iii) to restore cleared locations for adjacent property owners. Discuss existing or proposed landscape planting, earthwork, or installed features to screen or landscape substations and other Project components.
- b. Include a Lighting Plan for the SFEC-Interconnection Facility that addresses:
 - i. security lighting needs at substation and switchyard sites, and any exterior equipment storage yards;
 - ii. plan and profile figures to demonstrate the lighting area needs and proposed lighting arrangement at the substation site, switchyard site, and any exterior equipment storage yards;
 - iii. lighting design to provide safe working conditions at appropriate locations;
 - iv. exterior lighting design to avoid off-site lighting effects, by:
 - v. the use of task lighting only as needed and as appropriate to perform specific installation, maintenance, repair, or emergency-response tasks; task lighting shall be designed to be capable of manual or auto-shut off switch activation rather than motion detection;
 - vi. a requirement for full cutoff fixtures, with no drop-down optical elements (that can spread illumination and create glare) for permanent exterior security lighting;
 - vii. manufacturer's cut sheets of all proposed lighting fixtures shall will be provided.

27. <u>ROW Encroachment Plan (Onshore Only)</u>

Provide detailed plans for identifying and resolving potential encroachments to the SFEC-Interconnection Facility location.

28. <u>Cable Maintenance (Onshore and Offshore)</u>

- a. Include a cable monitoring and maintenance plan (the "SFEC-NYS Maintenance Plan") that will include:
 - i. the method for determining the actual cable location and burial depth of the SFEC-NYS and the timing for undertaking such efforts;
 - ii. the method to be used to determine, based upon inspection results and time of year restrictions described in Certificate Condition 72,

if and what reburial and/or added protection measures may be required;

- iii. a requirement to inspect the HDD exit pit annually for the first five(5) years following Commercial Operation, and the method for performing such inspections.
- a post-construction monitoring survey will be completed annually iv. for the first three (3) years following Commercial Operation. As part of these post-construction monitoring surveys, EMF measurements shall be taken at the locations specified in Section B(9), supra. If any three consecutive surveys show that the SFEC-NYS does not pose a hazard to public safety, navigation, or marine resources, the Certificate Holder shall perform additional monitoring surveys every five (5) years thereafter for the operational life of the Project. The SFEC-NYS Maintenance Plan will include provisions for monitoring the SFEC-NYS following a severe weather event that may have directly impacted the SFEC-NYS to ensure that it does not pose a hazard to public safety, navigation, or marine resources. If any survey shows that the SFEC-NYS poses a hazard to public safety, navigation, or marine resources, Certificate Holder shall perform annual surveys; after corrective action is completed, until three consecutive surveys show there is no such risk.
- v. a plan for remedying cable exposures within time-of-year restrictions;
- vi. a plan for remedying exposures outside of time-of-year restrictions that pose a hazard to public safety, navigation, or marine resources, including avoidance and minimization techniques for T&E species;
- vii. a requirement to take an EMF reading in the event of a cable exposure at the SFEC-NYS Sea-to-Shore Transition;
- viii. a description of methods to maintain burial depth; and
- ix. a plan for marking the location of any cable exposures
- x. a plan for monitoring and maintaining cable burial depth after any significant coastal erosion event that both: (i) causes a loss of more than five (5) feet of beach elevation over the portion of the SFEC Sea-to-Shore Transition installed at Wainscott Beach; and (ii) results in a cable burial depth of less than thirty (30) feet at that point at Wainscott Beach.
- xi. suitable measures to monitor, maintain, or restore cable depth to at least 30 feet beneath the surface of Wainscott Beach and a minimum of six feet beneath the existing seabed. The design profile of the Sea-to-Shore transition, including anticipated depth along the profile, will be included in the EM&CP. Certificate Holder shall consult with the Town and Trustees regarding restoration activities above the HDD installation and follow applicable State and Federal regulatory approvals

29. <u>Geotechnical (Onshore Only)</u>

a. "Geotechnical Site Investigation Report verifying subsurface conditions along the approved SFEC-Onshore corridor and characterizing subsurface conditions at sites where HDD is proposed.

30. <u>Highway Work (Onshore Only)</u>

- a. Include a Maintenance and Protection of Traffic Plan ("MPT") for all roadways directly affected by construction activities prepared in conformance with the National Manual on Uniform Traffic Control Devices ("MUTCD") and NY State Supplement. The MPT shall include provisions to maintain access to and parking for the farm stand located at the intersection of Beach Lane and Wainscott Main Street.
- b. Include a Highway Work Plan that covers:
 - i. a schedule showing the sequence and duration of trenching, drilling and/or pipejacking, cable delivery and laying, backfilling, splicing, and testing;
 - ii. a traffic diversion/lane closure plan, which shall identify procedures to be used to maintain traffic and provide a safe construction zone for those activities within the roadway ROW. The plan shall also describe temporary signage, lane closures, placement of temporary barriers and traffic diversion. Flaggers shall always be present when equipment is crossing any road, when equipment is being loaded or unloaded, and where two-lane traffic has been reduced to one lane;
 - iii. coordination with planned highway and bridge construction and repair projects;
 - iv. a map showing the location of: the trench with reference to the paved highway surface, lay down and mobilization areas, drilling and exit pits, pipejacking entry and exit pits, and splicing locations;
 - v. trench profile;
 - vi. a plan for trench backfilling, marking and protection, and temporary covering;
 - vii. a plan for conducting trenching and cable laying in the vicinity of other underground utility lines, conduits and pipes;
 - viii. a Soil Handling and Erosion Control Plan, including a plan for the handling of any contaminated materials;
 - ix. a Vegetation Management Plan, that includes a post-completion assessment of the need for remedial vegetation plantings
 - x. a plan for minimizing construction-related noise during the hours between 7:00 p.m. and 7:00 a.m.;
 - xi. a plan for minimizing construction-related lighting impacts on surrounding areas; and
 - xii. a plan for minimizing disruption of traffic, pedestrian and recreational use.

31. <u>Complaint Resolution (Onshore and Offshore)</u>

a. Include a Complaint Management and Resolution Plan that

- i. requires the Certificate Holder to retain, for a period of five years, electronic copies of: (i) the telephone logs for any calls made to the Project's toll-free number; and (ii) any submission to the Project website.
- ii. Requires the Certificate Holder to report to DPS Staff, NYSDEC, the Trustees, and the Town every complaint, and describe the actions taken to address the complaint, within ten (10) business days after receipt of the complaint.

32. <u>Decommissioning (Onshore and Offshore)</u>

- a. Include a Decommissioning Plan that includes:
 - i. the anticipated life of the Project;
 - ii. an estimate of the decommissioning costs for each of the SFEC-NYS, the SFEC-Onshore, and that portion of the SFEC-NYS from the mean high-water line to the SFEC Sea-to-Shore transition vault (in current dollars);
 - iii. the method of ensuring that funds will be available for decommissioning and restoration as provided in the Plan;
 - iv. an analysis of the options and alternatives for decommissioning the Project, including any cable protection measures used, and restoring the Project Area, including any decommissioning methods and potential impacts to the environment and fishermen for each option;
 - v. if applicable, how the Certificate Holder will address impacts of leaving any portion of the Project in place, including but not limited to, potential impacts to fishermen, fisheries, and other environmental resources, etc.; and
 - vi. procedures and timeframes for notifying landowners along the route about decommissioning activities.

APPENDIX F

PROPOSED § 401 WATER QUALITY CERTIFICATION

NEW YORK STATE PUBLIC SERVICE COMMISSION WATER QUALITY CERTIFICATION

Pursuant to:	Section 401 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1341, and Article VII of the New York Public Service Law 6 NYCRR Section 608.9
Certification Issued to:	Deepwater Wind South Fork, LLC ("DWSF")

Project Description and Location

The South Fork Export Cable ("SFEC") is an alternating current ("AC") electric cable (138 kilovolt ("kV")) that will connect the South Fork Wind Farm ("SFWF"), located offshore in federal waters on the Outer Continental Shelf ("OCS"), to the existing mainland electric grid in the Town of East Hampton, Suffolk County, New York. The SFEC includes the submarine segment of the cable in New York State territorial waters ("SFEC-NYS"), the terrestrial underground segment of the cable ("SFEC-Onshore"), and a new interconnection facility ("SFEC-Interconnection Facility"). The SFEC-NYS, SFEC-Onshore, and SFEC-Interconnection Facility will hereafter be referred to collectively as "the Project."

