



THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

OFFICE OF COASTAL ZONE MANAGEMENT

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July 15, 2021

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project– Bureau of Ocean Energy Management (BOEM) Action, U.S. Army Corps of Engineers (USACE) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the proposed project to build, operate, and decommission 12 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters.

To inform our federal consistency review, CZM reviewed the Construction and Operations Plan, Draft Environmental Impact Statement (DEIS), and the Preliminary Final Environmental Impact Statement (PFIES) developed pursuant to the National Environmental Policy Act; and, pursuant to the Coastal Zone Management Act, the federal consistency certification, the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404/Section 10 permit application, and lease/easement/right-of-way application to BOEM under the Outer Continental Shelf Lands Act. Over the course of the state and federal review process, CZM has received the data and information necessary to make a consistency determination. In our role as a designated cooperating agency, CZM will continue to review and comment on future BOEM submissions including the Final Environmental Impact Statement (FEIS), scheduled for release in August 2021.



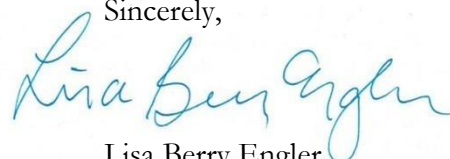
In the applicant's mitigation proposal, South Fork Wind, LLC acknowledged the need for mitigation to impacted fishermen to meet the CZM's enforceable policy under Ports and Harbors Policy #4. CZM cannot require monetary compensation for mitigation as part of CZMA federal consistency. Therefore, CZM could not object for failure to pay a compensation amount or include a condition that an applicant must pay a compensation amount. However, CZM and South Fork Wind, LLC can mutually agree upon a monetary compensation package to meet the applicable enforceable policies. As a result of extensive mitigation negotiations conducted between CZM, the Massachusetts Division of Marine Fisheries, the EEA Fisheries Working Group on Offshore Wind ("FWG"), key stakeholders, and South Fork Wind, LLC from January 2021 through July 2021, South Fork Wind, LLC has entered into an agreement with the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) to provide funds totaling \$2,600,000 over the life of the project. The agreement includes the Massachusetts Fisheries Direct Compensation Program, the Coastal Community Fund, and the Navigation Enhancement and Training Program. The Massachusetts Fisheries Direct Compensation Program (\$2,100,000) will be used to offset economic impacts to Massachusetts commercial and charter/for hire fishing and is intended for claims of direct impact to compensate Massachusetts fishermen for loss of access or reduction of harvest. The Coastal Community Fund (\$200,000) will provide funding for initiatives, research, and projects that will support the co-existence of the fishing and wind sectors in the offshore environment. The Navigation Enhancement and Training Program (\$300,000) will support upgrades to navigation equipment, professional training opportunities, experiential learning, and other initiatives to further a positive co-existence of the fishing and offshore wind industries. The Agreement Regarding the Establishment and Funding of the Massachusetts Fisheries Direct Compensation Program and Coastal Community Fund and Navigation Enhancement and Training Program is attached.

Based on our review, all aspects of the project, including those project elements located in federal waters, and the project's effects on resources and uses in the Massachusetts coastal zone, we concur with the certification that the activity as proposed is consistent with the CZM enforceable program policies.

If the above-referenced project is modified in any manner, including any changes resulting from permit, license or certification revisions, including those ensuing from an appeal, or the project is noted to be having effects on coastal resources or uses that are different than originally proposed, it is incumbent upon the proponent to notify CZM, submit an explanation of the nature of the change pursuant to 15 CFR 930, and submit any modified state permits, licenses, or certifications. CZM will use this information to determine if further federal consistency review is required.

Thank you for your cooperation with CZM.

Sincerely,



Lisa Berry Engler
Director

RLB/pb
CZM# 18265

cc:

Mary Boatman, Bureau of Ocean and Energy Management, US Department of the Interior

Michelle Morin, Bureau of Ocean and Energy Management, US Department of the Interior

Brian Krevor, Bureau of Ocean and Energy Management, US Department of the Interior

Christine Jacek, U.S. Army Corps of Engineers

Dennis Deziel, US Environmental Protection Agency

Tim Timmermann, U.S. Environmental Protection Agency

Chris Boelke, National Marine Fisheries Service, National Oceanic and Atmospheric Administration

Susan Tuxbury, National Marine Fisheries Service, National Oceanic and Atmospheric Administration

Wendi Weber, US Fish & Wildlife Service

Kathleen Theoharides, MA Executive Office of Energy and Environmental Affairs

Stephanie Moura, MA Department of Environmental Protection

Millie Garcia-Serrano, MA Department of Environmental Protection

David Wong, MA Department of Environmental Protection

Dan McKiernan, MA Division of Marine Fisheries

Matthew Nelson, Energy Facilities Siting Board

**AGREEMENT
REGARDING THE ESTABLISHMENT AND FUNDING OF THE
MASSACHUSETTS FISHERIES DIRECT COMPENSATION PROGRAM,
COASTAL COMMUNITY FUND
AND
NAVIGATIONAL ENHANCEMENT AND TRAINING PROGRAM**

This Agreement Regarding the Establishment and Funding of the Massachusetts Fisheries Direct Compensation Program, Coastal Community Fund, and Navigational Enhancement and Training Program (the “**Agreement**”), dated as of July 14, 2021, is made between South Fork Wind, LLC (“**SFW**”) and the Massachusetts Executive Office of Energy and Environmental Affairs (“**EEA**”) (together, the “**Parties**”).

Recitals

WHEREAS, SFW holds a federal Commercial Lease of Submerged Lands for Renewable Energy Development with the U.S. Bureau of Ocean Energy Management (“**BOEM**”), OCS-A-0517 (the “**Lease**”), located in federal waters approximately 19 miles southeast of Block Island, Rhode Island, and 35 miles east of Montauk Point, New York;

WHEREAS, the Lease grants SFW the exclusive right to submit to BOEM a Construction and Operations Plan (“**COP**”) for a wind energy project and to conduct the activities described in the COP if approved by BOEM and other Federal agencies having jurisdiction over such project and/or activities;

WHEREAS, on June 29, 2018, SFW submitted a COP to BOEM proposing to construct up to fifteen (15) wind turbine generators with a nameplate capacity of 6 to 12 MW per turbine, submarine cables between the wind turbine generators, an offshore substation, and an alternating current electric cable (“**Export Cable**”) that will interconnect to the existing mainland electric grid in East Hampton, New York (collectively, the “**Project**”);

WHEREAS, the Coastal Zone Management Act, 16 U.S.C. § 1451 *et seq.*, as amended, requires that an applicant for a federal license or permit activity in or outside the coastal zone or an outer continental shelf plan affecting any land or water use or natural resource of a state coastal zone certify that the proposed activities comply with the enforceable policies of the state’s approved program and that such activities will be conducted in a manner consistent with the program;

WHEREAS, for projects located outside a state’s coastal zone, the state may formally request review from the Office for Coastal Management of the National Oceanic and Atmospheric Administration;

WHEREAS, in the absence of a formal request for review, SFW voluntarily agreed to federal consistency review of the Project by the Massachusetts Office of Coastal Zone Management (“**CZM**”) and filed a consistency certification for the Project on November 19, 2018, certifying that the proposed activities comply with the enforceable policies of the Massachusetts Coastal Program Policies (the “**Coastal Policies**”) and will be conducted in a manner consistent with the enforceable policies of the Coastal Policies;

WHEREAS, the Coastal Policies seek to avoid, minimize, and mitigate impacts to coastal resources and uses of the Commonwealth including areas of high concentrations of existing water-dependent uses, which include commercial and charter/for hire fishing, to the extent practicable;

WHEREAS, portions of the Project area are fished by Massachusetts commercial and charter/for hire fishermen;

WHEREAS, SFW acknowledges the importance of open and regular communication with members of the Massachusetts commercial and for-hire/charter fishing industries, as shown for example with its port hours

and fisheries representatives and fisheries liaisons, in order to hear and understand questions or concerns with the purpose of supporting the sustainable development of SFW and the overall future coexistence of these two industries;

WHEREAS, SFW has modified its Project to avoid and minimize impacts to Massachusetts fishermen, including by adopting uniform 1 nautical mile by 1 nautical mile spacing between wind turbine foundations, reducing the number of wind turbine foundations to no more than twelve (12), adopting a fisheries monitoring plan focused on commercial and recreationally important species in the Project area, micro-siting wind turbine foundations to minimize impacts to sensitive benthic habitats, adopting noise reduction systems during pile driving of wind turbine foundations to reduce impacts to fish populations, developing a gear loss claims process to compensate fishermen for lost or damaged gear and associated business interruptions costs, adjusting the Export Cable route to avoid areas of concern to fishermen, and incorporating automatic identification systems, enhanced cellular, and very-high frequency coverage into the wind turbine generators to enhance safe navigation;

WHEREAS, on May 27, 2021 and subsequently as amended, SFW submitted to CZM a mitigation proposal for potential adverse impacts to Massachusetts commercial and charter/for hire fisheries from the Project based on a report by the Woods Hole Oceanographic Institution on the economic impact of the Project on Massachusetts fisheries (draft submitted March 3, 2021 and as amended June 10, 2021), a Massachusetts Fisheries Direct Compensation Program Proposed Term Sheet and a Coastal Community Fund Proposed Term Sheet. The Parties acknowledge that SFW provided CZM a draft Fisheries Direct Compensation Program Term Sheet and a draft Coastal Community Fund Proposed Term Sheet on March 11, 2021 and a description of Project modifications on March 17, 2021;

WHEREAS, from approximately March through July 2021, SFW engaged in negotiations with CZM resulting in certain amendments to the proposed term sheets, as reflected in the final term sheets, attached hereto as Exhibit A-1 (Exhibit A-1 referred to as the “**Direct Compensation Program Term Sheet**”), and Exhibit B-1 (Exhibit B-1 referred to as the “**Coastal Community Fund Term Sheet**”);

WHEREAS, these negotiations included the solicitation and receipt of feedback from the Massachusetts Fisheries Working Group on Offshore Wind Energy;

WHEREAS, SFW offered a final compensatory mitigation to CZM of Two Million Six Hundred Thousand and 00/100 Dollars (\$2,600,000) to cover any and all potential adverse impacts resulting from the Project so as to satisfy any and all applicable enforceable policies of the Coastal Policies. This final compensatory mitigation is for only Massachusetts fishermen;

WHEREAS, the Parties recognize and acknowledge that each proposed project that comes before CZM stands alone and must be evaluated on its own merits, and that this compensatory mitigation does not provide a precedent for future offshore wind projects;

WHEREAS, although the Office for Coastal Management of the National Oceanic and Atmospheric Administration has stated that compensation cannot be required as a means of complying with Coastal Policies and achieving federal consistency concurrence, the Parties may agree to compensation, and SFW agrees to establish a two-part mitigation program to compensate Massachusetts fishermen for reasonably foreseeable adverse impacts not fully mitigated by the Project modifications within the Project area as outlined in the Direct Compensation Program Term Sheet and Coastal Community Fund Term Sheet;

WHEREAS, pursuant to the compensation program, SFW will establish the Construction and Operation Mitigation Fund and the Decommissioning Fund in accordance with the Direct Compensation Program Term Sheet (the Construction Operation Mitigation Fund and the Decommissioning Fund (as defined in Paragraph 4 below) shall be referred to together as the “**Direct Compensation Program**”);

WHEREAS, pursuant to the compensation program, SFW will establish a Coastal Community Fund (the “**Coastal Community Fund**”) in accordance with the Coastal Community Fund Term Sheet;

WHEREAS, pursuant to the compensation program, SFW will establish the Massachusetts Navigational Enhancement and Training Program (the “**Navigational Enhancement and Training Program**”) in accordance with the Navigational Enhancement and Training Term Sheet attached hereto as Exhibit C-1 (Exhibit C-1 referred to as the “**Navigational Enhancement and Training Program Term Sheet**”); and

WHEREAS, CZM will reference the terms of this Agreement in its federal consistency concurrence letter;

NOW THEREFORE, the Parties agree as follows:

SFW Compensatory Mitigation

1. SFW shall make one lump sum payment of Two Million Three Hundred Thousand and 00/100 Dollars (\$2,300,000), as compensatory mitigation as part of its overall Project modifications and mitigations to achieve consistency with the enforceable policies of the Coastal Policies. SFW shall also make available up to Three Hundred Thousand and 00/100 Dollars (\$300,000) (the “**Navigational Enhancement and Training Funding**”) to fund claims when made through the Navigational Enhancement and Training Program, as compensatory mitigation as part of its overall Project modifications and mitigations to achieve consistency with the enforceable policies of the Coastal Policies. The Parties agree and acknowledge that the combined sum of Two Million Six Hundred Thousand and 00/100 Dollars (\$2,600,000) reflects the Parties’ recognition that the Project is one of several offshore wind development projects proposed for the Massachusetts/Rhode Island Wind Energy Area and that each project must be evaluated on its own merits and that this compensatory mitigation does not provide a precedent for future offshore wind projects. Two Million Six Hundred Thousand and 00/100 Dollars (\$2,600,000) shall be SFW’s only financial contribution to mitigation in Massachusetts (the “**Compensatory Mitigation**”).
2. A national bank, federal savings bank or federal savings and loan association, lawfully doing business within the Commonwealth, or a trust company, savings bank or cooperative bank chartered under the laws of the Commonwealth of Massachusetts (the “**Trust Company**”) shall serve as custodial administrator of the Compensatory Mitigation.
3. Within thirty (30) days after the receipt of all final federal, state and local permits, authorizations, concurrences and approvals necessary to construct and operate the Project as described in the approved COP, SFW shall: (a) provide the payment of Two Million Three Hundred Thousand and 00/100 Dollars (\$2,300,000) of the Compensatory Mitigation to the Trust Company to be held in an escrow account (the “**Escrow Account**”) substantially in accordance with the terms of and in the form of the Compensation Mitigation Escrow Agreement attached hereto as Exhibit A-2 (the “**Escrow Agreement**”) with such changes as requested/required by the Trust Company, and (b) make available Three Hundred Thousand and 00/100 Dollars (\$300,000) of the Compensatory Mitigation for the Navigational Enhancement and Training Funding to be disbursed by SFW upon receipt of claims pursuant to the Navigational Enhancement and Training Program Term Sheet. The Compensatory Mitigation shall be ear-marked as set forth in Paragraph 4 below.
4. The Compensatory Mitigation shall be ear-marked as follows:
 - i. The Direct Compensation Program
 - a) One Million Nine Hundred Thousand and 00/100 (\$1,900,000) for compensation for Massachusetts commercial and for-hire charter fishing operations for mitigation of direct losses/impacts arising from the construction and operation of the Project and unforeseen, extraordinary events that lead to later business interruption (“**Construction and Operation Mitigation Fund**”). The Trust Company shall be provided with the following or similar investment guidelines and directed to manage

the funds accordingly, with the overall investment goal of achieving an average annual rate of return of no less than 3 percent:

- a. 30 percent U.S. Treasuries with a 30-year Treasury yield of no less than 2.0 percent;
 - b. 40 percent Municipal bonds with a bond yield of no less than 2.5 percent; and
 - c. 30 percent investment-grade Corporate bonds with a bond yield of no less than 4.0 percent;
 - b) Two Hundred Thousand and 00/100 (\$200,000) for direct losses/impacts caused by decommissioning (“**Decommissioning Fund**”). The Trust Company shall be provided with the following or similar investment guidelines and directed to manage the funds accordingly, with the overall investment goal of achieving an average annual rate of return of no less than 4 percent:
 - a. 15 percent U.S. Treasuries with a 30-year Treasury yield of no less than 2.0 percent;
 - b. 15 percent Municipal bonds with a bond yield of no less than 2.5 percent; and
 - c. 60 percent investment-grade Corporate bonds with a bond yield of no less than 4.5 percent;
 - ii. Two Hundred Thousand and 00/100 (\$200,000) or the Coastal Community Fund, which the Trust Company shall disburse at the direction of the Director of the Division of Marine Fisheries (the “**Director**”) pursuant to the provisions herein and in accordance with the Escrow Agreement. The Trust Company shall be provided with the following or similar investment guidelines and directed to manage the funds accordingly, with the overall investment goal of achieving an average annual rate of return of no less than 3 percent:
 - a) 30 percent U.S. Treasuries with a 30-year Treasury yield of no less than 2.0 percent;
 - b) 40 percent Municipal bonds with a bond yield of no less than 2.5 percent; and
 - c) 30 percent investment-grade Corporate bonds with a bond yield of no less than 4.0 percent; and
 - iii. Three Hundred Thousand and 00/100 Dollars (\$300,000) will be available for the Navigational Enhancement and Training Program, and SFW shall administer such Program in accordance with the provisions the Navigational Enhancement Training Program Term Sheet.
5. After five (5) years of Project operations, the Technical Assistance Provider (“**TAP**”) will evaluate the claims history and fees and costs of the Direct Compensation Program against the Compensatory Mitigation in the Escrow Account and, based on historical actual claims paid and associated fees and costs, make reasonable projections regarding future claims and associated fees and costs. To be clear, associated fees and costs shall include, for example, those associated with the TAP, escrow agent and any other professionals including trust/investment management. The TAP will use his/her best professional judgment as to whether the balance of the Compensatory Mitigation in the Escrow Account exceeds the amounts necessary to pay anticipated claims and fees and costs. The TAP also will use his/her best professional judgment as to whether Decommissioning Fund earmark is sufficient based on the claims history and fees and costs of the Direct Compensation Program during the construction period and may adjust the Decommissioning Fund earmark

based on his/her best professional judgment. If the TAP determines that the balance of the Compensatory Mitigation in the Escrow Account exceeds an amount deemed necessary to pay future claims and associated fees and costs, the TAP may transfer excess funds in an amount to be determined by the TAP to the Coastal Community Fund to be used in accordance with the purposes of the Coastal Community Fund as specified in the Coastal Community Fund Term Sheet and Fund Agreement (the Fund Agreement is to be prepared after the date hereof) (“**Fund Agreement**”). The TAP shall conduct this assessment every five (5) years thereafter and transfer funds accordingly. The TAP is not obligated to transfer any funds he/she reasonably believes will be necessary to satisfy future claims, fees and costs. Any Compensatory Mitigation in the Escrow Account remaining after payment of all allowed claims or twelve (12) months after Project decommissioning, whichever is later, shall be deemed ear-marked to the Coastal Community Fund to be used in accordance with the purposes of the Coastal Community Fund as specified in the Coastal Community Fund Term Sheet.