The SFEC-NYS segment of the export cable will be buried beneath the seabed within State territorial waters from the boundary of New York State waters (three nautical miles ("nm") offshore) south of Wainscott Beach in East Hampton, New York. The SFEC-NYS transitions onshore under the beach located at a transition vault at the southern end of Beach Lane in the Town of East Hampton, New York. The SFEC-NYS is approximately 3.5 miles long from the boundary of New York State territorial waters to the sea-to-shore transition vault located on Beach Lane. The SFEC-Onshore is the terrestrial underground segment of the export cable from the sea-to-shore transition vault to the SFEC-Interconnection Facility where the SFEC will interconnect with the Long Island Power Authority ("LIPA") electric transmission and distribution system in the Town of East Hampton, New York. The SFEC-Onshore is approximately 4.1 miles long from the transition vault located on Beach Lane to the SFEC-Interconnection Facility, which is adjacent to the Long Island Power Authority's East Hampton Substation on Cove Hollow Road. The SFEC-Onshore will be located both in the public road rights-of-way ("ROW") (including Beach Lane, Wainscott Main Street, Sayre's Path, Wainscott Stone Road, and Wainscott Northwest Road) and

in the Long Island Railroad ("LIRR") ROW. The SFEC-Interconnection Facility is a new onshore facility primarily located on the same parcel as the existing LIPA East Hampton Substation and consisting of a transformer and a 69 kV interconnection cable that will connect to the 69 kV bus in the existing LIPA East Hampton Substation in the Town of East Hampton, New York.

Certification

The New York State Public Service Commission hereby certifies pursuant to Section 401 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1341(a)(1) and Article VII of the New York Public Service Law that the Project, as conditioned herein, complies with applicable requirements of Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, as amended, and applicable New York State water quality standards, limitations, criteria and other requirements set forth in Parts 608.9(a), and 701 through 704 of Title 6 of New York Codes, Rules and Regulations ("NYCRR"), provided that all of the conditions listed herein are met. This Certification is issued in conjunction with the NYS Public Service Law Article VII Certificate of Environmental Compatibility and Public Need ("CECPN") sought by Deepwater Wind South Fork, LLC ("DWSF") in, and based on the record of, Case 18-T-0604.

Conditions:

- No in-water work shall commence until all pre-construction conditions relating to such work contained in the CECPN in Case 18-T-0604 have been met to the satisfaction of the New York State Department of Public Service.
- 2. Construction, operation, maintenance, repair and decommissioning of the Project shall at all times be in conformance with the Application in Case 18-T-0604 (as amended and supplemented), to the degree not superseded by the CECPN, all conditions of approval contained in the CECPN, the Environmental Management and Construction Plan ("EM&CP"), the Municipal Separate Storm Sewer System-approved Stormwater Water Pollution Prevention Plan, and all conditions incorporated in any order approving any revisions to the EM&CP required by the CECPN, to the extent the documents referenced above pertain to compliance with New York State water quality standards necessary and appropriate for issuance of, and compliance with, this Water Quality Certification.

- 3. DWSF shall provide a copy of this Water Quality Certification ("WQC") to the U.S. Army Corps of Engineers along with a copy of the Application, CECPN, and the EM&CP so that the U.S. Army Corps of Engineers will have a complete record of the conditions that apply hereto.
- 4. DWSF shall provide to all construction contractors performing work on the Project complete copies of this WQC, the CECPN, and the EM&CP.
- 5. No in-water seabed disturbing work, including jet trenching trials, shall occur between May 1 to June 30 and September 1 to November 15 in any year to avoid the risk for incidental take of Atlantic Sturgeon, except that DWSF may be permitted to perform some limited seabed disturbing work activities (*i.e.*, diver clearance and maintenance of the horizontal directional drill ("HDD") exit pit, and backfill of the HDD exit pit) May 1 through May 15 and November 1 through November 15. If backfill of the HDD exit pit occurs May 1 through May 15 or November 1 through November 15, DWSF shall develop an Atlantic Sturgeon Monitoring and Impact Minimization Plan. Such Atlantic Sturgeon Monitoring and Impact Minimization Plan must meet the substantive requirements of 6 NYCRR Part 182, and shall be included as part of the EM&CP. DWSF shall provide the Atlantic Sturgeon Monitoring and Impact Minimization Plan to New York State Department of Environmental Conservation ("NYSDEC") forty-five (45) days prior to filing of the EM&CP for NYSDEC's review and comment.
- 6. All water quality laboratory analyses required in this WQC must be conducted by a laboratory certified by the New York State Department of Health ("NYSDOH") Environmental Laboratory Approval Program ("ELAP"). DWSF shall use commercially reasonable efforts to request the most expedited turnaround time available for laboratory samples for locations along the SFEC-NYS. Analytical results for Total Suspended Solids and turbidity must be sent to the New York State Department of Public Service Staff ("DPS Staff") and NYSDEC as soon as received from the laboratory but no longer than within forty eight (48) hours of receipt. Exceedances of the TSS standard must be identified.
- 7. All drilling fluid additives must be water-based unless otherwise approved by DPS Staff in consultation with the NYSDEC. If a polymer-based additive is proposed, it must be indicated in the EM&CP with the corresponding materials safety data sheet containing eco-toxicity information and an approved NYSDEC Water Treatment Chemical Form. Petroleum-based additives are strictly prohibited.

- Water quality standards set forth in 6 NYCRR Parts 701, 702, 703 and 704, and sections 301, 302, 303, 306, and 307 of the federal Clean Water Act (see 33 USC §§ 1311, 1312, 1313, 1313a, and 1317) shall not be contravened.
- 9. Exclusive of the portion of the cable installed via HDD, DWSF shall install the SFEC-NYS a minimum burial depth ("Burial Depth") of six (6) feet (measured from top of cable) below the existing seabed. Should the Burial Depth not be achieved during the initial pass of the cable installation tool that is best suited to achieve Burial Depth, DWSF shall perform up to two (2) additional passes with the installation tool, or other burial tool that complies with the requirements of the Certificate, unless (a) additional passes risk causing damage to the SFEC-NYS or the installation tool; or (b) due to geologic obstructions, additional passes would not increase the burial depth or risk causing cable exposure. DWSF shall use best efforts to micro-route the cable within the cable corridor to achieve Burial Depth during installation. If boulders are not identified during pre-construction surveys, and therefore micro-routing the cable is impracticable, DWSF shall, if required to increase the likelihood of achieving Burial Depth, relocate any encountered boulders within sixty-five feet (65) feet of the planned centerline of the cable. Where DWSF has relocated a boulder one (1) meter or more in diameter a distance of two meters or more from the location where it was initially encountered, DWSF shall provide notice to mariners, recreational fishermen, and NYSDEC-Licensed Fishermen in accordance with the requirements of the of the CECPN.
- 10. DWSF shall install the SFEC-NYS, exclusive of the HDD, using either simultaneous lay and burial or pre-lay and post-burial processes.
 - a. The following processes may be used, individually or in combination, to install the SFEC-NYS, exclusive of the HDD: mechanical cutter, mechanical plow (which may include a jetting system), jet sled, jet trencher and/or controlled flow excavator.
- 11. DWSF may use a temporary cofferdam, gravity cell, or similarly-Commission-approved structure (collectively referred to as "Temporary Cofferdam"), or no structure around the HDD exit pit during construction. Final details regarding whether a Temporary Cofferdam will be used, and, if so, the type, design, and installation method shall be included in the EM&CP. Any Temporary Cofferdam shall be fully removed and prior to the Project achieving commercial operation, but no later than thirty (30) days after the installation of

the cable in NYS waters. If Temporary Cofferdam is used, DWSF shall provide notice of its location to mariners and recreational and NYSDEC-Licensed Fishermen in accordance with the CECPN, and any Temporary Cofferdam will be marked in accordance with applicable United States Coast Guard ("USG") requirements.

- 12. DWSF will use best efforts to avoid the use of cable protection if the actual burial depth achieved provides adequate protection. In areas where seabed conditions or geologic or topographic features, or utility crossings do not allow DWSF to achieve Burial Depth, DWSF is authorized, but not required, to use cable protection methods. Cable protection may include tapered engineered concrete mattresses, rock bags, crushed rock, or other appropriate protection method(s). DWSF shall install and maintain any necessary cable protection measures in a manner that provides the ability to maintain overtrawlability, to minimize shifting over time, and to avoid creating a discernable berm. DWSF shall not leave any portions of the cable exposed on the seabed without cable protection measures. As part of decommissioning, DWSF shall perform surveys of the cable protection measures and use best efforts to remove installed cable protection measures that are within two (2) feet of the seabed surface.
- 13. The following limits must be achieved for Total Suspended Solids ("TSS") one thousand five hundred (1,500) feet down current (based on tide direction) of sediment disturbing activities:
 - a. Water Quality Standard: None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages; and
 - b. Guidance Value: 100 mg/L above ambient.