6. The Trust Company and TAP selected by SFW shall be subject to the approval of EEA, which approval shall not be unreasonably withheld, conditioned or delayed. The TAP shall be a person, institution or business entity with significant knowledge of the fishing industry, including the commercial fishing industry, in New England.
7. Upon selection of the Trust Company and TAP, SFW shall have no further involvement whatsoever with respect to the Direct Compensation Program or Coastal Community Fund; provided, however, that this paragraph shall not operate as a limitation on SFW’s right to enforce this Agreement, including any limitations on the Coastal Community Fund’s expenditures.

Establishment of the Direct Compensation Program

8. The purpose of the Direct Compensation Program is to provide financial compensation to eligible fishermen for mitigating direct losses/impacts to commercial and for-hire (charter) fishing from the construction, operation and decommissioning of the Project.
9. The Direct Compensation Program will be established in accordance with the Direct Compensation Program Term Sheet. The TAP selected pursuant to the Direct Compensation Program Term Sheet shall have authority and discretion to establish such additional terms and conditions for the Direct Compensation Program as are required to fulfill its purpose so long as any such additional terms and conditions are consistent with the Direct Compensation Program Term Sheet, Model Eligibility Form substantially in the form attached as Exhibit A-3, Model Claims Form substantially in the form attached as Exhibit A-4, and Model Form of Release of Liability substantially in the form attached as Exhibit A-5. Any ambiguity between the Direct Compensation Program Term Sheet and this Agreement shall be resolved by the TAP in favor of this Agreement, which embodies the final intent of the Parties with respect to the Direct Compensation Program.
10. Applicants shall apply for eligibility for the Direct Compensation Program by submitting an Eligibility Form established by the TAP in substantially in the form attached as Exhibit A-3. The eligibility period will begin prior to the claims and payment period and will last for a reasonable period of time and, in no event less than six (6) months. The TAP will approve or reject eligibility submittals during the eligibility period. Eligibility will be based on historic fishing in the Project area and a direct impact or direct loss caused by the Project.
11. Once the eligibility period closes, new applicants may enter the Direct Compensation Program and evidence eligibility only at: (a) the time of decommissioning; or (b) during operations if and only if an unforeseen, extraordinary event occurs that leads to business interruptions and direct impacts/losses caused by the Project (“**Operations Interruptions Event**”). In any such case, the eligibility period will re-open for a reasonable period. New applicants identified during this period may seek compensation from the ear-marks set aside for such contingencies as identified in Paragraph 4 herein.
12. The TAP will establish a claims review and decision process in accordance with the Direct Compensation

Program Term Sheet. Applicants shall apply for compensation from the Direct Compensation Program for one of the three payment phases of construction and operations, decommissioning, and/or Operations Interruptions Events by submitting a claims form substantially in the form of the Model Claims Form attached as Exhibit A-4. The TAP will approve or reject claims submittals during the claims period.

13. All confidential, non-public or proprietary information (the “**Information**”) provided by applicants to the TAP will be kept confidential unless disclosure is required by law, rule, regulation, regulatory authority or pursuant to a legal or similar process. In such an event, the TAP shall disclose only that portion of the Information that it determines it is legally required to disclose and shall request confidential treatment of any Information so disclosed. Notwithstanding anything in this Paragraph to the contrary, information pertaining to final award amounts, along with names and other identifying information, will be provided to the Division of Marine Fisheries and made a public record. Information pertaining to final award amounts, along with address and taxpayer identification numbers necessary to process payments, will be provided to the escrow agent for the purpose of issuing payments.
14. In accordance with the Direct Compensation Fund Term Sheet, the amount of payment will be based on: the eligible claimant’s historical activity in the Project area such that applicants with a higher value of historical landings in the Project area will receive higher payment than those that have a lower value of historical landings; the number of eligible applicants; and preservation of funds in the Escrow Account for future applicants.
15. In consideration for receipt of funds from the Direct Compensation Program, applicants simultaneously shall execute a Form of Release of Liability substantially in the form attached as Exhibit A-5 (each a “**Release**”), and each executed Release shall be promptly forwarded to SFW at the address set forth in Paragraph 37.
16. The Direct Compensation Program is not intended to address or provide compensation for any claims of lost or damaged gear or related economic loss. Any such claim submitted to the Direct Compensation Program shall be immediately rejected by the TAP and referred to Orsted under the Orsted Fishing Gear Conflict Prevention and Claim Procedure, which is publicly available through Orsted’s Mariners’ website.

Establishment of the Coastal Community Fund

17. The Coastal Community Fund shall be established as an ear-marked portion of the Escrow Account, with funds to be released by the Escrow Agent upon the written instructions of the Director.
18. SFW will provide initial funding for the Coastal Community Fund pursuant to the Compensatory Mitigation ear-mark set forth in Paragraph 4.
19. The Fund shall be used to fund only projects that satisfy the Coastal Community Fund’s objectives, which explicitly do not include funding for litigation, regulatory work, or petitioning activities, and that are approved by the Director after consultation with the SFW Coastal Community Advisory Council (“**Advisory Council**”), including for support for Massachusetts companies that support Massachusetts fishing interests.
20. The members of the Advisory Council shall be appointed by the Commissioner of the Massachusetts Department of Fish and Game with input from CZM and consist of at least nine (9) members including two (2) members of the Marine Fisheries Advisory Commission, the Executive Director of the New Bedford Port Authority (or his or her designee) and six (6) members of the public at large, all of whom shall have specific expertise and background in the conduct and management of marine fisheries in Southern New England. Members shall include one representative of the lobster trap fishery, one representative of the mobile gear fishery, one representative of a Commercial Fishery Advocacy Organization, one representative of the for-hire hook-and-line fishery, and one representative of wholesale seafood dealers. To the extent practicable, such representatives shall be owners or operators of, or be employed by, business associations located within

the ports where impacts from the Project may occur, such as New Bedford/Fairhaven, Westport, Chatham, and Menemsha. The Advisory Committee members shall serve for terms of three (3) years. Any member shall be eligible for reappointment.

21. SFW will have no rights or role with respect to the Advisory Council's management of the Fund or approval of project funding requests by the Director; provided, however, that this paragraph shall not operate as a limitation on SFW's right to enforce this Agreement, including any limitations on the Coastal Community Fund's expenditures.
22. The Director may condition the approval of any project funding on the execution of a grant agreement that provides reporting to the Director and the Advisory Council and transparency to the public with respect to the spending of funds.

Navigational Enhancement and Training Funding

23. The Navigational Enhancement and Training Funding shall be established and operated by SFW independent of EEA, the Director, the TAP and the Escrow Agent.
24. SFW will make available funding for the Navigational Enhancement and Training Funding pursuant to the Compensatory Mitigation ear-mark set forth in Paragraphs 3 and 4.
25. The Navigational Enhancement and Training Fund shall be used solely to pay approved vouchers under the Navigational Enhancement and Training Program as described in the Navigational Enhancement and Training Program Term Sheet. Should any money remain in the Navigational Enhancement and Training Funding as of decommissioning, that money shall be deemed ear-marked for the Coastal Community Fund to be used in accordance with the purposes of the Coastal Community Fund as specified in the Coastal Community Fund Term Sheet.

Payment of Expenses for the Funds

26. The reasonable costs and expenses incurred in the establishment and implementation of the Coastal Community Fund and the Direct Compensation Program, including the fees and costs of the TAP and the fees and costs for the preparation of the Fund Agreement and Escrow Agreement, shall be paid from the Escrow Account, subject to any caps established by the Parties. After five (5) years of Project operations, by March 1 of each succeeding calendar year, the TAP will send the Parties a report on the costs and expenses paid and the income accrued to the Escrow Account over the previous calendar year and the life of the Escrow Account through December 31 of the previous calendar year ("Annual Report"). If the costs and expenses over the life of the Escrow Account exceed the income accrued over the life of the Escrow Account (a "Deficiency"), in more than three (3) consecutive Annual Reports, SFW shall, within 30 days of receipt of the most recent Annual Report, make a payment to the Escrow Account in the amount of the Deficiency. The TAP shall treat this payment as income in any future Annual Report. In calculating a Deficiency, the TAP will not consider claims paid under the Direct Compensation Program or grants made from the Coastal Community Fund.

Precedent Conditions

27. This Agreement and the implementation of the Direct Compensation Program, Coastal Community Fund and Navigational Enhancement and Training Fund shall be contingent upon the occurrence of each of the following events:
 - a. On or before July 15, 2021, CZM issuing concurrence with SFW's federal consistency certification; and

- b. SFW receiving all other final federal, state, and local permits, authorizations, concurrences and approvals necessary to construct and operate the Project as described in the approved COP.

For the avoidance of doubt, if: (i) CZM does not issue its concurrence with SFW's consistency certification on or before July 15, 2021; or (ii) SFW fails to receive all other such permits, authorizations, concurrences and approvals, then SFW shall have no further obligations under this Agreement.

Dispute Resolution

28. If either Party alleges that there exists a dispute or disagreement regarding the matters covered by this Agreement, it shall notify in writing the other Party of such alleged dispute or disagreement ("**Dispute Notice**"). The Parties shall attempt to resolve the alleged dispute or disagreement through good faith negotiations. If the Parties fail to resolve the alleged dispute or disagreement within sixty (60) days of the Dispute Notice, the Party alleging the dispute or disagreement may enforce this Agreement only by specific performance, injunctive relief or a declaratory judgment action pursuant to M.G.L. Ch. 231A *et seq.* The remedies of specific performance, injunctive relief and declaratory judgment shall be cumulative of all other rights and remedies at law or equity of the Parties under this Agreement.

Governing Law

29. This Agreement shall be construed in accordance with and all disputes hereunder shall be controlled by the laws of the Commonwealth of Massachusetts without regard to its conflict of laws principles. For the purposes of this Agreement only, Massachusetts shall be the forum state for all forms of dispute resolution between the Parties arising out of this Agreement, including but not limited to judicial actions to enforce the Agreement.

Implementation

30. CZM shall implement this Agreement on behalf of the EEA.

Entire Agreement

31. This Agreement constitutes the entire agreement of the Parties as to the subject matter herein, and supersedes any and all prior oral or written agreements of the Parties. This Agreement cannot be changed or modified except in a written instrument signed by both Parties.

Recitals

32. The above recitals are incorporated herein by reference.

Successors and Assigns

33. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

No Third-Party Beneficiaries

34. Except for CZM in connection with its implementation of this Agreement on behalf of EEA, the Parties do not confer any rights or remedies upon any person other than the Parties to this Agreement and their respective successors and assigns.

Severability

35. If any part of this Agreement is found to be unenforceable, the rest will remain in full force and effect and shall be interpreted so as to give full effect to the intent of the Parties.

Execution in Counterparts

36. This Agreement may be executed in counterparts and by the different Parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all counterparts shall together constitute one and the same instrument. This Agreement may be delivered by the exchange of signed signature pages by facsimile transmission, electronic signatures, or by attaching a pdf copy to an e-mail, and any printed or copied version of any signature page so delivered shall have the same force and effect as an originally signed version of such signature page.

Notice

37. Each Party shall deliver all notices, requests, consents, claims, demands, waivers, and other communications under this Agreement (each, a “**Notice**”) in writing and addressed to the other Party at its address set out below (or to any other address that the receiving Party may designate from time to time in accordance with this Paragraph 37). Each Party shall deliver all Notices by personal delivery, nationally recognized overnight courier (with all fees prepaid), or email (with confirmation of transmission), or certified or registered mail (in each case, return receipt requested, postage prepaid). Except as otherwise provided in this Agreement, a Notice is effective only (a) upon receipt by the receiving party and (b) if the party giving the Notice has complied with the requirements of this Paragraph 37:

If to EEA/CZM: Lisa Berry Engler, Director
 Massachusetts Office of Coastal Zone Management
 251 Causeway Street, Suite 800
 Boston, Massachusetts 02114
 Email: lisa.engler@state.ma.us

If to SFW: Melanie Gearon, Permitting Manager_
 South Fork Wind, LLC
 399 Boylston Street, 12th Floor
 Boston, MA 02116
 Email: MELGE@orsted.com

Term; Termination


38. The term of this Agreement shall start on the date of this Agreement. If any of the “Precedent Conditions” above cannot be fulfilled, this Agreement shall terminate upon the date in which it becomes apparent that such condition set forth in the “Precedent Conditions” cannot be fulfilled. If the “Precedent Conditions” are fulfilled, this Agreement shall expire on the date on which all funds held by the Coastal Community Fund and the Direct Compensation Program have been disbursed.

Signatures on Following Page

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the date first written above.

SOUTH FORK WIND, LLC

By: Melanie Gearon
Name: **Melanie Gearon**
Title: Authorized Person

By: 
Name: **Robert Mastria**
Title: Authorized Person

**MASSACHUSETTS EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS**

By: K. Theoharides
Name: **Kathleen Theoharides**
Title: **Secretary of Energy and Environmental Affairs**

Exhibit A-1

South Fork Wind (SFW) Massachusetts Fisheries Direct Compensation Program

Term Sheet

I. Purpose and Brief Description

- The SFW Massachusetts Fisheries Direct Compensation Program will provide financial compensation for economic loss to commercial and charter/for hire fishing as a result of the construction, operation and decommissioning of SFW.
- The SFW Massachusetts Fisheries Direct Compensation Program will pay eligible fishers within a reasonable period of time after their claim is approved from an escrow account to be funded according to the process as defined in the above Agreement.
- The SFW Massachusetts Fisheries Direct Compensation Program has two key parts: 1) determining which fishers are eligible for compensation based on their historical fishing activity in SFW; and 2) calculating the amount of individual compensation based on an open and transparent predetermined payment framework that applies a tiered approach. In this tiered approach, every eligible fisher receives a payment but those with higher historical value landings within SFW receive more compensation than those with lesser value landings.

II. Creation, Use and Funding of SFW Escrow Account and Technical Assistance Provider

- SFW will fund an escrow account for the SFW Fisheries Direct Compensation Program. The escrow will be managed by an independent third party selected by SFW with approval from EEA and CZM, which approval shall not be unreasonably withheld, conditioned or delayed.
- The Technical Assistance Provider (TAP) will ease the administrative aspects of the program on fishers. The TAP will be responsible for overseeing the administration of the fund as described below. SFW will select the TAP through a competitive process with approval from EEA and CZM, which shall not be unreasonably withheld, conditioned or delayed.

III. Pre-Qualifying for Compensation During the Eligibility Period

- The purpose of the eligibility period is to provide sufficient time for fishers to prequalify for compensation to improve the efficiency of the claim and payment phase so that the payment of approved claims will be fast.

- During the eligibility phase, fishers will be asked to fill out a simple certification form stating that they have fished in the SFW area over a three-year period. Fishers will be required to list the approximate value of their landings from that area over the three years.
- SFW will seek advice from the EEA and CZM on the documentation for eligibility.
- The TAP will be available to assist fishers with filing for eligibility. All information from fishers will be kept confidential by SFW and the TAP except as required by law.
- The eligibility period will begin prior to the claims and payment period and will last for a reasonable period of time and in no event less than 6 months.
- The TAP will approve or reject eligibility submittals during the eligibility period.
- SFW and EEA will have no rights or role with respect to the TAP's approval or rejection of eligibility submittals.

IV. Claim and Payment Period for Eligible Fishers

- The claim and payment period for eligible fishers to obtain funds from the escrow will begin upon completion of SFW's commissioning and will last for a reasonable time period.
- Each payment form will include a release of liability by the certifying fisher releasing SFW.
- The amount of the payment will be based on the eligible fishers' historical activity in the SFW area. Payments will be established in tiers by fishery.
 - i. Once the eligibility period ends, tiered payment levels will be established for allocating funds. Fishers with a higher value of historical landings in the SFW area will receive higher payment than those that have a lower value of historical landings. A minimum payment will be incorporated to ensure all fishers with any level of historical landings from the SFW area will receive a payment. The predetermined funding framework will provide full transparency of how much compensation each eligible claimant will receive.
- Payments will be made within a reasonable time frame.
- The TAP will approve claims consistent with the predetermined funding framework. SFW, CZM and EEA will have no role with the claim and payment period. Upon approval from the TAP, the escrow agent will pay funds directly to the eligible fisher.

* * *

Exhibit A-2

Escrow Agreement

The Escrow Agreement shall be prepared after the date hereof in consultation with the selected Escrow Agent.

Exhibit A-3
Eligibility Form

Massachusetts Fisheries Direct Compensation Program

Eligibility Application

Commercial fishermen and party/charter boat operations must use this form to demonstrate eligibility for compensation under the South Fork Wind (SFW) Massachusetts Fisheries Direct Compensation Program. The Massachusetts Fisheries Direct Compensation Program will provide financial compensation for mitigating direct losses/impacts to commercial fishing and party/charter boat operations during the construction, operation, and decommissioning phases of SFW. Separate eligibility forms must be submitted for each affected vessel. Only the DMF permit holder may apply for eligibility.

This form must be completed in full and delivered to the Technical Assistance Provider (TAP) designated to administer the fund. Applicants can file the form electronically by emailing it to [TAP email address] or by mailing it to [TAP address]. You may contact the TAP by email or by phone ([TAP phone number]) if you have questions on the application.

The purpose of this eligibility phase is to prequalify for compensation to improve the efficiency of the claim and payment phase and pay claims faster. Once you are deemed eligible by the TAP, you will be asked to submit a simplified claims form to inform your direct compensation payment.

The TAP will approve or reject eligibility submittals during the eligibility period based on the information submitted with your application.

I. Applicant Information

A. Name: _____
First Last M.I.

B. Mailing Address: _____
Street Address Apartment/Unit
City State Zip

C. Place of Residence (if different from mailing address): _____
Street Address Apartment/Unit
City State Zip

D. Phone: _____

E. Email: _____

F. Fishing Operation Information (complete the section that applies):

☐ Commercial fishing operation

1. Vessel Name: _____
2. State Registration Number/Coast Guard Documentation Number: _____
3. Homeport (as listed on your state or Coast Guard registration):

4. Federal Permit (if applicable): _____
5. MA Commercial Fishing Permit Number: _____
6. Tax Identification Number (TIN), if applicable: _____

☐ Party and charter boat information

1. Vessel Name: _____
2. MA Charter/Party Permit Number: _____
3. Federal Permit (if applicable): _____
4. Business Name (if different from applicant name): _____
5. Tax Identification Number (TIN), if applicable: _____

II. Demonstration of Eligibility

Identify the project phase for which you are seeking eligibility to submit a claim:

- ☐ Business interruption during construction and the operations period following construction.
- ☐ Business interruption during the decommissioning phase.
- ☐ Business interruption during the operations phase that arises from an extraordinary unforeseen event (e.g., extraordinary maintenance in the Project area resulting in extended constraints on access).

Applicants must stipulate to the following eligibility criteria:

- You must hold a valid state fishing or landing permit;
- You must have a homeport in Massachusetts (as documented on your vessel registration) or be a resident or incorporated business in Massachusetts; and
- You must demonstrate a history of the vessel operating in the SFW Project area in the three years prior to eligibility and having incurred a direct impact/direct loss caused by SFW.

Schedule A identifies the documentation needed to verify eligibility. Failure to provide adequate documentation to the TAP may lead the TAP to disqualify you from participating in the program.

III. Confidentiality

Information provided via this application process will be kept confidential by the TAP, except as otherwise required by law. Notwithstanding anything herein to the contrary, if the TAP pays a

claim, the amount of the payment and the identity of the recipient will be reported to the Division of Marine Fisheries and made a public record.

IV. Notification

The TAP will notify you of the decision regarding your eligibility by contacting you at the email address provided above.

V. Certification and Release

By completing and signing this form, I certify my understanding of the following:

- A. I understand and acknowledge that the TAP will rely on the information I have provided, and I agree that the information I have provided is material to my request for eligibility. I certify upon the pains and penalties of perjury that I have provided complete and truthful information here and to the TAP for considering my eligibility.
- B. I certify that I am duly authorized to bind the entity or individual and the vessel identified above.
- C. I consent to allowing the TAP to use VTRs, SAFIS trip-level data, and other Massachusetts Division of Marine Fisheries data, as applicable, to verify the information contained in this application, and I waive any and all confidentiality pertaining to this information as it relates to this application.

Signature _____ Date _____

Title (if any): _____

Schedule A: Examples/Operations Interruptions Events Qualifying for Compensation

1. Possible business interruptions arising from unforeseen extraordinary events may include the following or similar event:
 - Extraordinary maintenance in the Project area resulting in extended constrained access within the SFW Project area
2. Examples of excluded Operations Interruptions are:
 - Fishery management measures that constrain catch or access to fishing grounds (e.g., quotas, area closures) or seasonal restrictions;
 - General declines in stock for targeted species caused by climate change;
 - Environmental changes unrelated to SFW;
 - Harmful algal blooms;
 - Vessel or other property damage;
 - Reductions in fishing activity due to personal illness or public health measures;
 - Inclement weather; or
 - Force majeure events where the direct impact to applicant was not exacerbated or contributed to by the operation or maintenance of the SFW Project.

Schedule B. Documentation to Affirm Eligibility to Participate in the Direct Compensation Program

A. Commercial fishing documentation is required for the three years prior to construction.

- If you file Vessel Trip Reports (VTRs) with the National Marine Fisheries Service (NMFS):
 - You must submit one of the following documents:
 - Your VTR data for the relevant years; or
 - Documentation that you have authorized NMFS to release your VTR data to the TAP.
 - While optional, you may also submit:
 - Documentation that you have authorized NMFS to release vessel monitoring system (VMS) or observer program data relevant to your vessel.
 - Other detailed electronic information (e.g., chart plotter data) documenting effort within the SFW Project Area.
- If you do not file VTRs with NMFS:
 - You must submit one of the following documents:
 - Massachusetts trip-level reporting data, whether filed electronically (through the Standard Atlantic Fisheries Information System, SAFIS) or via paper; or
 - Documentation that you have authorized the Massachusetts Division of Marine Fisheries (MADMF) to release your trip-level reporting data.
 - While optional, you may also submit other electronic information (e.g., chart plotter data) or independently maintained logbooks that document your activity in the SFW Project Area.

B. Party/Charter boat documentation is required for the three years prior to construction:

- You must submit eTRIPS Desktop or Mobile trip data submitted to MADMF or documentation that you have authorized MADMF to release your trip data.
- While optional, you may submit other electronic information (e.g., chart plotter data) or independently maintained logbooks that document your activity in the SFW Project Area.

Exhibit A-4
Claims Form

Massachusetts Fisheries Direct Compensation Program

Claim Application

Commercial fishermen and party/charter boat operations must use this form to file claims for direct compensation of economic impacts directly attributable to the South Fork Wind (SFW) project. The SFW Massachusetts Fisheries Direct Compensation Program will provide financial compensation for mitigating impacts to commercial and party/charter boat fishing during the construction, operation, and decommissioning phases of SFW. **Only applicants who have separately filed an eligibility form and been approved to participate in the SFW Direct Compensation Program for the applicable project phase may complete this claim form.** Separate claim forms must be submitted for each affected vessel. If you are a new fisherman in the SFW Project Area, you will need to apply for eligibility prior to submitting this claim form.

This form must be completed in full and delivered to the Technical Assistance Provider (TAP) designated to administer the fund. Applicants can file the form electronically by emailing it to [TAP email address] or by mailing a physical copy to [TAP address]. You may contact the TAP by email or by phone ([TAP phone number]) if you have questions on the application.

I. Applicant Information

- A. Name: _____
First Last M.I.
- B. Phone: _____
- C. Email: _____
- D. Vessel Name: _____
- E. State-Issued Fishing Permit Number: _____
- F. Federal Fishing Permit Number (if any): _____

If any identification information (e.g., vessel name, fishing permit number) provided when you applied for eligibility has changed, please note that here:

II. Economic Impact

- A. A claim may be filed for impacts incurred in each of the following phases of the project. Please check the phase that is relevant to your claim:
- ☐ Business interruption during construction and the operations period following construction.
 - ☐ Business interruption during the decommissioning phase.
 - ☐ Business interruption during the operations phase that arises from an extraordinary unforeseen event (e.g., extraordinary maintenance in the Project area resulting in extended constraints on access).

B. The basis for your claim will be your average historical gross revenue.

1. Commercial Fishing Operations

Claims are estimated based on your historical gross revenue in the SFW Project Area, incorporating the years prior to construction, decommissioning or the unforeseen operations interruptions event.

- a) *Complete Table 1 below to document your landings and gross revenue in each year that you fished. If you did not fish in a given year, leave the space blank.*
- b) *Using the same table, calculate your average annual gross revenue based on the highest three years, i.e., the sum of your top three gross revenue figures divided by three. This figure will be the basis for your claim (see below).*

| Table 1. ESTIMATION OF AVERAGE ANNUAL COMMERCIAL FISHING REVENUE FROM WITHIN SFW | | |
|--|-------------------|--------------------------------|
| Year | Landings (pounds) | Gross (Ex-Vessel) Revenue (\$) |
| 5 years ago | | \$ |
| 4 years ago | | \$ |
| 3 years ago | | \$ |
| 2 years ago | | \$ |
| Last year | | \$ |
| AVERAGE ANNUAL GROSS REVENUE BASED ON TOP THREE YEARS | | \$ |

2. Party/Charter Boat Operations

Claims are estimated based on your historical gross receipts, as reported to the tax authorities, scaled for trips made in the SFW Project Area. The TAP will compare your gross receipts in the tax year your claim event occurs to the average annual gross receipts for the three tax years immediately prior to your claim event.

- a) *Using Table 2 below, document the number of trips you conducted in the SFW Project Area in each tax year.*
- b) *Using the same table, report your annual gross receipts in each tax year. This information should be obtained from your tax returns.*
- c) *Using the same table, calculate the difference between your pre- and post-claim annual gross receipts. The net change in gross receipts is the basis for your claim (see below).*

| Table 2. ESTIMATION OF PARTY/CHARTER BOAT REVENUE IMPACT FROM WITHIN SFW | | |
|---|-------------------------------------|-----------------------|
| Year | Number of Trips in SFW Project Area | Annual Gross Receipts |
| 3 years ago | | \$ |
| 2 years ago | | \$ |
| Last year | | \$ |
| Average Annual Pre-Claim Event Gross Receipts | | \$ |
| Current year (post-claim event) | | \$ |
| Net Economic Impact (Difference Between Post-Claim Event Gross Receipts and Average Annual Pre-Claim Event Gross Receipts) | | \$ |

- C. Please attach the following documentation. If you provided this documentation with your initial eligibility form, there is no need to duplicate your submission.
1. Commercial fishing documentation: You may provide personal or business tax returns to corroborate your gross revenue data. If you prefer not to do so, please provide the following documentation:
 - If you file Vessel Trip Reports (VTRs) with the National Marine Fisheries Service (NMFS), you must submit either your VTR data for the relevant years or documentation that you have authorized NMFS to release your VTR data to the TAP.
 - If you do not file VTRs with NMFS, you must submit Massachusetts trip-level reporting data (whether filed electronically through the Standard Atlantic Fisheries Information System, SAFIS, or via paper) or documentation that you have authorized the Massachusetts Division of Marine Fisheries (MADMF) to release your trip-level reporting data.
 2. Party/charter boat documentation:
 - You must provide personal or business tax returns to corroborate your gross receipts data.
 - You must submit eTRIPS Desktop or Mobile trip data submitted to MADMF or documentation that you have authorized MADMF to release your trip data.

III. Amount of Claim

Each eligible applicant may apply for a one-time pro-rata fixed payment to compensate for economic impacts. Please check the box corresponding to the impact for which you are seeking compensation:

- ☐ Business interruption during construction and the operations period following construction.
- ☐ Business interruption during the decommissioning phase.
- ☐ Business interruption during the operations phase that arises from an extraordinary unforeseen event (e.g., extraordinary maintenance in the Project area resulting in extended constraints on access). If more than one separate and unrelated eligible event occurs, you may apply for compensation for each such event.

Calculation of the compensation payment differs by project phase and by Applicant Type, as explained below.

- A. For commercial fishing vessels:
1. Compensation for impacts during construction and operation will be calculated as Average Annual Gross Revenue times a Construction Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.
 2. Compensation for impacts during decommissioning will be calculated as Average Annual Gross Revenue times a Decommissioning Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.
 3. Compensation for impacts arising from an extraordinary unforeseen event during operations will be calculated as Average Annual Gross Revenue times a Business Interruption Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.

- B. For charter/party vessels:
1. Compensation for impacts during construction and operation will be calculated as Net Economic Impact from Section II, Table 2 times a Construction Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.
 2. Compensation for impacts during decommissioning will be calculated as Net Economic Impact from Section II, Table 2 times a Decommissioning Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.
 3. Compensation for impacts arising from unforeseen business interruption during operations will be calculated as Net Economic Impact from Section II, Table 2 times a Business Interruption Scaling Factor, which will reflect adjustments for variable expenses to approximate net operating income.

IV. Confidentiality

Information provided via this application process will be kept confidential by the TAP, except as otherwise required by law.

Notwithstanding anything herein to the contrary, information pertaining to final award amounts, along with names and other identifying information, will be provided to the Division of Marine Fisheries and made a public record. Information pertaining to final award amounts, along with address and taxpayer identification numbers necessary to process payments, will be provided to the escrow agent for the purpose of issuing payments.

V. Certification and Release

By completing and signing this form, I certify my understanding of the following:

- A. As a condition to and in full consideration of any payment, I will execute the attached release.
- B. I understand and acknowledge that the TAP will rely on the information I have provided, and I agree that the information I have provided is material to my claim for compensation. I certify upon the pains and penalties of perjury that I have provided complete and truthful information here and to the TAP for evaluating my claim.
- C. I certify that I am duly authorized to bind the entity or individual and the vessel identified above.
- D. I consent to allowing the TAP to use the information I provided, including, as applicable, VTRs, SAFIS trip-level reporting data, NMFS Dealer data, and/or information from the Massachusetts Department of Revenue, to verify the information contained in this application, and I waive any and all confidentiality pertaining to this information as it relates to this application.