Water quality monitoring shall be conducted during jet trench trials, jet trenching activities, cable installation, excavation of the HDD exit pit, pre-lay grapnel run and backfill of the HDD exit pit, and maintenance and decommissioning activities that involve disturbance of sediments. Maintenance and decommissioning activities that result in only minor disturbance of sediments,, including: (i) anchor sweep; (ii) anchoring; (iii) placement of jack-up barge; (iv) hand jetting; or (v) other activities as determined by DPS Staff, in consultation with NYSDEC, shall not require water quality monitoring.

- 14. Visual observations of turbidity caused by underwater cable and HDD exit pit installation/backfill activities, pre-lay grapnel run operations, maintenance, and decommissioning activities must be conducted to ensure compliance with the narrative water quality standard in 6 NYCRR § 703.2, which states "No increase that will cause a substantial visible contrast to natural conditions."
- 15. DWSF shall implement, the Suspended Sediment and Water Quality Monitoring Plan ("SSWQP") as required in the CECPN. Suspended sediment plume monitoring and water quality monitoring shall be conducted at the locations and frequency set forth in SSWQP.
- 16. If any jet trenching technology is used to lay the cable, trials must be conducted within representative sections or areas proximate to the proposed underwater cable route in NYS waters prior to cable installation to ensure compliance with the TSS threshold limits as defined above. The trial will include approximately one thousand (1,000) feet of jet trenching operations within an area to be specified in the Jet Trencher Trial Plan in the EM&CP. The following conditions apply to jet trencher trials:
 - A combination of calibrated acoustic ("ADCP") and optical backscatter ("OBS") instruments will be used to measure water column TSS and turbidity on selected transects. Companion water samples will be collected and analyzed by a NYSDOH ELAP certified laboratory for TSS and turbidity during jet trencher trials;
 - b. DWSF must work cooperatively with DPS Staff and NYSDEC to immediately review the results of the real-time data measurements during the jet trencher installation trials to evaluate whether the operating conditions result in TSS concentrations that exceed the TSS threshold limit;
 - c. If the jet trencher trials demonstrate that the operating conditions result in TSS concentrations that exceed the TSS threshold limit established herein, DWSF must work with DPS Staff and NYSDEC to evaluate and implement feasible modifications to the jet trencher operating conditions to further reduce in-situ sediment re-suspension associated with the jet trencher installation procedure; and
 - d. Jet trencher operations must not proceed until the results of the Jet Trencher Trial Plan is reviewed and accepted by DPS Staff and NYSDEC. Review of this

information by DPS and NYSDEC staffs shall not unreasonably delay the commencement of installation of the underwater cable system.

17. The following conditions apply if jet trenching technology is used to install the cable:

- a. DWSF must operate the jet trencher in accordance with the operating conditions determined through jet trencher trials to maintain the suspension of in-situ sediments within the TSS limits;
- b. Midline buoys or alternative measures shall be employed to minimize sediment disturbance caused by cable sweep;
- c. If, during jet trencher installation of the cable, TSS concentrations exceed the established TSS limits, DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor (described in the conditions to the CECPN) shall be immediately notified and work shall cease. DWSF shall immediately implement one or more of the following measures after consultation with DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor: changing the rate of advancement of the jet trencher; modifying or varying hydraulic jetting pressures; or implementing other reasonable operational controls that may reduce suspension of in-situ sediments, but not in a manner that would materially delay the progress of work to complete the jet trencher installation procedure. Prior to re-commencement of work, DPS Staff, in consultation with NYSDEC, must authorize the jet-trencher operation mitigation measures; and
- d. During implementation of corrective actions, DPS Staff, in consultation with NYSDEC, may specify additional monitoring until compliance with Water Quality Standards is demonstrated. DWSF shall adhere to the additional monitoring requirements until resumption of routine monitoring is authorized by DPS Staff in consultation with NYSDEC.
- 18. The following conditions shall be applied to minimize sediment released into the water column during excavation and backfilling of the HDD exit pit:
 - a. The environmental monitor shall inspect all excavating and backfilling equipment prior to use and shall perform periodic inspections of all such equipment no less than once per week when in use. The DWSF shall demonstrate to the

environmental monitor that the equipment operator has sufficient control over the bucket operation so that the sediment re-suspension from bucket contact with the bottom and bucket over-filling is minimized.

- b. Excavated material is to be recovered to a barge and shall not be sidecasted. DWSF shall:
 - i. only use barges in good operating condition;
 - ii. not use deck barges, unless modified to allow no barge overflow and as approved by the Environmental Monitor and DPS Staff in consultation with NYSDEC;
 - iii. use barges or scows of solid hull construction or which are sealed;
 - iv. use a closed (*i.e.*, sealed) environmental (*e.g.*, clamshell) bucket with sealing gaskets or an overlapping sealed design at the jaws and seals or flaps positioned at locations of vent openings to minimize sediment suspension;
 - ensure that seals or flaps designed or installed at the jaws and locations of vent openings tightly cover these openings while the bucket is lifted through the water column and into the barge;
 - vi. equip the closed environmental (*e.g.*, clamshell) bucket with sensors to ensure complete closure of the bucket before lifting through the water;
 - vii. operate the bucket so as to control the rate of the descent and to maximize the depth of penetration without overfilling the bucket;
 - viii. control bucket retrieval rates to minimize turbidity;
 - ix. lower the bucket to the level of the barge gunwales prior to release of the load and place the excavated material deliberately and in a controlled manner;
 - x. suspend operations until any necessary repairs or replacements are made when a significant loss of water and visible sediments from the bucket is observed;
 - xi. avoid washing the gunwales of the scow except to the extent necessary to ensure the safety of workers;
 - xii. not overflow the barge; and

- xiii. DWSF shall allow a minimum twenty-four (24) hours of settlement prior to decanting barges. Decanting of barges may not commence until approved by DPS Staff, in consultation with NYSDEC.
- c. DWSF shall not use a dragline for excavation.
- d. DWSF shall not use airlift, controlled flow excavation, and/or suction dredging except in instances where bucket excavation would endanger the HDD borehole, the HDD conduit, the SFEC-NYS cable or installation equipment.
- e. DWSF may install permanent concrete mattresses, rock bags, or other alternative means of protection of the conduit and/or cable within the HDD exit pit, provided that DWSF shall cover such protection measures with three (3) feet of material excavated from the HDD exit pit or similar material from upland sources. Additional details regarding such cable protection measures shall be provided in the EM&CP. Prior to filing the EM&CP, DWSF shall consult with DPS, NYSDEC, and New York State Department of State ("NYSDOS") regarding cable protection measures.
- f. No later than three (3) months following the Commercial Operation Date, exclusive of the construction windows described herein, DWSF shall backfill the HDD exit pit to ensure that there is no discernible trough.
- g. During excavation and backfill of the HDD exit pit, DWSF shall provide to DPS Staff, NYSDEC, NYSDOS, the Town of East Hampton ("Town"), and the Trustees of the Freeholders and Commonalty of the Town of East Hampton ("Trustees"), weekly progress reports that demonstrate compliance with CECPN requirements and such other information as determined necessary based on consultation with DPS Staff, NYSDEC, and NYSDOS.
- 19. Following excavation of the SFEC-NYS HDD exit pit, DWSF shall displace the dredged material to a barge. If the material is not contaminated, and if the backfill of the HDD exit pit occurs prior to May 15th of the first year of construction that HDD work is commenced, the dredged material must be used as the top three feet of backfill for the HDD exit pit. If DWSF cannot backfill the HDD exit pit by such date, or if dredged material is contaminated, DWSF may use clean material of similar grain size to the dredged material,

and shall consult with NYSDEC, NYSDOS, and DPS Staff on the source of such fill prior to use. If material to be dredged is contaminated, prior to dredging, DWSF shall identify the final dredged material disposal location, including a letter from the permitted disposal facility verifying that they will accept the material. All contaminated material shall be handled in accordance with the Final Hazardous Waste and Petroleum Work Plan and Materials Management Plan submitted as part of the EM&CP. For any excavated material not used as backfill, the final material disposal location must be submitted to DPS Staff, the Town, Trustees, and NYSDEC at least thirty (30) days prior to disposal. Disposal of all material must comply with 6 NYCRR Part 360 *et seq*.