Signature _____ Date _____

Title (if any): _____

Schedule A: Examples/Operations Interruptions Events Qualifying for Compensation

1. Possible business interruptions arising from unforeseen extraordinary events may include the following or similar events:
 - Extraordinary maintenance in the Project area resulting in extended constrained access within the SFW Project area; or
2. Examples of excluded Operations Interruptions are:
 - Fishery management measures that constrain catch or access to fishing grounds (e.g., quotas, area closures) or seasonal restrictions;
 - General declines in stock for targeted species caused by climate change;
 - Environmental changes unrelated to SFW;
 - Harmful algal blooms;
 - Vessel or other property damage;
 - Reductions in fishing activity due to personal illness or public health measures;
 - Inclement weather; or
 - Force majeure events where the direct impact to applicant was not exacerbated or contributed to by the operation or maintenance of the SFW Project.

Exhibit A-5

Release of Liability

I, _____, have submitted a claim for compensation to the South Fork Wind Massachusetts Fisheries Direct Compensation Program (the “Program”) for business interruption losses for one of the following three Program phases described in the claims form [(1) construction and the operations period following construction, (2) decommissioning, or (3) Operations Interruptions Events] (circle one) (the “Claim”).

I assert that my Claim resulted directly from the South Fork Wind project. By signing this Release of Liability, I acknowledge that the Program has accepted and paid my Claim. My acceptance of such payment constitutes full, final and complete payment for this Claim. I agree on behalf of myself, and all my personal representatives, heirs, executors, administrators, agents, representatives, employees, affiliates, business partners, predecessors-in-interest, successors-in-interest, and assigns (the “Releasing Parties”) that neither South Fork Wind, LLC, Orsted North America, Inc., Eversource Investment LLC, nor any of their affiliates or joint venture partners, officers, directors, shareholders, employees, agents, representatives, insurers, predecessors, parents, subsidiaries, successors, and assigns (the “Released Parties”) shall have any further outstanding or ongoing obligation with respect to this Claim, even if the Releasing Parties learn new information about the Claim I agree that neither I nor the Releasing Parties will, directly or indirectly, assert any claim, or commence, join in, prosecute, participate in, or fund any part of, any suit or other proceeding of any kind against the Released Parties arising out of, related to or concerning in any way the Claim, and I and the Releasing Parties forever release and discharge the Released Parties from any liability arising under, related to, or concerning such Claim.

I acknowledge that I am duly authorized to sign on behalf of the entity indicated below.

Signed under pains and penalties of perjury.

Date

Signature

Name

Exhibit B-1

South Fork Wind (SFW) Coastal Community Fund Term Sheet

I. Purpose

- SFW will establish the SFW Coastal Community Fund to provide grants for initiatives supporting coastal communities in Massachusetts.
- By way of example, but without limitation except as set forth in Paragraph 19 of the Agreement, the SFW Coastal Community Fund may be used for the following objectives:
 - Supporting the recreational and charter boat industry;
 - Providing marketing and promotional support for processors, manufacturers of local seafood products, party or charter boat services;
 - Enhancing opportunities for training, apprenticeship, and employment in the commercial fishing industry, offshore wind industry, and other sectors of the coastal economy;
 - Improving infrastructure that supports the commercial fishing industry including but not limited to processors, wholesalers, and recreational fishers;
 - Supporting the enhancement and productivity of the commercial fishing industry; and
 - Supporting technology development to reduce potential conflicts between commercial fishing and offshore wind operations.

II. Creation, Use and Funding of the Coastal Community Fund

- SFW will establish an escrow account that will be overseen by an independent third- party escrow agent selected by SFW with approval from EEA, which approval shall not be unreasonably withheld, conditioned or delayed.
- SFW will fund the escrow account according to the process as defined in the foregoing Agreement. Such payments were informed by analyses performed by the Woods Hole Oceanographic Institution on the indirect economic impacts from SFW.
- These funds will be used only to fund projects that satisfy the SFW Coastal Community Fund's objectives and as approved by the Director of the Division of Marine Fisheries, who shall act only after receiving advice from the SFW Coastal Community Advisory Council ("Advisory Council").
- SFW will have no rights or role with respect to the Advisory Council's approval of project funding requests.

III. Distribution of Escrow Account Funds

- Each request for project funding must be submitted to the Advisory Council and affirm that funds will be used to support projects that meet the objectives of the fund.
- The Advisory Council will review all submitted proposals. The Advisory Council will either recommend approval or rejection with an explanation, or request additional documentation necessary to complete its evaluation of a proposal.
- The process and form of such proposals will be determined by the Advisory Council and the Director.
- Upon written instructions from the Director, the escrow agent will disburse funds directly to the project applicant.
- In the event the fund is oversubscribed, the Director may, in consultation with the Advisory Council, approve partial payment of a proposal.

* * *

Exhibit B-2

Form of Fund Agreement

To be prepared after the date hereof.



November 16, 2018

Bruce Carlisle
CZM Director
Massachusetts Office of Coastal Zone Management
251 Causeway Street, Suite 800
Boston, MA 02114-2138

Lisa Engler
CZM Acting Director
Massachusetts Office of Coastal Zone Management
251 Causeway Street, Suite 800
Boston, MA 02114-2138

Subject: South Fork Wind Farm and South Fork Export Cable Coastal Management Zone Federal Consistency Review

Dear Mr. Carlisle and Ms. Engler,

As discussed during our pre-filing consultations with Massachusetts Office of Coastal Zone Management (MA CZM), Deepwater Wind South Fork, LLC (DWSF) is voluntarily providing the enclosed consistency certification along with the necessary data and information required for the Commonwealth of Massachusetts to conduct a federal consistency review for the South Fork Wind Farm (SFWF) and South Fork Export Cable (SFEC).

On October 24, 2018, DWSF provided MA CZM with a copy of the SFWF and SFEC Construction and Operations Plan (COP) submitted to the Bureau of Ocean Energy Management (BOEM). The COP contains the necessary data and information required for consistency certification under the Massachusetts Coastal Zone Management Program (CZMP). Appendix A-Coastal Zone Management Consistency Statements (New York, Rhode Island, and Massachusetts) of the COP contains a list of the enforceable policies and statement of compliance for each state approved coastal management program. References are provided to the sections of the COP where the applicable policy is addressed.

Enclosed is a revised copy of Appendix A that includes the required statement under 5 CFR § 930.57 that "the proposed activity complies with the enforceable policies of the Massachusetts approved management program and will be conducted in a manner consistent with such program."

The enclosed version of Appendix A replaces the version you received on October 24, 2018. The compliance analysis for Massachusetts is provided in Appendix A-3. A “clean” and “redline” version of Appendix A is included to assist in your review.

Please do not hesitate to contact me or Melanie Gearon at mgearon@dwwind.com or at (401) 486-7797 if you have any questions.

Sincerely,



Aileen Kenney
Senior Vice President, Development

Enclosure: Updated SFWF and SFEC COP Appendix A - Coastal Zone Management Consistency Statements, November 2018

Cc (*via email*): Todd Callaghan, MA CZM
Robert Boeri, MA CZM
Jessica Stromberg, BOEM
Mary Boatman, BOEM

Coastal Zone Management Consistency Statements (New York, Rhode Island, and Massachusetts)

Prepared for



November 2018



18 Tremont Street
Suite 700
Boston, Massachusetts 02108

Coastal Zone Management Consistency Statements

The federal Coastal Zone Management Act (CZMA) of 1972 requires that federal actions affecting any coastal use or resource (defined as land or water use, or natural resource of a state's coastal zone), be conducted in a manner that is consistent with the enforceable policies of a state's federally-approved Coastal Zone Management Program (CZMP) or Coastal Resource Management Program (CRMP). The CZMA and federal regulations at 15 Code of Federal Regulation (CFR) 930.00 authorize states with approved coastal zone management programs to conduct a coastal zone consistency review and concurrence determination of projects within or outside the state coastal zone boundary (if applicable) that require a federal license or permit, are federally funded, or are a direct activity of a federal agency to ensure that activities in or affecting the state's coastal zone are consistent with the state enforceable program policies.

In accordance with the "federal consistency" requirement of the CZMA (16 USC 1456), as well as 307(c)(3)(A) and 15 CFR Part 930, the federal actions associated with the Project include approval of the COP by BOEM (15 CFR part 930, subpart E) and issuance of an Individual Permit by USACE, under Section 10 and 404 (15 CFR part 930, subpart D). Based on pre-application discussions, DWSF expects that New York, Rhode Island, and Massachusetts will review the Project for consistency with their state's enforceable program policies. The construction, operations and maintenance, and decommissioning of the SFEC-NYS and SFEC-Onshore will also be reviewed and authorized under Article VII of the New York Public Service Law (PSL) by the New York State Department of Public Service Commission (NYSPSC). Their review will include review for consistency with the New York State CZMP.

This appendix provides summary tables listing each of the enforceable program policies and management principles for the New York State CZMP, the Rhode Island CRMP, and the Massachusetts CZMP. The summary tables present descriptions of how the South Fork Wind Farm (SFWF) and South Fork Export Cable (SFEC) will be consistent with each applicable policy or management principle and provide a cross reference to specific sections of the COP where the applicable policy or management principle is addressed. Key details for each state are described below.

New York State's Coastal Zone Management Program

The New York CZMP was established in 1982 and is administered by the New York Coastal Management Program within the New York State Department of State, which serves as the lead agency for the network of New York state agencies and local governments that administer the CZMP. The 44 enforceable policies of the New York State CZMP are implemented through a series of regulatory and management state authorities assigned to the New York State Department of State (NYSDOS), the Department of Environmental Conservation, the Department of Energy, the Public Service Commission, and the Office of Parks, Recreation, and Historic Preservation. The Waterfront Revitalization and Coastal Resources law (Executive Law, Article 42) establishes a balanced statewide approach for encouraging development in the coastal area while protecting natural coastal resources. The local waterfront revitalization program offers the town of East Hampton with the opportunity to participate in the State's CZMP. DWSF has voluntarily prepared a consistency statement that reviews the Project for consistency with the enforceable policies that make up the New York CZMP, including the Town of East Hampton Local Waterfront Revitalization Program (LWRP), see Appendix A-1. The proposed activity complies with

the enforceable policies of the New York approved management program and will be conducted in a manner consistent with such program.

Rhode Island Coastal Resources Management Program

The Rhode Island CRMP was established in 1977 and is administered by Rhode Island Coastal Resources Management Council (CRMC), the lead agency for the network of Rhode Island state agencies and local governments that administer the CRMP and the Rhode Island Ocean Special Area Management Plan, or Ocean SAMP. The Ocean SAMP serves as a federally recognized coastal management and regulatory tool for outer continental shelf (OCS) exploration, development, and production activities needs to follow the requirements of CZMA section 307(c)(3)(b) (16 U.S.C. 1456(c)(3)(B)) and 15 CFR part 930, subpart E. Rhode Island has established a geographic location description (GLD) associated with the Ocean SAMP, which includes the federal portions of Block Island Sound and Rhode Island Sound as well as portions of the Atlantic Ocean. The SFWF and a large portion of the SFEC are located in the area defined by the GLD. DWSF is required to file a consistency certification because the Project is a listed activity on Rhode Island's approved federal consistency list and is located within Rhode Island's GLD. DWSF has prepared a consistency statement that reviews the Project for consistency with the enforceable policies set forth in Section 11.10 (formerly 1160) of the Ocean SAMP Renewable Energy and Other Offshore Development Policies and Standards, see Appendix A-2. The proposed activity complies with the enforceable policies of the Rhode Island approved management program and will be conducted in a manner consistent with such program.

Massachusetts Coastal Zone Management Program

The Massachusetts CZMP was established in 1978 and is administered by the Massachusetts Office of Coastal Zone Management, which serves as the lead agency for the network of Massachusetts state agencies and local governments that administer the CZMP. DWSF has voluntarily prepared a consistency statement that reviews the Project for consistency with the enforceable policies of the Massachusetts CZMP, see Appendix A-3. The proposed activity complies with the enforceable policies of the Massachusetts approved management program and will be conducted in a manner consistent with such program.

Appendix A-1

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|--|--|--|--|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| <i>Development Policies</i> | | | | |
| 1 | Restore, revitalize, and redevelop deteriorated and underutilized waterfront. | This policy is not applicable because the South Fork Wind Farm (SFWF), which consists of an offshore wind farm is not located in an urban waterfront area. SFWF installation and operation will not inhibit further redevelopment or use of any underutilized waterfront locations. | This policy is not applicable because the South Fork Export Cable (SFEC), which consists of a buried export cable and onshore substation, are not located in an urban waterfront area. SFEC installation and operation will not inhibit further redevelopment or use of any underutilized waterfront locations. | Not applicable |
| 2 | Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters. | The SFWF is consistent with this policy to the extent applicable. The SFWF is an offshore wind energy facility located on the Outer Continental Shelf (OCS) and will not limit or preclude the future siting of water-dependent uses and facilities in the coastal zone. | The SFEC complies with this policy to the extent applicable. The SFEC is a water-dependent use. The SFEC-NYS will be installed beneath the seabed of New York State territorial waters and it will not negatively impact or otherwise preclude the future siting of water dependent uses in the coastal zone. The SFEC-Onshore will be installed underground within existing public road right-of-way (ROW) and will not negatively impact the ability of future water-dependent uses to locate on or adjacent to coastal waters or interfere with existing public access to the waterfront. | Section 1.2, Project Purpose; Section 1.3, Regulatory Framework; Section 2.0, Project Siting and Future Activities; and Section 1.3.1, Federal Permits, Approvals, and Consultations |
| 3 | Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people. | This policy does not apply because the SFWF is not associated with siting or development in New York State's major ports indicated in the policy. However, there would be construction activity and vessel traffic in proximity to transit lanes that service the State's major ports. Activities will be conducted in a manner that minimize impact to other marine uses. | This policy does not apply. The SFEC does not include any siting or development in New York State's major ports indicated by the policy; however, there would be construction activities and vessel traffic in proximity to transit lanes that service the State's major ports. Activities will be conducted in a manner that minimize impact to other marine uses. | Not applicable |
| 4 | Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity. | The SFWF is consistent with this policy to the extent applicable. The SFWF is not located or otherwise associated with development around a small harbor area. However, construction related vessel traffic may occur in proximity to small harbor areas | The SFEC is consistent with this policy to the extent applicable. The SFEC is not located in or otherwise associated with development around a small harbor area. However, construction related vessel traffic may occur in proximity to small harbor areas. | Section 2.0, Project Siting and Future Activities; Section 3.2, South Fork Export Cable; Section 4.6, Socioeconomic Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 5 | Encourage the location of development in areas where public services and facilities essential to such development are adequate. | This policy does not apply because the SFWF is located on the OCS and not in the vicinity of a public service facility. | The SFEC is consistent with this policy to the extent applicable. The SFEC is located in an area where public service facilities are adequate. | Section 1.2, Project Purpose; Section 1.3, Regulatory Framework; Section 1.3.1, Federal Permits, Approvals, and Consultations; and Section 2.0, Project Siting and Future Activities |
| 6 | Expedite permit procedures in order to facilitate the siting of development activities at suitable locations. | This policy does not apply because the SFWF is located in federal waters and not in the jurisdiction of NY State. | The SFEC is consistent with this policy. Several State and local agencies will be coordinating their review under the Article VII framework pursuant to the Public Service Law (PSL). The SFEC is consistent with this policy. | Not applicable |
| <i>Fish and Wildlife Policies</i> | | | | |
| 7 | Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats. | This policy does not apply because the SFWF is located in federal waters and will not impact any state-designated significant coastal fish and wildlife habitats. | The SFEC is consistent with this policy to the extent applicable. There are no New York State significant coastal fish and wildlife habitats crossed by the SFEC. | Section 4.3.1, Coastal Habitat; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix M, Onshore Biological Resources Report; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 8 | Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources. | The SFWF is consistent with this policy to the extent applicable. The Project does not anticipate introducing hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on coastal fish and wildlife resources. Any hazardous materials that may be involved in construction and operations will be handled and stored in accordance with all federal, state and local regulations in order to minimize potential contamination of coastal areas. An Oil Spill Response Plan has been developed to minimize any impacts from a potential introduction of hazardous wasters or other pollutants. | The SFEC is consistent with this policy to the extent applicable. The Project does not anticipate introducing hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on coastal fish and wildlife resources. Any hazardous materials that may be involved in construction and operations and maintenance will be handled and stored in accordance with all federal, state and local regulations in order to minimize potential contamination of coastal areas. A Construction Contingency Plan and a Storm Water Pollution Prevention Plan (SWPPP) will be developed as part of the Project EM&CP under Article VII. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
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| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| 9 | Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources. | This policy is not applicable because the SFWF is located on the OCS will not impact recreational use of fish and wildlife resources in the NY coastal area. | The SFEC is consistent with this policy to the extent practicable. The SFEC was sited to avoid impacts to recreational use of fish and wildlife resources, where possible. Where avoidance was not possible, measures were employed to minimize impacts to recreational use of fish and wildlife resources along the SFEC route. Any impact to recreational use of the resources offshore during the construction period will be temporary and localized. Operationally, there are no anticipated impacts to recreational use of resources, because the SFEC will be buried to a target depth of 4-6 feet. As a result, installation and operation will not impede further development and use of fish and wildlife resources in the coastal area. | Section 4.3.1, Coastal Habitat; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix M, Onshore Biological Resources Report; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 10 | Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing onshore commercial fishing facilities, increasing marketing of the state's seafood products, maintaining adequate stocks, and expanding aquaculture facilities. | This policy is not applicable because the SFWF will not impact commercial fishery resources in the NY coastal area. | The SFEC is consistent with this policy to the extent practicable. Various fisheries monitoring data sets suggest multiple fisheries are active near the SFEC–NYS. Installation of the SFEC may have temporary minimal affects to commercial fishery resources or activities. Operation of the SFEC will not affect commercial fishery resources or activities in the coastal area. | Section 4.3.1, Coastal Habitat; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix M, Onshore Biological Resources Report; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| Flooding and Erosion Hazard Policies | | | | |
| 11 | Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion. | This policy is not applicable because the SFWF does not include any buildings or structures within the New York State coastal area. | The SFEC is consistent with this policy to the extent applicable. Portions of the SFEC will occur within areas vulnerable to flooding and erosion. The SFEC is designed to use construction techniques and best management practices (BMPs) to avoid or minimize damage to property and lives caused by flooding and erosion. Construction activities will occur in accordance with a SWPPP, which will be included within the Project EM&CP. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.6.3, Public Services; Section 4.6.7, Coastal Land Use and Infrastructure; Appendix E, Safety Management System; and Appendix M, Onshore Biological Resources Survey Report |
| 12 | Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs. | This policy is not applicable because the SFWF is located on the OCS outside New York State coastal areas and flood hazard zones, and therefore will not result in damage to natural resources or property in New York State coastal areas. | The SFEC is consistent with this policy to the extent applicable. The Project EM&CP will include measures to minimize damage to natural resources and property from flooding and erosion (e.g. hay bale and/or silt fence barriers).During construction of the landing site and the SFEC, the Applicant will comply with all applicable regulations for Coastal Erosion Hazard Areas (CEHAs). In addition, horizontal direction drilling (HDD) will be utilized where necessary to avoid disturbing natural resources (e.g. the beach and associated dunes at the Beach Lane landing site) to the extent practicable. | Section 3.0, Project Description; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix M, Onshore Biological Resources Survey Report |
| 13 | The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs. | This policy is not applicable because the SFWF is located on the OCS and does not involve construction or reconstruction of erosion protection structures onshore in the New York State coastal area. | This policy is not applicable because the SFEC does not involve construction or reconstruction of erosion protection structures onshore in the New York State coastal area. | Not applicable |
| 14 | Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations. | This policy is not applicable because the SFWF is located on the OCS and does not involve activities or development onshore (including construction and reconstruction of erosion protection structures) in the New York State coastal area. | This policy is not applicable because the SFEC does not involve activities or development onshore (including construction and reconstruction of erosion protection structures) in the New York State coastal area. | Not applicable |
| 15 | Mining, excavation, or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land. | The SFWF is consistent with this policy to the extent applicable.The SFWF is located on the OCS, any dredging or disposal of dredged materials will not occur in NY State waters and therefore will not cause an increase in erosion, and will not result in adverse impacts to water quality, physical processes, and marine productivity. | The SFEC is consistent with this policy to the extent applicable. The SFEC will be installed using a combination of hydraulic jet and mechanical plow. This process results in a minimum amount of sediment being suspended into the water column. Disturbed sediment will be allowed to naturally backfill the trench. HDD will be used at the sea-to-shore transition to avoid disturbance to shoreline structures or disturbance of nearshore coastal features. A temporary cofferdam will be installed at the sea-to-shore transition, which will aid in minimizing the spread of sediments suspended during the dredging process. After installation, all areas affected by the installation of the SFEC will be actively restored or allowed to return to their pre-installation condition. | Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.2.2, Water Quality and Water Resources Section 4.2.3, Geological Resources; Appendix H, Geophysical and Geotechnical Survey Reports; and Appendix I, Sediment Survey and Sediment Transport Analysis Report |

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|--|--|---|--|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| 16 | Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long-term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features. | This policy is not applicable because the SFWF is located on the OCS and will not involve the use of public funds for erosion protective structures. | This policy is not applicable to the SFEC because it does not involve the use of public funds for erosion protective structures. | Not applicable |
| 17 | Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible. | This policy is not applicable because the SFWF is located on the OCS outside New York State coastal waters and coastal areas. | The SFEC is consistent with this policy to the extent applicable. The SFEC sea-to-shore transition will be installed via HDD to avoid impacts to the shoreline and existing natural resources. The SFEC-Onshore will be constructed along existing roads and railroad ROW without increasing the amount of impervious surfaces. The SFEC will not result in an increase in the potential for erosion or for flooding that would result in damage to natural resources or property. | Section 2.3, Review of Technologies and Installation Methods; Section 3.0, Project Description; Section 4.6.7, Coastal Land Use and Infrastructure; Appendix G, Project Engineering Plans and Construction Drawings; and Appendix M, Onshore Biological Resources Survey Report |
| <i>General Policy</i> | | | | |
| 18 | To safeguard the vital economic, social and environmental interests of the state and its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal areas. | This policy is not applicable because the SFWF is located on the OCS and is not anticipated to impact any valuable New York State coastal waters or resources or affect economic, social, cultural, and environmental interests of the state and its citizens. | The SFEC is consistent with this policy to the extent applicable. The SFEC has been sited and designed in a manner that safeguards the economic, social, cultural, and environmental interests of the state and its citizens. The SFEC will be installed via HDD at the sea-to-shore transition and will have a minimal temporary impact during construction, and will not negatively impact the coastal environment or the ecological, historical, and scenic qualities it provides to the Town; and therefore will not have a significant negative impact on social, cultural, economic and environmental interests of the State. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 3.2, South Fork Export Cable; Section 4.3.1, Coastal and Terrestrial Habitat; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.6, Socioeconomic Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix M, Onshore Biological Resources Survey Report; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix R, Marine Archaeological Report (Not for Public Distribution); Appendix S, Archaeological Resources Report - Onshore (Not for Public Distribution); Appendix T, Historic Resources Report for Substation; Appendix U, Visual Resources Assessment Report for Substation; Appendix V, Visual Impact Assessment Report for SFWF; and Appendix Y, Commercial and Recreational Fisheries Technical Report |

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|--|---|--|---|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| <i>Public Access Policies</i> | | | | |
| 19 | Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities. | This policy is not applicable because the SFWF is located on the OCS and will not limit the level or type of access to public water related recreation resources and facilities in the New York State coastal area. | The SFEC is consistent with this policy to the extent applicable. Construction of the SFEC may temporarily affect public access to the shoreline from the landing site. However, pedestrian and vehicle access will be maintained throughout construction. HDD methods will be utilized at the landfall to avoid permanent impacts to public access. The existing road ROW will remain in Town ownership. The area necessary to construct the transition vault will be minimal in area and its disturbance will be temporary. Therefore, there will be no permanent reduction to public access to public water-related recreation resources. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 20 | Access to the publicly owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly owned shall be provided and it shall be provided in a manner compatible with adjoining uses. | This policy is not applicable because the SFWF is located on the OCS and will not impact publicly owned foreshore and areas immediately adjacent to the foreshore or the water's edge that is publicly owned. | The SFEC is consistent with this policy to the extent applicable. The SFEC is not anticipated to permanently impact any publicly-owned foreshore areas or lands that are immediately adjacent. Construction of the SFEC may temporarily affect public access to the shoreline at the landing site. However, pedestrian and vehicle access will be maintained throughout construction. HDD methods will be utilized at the landfall to avoid permanent impacts to public access from. The existing road ROW will remain in Town ownership. | Section 4.6.4, Recreation and Tourism; and Section 4.6.7, Coastal Land Use and Infrastructure |
| <i>Recreation Policies</i> | | | | |
| 21 | Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related used along the coast. | The SFWF is consistent with this policy to the extent applicable. The SFWF is located on the OCS; however construction activity and vessel traffic during construction may temporarily impact water-dependent recreation. <ul style="list-style-type: none">• A comprehensive communication plan will be implemented during offshore construction to inform all mariners, including commercial and recreational fishermen, and recreational boaters of construction activities and vessel movements. Communication will be facilitated through a Project website, public notices to mariners and vessel float plans, and a fisheries liaison. DWSF will submit information to the USCG to issue Local Notice to Mariners during offshore installation activities.• The communication plan will also include outreach to stakeholders in the offshore recreational and tourism industry to minimize impacts to recreational events (e.g., sailboat races). | The SFEC is consistent with this policy to the extent applicable. The SFEC will not permanently impact existing or future water-dependent or water-enhanced recreational uses. Construction at the landing site and the SFEC may temporarily affect public access to the shoreline. However, pedestrian and vehicle access will be maintained throughout construction. Water dependent and water enhanced recreation will be fully restored upon completion of construction. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 22 | Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development. | The SFWF is consistent with this policy to the extent applicable. The SFWF is located on the OCS; however construction activity and vessel traffic during construction may temporarily impact access water-related recreation. <ul style="list-style-type: none">• A comprehensive communication plan will be implemented during offshore construction to inform all mariners, including commercial and recreational fishermen, and recreational boaters of construction activities and vessel movements. Communication will be facilitated through a Project website, public notices to mariners and vessel float plans, and a fisheries liaison. DWSF will submit information to the USCG to issue Local Notice to Mariners during offshore installation activities.• The communication plan will also include outreach to stakeholders in the offshore recreational and tourism industry to minimize impacts to recreational events (e.g., sailboat races). | The SFEC is consistent with this policy to the extent applicable. While the SFEC will involve minor and temporary construction activities within the Town road ROW for construction of the transition vault, there will be no permanent reduction in existing water-related recreation opportunities resulting from the SFEC. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| <i>Historic and Scenic Resources Policies</i> | | | | |
| 23 | Protect, enhance, and restore structures, districts, areas, or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation. | The SFWF is consistent with this policy to the extent practicable. No shipwrecks or significant archaeological sites are recorded within the SFWF area at the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP). Data from NOAA's Automated Wreck and Obstruction Information System (AWOIS) and Electronic Navigational Charts (ENC) databases, as well as the proprietary BOEM shipwreck database, indicated one shipwreck reported within the SFWF. DWSF will maintain a protective buffer extending 164 feet (50 m) from the maximum discernable extent of each wreck during Project construction, O&M, and decommissioning, to avoid impact. | The SFEC is consistent with this policy to the extent applicable. Construction and O&M will not require the demolition or physical alteration of any New York State and/or National Register of Historic Places (S/NHRP)-eligible or S/NRHP-listed buildings. No mitigation is anticipated to be necessary for negative impacts to historic resources associated with construction. In the event that unanticipated archaeological resources are encountered during construction, the actions outlined in the Unanticipated Discovery Protocol for the Project will be followed. | Section 4.4, Cultural Resources; Appendix R, Marine Archaeological Report (Not for Public Distribution); Appendix S, Archaeological Resources Report-Onshore (Not for Public Distribution); and Appendix T, Historic Resources Report for Substation |

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| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|---|---|---|---|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| 24 | Prevent impairment of scenic resources of statewide significance. | The SFWF is consistent with this policy to the extent applicable. The SFWF will be located approximately 19 miles (30.6 km, 16.6 nm) southeast of Block Island, Rhode Island, and 35 miles (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF is located far enough offshore such that only a relatively small portion of the project would be visible from the New York State coastline; therefore, the SFWF is not expected to impact scenic resources of statewide significance. | The SFEC is consistent with this policy to the extent applicable. The SFEC and sea-to-shore transition vault will be located underground within the existing paved Town road ROW with a manhole cover at the surface, thus avoiding direct impacts to existing scenic resources. Within the Coastal Boundary, the SFEC will not be visible as it will be installed underground and therefore will not impact scenic resources of Statewide Significance. | Section 4.1.9, Visible Structures; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix U, Visual Resources Assessment Report for Substation; and Appendix V, Visual Impact Assessment Report for SFWF |
| 25 | Protect, restore, or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area. | The SFWF is consistent with this policy to the extent applicable. The SFWF will be located approximately 19 miles (30.6 km, 16.6 nm) southeast of Block Island, Rhode Island, and 35 miles (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF is located far enough offshore such that only a relatively small portion of the project would be visible from the New York State coastline; therefore, the SFWF is not expected to impact the overall scenic quality of the coastal area. | The SFEC is consistent with this policy to the extent applicable. As stated in response to State Policy 24, within the Coastal Boundary the SFEC will be installed underground, and therefore will not impact existing scenic resources. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix U, Visual Resources Assessment Report for Substation; and Appendix V, Visual Impact Assessment Report for SFWF |
| <i>Agricultural Lands Policy</i> | | | | |
| 26 | Conserve and protect agricultural lands in the state's coastal area. | This policy is not applicable because the SFWF is located on the OCS and will not impact agricultural lands. | The SFEC is consistent with this policy to the extent applicable. Within the Coastal Boundary, the SFEC will be located within Town road ROW and proximate, but not within Suffolk County Agricultural District 5 (East Hampton, Southampton). The SFEC is not anticipated to impact this Agricultural District or any active farmland or agricultural soils, since the SFEC will be installed, within the existing pavement section, wherever practicable. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.6.3, Public Services; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix G, Project Engineering Plans and Construction Drawings |
| <i>Energy and Ice Management Policies</i> | | | | |
| 27 | Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location. | This policy is not applicable because the SFWF is located on the OCS outside of NY State coastal areas. | The SFEC is consistent with this policy to the extent applicable. The purpose of the Project is to generate electricity and transmit it to the existing East Hampton Substation. The Project addresses the need identified by the LIPA for new sources of power generation that can cost-effectively and reliably supply the South Fork of Suffolk County, Long Island, as an alternative to constructing new transmission facilities. The Project will also help LIPA achieve its renewable energy goals and will enable DWSF to fulfill its contractual commitments to LIPA pursuant to a Power Purchase Agreement (PPA) executed in 2017 resulting from LIPA's technology-neutral competitive bidding process. The nature of offshore wind energy production necessitates transmission facilities within the coastal area in order to connect the electricity generated offshore by the wind turbine generators to distribution facilities located onshore. The Applicant's filing of an application with the New York State Public Service Commission (NYSPSC) under Article VII of the PSL that fully evaluates the public energy needs, compatibility of the SFEC with the environment, and Project location, demonstrates compliance with this policy. | Section 1.2, Project Purpose; and Section 2.0, Project Siting and Future Activities |
| 28 | Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or | This policy is not applicable because the SFWF will not involve ice management measures and practices. | This policy is not applicable because the SFEC will not involve ice management measures and practices. | Not applicable |
| 29 | Encourage the development of energy resources on the outer continental shelf, in Lake Erie, and in other water bodies, and ensure the environmental safety of such activities. | The SFWF is consistent with this policy to the extent applicable. The SFWF is an offshore wind energy facility located on the OCS that has been designed to use construction techniques to avoid or minimize environmental impacts to the greatest extent practicable. | The SFEC is consistent with this policy to the extent applicable. The SFEC will support and facilitate the transmission of electricity generated by offshore wind energy facility to the local grid in the Town of East Hampton. The SFEC is designed to use construction techniques and BMPs to avoid or minimize impacts on water bodies and fisheries to the greatest extent practicable. | Section 1.2, Project Purpose; Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; and Section 4.0, Site Characterization and Assessment of Potential Impacts |