- 20. During pre-lay grapnel run operations, cable installation, excavation of the HDD exit pit, and backfill of the HDD exit pit, if any TSS standards concentrations are exceeded at the edge of the 1,500-foot mixing zone, work must immediately cease until corrective action is implemented. If corrective action does not restore compliance, that action shall cease until a solution acceptable to DPS Staff and NYSDEC is developed.
- 21. The environmental monitor(s) shall have stop work authority over aspects of the Project that could violate the terms of the WQC, CECPN, or the EM&CP.
- 22. Within four (4) months of completion of the excavation of the HDD exit pit, DWSF must submit a report summarizing the results of the excavation of the HDD exit pit, water quality monitoring, and excavated material management operations. The report shall include:
 - a. Location and extent of excavation;
 - b. Total amount of material excavated;
 - c. Ultimate placement location of excavated material;
 - d. Water quality monitoring results and corrective actions (as-needed) taken; and
 - e. Documentation of follow-up testing/observations.
- 23. Within four (4) months of the completion of SFEC-NYS cable installation, DWSF must file with the Secretary of the Public Service Commission an analysis comparing the actual

water quality monitoring results obtained during installation with any model predictions previously provided in support of the Project.

Certified by:

Date

Chief

Environmental Certification & Compliance Section Office of Electric, Gas and Water New York State Department of Public Service Three Empire State Plaza Albany, New York 12223

APPENDIX G

BENTHIC SAMPLING PLAN

APPENDIX G

BENTHIC SAMPLING PLAN WITHIN NEW YORK STATE WATERS

Introduction

The proposed South Fork Export Cable ("SFEC") that is planned to run through New York state waters ("SFEC-NYS") will provide power from the proposed offshore South Fork Wind Farm ("SFWF"; Figure 1). INSPIRE Environmental ("INSPIRE") has prepared this draft benthic sampling plan aimed at conducting benthic assessments in agreement with state and local agencies along the proposed SFEC-NYS corridor. Specifically, the objectives of these surveys are to characterize seafloor conditions, including the collection of geophysical and biological parameters, prior to and after the installation of the SFEC-NYS. The benthic sampling protocol, which is described in detail below, is designed to (1) establish baseline benthic conditions prior to cable installation within New York state waters, and (2) subsequently monitor post-installation benthic conditions to assess any effects resulting from installation activities and operation of the SFEC.

Sediment profile and plan view imaging ("SPI/PV") in combination with sediment grab samples will be used to meet the benthic assessment goals outlined above.

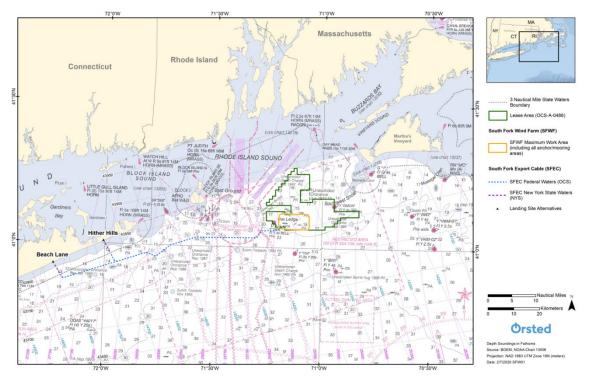


Figure 1. SFWF and SFEC project overview map. Beach Lane the preferred landing site and cable route.

SPI/PV is a widely accepted approach to assess the seafloor as it provides an integrated, multidimensional view of the benthic and geological condition of the seafloor sediments (Germano *et al.*, 2011). Since this method preserves the organism-sediment relationship, it can accurately characterize benthic epifauna and infauna communities in relation to the environmental context. Pairing SPI/PV images provides a comprehensive depiction of the seafloor that, through standardized analysis and interpretation (*e.g.* using the BOEM recommended Coastal and Marine Ecological Classification Standard ("CMECS"); FGDC, 2012; BOEM, 2019) allows for accurate comparisons to be made before and after installation activity. SPI/PV provides real-time results that can be assessed onboard during the surveys, which allows for rapid adaptive sampling to target locations of interest.

Specifically, these SPI/PV field surveys will:

- Identify dominant macrofaunal and macrofloral communities;
- Identify dominant geophysical substrate;
- Identify potentially sensitive seafloor habitats, defined as hard bottom habitat, commercial shellfish beds, submerged aquatic vegetation (SAV), and corals (as well as salt marsh, although this habitat is not relevant given the context of this work);
- Establish a pre-installation baseline to assess any post-installation changes in benthic habitat; and
- Develop an approach to quantify any substantial changes in benthic community composition associated with the proposed cable installation.

Previous SFEC surveys completed by INSPIRE in 2017 utilized the SPI/PV approach to assess the benthic environment along the full length of the proposed SFEC corridor, including 6 stations in New York state waters. This proposed benthic sampling plan will add to the data already collected in association with the SFEC project, but with a focus on the project activities and operations within New York state waters. In addition to SPI/PV collection, sediment grab samples will be collected for benthic community analysis ("BCA") and grain size analysis. Temperature and salinity profiles will be collected with a Conductivity, Temperature, Depth sensor ("CTD") at each SPI/PV station on each survey with particular attention to the temperature at the sediment water interface. Three separate surveys within New York state waters are scoped below, including a precable installation survey and two post-cable installation surveys.

Pre-cable Installation Baseline Benthic Sampling Survey

The pre-cable installation survey is expected to occur in 2021 and sampling will be conducted between August 1st and October 31st prior to commencement of cable installation activities in the area. This baseline survey will consist of an SPI/PV station every 1,000 feet along the proposed SFEC-NYS route. At each SPI/PV station, a minimum of three SPI/PV image replicates will be collected and analyzed. In order to identify and quantify infauna, a minimum of three (3) replicate grab samples will be collected at an interval of one every 2,000 feet along the centerline of the proposed SFEC-NYS route. Sediment subsamples will be collected from each grab sample for grain size analysis and the remaining sediment will be processed (*i.e.* sieved and preserved) onboard the vessel for BCA. A minimum of three (3) replicate grab samples will be analyzed for

BCA and grain size by standard Environmental Protection Agency approved protocols (Swartz, 2004). BCA results will be summarized with metrics for total abundance, total biomass, abundance of certain common species, species richness, and diversity indices (Shannon-Wiener, evenness). The variance estimated from these data will be used in a statistical power analysis for the comparison of these metrics between pre- and post-installation time periods. In the power analysis, the baseline mean, and the variance, would be used to estimate the minimum detectable difference (MDD) with 90% confidence and 80% power for a study design that utilizes one to three replicates. This MDD for the different study designs (*i.e.*, 1 to 3 replicates) will be compared to an ecologically meaningful difference to estimate the number of replicates required for analysis in the post-installation surveys. To identify what constitutes an ecologically meaningful difference for this habitat, available regional data will be mined to quantify natural spatial/temporal variability in the area. The Maher and Cerrato (2006) method for estimating sampling effort (i.e., number of replicates) will also be conducted. Results of the statistical power analysis and estimation of ecologically meaningful difference will be presented to NYS DEC for review prior to the postcable installation sampling surveys.

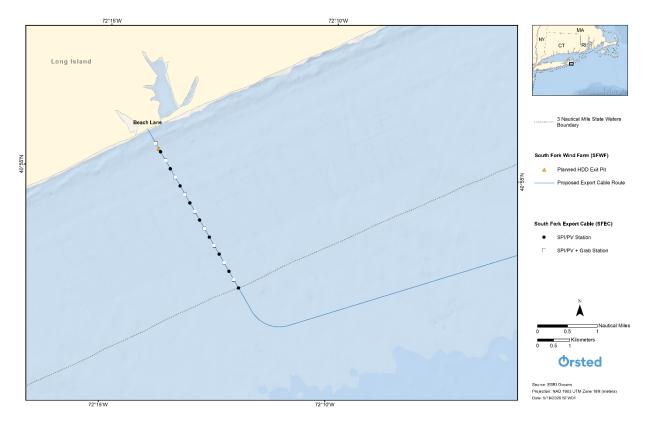


Figure 2. Targeted SPI/PV and grab sample locations within NY state waters along the proposed SFEC-NYS for the pre-cable installation baseline survey. This is a conceptual representation of the planned station locations for the landing site at Beach Lane.