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| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| <i>SFWF - New York State Coastal Zone Management Program Consistency Review</i> | | | | |
| 30 | Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards. | The SFWF is consistent with this policy to the extent applicable. Routine or accidental (non-routine) fuel spills, wastewater discharges and solid waste releases associated with SFWF construction, O&M, and decommissioning activities are possible but considered unlikely. All vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations, such as the U.S. Environmental Protection Agency (EPA) and USCG requirements for discharges and releases to surface waters. A project-specific Oil Spill Response Plan has also been developed to mitigate the potential for adversely impacting water quality. | The SFEC is consistent with this policy to the extent applicable. Routine or accidental (non-routine) fuel spills, wastewater discharges and solid waste releases associated with SFEC construction, O&M, and decommissioning activities are possible but considered unlikely. All vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations, such as the United States Environmental Protection Agency (EPA) and United State Coast Guard (USCG) requirements for discharges and releases to surface waters. Activities associated with the construction of the SFEC are unlikely to result in the discharge of pollutants into coastal waters. There will be no process discharge associated with the operation of the SFEC. Unanticipated discharges will be handled and stored in accordance with all applicable federal, state, and local regulations in order to minimize potential contamination of coastal areas. A Construction Contingency Plan that addresses spill prevention, controls, and countermeasures, onshore and offshore, and a SWPPP will be developed as part of the Project EM&CP. The Applicant will implement the SWPPP during construction to preclude pollution of surface and ground waters in the vicinity of the SFEC route. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |
| 31 | State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint. | This policy is not applicable because the SFWF is located on the OCS and not in an area subject to a waterfront revitalization program. | The SFEC is subject to review under the East Hampton LWRP. See Appendix A-1-A | Appendix A |
| 32 | Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities. | This policy is not applicable because the SFWF is located on the OCS and does not include the installation of permanent sanitary waste systems. | This policy is not applicable because the SFEC does not involve the installation of permanent sanitary waste systems. | Not applicable |
| 33 | Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters. | This policy is not applicable because the SFWF is located on the OCS and will not cause or result in storm water runoff or sewer overflows in NY State waters. | The SFEC is consistent with this policy to the extent applicable. The SFEC will not result in any direct discharge of untreated storm water into wetlands or waterbodies. Because the terrestrial portions of the SFEC will be located primarily underground within existing Town road ROW, the SFEC will not result in an increase in impervious surfaces or in a volume of storm water generated. The Applicant will prepare a SWPPP in accordance with the State Pollutant Discharge Elimination Systems (SPDES) rules and implement BMPs, to the extent necessary during construction, to avoid pollution of surface waters from storm water runoff. These may include, but are not limited to: •After completion of construction, there will be no significant increase in impervious surfaces, as the SFEC is proposed to be installed beneath existing paved road ROWs and therefore, will not create an increase in storm water runoff. •HDD will be utilized in order to minimize areas of disturbance at the landing site. •Disturbed roadway and shoulder surfaces will be restored upon the completion of construction activities. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 34 | Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas, and water supply areas. | The SFWF is consistent with this policy to the extent applicable. All vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations, such as USCG requirements for discharges and releases to surface waters. | The SFEC is consistent with this policy to the extent applicable. Vessels participating in the construction and O&M of the SFEC will adhere to all applicable local, state and federal regulations, such as the EPA and USCG requirements for discharges and releases to surface waters. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|---|---|--|---|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| 35 | Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing state permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands. | The SFWF is consistent with this policy to the extent applicable. Any dredging or disposal of dredged materials necessary for GBS foundation placement at the SFWF will not occur in NY state waters, and therefore will not interfere with natural coastal processes, will not cause an increase in erosion, and will not result in adverse impacts to fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands. | The SFEC is consistent with this policy to the extent applicable. The majority of the SFEC will be installed using a simultaneous trench and lay process in which a self-propelled mechanical trenching plow creates a trench along the seabed and the cable is simultaneously laid and buried in a single pass. This process does not require the direct removal of sediment. HDD will be used to install the SFEC at the sea-to-shore transition in which a temporary cofferdam may be utilized. The use of the cofferdam will minimize the spread of sediments suspended during construction. Material removed from within the cofferdam will be side cast and allowed to disperse naturally after removal. The Project will comply with all applicable federal and state laws and regulations regarding water quality, fish and wildlife habitats, wetlands, scenic resources, natural protective features, and important coastal resources. The SFEC is designed to use construction techniques and BMPs to avoid or minimize impacts from dredging and fill to the greatest extent practicable. | Section 1.3, Regulatory Framework; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix I, Sediment Survey and Sediment Transport Analysis Report |
| 36 | Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur. | The SFWF is consistent with this policy to the extent applicable. Appropriate measures to prevent, minimize, and mitigate any spills or releases of petroleum or hazardous wastes will be implemented during construction, O&M, and decommissioning of the SFWF. A spill prevention, control, and countermeasure plan (SPCC), an oil spill response plan (OSRP), and a storm water pollution prevention plan (SWPPP) will be prepared to comply with all federal, state, and local regulations. | The SFEC is consistent with this policy to the extent applicable. Appropriate measures to prevent, minimize, and mitigate any spills or releases of petroleum or hazardous wastes will be implemented during construction and O&M of the SFEC. A Construction Contingency Plan and a SWPPP will be prepared to comply with all federal, state, and local regulations. | Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.6.3, Public Services; Appendix D, Oil Spill Response Plan; and Appendix E, Safety Management System |
| 37 | Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters. | This policy is not applicable because the SFWF is located on the OCS and will not generate non-point discharges into NY coastal waters. | The SFEC is consistent with this policy to the extent applicable. The implementation of BMPs during construction and O&M will avoid non-point source discharge of pollutants into coastal waters. As part of the Project EM&CP, the Applicant will develop a plan for construction activities which will include an SWPPP. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 38 | The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply. | This policy is not applicable because the SFWF is located on the OCS and is not located by any primary or sole source aquifers. | The SFEC is consistent with this policy to the extent applicable. During construction and O&M of the SFEC, a SWPPP will be implemented to minimize potential impacts to wetlands, waterbodies, and groundwater during construction. The target burial depth of SFEC is much shallower than the depth of private water-supply wells in the area (> 50 feet deep). During operations, there will be no impact to the groundwater quality or quantity, as the SFEC does not involve the use of groundwater resources and no groundwater resources are anticipated to be impacted. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 39 | The transport, storage, treatment, and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands, and scenic resources. | The SFWF is consistent with this policy to the extent applicable. All vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations, such as USCG requirements for discharges and releases to surface waters. | The SFEC is consistent with this policy to the extent applicable. Vessels participating in the construction and O&M of the SFEC will adhere to all applicable local, state and federal regulations, such as the EPA and USCG requirements for discharges and releases to surface waters. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |
| 40 | Effluent discharges from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards. | This policy is not applicable because the SFWF is not a major steam electric generating or industrial facility with effluent discharges. | This policy is not applicable because the SFEC is not a major steam electric generating or industrial facilities with effluent discharges. | Not applicable |
| 41 | Land use or development in the coastal area will not cause national or state air quality standards to be violated. | The SFWF is consistent with this policy to the extent applicable. The construction, O&M, and decommissioning of the SFWF is expected to comply with national and state air quality standards. Emissions associated with increased vessel traffic in New York State coastal waters may temporarily impact to air quality. However, given the amount of existing vessel traffic in the area, the impact from the SFWF on air quality is expected to be negligible. The SFWF will obtain the necessary permits as applicable and required by federal and state air quality standards for construction, O&M, and decommissioning. | The SFEC is consistent with this policy to the extent applicable. The construction and O&M of the SFEC is expected to comply with national or state air quality standards. Emissions associated with increased marine vessel traffic emissions in New York State coastal waters and onshore construction vehicles may temporarily impact air quality. However, given the amount of existing marine vessel and vehicle traffic in the area, the impact on air quality is expected to be negligible. The SFEC will obtain the necessary permits as applicable and required by federal and state air quality standards for construction and O&M. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.8, Air Emissions; Section 4.2.1, Air Quality; and Appendix L, Air Emissions Inventory |

Appendix A-1. Coastal Zone Management Consistency Statements: New York
Deepwater Wind South Fork, LLC