Post-cable Installation Benthic Sampling Surveys (two surveys)

At least two field sampling events will occur after the proposed SFEC-NYS has been installed. These surveys will occur between August 1st and October 31st each year within 24 months of the SFWF project's commercial operational date. During the post-cable installation surveys, three stations will be sampled with SPI/PV in a transect perpendicular to the SFEC-NYS at the centerline with one (1) station as close as practicable to the centerline and one (1) station approximately one hundred (100) feet on either side at 1,000 foot intervals from the HDD exit pit offshore to the territorial limit of NYS waters. At each SPI/PV station a minimum of three replicate images shall be collected and analyzed. The SPI/PV sampling will be supplemented with two grab stations with one (1) station as close as practicable to the centerline and one (1) station approximately one hundred (100) feet on the eastern side of the cable with three (3) replicate grab samples collected at intervals of two thousand (2,000) feet (Figure 3). Grab samples will be sieved onboard, preserved and at least one replicate from each station analyzed for BCA by standard Environmental Protection Agency approved protocols (Swartz, 2004). Results from the BCA analysis of station replicates (the number will depend on the outcome and review of the power analysis and the Maher and Cerrato (2006) method) will be presented in the report. The results from the first postinstallation survey will be compared statistically with the pre-installation survey results and after the second post-installation survey comparison will be made between each survey.

Results of the pre-cable installation SPI/PV benthic sampling event and of the post-cable installation benthic sampling events shall be submitted to the Staffs of the New York State Department Public Service, New York State Department of State, and the New York State Department of Environmental Conservation in a final written report within six (6) months of the completion of each sampling event. The results of the BCA will be provided as a supplement of the report within nine (9) months of the completion of each sampling event.

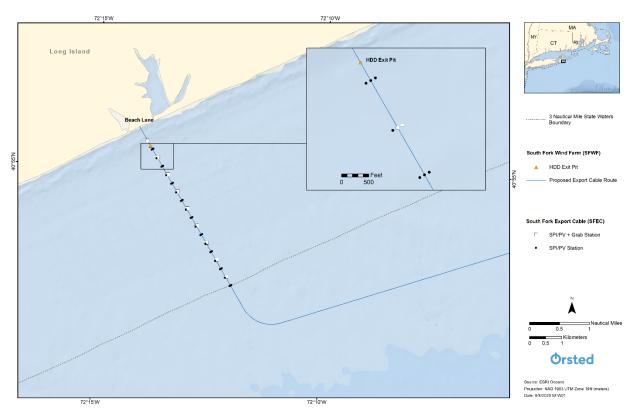


Figure 3. Targeted SPI/PV and grab sample locations within NY state waters along the proposed SFEC-NYS for the postinstallation surveys. This is a conceptual representation of the planned station locations for landing site at Beach Lane.

References

- Bureau of Ocean Energy Management ("BOEM") Office of Renewable Energy Programs. 2019. Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585. June 2019.
- FGDC (Federal Geographic Data Committee). 2012. Coastal and Marine Ecological Classification Standard. Federal Geographic Data Committee. FDGC-STD-018-2012. 337 pages.
- Germano, J.D., D.C. Rhoads, R.M. Valente, D. Carey, and M. Solan. 2011. The use of Sediment Profile Imaging (SPI) for environmental impact assessments and monitoring studies: Lessons learned from the past four decades. Oceanography and Marine Biology: An Annual Review 49: 247-310.
- Maher, N.P. and R.M. Cerrato. 2006. Using Species Richness to Estimate Sampling Effort, a report prepared for the Hudson River Estuary program, NYSDEC.

Swartz, R. 2004. Techniques for Sampling and Analyzing the Marine Macrobenthos. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/3-78/030. <u>https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=NHEERL&dirEntryID=4223</u> <u>9</u>

APPENDIX H

INITIAL HAZARDOUS WASTE AND PETROLEUM WORK PLAN

APPENDIX H

INITIAL HAZARDOUS WASTE AND PETROLEUM WORK PLAN

- 1. Deepwater Wind South Fork, LLC ("DWSF") shall prepare a Final Hazardous Waste and Petroleum Work Plan ("Plan") in conformance with the following requirements for inclusion in the Environmental Management and Construction Plan. The Plan must be a complete sampling plan for soil and groundwater for i) all areas where contact with groundwater during construction activities is anticipated, and ii) all areas where contamination is likely to be encountered, as more fully described below. The Plan must include sampling locations, number and depth of samples, methodologies, etc.
- All sampling activities must be performed in a manner consistent with NYSDEC guidance including, but not limited to, NYSDEC's Guidelines for Sampling and Analysis of 1,4-Dioxane and Per- and Polyfluoroalkyl Substances ("PFAS") and Technical Guidance for Site Investigation and Remediation ("DER-10") in effect at the time of sampling.
- 3. Soil sampling:
 - a. The following protocol applies for the entire proposed terrestrial cable route and at the substation:
 - i. In any areas with visibly contaminated material, soil sampling and analysis for the full Target Analyte List ("TAL")/Target Compound List ("TCL") must be conducted.
 - ii. In any areas where a fire occurred after 1940 (based on information obtained by the Applicant after performing due diligence of historical records consistent with standard industry practice), soil sampling and analysis for PFAS must be conducted.
 - b. The following protocol applies for the proposed terrestrial cable route along the Long Island Railroad right-of-way and at the substation:
 - i. Soil sampling and analysis for the full TAL/TCL must be conducted along the entire Long Island Railroad right-of-way and at the substation.
 - ii. Soil sampling must be conducted wherever the Applicant anticipates encountering groundwater during construction activities. Analysis must include the following contaminants that have been confirmed positive in the area and must be analyzed in a manner consistent with EPA Method 8151A for pesticides and with NYSDEC guidance for 1,4-dioxane:
 - a. DEET;
 - b. Dichlorvos;
 - c. Didealkylatrazine;
 - d. Imidachloprid;

- e. 1,4-dioxane;
- f. Aldicarb;
- g. Dacthal; and
- h. Simazine.

4. Groundwater Sampling:

- a. Where dewatering is anticipated along the SFEC-Onshore and SFEC-Interconnection Facility, the following protocols shall apply:
 - i. Groundwater samples shall be collected every 500 linear feet, and must include analysis for the following contaminants:
 - a. EPA Method 624 List plus MTBE and Naphthalene; analyzed in a manner consistent with EPA Method 624 plus MTBE and Naphthalene; and
 - b. 1,4-dioxane and PFAS.
- b. Where contact with groundwater during construction activities is anticipated for the SFEC-Onshore route along the Long Island Railroad right-of-way and at the SFEC-Interconnection Facility, the following protocols shall apply:
 - i. Groundwater sampling must be conducted for the following contaminants that have been confirmed positive in the area and must be analyzed in a manner consistent with EPA Method 8151A:
 - a. DEET;
 - b. Dichlorvos;
 - c. Didealkylatrazine;
 - d. Imidachloprid;
 - e. Aldicarb;
 - f. Dacthal; and
 - g. Simazine.

APPENDIX I

SUSPENDED SEDIMENT AND WATER QUALITY MONITORING PLAN SCOPE OF STUDY

Appendix I

SCOPE OF STUDY: SUSPENDED SEDIMENT / WATER QUALITY MONITORING PLAN

1.0 Introduction

Suspended sediment and water quality sampling and monitoring (hereinafter referred to as "water quality monitoring") will be conducted during pre-lay grapnel run activities, HDD exit pit excavation, and jet trencher operations, including jet trencher pre-installation trials and cable installation, as well as maintenance and decommissioning activities that involve disturbance of sediments, except minor sediment disturbing activities, including: (i) anchor sweep; (ii) anchoring; (iii) placement of jack-up barge; (iv) hand jetting; or (v) other activities as determined by DPS Staff, in consultation with NYSDEC.

Water quality monitoring will consist of collecting water samples for laboratory analysis of turbidity and total suspended solids ("TSS") at specified transects and real-time monitoring for turbidity. Jet trencher trials will be conducted in the portion of the route that is located within New York State ("NYS") waters. Trial runs shall evaluate operational modifications such as changing the rate of advancement of the jet trencher; modifying or varying hydraulic jetting pressures; or implementing other reasonable operational controls that may reduce suspension of *in-situ* sediments. Water quality monitoring will take place over the entire in-water cable route in NYS waters and for the full duration of the HDD exit pit excavation. A draft "Suspended Sediment and Water Quality Monitoring Plan" (hereinafter referred to as "the Plan") shall be provided to the New York State Department of Public Service ("DPS"), the New York State Department of State ("NYSDOS") at least forty-five days prior to filing the Environmental Management and Construction Plan ("EM&CP") for review and comment and will be consistent with the Scope of Study presented herein (Appendix I of the Joint Proposal).

2.0 General Sampling and Monitoring Procedures

The physical characteristics of the ambient background water conditions and the sediment re-suspended by the installation equipment will be determined through water sampling at selected transects and subsequent laboratory analysis. Sampling will be conducted down-current of the installation equipment and at an up-current control (i.e., background) station.

TSS and turbidity monitoring will use a similar up-current and down-current transect approach. Samples will be collected along transects approximately 1,500 feet up-current (or at a reasonably safe survey distance up-current and outside of the effects of cable installation equipment or HDD excavation equipment) and 1,500 feet down-current of the installation or excavation equipment. A combination of calibrated acoustic doppler current profiler (ADCP) and optical backscatter (OBS) instruments will be used to estimate TSS concentrations on selected transects based on the relationship between backscatter intensity and TSS concentration established during pre-installation trials. Companion water samples will be collected and analyzed

for TSS and turbidity. The laboratory derived TSS data will be used to calibrate the ADCP and OBS instrumentation during jet trencher trials of selected operating conditions and to provide a calibration check during cable installation.

An Environmental Monitor, as described in the Certificate Conditions, will be present for the duration of the in-water work that requires suspended sediment and water quality sampling and monitoring as described herein.

3.0 TSS Sampling and Monitoring – Cable Pre-Installation Trials

Cable pre-installation trials of the jet trencher equipment will be conducted to simulate cable installation and refine operating configurations. The Aquatic Environmental Monitor will be present during the trials. These trials will be conducted in actual field conditions within representative sections or areas proximate to the proposed underwater cable route in NYS waters. Trial areas will be identified in the Plan. Trials will include approximately 1,000 feet of jet trencher operations within sediment types identified to have the potential to result in the highest TSS concentrations and turbidity (*i.e.*, areas observed to have higher percentages of the finer grain sizes such as fine sands and silts). Trials will simulate actual cable installation to design burial depth. Suspended sediment (i.e., the sediment plume) associated with the trials will be monitored using the ADCP, OBS vertical profiles and water samples. Trials will allow the testing of equipment operation settings in order to minimize resuspension of sediments while achieving target burial depth. In addition, the trials will provide an opportunity to refine suspended sediment monitoring procedures including the calibration of acoustic, optical backscatter and water sampling equipment, as well as communication and safety protocols between the monitoring and installation crews. Procedures for TSS monitoring may be modified based on the findings of the preinstallation trial. Modifications may include adjustment of transect locations, number of water samples collected, methods for deploying equipment, and the procedures for correlating water samples with real-time instrument monitoring. Any modification to this monitoring plan must be coordinated with NYSDEC Staff and DPS Staff and then be submitted to DPS Staff for approval.

Water samples will be collected at multiple points in the tidal cycle to generate data required to develop curves for calibration of the ADCP and OBS sensors. The calibration will consist of a regression type analysis. Once calibration procedures have been completed, a calibration curve will be generated and provided to NYSDEC Staff and DPS Staff prior to the commencement of cable installation. The calibration curves will be updated based on data collected during the cable installation. Water samples collected for TSS analysis during trials will be sent to the laboratory, and Certificate Holder shall use commercially reasonable efforts to request the most expedited turnaround time available for laboratory samples for locations along the SFEC-NYS. Analytical results must be sent to DPS Staff and NYSDEC as soon as received from the laboratory, but no longer than 48 hours of receipt followed by a mailed hard copy. If the jet trencher trials demonstrate that the preferred operating conditions result in real-time TSS concentrations, measured 1,500 feet down-current of the jet trencher exceeding the TSS concentrations at an up-current background station by more than 100 mg/L, the Certificate Holder shall report such conditions to the Aquatic Environmental Monitor and work with the Staffs of DPS and NYSDEC to evaluate and implement modifications to operating conditions to further reduce *in-situ* sediment suspension. The Certificate Holder shall not utilize the jet trencher until they have successfully demonstrated their ability to achieve the TSS thresholds in the Certificate.

Review of this information by DPS and NYSDEC Staffs shall not unreasonably delay the commencement of installation of the underwater cable system.

4.0 TSS Monitoring – Cable Installation

TSS monitoring will be conducted in accordance with procedures established during jet trencher trials and will be modified as needed during installation operations. Water samples collected for TSS analysis will be sent to the laboratory, and Certificate Holder shall use commercially reasonable efforts to request the most expedited turnaround time available for laboratory samples for locations along the SFEC-NYS. TSS samples will not be batched since the results will be used during installation to update calibration curves. The calibration curves will be updated based on laboratory results on a daily basis.

Sediment resuspension during cable installation will be monitored along transects oriented perpendicular to the direction of current flow (*i.e.* the TSS plume). The Plan will include a schematic depicting where transects will be located and oriented in relation to the plume and trenching/dredging equipment, and will indicate the length and width of the transects. The characteristics of the suspended sediment plume created by jet trencher operations will be monitored in real-time using an ADCP and a CTD-OBS vertical profiler. Water samples for laboratory analysis of TSS will also be collected from a designated location at each transect. The ADCP and CTD-OBS instruments will be calibrated to measure suspended sediment concentrations during installation through quantitative relationships between the ADCP, CTD-OBS, and TSS established during Pre-Installation Trials and updated and refined throughout the installation monitoring. Monitoring of the suspended sediment plume will be conducted during varying tidal cycles.

Real-time monitoring will consist of ADCP measurements and CTD-OBS profile measurements taken along transects perpendicular to the direction of current flow (*i.e.*, the TSS plume). The first transect will be conducted approximately 1,500 feet up-current of the operating jet trencher (or at reasonable safe survey distance up-current and outside of the effects of the trencher) to measure ambient or background TSS conditions. The down-current transect will be conducted 1,500 feet down-current of the installation device.

Along each transect, the ADCP will provide horizontal and vertical profiles of current velocities and acoustic backscatter intensity at the point of measurement. At the conclusion of each transect a CTD-OBS vertical profiler system will be deployed and collected at the location where the highest acoustic backscatter intensity was observed by the ADCP. Water samples will also be collected at this location for laboratory measurement of TSS from approximately three depths (e.g. near-surface, mid-depth, and near bottom). Water samples will be shipped to a New York State Department of Health Environmental Laboratory Approval Program ("ELAP") certified laboratory for analysis of TSS concentration.

If, during underwater cable installation, (1) TSS concentrations monitored or measured at 1,500 feet down-current of the jet trencher exceed TSS concentrations at an up-current background station by more than 100 mg/L at the corresponding depth, then DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor shall be immediately notified. After consultation with DPS Staff, NYSDEC Staff, and the Aquatic Inspector, the Certificate Holder shall immediately employ

operational modifications such as: changing the rate of advancement of the jet trencher; modifying or varying hydraulic jetting pressures; or implementing other reasonable operational controls that may reduce suspension of *in-situ* sediments, but not in a manner that would materially delay the progress of work to complete the jet trencher installation procedure.

Nothing in this subsection is intended to require that cable installation methods be modified in a manner that would inhibit the cable installer from burying the cable to the depths specified.

5.0 Sampling and Monitoring Schedule

Suspended sediment and water quality field monitoring will be conducted for the duration of the cable installation in NYS waters, including during pre-lay grapnel run activities, HDD exit pit excavation and backfill and jet trencher operations (including jet trencher pre-installation trials and cable installation), as well as maintenance and decommissioning activities that involve disturbance of sediments, except minor sediment disturbing activities, including: (i) anchor sweep; (ii) anchoring; (iii) placement of jack-up barge; (iv) hand jetting; or (v) other activities as determined by DPS Staff, in consultation with NYSDEC:

Monitoring will include daily sampling during each tidal cycle. If sampling results indicate consistent compliance with the TSS standards, the Certificate Holder can submit a request in writing to DPS Staff and NYSDEC Staff to reduce the sampling frequency. Based on a review of the methodology and results of the installation monitoring program, a monitoring program for potential cable repair in the future will be developed.

6.0 Reporting

Results of the pre-installation trials will be summarized along with any findings or recommendations for procedures to be followed during cable installation. These results will be summarized and provided to the Staffs of NYSDEC, NYS Department of State (NYSDOS), and DPS prior to in-water installation of the cables. Once cable installation activities begin, available monitoring data results will be reported daily.

Within 4 months of the completion of cable installation, the Certificate Holder must file with the Secretary of the New York State Public Service Commission an analysis comparing the actual water quality monitoring results obtained during installation with any model predictions previously provided in support of the Project. This analysis will include a table and a quantitative analysis (statistical analysis if possible) comparing the actual and predicted results.

After completion of cable installation activities, a final report will be prepared that will include a description of procedures followed during the monitoring program, field data results, analytical testing data results, and accompanying QA/QC data. The final report will include the correlations between optical and acoustical backscatter data and corresponding TSS results from water samples. The report will also include a comparison of TSS results to permit-required thresholds and a comparison of water quality results to relevant water quality standards. The final report summarizing the results of the suspended sediment/water quality monitoring program will be filed with the Secretary of the New York State Public Service Commission within one year of completion of installation.