SFWF - New York State Coastal Zone Management Program Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|---|---|--|--|
| 19 NYCRR Part 600.5 Coastal Policies; 19 NYCRR Part 600.6 Long Island Sound Coastal Policies; and New York Consolidated Laws, Environmental Conservation Law | | | | |
| 42 | Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act. | This policy is not applicable because the SFWF does not involve reclassification of land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act. | This policy is not applicable because the SFEC does not involve reclassification of land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act. | Not applicable |
| 43 | Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates. | The SFWF is consistent with this policy to the extent applicable. The SFWF may affect air quality temporarily because of marine vessels traveling through New York State coastal waters for construction, O&M, and decommissioning. However, the volume of pollutants that could be emitted, in comparison to existing vessel traffic, is not anticipated to generate significant amounts of acid rain precursors: nitrates and sulfates. | The SFEC is consistent with this policy to the extent applicable. Operation of the SFEC will not generate significant amounts of nitrates and sulfates and will be consistent with this policy. Construction activities may affect air quality temporarily because of marine vessels traveling through New York State coastal waters and construction equipment used onshore for construction and O&M. However, the volume of pollutants that could be emitted, in comparison to existing vessel traffic, is not anticipated to generate significant amounts of acid rain precursors: nitrates and sulfates. | Section 1.3.1, Federal Permits, Approvals, and Consultation; Section 4.1.8, Air Emissions; Section 4.2.1, Air Quality; and Appendix L, Air Emissions Inventory |
| Wetland Policy | | | | |
| 44 | Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas. | This policy is not applicable because the SFWF is located on the OCS and will not impact NY tidal or freshwater wetlands. | The SFEC is consistent with this policy to the extent applicable. Construction of the SFEC will not directly impact any tidal or freshwater wetlands. HDD methods will be used to install the SFEC in order to avoid potential direct impacts to wetland, waterfront areas or shoreline resources. In addition, the SFEC will obtain and comply with all applicable federal, state, and local surface water quality requirements and permits in the coastal zone. | Section 4.2.2, Water Quality and Water Resources; Section 4.3.1, Coastal and Terrestrial Habitat; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix M, Onshore Biological Resources Survey Report |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|--|---|---|
| 1 and 1A | <p>Restore, revitalize and redevelop deteriorated and underutilized waterfront areas for commercial and industrial, cultural, recreational and other compatible uses. This statewide policy was adapted in the LWRP as Policy 1A (see below) to better address local concerns.</p> <p>LWRP Policy 1A: Restore, revitalize, and redevelop the following underutilized sites for cultural, recreational, and other compatible uses.</p> <ul style="list-style-type: none"> (1) Marina Lane dredge spoil site, Three Mile Harbor (2) Old Fish Factory Site, Napeague (3) Former Montauk Landfill (4) Montauk Harbor Area (5) Camp Hero, Montauk (6) Montauk Business Area | <p>This policy is not applicable because the South Fork Export Cable (SFEC), which consists of a buried export cable and onshore substation, are not proposed to be located at any of the listed underutilized sites. SFEC installation and operation will not inhibit further redevelopment or use of any underutilized waterfront locations.</p> | <p>Not applicable</p> |
| 2 and 2A | <p>Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters. This statewide policy was adapted in the LWRP as Policy 2A (see below) to better address local concerns.</p> <p>LWRP Policy 2A: Water-dependent uses and facilities shall be sited on or adjacent to coastal waters, provided the proposed use is consistent with preservation and enhancement of other coastal resources, including cultural or natural resources.</p> | <p>The SFEC complies with this policy to the extent applicable. The SFEC is a water-dependent use. The SFEC-NYS will be installed beneath the seabed of New York State territorial waters and it will not negatively impact or otherwise preclude the future siting of water dependent uses in the coastal zone. The SFEC will be installed underground and will not negatively impact the ability of future water-dependent uses to locate on or adjacent to coastal waters. The underground installation of the SFEC within existing public road right-of-way (ROW) will ensure that the Project will not interfere with existing public access to the waterfront.</p> | <p>Section 2.0, Project Siting and Future Activities; Section 3.2, South Fork Export Cable; Section 4.6, Socioeconomic Resources; Section 4.6.4, Recreation and Tourism; and Section 4.7, Summary of Potential Impacts and Proposed Mitigation Measures</p> |
| 3 | <p>Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in the port areas, including those under the jurisdiction of State public authorities, of land use and development, which is essential to or support of the waterborne transportation of cargo and people.</p> | <p>This policy does not apply. The SFEC does not include any siting or development in New York State's major ports indicated by the policy; however, there would be construction activities and vessel traffic in proximity to transit lanes that service the State's major ports. Activities will be conducted in a manner that minimize impact to other marine uses.</p> | <p>Not applicable</p> |
| 4 | <p>Strengthen the economic base of small harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.</p> | <p>The SFEC is consistent with this policy to the extent applicable. The SFEC is not proposed within Three Mile Harbor or Montauk Harbor, and, therefore will not have a negative impact upon the small harbors identified in the LWRP. However, construction vessels may utilize nearby small harbors and construction related vessel traffic may occur in proximity to small harbor areas. It is noted that, by bringing electricity generated by an alternative source of energy to the local transmission grid, the Project could have a beneficial economic impact on local businesses (some of which include traditional uses and activities), including those in the Three Mile Harbor and Montauk Harbor areas.</p> | <p>Section 2.0, Project Siting and Future Activities; Section 3.2, South Fork Export Cable; Section 4.6, Socioeconomic Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures</p> |
| 5 | <p>Encourage the location of development in areas where public services and facilities essential to such development are adequate, except when such development has special functional requirements or other characteristics which necessitate its location in other coastal areas.</p> | <p>The SFEC is consistent with this policy to the extent applicable. The purpose of Policy 5 is to "strengthen commercial centers and minimize sprawl" (East Hampton Town, 1999, II-63). The SFEC will not extend public utility infrastructure to areas that are not already served; rather, it will increase the electricity supply and reliability of electric service available to the existing local transmission grid, and therefore, will not result in the increased potential for sprawling development. The SFEC does not encourage development or require public services offshore.</p> | <p>Section 1.2, Project Purpose; Section 1.3, Regulatory Framework; Section 1.3.1, Federal Permits, Approvals, and Consultations; and Section 2.0, Project Siting and Future Activities</p> |
| 6 | <p>Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.</p> | <p>The purpose of this policy is for state agencies to coordinate permitting decisions. In the case of the SFEC, several state and local agencies will be coordinating their review under the Article VII framework pursuant to the PSL. Accordingly, the Project is consistent with this policy.</p> | <p>Not applicable</p> |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|--|--|---|
| 7, 7A, and 7B | <p>Significant coastal fish and wildlife habitats, as identified on the coastal area map, shall be protected, preserved, and, where practicable, restored so as to maintain their viability as habitats.</p> <p>LWRP Policy 7A: Locally significant coastal fish and wildlife habitats, as identified on the coastal area map shall be protected, preserved, and where practicable restored so as to maintain their viability as habitats.</p> <p>LWRP Policy 7B: Protect to the maximum extent practicable the vulnerable plant and animal species and natural communities that have been identified on the State and federal levels by the New York Heritage Program, the NYS DEC Protected Native Plant List (NYCRR 193.3), the NYS DEC List of Endangered, Threatened and Special Concern Species and the federal List of Endangered and Threatened Wildlife and Plants (50 CFR 17).</p> | The SFEC is consistent with this policy to the extent applicable. There are no New York State significant coastal fish and wildlife habitats along the SFEC corridor. As identified on Map III-1 of the LWRP, locally significant habitats within Reach 11 include Wainscott Pond and Georgica Pond. The SFEC will run west of Georgica Pond and east of Wainscott Pond. Construction activities will be limited to the existing ROW along the proposed corridor and will avoid impact to these resources. Due to construction time restrictions, low impact construction techniques, and optimized routing, there will be minimal to no impact to vulnerable plant and animal species or natural communities that have been identified by the state or the federal government. | <p>Section 4.3.1, Coastal and Terrestrial Habitat;</p> <p>Section 4.3.2, Benthic and Shellfish Resources;</p> <p>Section 4.3.3, Finfish and Essential Fish Habitat;</p> <p>Section 4.6.5, Commercial and Recreational Fishing;</p> <p>Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures;</p> <p>Appendix M, Onshore Biological Resources Report;</p> <p>Appendix N, Benthic Resources Survey Report;</p> <p>Appendix O, Essential Fish Habitat Report; and</p> <p>Appendix Y, Commercial and Recreational Fisheries Technical Report</p> |
| 8 | Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub-lethal or lethal effect on those resources. | The SFEC is consistent with this policy to the extent applicable. The Project does not anticipate introducing hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on coastal fish and wildlife resources. Any hazardous materials that may be involved in construction and operations will be handled and stored in accordance with all federal, state and local regulations in order to minimize potential contamination of coastal areas. A Construction Contingency Plan and a SWPPP will be developed as part of the Project EM&CP. | <p>Section 1.3.1, Federal Permits, Approvals, and Consultations;</p> <p>Section 4.1.5, Discharges and Releases;</p> <p>Section 4.1.6, Trash and Debris;</p> <p>Section 4.2.2, Water Quality and Water Resources;</p> <p>Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and</p> <p>Appendix D, Oil Spill Response Plan</p> |
| 9 and 9A | <p>Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.</p> <p>Policy #9A: Recreational use of fish and wildlife resources will be expanded by increasing public access and other measures at sites recommended under "opportunities for improvement" and "recreational use compatible with new development" in the analysis narrative of this report, and in "public access and recreation improvements" in projects section XIV.</p> | The SFEC is consistent with this policy to the extent practicable. The SFEC will not cause permanent increase or decrease in access to existing fish and wildlife resources for recreational use. During construction fishing in some areas may be temporarily interrupted. Where avoidance was not possible, measures were employed to minimize impacts to recreational use of fish and wildlife resources along the SFEC route. Any impact to recreational use of the resources offshore during the construction period will be temporary and localized. The SFEC will not cause permanent increase or decrease in access to existing fish and wildlife resources for recreational use. During construction fishing in some areas may be temporarily interrupted. Pedestrian and vehicle access will be maintained throughout installation. There will no permanent reduction in waterfront or beach access. | <p>Section 4.6.4, Recreation and Tourism;</p> <p>Section 4.6.5, Commercial and Recreational Fishing;</p> <p>Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures;</p> <p>Appendix B, Fisheries Communication Plan</p> <p>Appendix M, Onshore Biological Resources Survey Report; and</p> <p>Appendix Y, Commercial and Recreational Fisheries Technical Report</p> |
| 10 and 10A | <p>Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by: (i) encouraging the construction of new, or improvement of existing, on-shore commercial fishing facilities; (ii) increasing marketing of the state's seafood product; (iii) maintaining adequate stocks and expanding aquaculture facilities. Such efforts shall be in a manner which ensures the protection of such renewable fish resources and considers other activities dependent on them.</p> <p>Policy #10A: Encourage aquaculture and mariculture which benefits overall public stocks of living marine resources, but discourage aquaculture or mariculture inconsistent with maintaining healthy stocks and habitats.</p> | The SFEC is consistent with this policy to the extent practicable. Various fisheries monitoring data sets suggest multiple fisheries are active near the SFEC. Installation of the SFEC may have temporary minimal affects to commercial fishery resources or activities. Operation of the SFEC will not affect commercial fishery resources or activities in the coastal area. | Not applicable |
| 11 | Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion. | The SFEC is consistent with this policy to the extent applicable. The SFEC will not increase the amount of impervious surfaces present within the coastal area, thus there will not be a significant increase in the potential for flooding or erosion. Where portions of the SFEC will occur within areas vulnerable to flooding and erosion, construction activities will occur in accordance with an erosion and sediment control plan. Construction activities will also comply with all applicable flood prevention regulations. The SFEC will not increase the amount of impervious surfaces present within the coastal area, thus there will not be a significant increase in the potential for flooding or erosion. Although new impervious surfaces will be created at the SFEC-Interconnection Facility, it is outside of the coastal area. | <p>Section 2.0, Project Siting and Future Activities;</p> <p>Section 3.0, Project Description;</p> <p>Section 4.6.3, Public Services;</p> <p>Section 4.6.7, Coastal Land Use and Infrastructure;</p> <p>Appendix E, Safety Management System; and</p> <p>Appendix M, Onshore Biological Resources Survey Report</p> |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|---|---|---|
| 12 | Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands, and bluffs. Primary dunes will be protected from all encroachments that could impair their natural protective capacity. | The SFEC is consistent with this policy to the extent applicable. During construction of the landing site and the SFEC, the Applicant will comply with all applicable regulations for CEHAs. The EM&CP for the Project will include measures to minimize damage to natural resources and property from flooding and erosion (e.g. hay bale and/or silt fence barriers). In addition, HDD will be utilized where necessary to avoid disturbing natural resources to the extent practicable | Section 2.0, Project Siting and Future Activities; Section 3.2, South Fork Export Cable; Section 4.3.1, Coastal and Terrestrial Habitats; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix M, Onshore Biological Resources Survey Report |
| 13 and 13A | The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least 30 years as demonstrated in design and construction standards and/or assured maintenance or replacement programs. Policy #13A: Erosion protection structures must be maintained both with regard to the structure and to adjoining natural protective features. Required maintenance may include beach nourishment and mitigation of erosion to nearby property and resources caused by construction or reconstruction of the erosion protection structure. | This policy is not applicable because the SFEC does not involve construction or reconstruction of erosion protection structures onshore in the New York State coastal area. | Not applicable |
| 14 and 14A | Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations. Policy #14A: Minimize the construction of erosion protection structures and new development in hazardous areas in Reaches 1, 4, 5, 7, 8, 9, 10, 11, 12, and parts of Reaches 2, 3, and 6. | This policy is not applicable. The SFEC will be installed underground, and therefore will not increase the potential for flooding or erosion . In addition, the Applicant is not proposing to construct erosion protection structures | Not applicable |
| 15 | Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land. | The SFEC is consistent with this policy to the extent applicable. Dredging/excavation will be required within coastal waters for installation of the SFEC, and at the landing site. HDD will be utilized where possible to limit sediment disturbance to the extent practicable. In areas where excavation is required, the Applicant will use a combination of hydraulic jet and mechanical plow to install the SFEC in accordance with prevailing regulations (e.g. CEHA), which will not cause an increase in erosion or significantly interfere with natural coastal processes. All construction activities will comply with USACE requirements. An Individual Permit will be acquired from the USACE under Section 10 of the Rivers and Harbors Act (33 United States Code [USC] 403) and Section 404 of the Clean Water Act (CWA) (33 USC 1344). After installation, all areas affected by the installation of the SFEC will be actively restored or allowed to return to their pre-installation condition. It is anticipated that construction and O&M of the SFEC will not cause interference with natural coastal process, increased erosion, or result in adverse impacts to water quality, physical processes, and marine productivity in coastal areas. | Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.2.2, Water Quality and Water Resources; Section 4.2.3, Geological Resources; Appendix H, Geophysical and Geotechnical Survey Reports; and Appendix I, Sediment Survey and Sediment Transport Analysis Reports |
| 16 | Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long-term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features. | This policy is not applicable because the SFEC does not involve the use of public funds for erosion protection structures. | Not applicable |
| 17 and 17A | Whenever possible, use non-structural measures to minimize damage to natural resources and property from flooding and erosion, such measures shall include: (I) The setback of buildings and structures; (II) The planting of vegetation and installation of sand fencing and draining; (III) The reshaping of bluffs; and (IV) The flood-proofing of buildings of their elevation above the base flood level. Policy #17A: Along south shore ocean facing Reaches 8, 9, 10, and 11, only non-structural measures are permitted to minimize flooding and erosion. | The SFEC is consistent with this policy to the extent applicable. The Project does not include any shore line protection structures. The SFEC will be installed via HDD to avoid impacts to the shoreline and existing natural resources. The SFEC-Onshore will be constructed along existing roads and railroad ROW without increasing the amount of impervious surfaces. The Project will not result in an increase in the potential for erosion or for flooding that would result in damage to natural resources or property. | Section 2.3, Review of Technologies and Installation Methods; Section 3.0, Project Description; Section 4.6.7, Coastal Land Use and Infrastructure; Appendix G, Project Engineering Plans and Construction Drawings; and Appendix M, Onshore Biological Resources Survey Report |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|--|---|---|
| 18 | To safeguard the vital economic, social and environmental interests of the state and its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal areas. | The SFEC is consistent with this policy to the extent applicable. The SFEC will have a minimal temporary impact during construction only, and will not negatively impact the coastal environment or the ecological, historical, and scenic qualities it provides to the Town. The SFEC is not anticipated to impact any valuable New York State coastal waters or resources or impact economic, social, cultural, and environmental interests of the state and its citizens. | Section 2.0, Project Siting and Future Activities; Section 3.2, South Fork Export Cable; Section 4.3.1, Coastal and Terrestrial Habitat; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.6, Socioeconomic Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix M, Onshore Biological Resources Survey Report; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix R, Marine Archaeological Report; Appendix S, Archaeological Resources Report - Onshore; Appendix T, Historic Resources Report for Substation; Appendix U, Visual Resources Assessment Report for Substation; Appendix V, Visual Impact Assessment Report for SFWF; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 19 | Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities so that these resources and facilities may be fully utilized in accordance with reasonably anticipated recreation needs and protection of historic and natural resources. In providing such access, priority shall be given to public beaches, boating facilities, fishing areas waterfront parks. | The SFEC is consistent with this policy to the extent applicable. Construction of the SFEC landing site may temporarily affect public access to the shoreline. However, pedestrian and vehicle access will be maintained throughout installation. Additionally, HDD methods will be utilized at the landing site in order to avoid permanent reduction to public access. Therefore, there will be no permanent negative impact to public access to public water-related recreation resources. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 20 | Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided, and it shall be provided in a manner compatible with adjoining uses. Such lands shall be retained in public ownership. | The SFEC is consistent with this policy to the extent applicable. The SFEC is not anticipated to permanently impact any publicly-owned foreshore areas or lands that are immediately adjacent. There may be a temporary impact to access in certain areas during construction of the SFEC. Limited waterfront access will be maintained during the construction and maintenance and full access will be restored once these activities have been completed. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.6.3, Public Services; Section 4.6.4, Recreation and Tourism; and Section 4.6.7, Coastal Land Use and Infrastructure |
| 21 | Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast, provided it is consistent with the preservation and enhancement of other coastal resources and, takes into account demand for such facilities. In facilitating such activities, priority shall be given to areas where access to the recreation opportunities of the coast can be provided by new or existing public transportation services and to those areas where the use of the shore is severely restricted by existing development. Policy #21A: Water-dependent and water-enhanced recreation will be encouraged and facilitated at sites recommended under "opportunities for improvement" and "recreational uses compatible with new development" in the analysis narrative of this report, and in "public access and recreation improvements" in projects XIV. | The SFEC is consistent with this policy to the extent applicable. The SFEC will not permanently impact existing or future water-dependent or water-enhanced recreational uses. Construction at the landing site and the SFEC may temporarily affect public access to the shoreline at the landing site. However, pedestrian and vehicle access will be maintained throughout construction. Water dependent and water enhanced recreation will be fully restored upon completion of construction. The SFEC will not encourage or facilitate water-dependent and water-enhanced recreation. However, it is noted that because all facilities within the State's coastal area boundary will be located below grade there will be no reduction in water-dependent and water-enhanced recreation uses. | Not applicable |
| 22 | Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development. | The SFEC is consistent with this policy to the extent applicable. Minor development adjacent to the shore will occur at the landing site for construction of the transition vault. The remainder of the SFEC within the coastal area will involve an underground electric transmission cable in already developed public road ROWs. However, it is noted that because all Project facilities within the State's coastal area boundary will be located below grade and there will be no reduction in water-dependent and water-enhanced recreation uses. | Not applicable |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|--|---|---|
| 23 | Protect, enhance, and restore structures, districts, areas, or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation. | The SFEC is consistent with this policy to the extent applicable. Construction and O&M will not require the demolition or physical alteration of any S/NRHP-eligible or S/NRHP-listed buildings. No mitigation is anticipated to be necessary for negative impacts to historic resources associated with construction. In the event that unanticipated archaeological resources are encountered during construction, the actions outlined in the Unanticipated Discovery Protocol for the Project will be followed. | Not applicable |
| 24 | Prevent impairment of scenic resources of statewide significance, as identified on the coastal area map. Impairment shall include: (i) The irreversible modification of geological forms, the destruction or removal of vegetation or structures that are significant to the scenic quality of an identified resource; (ii) The addition of structures which because of siting or scale will reduce identified views or which because of scale, form, or materials will diminish the scenic quality of an identified resource. | The SFEC is consistent with this policy to the extent applicable. Portions of the SFEC will pass through areas identified as SASS's. However, the sea-to-shore transition vault will be located underground within the existing paved Town road. The SFEC will also not be visible, as it will be installed underground in existing public road ROWs within the coastal area. Visual impacts from construction at the landing site and along the SFEC will be temporary in nature. As such, the SFEC will not result in any permanent impairment of SASS's. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix U, Visual Resources Assessment Report for Substation; and Appendix V, Visual Impact Assessment Report for SFWF |
| 25 | Protect, restore, or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area. | The SFEC is consistent with this policy to the extent applicable. As discussed above, the SFEC, including the sea-to-shore transition vault, will not impair scenic resources, as it will be installed underground and will not be visible from any natural and man-made resources. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix U, Visual Resources Assessment Report for Substation; and Appendix V, Visual Impact Assessment Report for SFWF |
| 26 | (Important Agricultural Lands). To conserve and protect agricultural lands in State's coastal area, an action shall not result in a loss, nor impair the productivity, of important agricultural lands if that loss or impairment would adversely affect the viability of agriculture in an agricultural district or if there is no agricultural district, in the area surrounding such lands. LWRP Policy 26A: (Locally Important Agricultural Lands). To conserve and protect agricultural lands in East Hampton's coastal area, an action shall not result in a loss, nor impair the productivity, of locally important agricultural lands if that loss or impairment would adversely affect the viability of agriculture in an agricultural district or if there is no agricultural district, in the area surrounding such lands. | The SFEC is consistent with this policy to the extent applicable. The SFEC will not result in a loss, nor will it impair the productivity, of locally important agricultural lands, because the SFEC will be installed within existing paved road ROWs and within existing LIRR ROW within the coastal area, and will not traverse the Suffolk County Agricultural District 5 or any active farmland or agricultural soils | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.6.3, Public Services; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix G, Project Engineering Plans and Construction Drawings |
| 27 | Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location. | The SFEC is consistent with this policy to the extent applicable. The SFEC is directly compatible with this policy, as it will facilitate the transmission of electricity generated by offshore wind energy facilities to the local grid in the Town of East Hampton and satisfy the PPA entered into by the LIPA and the Applicant. The nature of offshore wind energy production necessitates transmission facilities within the coastal area in order to connect the electricity generated offshore by the wind turbine generators to distribution facilities located onshore. Therefore, the shorefront location is necessary for the sea-to-shore transition vault. The Applicant's filing of an application with the NYSPSC under Article VII of the PSL that fully evaluates the public energy needs, compatibility of the Project with the environment, and Project location, demonstrates compliance with this policy. | Section 1.2, Project Purpose; and Section 2.0, Project Siting and Future Activities |
| 28 | Ice management practices shall not damage significant fish and wildlife and their habitats, increase shoreline erosion or flooding, or interfere with the production of hydroelectric power. | This policy does not apply because the Project does not include or anticipate the need for ice management measures and practices. | Not applicable |
| 29 | Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities. | The SFEC is consistent with this policy to the extent applicable. As with LWRP Policy 27 above, the SFEC will be directly compatible with this policy, as it will facilitate the transmission of electricity generated by offshore wind energy facility to the local grid in the Town of East Hampton. HDD will be utilized as necessary to minimize impacts to coastal water bodies. The SFEC is designed to use construction techniques and BMPs to avoid or minimize environmental impacts to the greatest extent practicable. | Section 1.2, Project Purpose; and Section 2.0, Project Siting and Future Activities |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|---|---|--|
| 30 | Municipal, industrial, and commercial discharge of pollutants including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and national water quality standards. | The SFEC is consistent with this policy to the extent applicable. Any hazardous materials that may be involved in construction and operations will be handled and stored in accordance with all federal, state and local regulations in order to minimize potential contamination of coastal areas. A Construction Contingency Plan and a SWPPP will be developed as part of the Project EM&CP. The Applicant will implement the SWPPP during construction to preclude pollution of surface and ground waters in the vicinity of the Project. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |
| 31 | State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint. | The SFEC is subject to review under the East Hampton LWRP. This Appendix provides an assessment of the Project's consistency with the State coastal area policies and management objectives of East Hampton's LWRP. | Not applicable |
| 32 | Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities. | This policy is not applicable because the SFEC will not be installing sanitary waste systems in small communities. | Not applicable |
| 33 | Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters. | The SFEC is consistent with this policy to the extent applicable. The SFEC will not result in any direct discharge of untreated stormwater into wetlands or waterbodies. The Applicant will implement BMPs and follow the SWPPP within the Project EM&CP, to the extent necessary during construction, to avoid pollution of surface waters from stormwater runoff. These may include, but are not limited to: •After completion of construction, there will be no significant increase in impervious surfaces, as the SFEC is proposed to be installed beneath existing paved road ROWs and therefore, will not create an increase in stormwater runoff. •HDD will be utilized in order to minimize areas of disturbance at the landing site. •Disturbed roadway and shoulder surfaces will be restored upon the completion of construction activities. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 34 and 34A | Discharge of waste materials into coastal waters from vessels will be limited so as to protect significant fish and wildlife habitats, recreation areas and water supply areas. Policy #34A: The following harbors and creeks of the town are designated state and federal EPA No discharge Zones as of January 1999: Reach 1: Northwest Creek Reach 2: Three Mile Harbor, Hog Creek Reach 3: Accabonac Harbor Reach 4: Napeague Harbor Reach 6: Lake Montauk | The SFEC is consistent with this policy to the extent applicable. In order to prevent waste materials from contaminating coastal waters the Applicant will follow the Construction Contingency Plan and the SWPPP, which will be developed as part of the Project EM&CP. All vessel waste will be offloaded, stored, and disposed of in accordance with all applicable local, state and federal regulations such as the EPA and USCG requirements for discharges and releases to surface waters. Additionally, the SFEC will not traverse any of the harbors and creeks identified in this local policy. | Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |
| 35 | Dredging and dredge spoil disposal in coastal waters will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands. | The SFEC is consistent with this policy to the extent applicable. The majority of the SFEC will be installed using a simultaneous trench and lay process in which a self-propelled mechanical trenching plow creates a trench along the seabed and the cable is simultaneously laid and buried in a single pass. This process does not require the direct removal of sediment. HDD will be used to install the SFEC at the sea-to-shore transition in which a temporary cofferdam may be utilized. The use of the cofferdam will minimize the spread of sediments suspended during construction. Material removed from within the cofferdam will be side cast and allowed to disperse naturally after removal. Burial of the SFEC will meet all applicable permitting requirements and conditions, including an Individual Permit from the USACE under Section 10 of the Rivers and Harbors Act (33 USC 403) and Section 404 of the Clean Water Act (CWA) (33 USC 1344). In addition, the Applicant will obtain all relevant permits prior to commencing installation activities. | Section 1.3, Regulatory Framework; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix I, Sediment Survey and Sediment Transport Analysis Reports |