APPENDIX J

CONSTRUCTION NOISE CONTROL PLAN SCOPE OF WORK

Appendix J

CONSTRUCTION NOISE CONTROL PLAN

Deepwater Wind South Fork, LLC ("DWSF") shall prepare a Construction Noise Control Plan ("Plan") in conformance with the following requirements for inclusion in the Environmental Management and Construction Plan ("EM&CP"). The Plan shall:

- Mandate that Certificate Holder use best efforts to conduct construction activities in accordance with the Best Management Practices set forth below. No deviation from such Best Management Practices shall be acceptable unless DWSF demonstrates in the EM&CP that it would not be feasible to perform the construction activity in question in accordance with such Best Management Practices.
 - For work outside 7 A.M. to 7 P.M., replacing back-up alarms with strobes, as allowed within Occupational Safety and Health Administration regulations, to eliminate the impulsive sound;
 - Assuring that equipment is functioning properly and is equipped with mufflers and other noise-reducing features;
 - Locating especially noisy equipment as far from sensitive receptors as possible;
 - Using quieter construction equipment and methods, as feasible, such as smaller backhoes;
 - Using path noise control measures such as portable enclosures for small equipment (e.g., jackhammers and saws);
 - Limiting the periods of time when construction may occur is a common approach to minimizing impact. The time-of-day restrictions in the Town of East Hampton noise code (Chapter 185 of the East Hampton Town Code) shall be complied with, wherever feasible, to minimize impacts to residences; and
 - Maintaining strong communication and public outreach with adjacent neighbors is an important step in minimizing impact. Therefore, abutting owners and residents shall be provided information about the time and nature of construction activities to help minimize the effects of construction noise.
- Provide for use of a continuous construction noise monitoring terminal (the "noise monitor"), which shall be located in the vicinity of the horizontal directional drilling ("HDD") work location and which shall record noise levels between 8:30 P.M. and 7:00 A.M.
- Provide for use of a stationary noise monitor located at 104 Beach Lane, provided that the owner of 104 Beach Lane executes an agreement authorizing DWSF access to that property

for placement, calibration, maintenance and removal of the noise monitor and consenting to the use and distribution by DWSF of all data and recordings from such noise monitor for purposes of compliance with the Plan and applicable conditions of the Public Service Law Article VII certificate. If the owner of 104 Beach Lane does not authorize DWSF to locate a noise monitor at that property, or if the Environmental Monitor and the Town agree that the noise monitor at 104 Beach Lane is not providing an accurate representation of noise from the HDD drilling site, DWSF shall locate a noise monitor at a distance of approximately 130 feet from the perimeter construction noise wall. The specific location will be determined based on accessibility to the site and be in a location where the noise monitor can be safely secured.

- Require that a stationary noise monitoring terminal be placed at the western property line of the SFEC-Interconnection Facility parcel.
- The stationary noise monitor will meet Type I accuracy according to the American National • Standards Institute (ANSI) Standard 1.4, "Specification for Sound Level Meters". The stationary noise monitor will be Bruel and Kjaer Model 2245, Bruel and Kjaer Model 2250, Bruel and Kjaer Model 2270, Larson Davis Model 831, Larson Davis SoundTrack LxT, or an equivalent and will be capable of collecting overall A-weighted sound levels. The noise monitor will be capable of reporting results, including minimum (Lmin), maximum (Lmax), energy-average (Leq), and statistics (i.e., L10, L50, L90), for every 15-minute period during nighttime construction activities. The noise monitor will also be able to collect snapshot audio recordings of noise events that exceed a prescribed limit (e.g., 65 dBA) to aid in identifying the source of sound. The noise monitor will also be capable of sending noise monitoring results via text message or email to the Environmental Monitor and to a person designated by the Town to receive such results ("Town Designee") provided that such Town Designee is qualified to review the noise monitoring results. The name and qualifications of the Town Designee will be submitted to DWSF for approval. The Environmental Monitor shall be qualified to review the noise monitoring results and the Environmental Monitor's qualifications will be provided to the Town at the time such person's qualifications are submitted pursuant to the procedure set forth in Certificate Condition 116.
- Include an aerial map showing the location of all stationary noise monitoring equipment and locations of noise mitigation measures.
- Provide the material composition and height of noise mitigation barriers and ensure that the seams for such barriers overlap or are sealed. In addition, the barrier will at a minimum incorporate an acoustic barrier/absorber with an NRC Rating of 0.85.
- Ensure that any data and audio files collected by the stationary noise monitoring terminals will be remotely available to the Environmental Monitor and Town Designee for review.

- Ensure that, if the stationary noise monitor registers an exceedance of either of the noise limits established herein, the Environmental Monitor will use a handheld monitor to conduct noise measurements near the closest occupied residence at a distance no closer than 130 feet to the HDD drilling site. If the handheld monitor measurements exceed either of the noise limits established herein, the Environmental Monitor will employ measures to mitigate the noise levels to the established limits. DWSF will determine the closest occupied residence by asking residences on Beach Lane if they will be occupying their property during the period of any nighttime construction at the time such residences are notified that the nighttime construction will occur.
- Ensure that the Environmental Monitor shall be available to conduct handheld noise measurements at receptor locations to evaluate noise conditions, review data from the stationary noise monitor and determine if corrective measures (additional mitigation measures) are warranted for any nighttime construction work after 8:30 P.M.
- Identify reasonable and safe mitigation measures for each nighttime construction activity prior to construction.
- Identify the contents and procedures for communication with abutting owners/residents prior to the construction activities that will extend beyond 8:30 P.M. (*i.e.*, when activities will occur, activity types amd duration, and the phone number of the Environmental Monitor) to allow abutting owners/residents to issue complaints or ask questions about the construction activities.
- Specify that nighttime construction noise will not exceed 65 dBA (equivalent continuous sound level ("Leq")) or an L10 sound level (sound level exceeded only 10% of the time) of 70 dBA at the receptor. In the event a nighttime noise complaint is made, the Environmental Monitor shall conduct noise measurements at the location of the complaint for 15 minutes. If the Environmental Monitor determines that construction noise levels exceed either 65 dBA (Leq) or 70 dBA (L10), DWSF shall employ measures to mitigate the noise levels to the above limits or stop the activity until 7 A.M., unless operations must be continued (a) for safety reasons; (b) to protect life and/or property; and/or (c) to protect the structural integrity of the HDD bore hole, or to prevent damage to or loss of the bore hole provided, however, that, if noise levels during the activities identified in clauses (a), (b) or (c) exceed noise levels provided herein and lead to a noise complaint two times during the course of one week, all such nighttime activity shall be halted until more effective mitigation measures can be developed and implemented in consultation with the Environmental Monitor.
- Specify that construction activities extending beyond 8:30 PM shall be performed only Monday through Thursday except for operations that must be continued (a) for safety reasons; (b) to protect life and/or property; and/or (c) to protect the structural integrity of the HDD bore hole, or to prevent damage to or loss of the bore hole.

• Specify that, prior to any delivery between 7:00 PM and 7:00 AM of any components, supplies, or equipment for construction, maintenance, repair, replacement and/or decommissioning of DWSF's facilities, or restoration of the Easement Area, DWSF shall consult with the Town Supervisor and Superintendent of Highway as to the routes to be used for such deliveries, and no such deliveries shall take place using any roadways other than those designated by the Town Supervisor and Superintendent of Highway.

<u>APPENDIX K</u>

INVASIVE SPECIES CONTROL PLAN SPECIFICATIONS

Appendix K

INVASIVE SPECIES CONTROL AND MANAGEMENT PLAN SPECIFICATIONS

Deepwater Wind South Fork, LLC ("DWSF") shall prepare an Invasive Species Control and Management Plan ("ISCMP") in conformance with the following requirements for inclusion in the Environmental Management and Construction Plan ("EM&CP"). The goal of the ISCMP is to achieve no net increase of invasive species due to construction related activities. The ISMCP shall include the following elements:

- Baseline invasive species surveys and report.
- Construction Best Management Practices ("BMPs") including pre-construction invasive species control (if necessary);
- Post-Construction Monitoring;
- Adaptive Management Strategy; and
- Invasive Species Assessment Report.

Invasive Species (IS) Baseline Survey and Report

- A **Pre-Application Baseline Survey** shall be conducted during the growing season to serve as a baseline for preparation of the ISCMP.
- A **Pre-Construction Baseline Survey** shall be conducted during the growing season prior to the commencement of construction, but no more than 1 year before construction commences.
- The entire Limits of Disturbance ("LOD") in the right-of-way ("ROW") and off-ROW access roads shall be surveyed for IS.
- Surveys shall include qualitative observations for IS spread potential from adjacent properties and land use (e.g., IS infested adjoining property, private off-site access roads).
- Preferred survey protocol is for data to be collected in a format to upload into the statewide database *iMapInvasives*.
 - An existing mobile application is available to facilitate data collection.
 - Alternately, a custom ArcGIS collector application can be developed by NYSDEC.
 - Either collection mechanism allows for:
 - Point data collected in the field on GPS-enabled tablets or smartphones.
 - Confidentiality controls to restrict information distribution. This coding hides the data from public view; only visible to key state agency staff and PRISM coordinators focused on IS work with funding from the state. Those with access to this data have signed a non-disclosure agreement.
 - An alternative protocol may be proposed for acceptance by NYSDEC.
- an **Invasive Species Survey Baseline Report** to summarize the baseline surveys, identify pre-construction invasive species controls (if needed) and identify construction BMPs.

Construction Best Management Practices

Construction BMPs shall be implemented for all IS in all LOD, not just jurisdictional areas, and at a minimum shall include:

- Contractor/employee training;
- Inspection of construction materials;
- Minimizing ground disturbance in IS infested areas;
- Proper clearing and disposal practices (*e.g.*, cut and leave in infested area or dispose offsite in landfill-incinerator or approved disposal site);
- Equipment cleaning; and
- Restoration.

IS Propagation shall be prevented by either:

- Preparing ROW travel routes to prevent IS spread through contact with equipment/vehicles by any practical combination of matting, IS burial, clean fill cover or IS eradication;
- Providing cleaning stations for equipment/vehicles whenever leaving IS infested areas along ROW; and/or
- Other mutually agreeable practices.

Post-Construction Monitoring

A post-construction monitoring program ("MP") shall be conducted one year, three years, and five years after the Project has achieved Commercial Operation to collect information necessary to facilitate evaluation of the ISCMP's effectiveness. If, after 3 years, it has been determined that there is no net increase of invasive species and subsequently no adaptive management or control measures are required, the Certificate Holder can request the post-construction monitoring be discontinued. The post-construction monitoring will end when NYSDEC and NYSDPS approve the Facility Site as having reached "Satisfactory Management" or on the fifth anniversary of the Project's commercial operation, whichever occurs first. Satisfactory Management is defined as the elimination of the spread of invasive species (*i.e.*, a net zero change in the extent) within the Project LOD. Post-Construction Monitoring shall:

- Be conducted in all LOD, not just jurisdictional areas;
- Use the Baseline IS Survey Protocols;
- Utilize a survey protocol with data to be collected in a format for upload into the statewide database *iMapInvasives*; and Include post-construction monitoring reports submitted for DEC review and comment.

Adaptive Management Strategy

The ISCMP will include a generic Adaptive Management Strategy prepared in consultation with and accepted by NYSDEC which, at a minimum, includes the following elements:

- Development of a project specific list of Prohibited Invasive Species pursuant to 6 NYCRR Part 575 divided into two sub-lists for which management and control will be required:
 - Invasive Species of Special Concern (ISSC), being comprised of *Prohibited* IS known to be present in the project area and for which the NYSDEC has deemed control necessary such that there is no net increase. This list will be generated following results of pre-construction surveys and an analysis of regional threat, e.g. PRISM Tier rankings.
 - Development of a project specific list of Invasive Species of High Concern (ISHC), being those IS not present in the project area, but which if newly identified in postconstruction monitoring eradication is required. This list will be generated by the Department to include *Prohibited* IS with the highest management concern, e.g. Giant Hogweed.
- Management of "expansion":
 - ISSC that have expanded under the following terms must be controlled.
 - ISHC that have been newly identified must be eradicated.
 - In comparing progressive monitoring data of ISSC, expansion may be defined in terms of categorical jump in *iMapInvasives* size categories, described as follows:
 - *iMapInvasives* size categories:
 - New and distinct occurrence;
 - Up to 10 sq. feet;
 - Up to 0.5 acre;
 - Up to 1 acre; and
 - More than 1 acre.
- Discussion of adaptive management and control techniques of invasive species requiring control or eradication:
 - This should include consideration of IS phenology, control methodology (mechanical techniques, pesticide use, etc.), and control objectives.

Upon completion of the post-construction monitoring survey, a **Final Adaptive Management Strategy Plan** will be prepared in consultation with NYSDEC that incorporates the elements included in the generic Adaptive Management Strategy and the site-specific post construction data.

Invasive Species Assessment Report

- Require the Certificate Holder to file an **Invasive Species Assessment Report** with the Secretary at the conclusion of the MP that assesses whether the goal of no net increase of invasive species due to construction of the Project was achieved; and
- Specify that, if the **Invasive Species Assessment Report** concludes there was an increase in invasive species due to Project construction, the Certificate Holder, DPS Staff, and NYSDEC must meet to (i) consider why initial control measures were ineffective; and (ii) determine if remedial control measures would be feasible and effective without the need for other actions.

APPENDIX L

SPECIFICATIONS FOR NOISE MODELING AND TONAL ASSESSMENT

Appendix L

SPECIFICATIONS FOR COMPUTER NOISE MODELING AND TONALITY ASSESSMENT

Sound Modeling and Tonal Analysis

- a. Final computer noise modeling shall be conducted by using:
 - The ISO-9613-2 Sound Propagation Standard with no meteorological correction ("Cmet");
 - ii. All noise sources operating at maximum sound power levels;
 - iii. A maximum ground factor of G=0.5;
 - iv. A factor of G=0 for waterbodies, if any;
 - v. A height evaluation of 1.5 meters for all receptors;
 - vi. A temperature of 10 degrees Celsius and 70% Relative Humidity; and
 - vii. At a minimum, the sound results (Broadband, dBA, and at the full-octave frequency bands from 31.5 Hz up to 8,000 Hz (dBA will be reported.
- b. Sound modeling results shall and conform to the following:
 - i. Results shall be included in a report that shall include among others, sound results in tabular and graphical format.
 - Sound contours shall be legible and rendered above a map that shall include all sensitive sound receptors and boundary lines; noise sources within the substation (including transformers, reactors, HVAC equipment, and other noise sources, if any);
 - iii. Sound contours shall be rendered at a minimum, until the 30 dBA noise contour is reached, in 1 dBA steps.
 - iv. Full-size, hard copy maps (22"x34") in 1:12,000 scale shall be submitted to DPS Staff.
 - v. GIS files used for the final computer noise modeling, including noise source and receptor locations and heights, topography, final grading, boundary line, and participating status shall be forwarded to DPS Staff in digital media.
 - vi. Final computer noise modeling files shall be delivered to DPS Staff by digital means.
- c. For noise sources, other than substation transformer(s), if any, and for non-participating receptors exceeding a sound level of 35 dBA Leq as modeled above, a prominent tone analysis will be presented subject to the following requirements:
 - i. The "prominent discrete tone" constant level differences (Kt) in ANSI S12.9-2013/Part 3 Annex B, section B.1, will be used as follows; 15 dB in low-frequency one-third-octave bands (from 25 up to 125 Hz); 8 dB in middle-

frequency one-third-octave bands (from 160 up to 400 Hz); and, 5 dB in high-frequency one-third-octave bands (from 500 up to 10,000 Hz).

- ii. The analysis will use one-third octave band information from the manufacturers (from 20 Hz up to 10,000 Hz, if available). If no manufacturer's information is available, sound information can be based on field test(s). The field test(s) will report at a minimum sound pressure and sound power levels and clear explanations about how the test was conducted and Sound Power Levels were obtained.
- iii. For the purposes of tonality assessment, calculations will include the following Attenuations as specified in ANSI/ASA S12.62/ISO 9613-2: 1996 (MOD).
 Acoustics – Attenuation of Sound During Propagation Outdoors-Part 2: General Method of Calculation:
 - a. Attenuation due to geometrical divergence (Adiv),¹
 - b. Atmospheric absorption for a temperature of 10 degrees Celsius and 70% Relative Humidity (Aatm),²
 - c. Attenuation to the ground effect $(Agr^{3,4})$,
 - d. Attenuation due to a barrier (Abar) if any,⁵
 - e. No miscellaneous attenuations (Amisc) will be included.
- iv. If no manufacturer's information or pre-construction field tests are available, sounds will be assumed to be tonal and the broadband overall (dBA) noise level at the evaluated position as determined with computer noise modeling shall be increased by 5 dBA for evaluation of compliance with applicable Conditions of the Order.

⁴ Calculations will use the maximum height of the equipment as the height of the noise source.

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

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

³ The same full-octave band attenuations as indicated in Table 3 of ANSI S12.62, can be used for the three adjacent one-third octave bands corresponding to each full-octave band.

⁵ Should the analysis show that a barrier will be needed, the barrier will be implemented before the start date of operations.