Appendix A-1-A. Coastal Zone Management Consistency Statements: Town of East Hampton, New York LWRP

Deepwater Wind South Fork, LLC

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
|-----------------|---|--|---|
| 36 | Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur. | The SFEC is consistent with this policy to the extent applicable. Appropriate measures to prevent, minimize, and mitigate any spills or releases of petroleum or hazardous wastes will be implemented during construction and O&M of the SFEC. A Construction Contingency Plan and a SWPPP will be prepared to comply with all federal, state, and local regulations. | Not applicable |
| 37 and 37A | Best Management Practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters. Policy #37A: Best management practices will be used to abate and eliminate storm water runoff draining into coastal waters. | The SFEC is consistent with this policy to the extent applicable. The SFEC will avoid nonpoint discharge of excess nutrients, organics, and eroded soils into coastal waters through the implementation of erosion control measures detailed in the SWPPP within the Project EM&CP. The SFEC and SFEC are consistent with this policy to the extent applicable. The SWPPP in the Project EM&CP will detail various BMPs, consistent with the intent of this policy. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 38 | The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply. | The SFEC is consistent with this policy to the extent applicable. During construction of the SFEC, any dewatering that is required in excavated and/or trenched areas will be properly managed by appropriate control measures, such as with temporary mud pumps and slurry machines, which perform drilling activities in underground areas where significant amounts of groundwater may be present. A SWPPP will be prepared as part of the Project EM&CP, and the Applicant will ensure that the appropriate measures outlined by these documents will be implemented during construction of the SFEC. During operations, there will no impact to the groundwater quality or quantity, as the SFEC does not involve the use the groundwater resource. The target burial depth of SFEC is much shallower that the depth of private water-supply wells in the area (> 50 feet deep). Therefore, groundwater and surface waters will not be negatively impacted as a result of the SFEC. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 39 | The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands and scenic resources. | The SFEC is consistent with this policy to the extent applicable. During the construction of the SFEC it is expected that limited amounts of solid waste will be generated. The Applicant will dispose of construction debris in accordance with prevailing Town of East Hampton regulations, a manner that will be protective of groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands, and scenic resources. Upon completion of construction, operation of the SFEC will not generate any significant quantities of solid waste outside of maintenance activities. The Applicant will likewise dispose of any solid waste generated during maintenance activities in accordance with prevailing Town of East Hampton regulations. Any hazardous materials that may be involved in construction and operations will be handled and stored in accordance with all applicable federal, state and local regulations, in order to minimize potential contamination of coastal areas. A Construction Contingency Plan and a SWPPP will be developed as part of the Project EM&CP. | Section 1.3.1, Federal Permit, Approvals, and Consultations; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2.2, Water Quality and Water Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix D, Oil Spill Response Plan |
| 40 | Effluent discharges from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards. | This policy is not applicable because the SFEC is not a major steam electric generating or industrial facility with effluent discharges. | Not applicable |
| 41 | Land use or development in the coastal area will not cause national or State air quality standards to be violated. | The SFEC is consistent with this policy to the extent applicable. The construction and O&M of the SFEC is expected to comply with national or state air quality standards. Emissions associated with increased marine vessel traffic emissions in New York State coastal waters and onshore construction vehicles may temporarily impact air quality. However, given the amount of existing marine vessel and vehicle traffic in the area, the impact on air quality is expected to be negligible. | Section 1.3.1, Federal Permits, Approvals, and Consultation; Section 4.1.8, Air Emissions; Section 4.2.1, Air Quality; and Appendix L, Air Emissions Inventory |
| 42 | Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal Clean Air Act. | This policy is not applicable because the SFEC does not involve reclassification of land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act. | Not applicable |

SFEC - Town of East Hampton Local Waterfront Revitalization Program (LWRP) Policies

| Policy # | Policy/Requirement | Response to Policy | COP Section Reference |
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| 43 | Land use or development in the coastal area must not cause the generation of significant amounts of the acid rain precursors: nitrates and sulfates. | The SFEC is consistent with this policy to the extent applicable. Operation of the SFEC will not generate significant amounts of nitrates and sulfates and will be consistent with this policy. Construction activities may affect air quality temporarily because of marine vessels traveling through New York State coastal waters and construction equipment used onshore for construction and O&M. However, the volume of pollutants that could be emitted, in comparison to existing vessel traffic, is not anticipated to generate significant amounts of acid rain precursors: nitrates and sulfates. | Section 1.3.1, Federal Permits, Approvals, and Consultation; Section 4.1.8, Air Emissions; Section 4.2.1, Air Quality; and Appendix L, Air Emissions Inventory |
| 44 | Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas. | The SFEC is consistent with this policy to the extent applicable. The SFEC is not anticipated to directly impact tidal and freshwater wetlands. The Applicant will implement measures such as HDD construction to protect and preserve tidal and freshwater wetlands, and the benefits derived from these areas. In addition, the SFEC will obtain and comply with all applicable federal, state, and local surface water quality requirements and permits in the coastal zone. | Section 4.2.2, Water Quality and Water Resources; Section 4.3.1, Coastal and Terrestrial Habitat; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix M, Onshore Biological Resources Survey Report |

Appendix A-2

Appendix A-2. Coastal Zone Management Consistency Statements: Rhode Island
Deepwater Wind South Fork, LLC

SFWF - Rhode Island Ocean Special Area Management Plan (Ocean SAMP) Consistency Review - DRAFT

| Ocean SAMP Section Number 650-RICR-20-05-11 | Policy/Requirement | Old Policy # | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|---|---------------|---|---|---|
| 11.10 Regulatory Standards | | 1160 | | | |
| 11.10 (A) | A. This section contains all the regulatory standards outlined by the Ocean SAMP. The regulatory standards have been organized according to the following stages: application; design, fabrication and installation; pre-construction; construction and decommissioning and; monitoring. Section 11.10.1 of this part, Overall Regulatory Standards, applies to all stages of development. The regulatory standards contained within all previous chapters of the Ocean SAMP document have been incorporated into this section based upon the applicable stage of development. The "Regulatory Standards" in Section 11.10 of this part are enforceable policies for purposes of the Federal CZMA Federal Consistency provision (16 U.S.C. § 1456 and 15 C.F.R. part 930). For CZMA Federal Consistency purposes the Regulatory Standards, in addition to other applicable federally approved RICRMP enforceable policies shall be used as the basis for a CRMC CZMA Federal Consistency concurrence or objection. | 1 | The South Fork Wind Farm (SFWF) is consistent with this policy. The SFWF is located in Federal waters, but also is within the Rhode Island Ocean Special Area Management Plan (Ocean SAMP) study area and meets the definition of an Offshore Development. | The South Fork Export Cable (SFEC) is consistent with this policy. The SFEC is located in Federal and New York State waters. Portions of the SFEC will be located in Federal waters as well as in the Rhode Island Ocean Special Area Management Plan (Ocean SAMP) study area and meets the definition of an Offshore Development. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10(B) | B.The federal offshore renewable energy leasing process, and subsequent regulation of renewable energy projects located in federal waters, will remain under the jurisdiction of BOEMRE, in consultation and coordination with relevant federal agencies and affected state, local, and tribal officials, as per BOEMRE's statutory authority at 43 USC 1337(p) and the regulations found at 30 CFR 285. | 2 | The SFWF is consistent with this policy. The SFWF is located in federal waters and therefore will remain in compliance with BOEMRE policies. The SFWF is also located within the RI Ocean SAMP study area and will comply with federally approved RICRMC enforceable policies | The SFEC is consistent with this policy. The SFEC is located in federal waters and state waters, and will remain in compliance with BOEMRE policies as well as with New York State Coastal Zone Management policies. The SFEC is also located within the RI Ocean SAMP study area and will comply with federally approved RICRMC enforceable policies. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10.1 Overall Regulatory Standards | | 1160.1 | | | |
| 11.10.1(A) | A. All Offshore Developments regardless of size, including energy projects, which are proposed for or located within state waters of the Ocean SAMP area, are subject to the policies and standards outlined in Sections 11.9 and 11.10 of this part (except, as noted above, Section 11.9 policies shall not be used for CRMC concurrence or objection for CZMA Federal Consistency reviews). For the purposes of the Ocean SAMP, Offshore Developments are defined as: | 1 | The SFWF is consistent with this policy. The SFWF is not located within Rhode Island State waters but meets the definition of a large-scale offshore development and is subject to section 11.10 policies. | The SFEC is consistent with this policy. The SFEC is not located within Rhode Island State waters but meets the definition of a large-scale offshore development and is subject to section 11.10 policies. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10.1(A)(1) | 1. Large-scale projects, such as: | i. | The SFWF is consistent with this policy because it is meets the definition of an offshore wind facility with 5 or more turbines. | This policy is not applicable because SFEC is a buried export cable, and does not include offshore wind facilities, wave generation devices, instream tidal or ocean current devices, offshore LNG platforms, artificial reefs, or OCS plans. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10.1(A)(1)(a) | a. offshore wind facilities (5 or more turbines within 2 km of each other, or 18 MW power generation); | a. | | | |
| 11.10.1(A)(1)(b) | b. wave generation devices (2 or more devices, or 18 MW power generation); | b. | | | |
| 11.10.1(A)(1)(c) | c. instream tidal or ocean current devices (2 or more devices, or 18 MW power generation); and | c. | | | |
| 11.10.1(A)(1)(d) | d. offshore LNG platforms (1 or more); and | d. | | | |
| 11.10.1(A)(1)(e) | e. Artificial reefs (1/2 acre footprint and at least 4 feet high), except for projects of a public nature whose primary purpose is habitat enhancement. | e. | | | |
| 11.10.1(A)(1)(f) | f. outer continental shelf (OCS) exploration, development, and production plans. | N/A | | | |
| 11.10.1(A)(2) | 2. Small-scale projects, defined as any projects that are smaller than the above thresholds; | ii. | This policy is not applicable because the SFWF is not a small-scale project. | This policy is not applicable because the SFEC is not a small-scale project. | |
| 11.10.1(A)(3) | 3. Underwater cables; | iii. | The SFWF is consistent with this policy. The SFWF includes an inter-array underwater cable system that connects the WTGs to an offshore substation. Although the SFWF is located in Federal waters, it is also located within the RI Ocean SAMP study area. | The SFEC is consistent with this policy because it includes underwater cables that connects the SFWF to the mainland electric grid. The SFEC-Offshore will be located both in federal waters and New York State waters, as well as within the RI Ocean SAMP study area. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10.1(A)(4) | 4. Mining and extraction of minerals, including sand and gravel; | iv. | This policy is not applicable because the SFWF is an offshore wind farm facility, not a mining and extraction of minerals facility. | This policy is not applicable because the SFEC is a buried export cable, not a mining and extraction of minerals facility. | Not applicable |
| 11.10.1(A)(5) | 5. Aquaculture projects of any size, as defined and regulated in Section 00-1.3.1(K) of this chapter; | v. | This policy is not applicable because the SFWF is an offshore wind farm facility, not an aquaculture project. | This policy is not applicable because the SFEC is a buried export cable, not an aquaculture project. | Not applicable |
| 11.10.1(A)(6) | 6. Dredging, as defined and regulated in Section 00-1.3.1(I) of this chapter; or | vi. | This policy is not applicable because the SFWF is an offshore wind farm facility, not a dredging project. | This policy is not applicable because the SFEC is a buried export cable, not a dredging project. | Not applicable |
| 11.10.1(A)(7) | 7. Other development as defined in subchapter 00 part 1 of this chapter (RICRMP - Red Book) which is located from the mouth of Narragansett Bay seaward, in tidal waters from between 500 feet offshore and the 3-nautical mile, state water boundary. | vii. | This policy is not applicable because the SFWF is an offshore wind farm facility, not a development located in Rhode Island coastal tidal waters. | This policy is not applicable because the SFEC is a buried export cable, not a development located in Rhode Island coastal tidal waters. | Not applicable |
| 11.10.1(B) | B. In assessing the natural resources and existing human uses present in state waters of the Ocean SAMP area, the Council finds that the most suitable area for offshore renewable energy development in the state waters of the Ocean SAMP area is the Renewable Energy Zone depicted in Figure 1 in Section 11.10.1(R) of this part, below. The Council designates this area as Type 4E waters. In the Rhode Island Coastal Resources Management Program these waters were previously designated as Type 4 (or multipurpose) but are hereby modified to show that this is the preferred site for large scale renewable energy projects in state waters. The Council may approve offshore renewable energy development elsewhere in the Ocean SAMP area, within state waters, where it is determined to have no significant adverse impact on the natural resources or human uses of the Ocean SAMP area. Large-scale Offshore Developments shall avoid areas designated as Areas of Particular Concern consistent with Section 11.10.2 of this part. No large-scale offshore renewable energy development shall be allowed in Areas Designated for Preservation consistent with Section 11.10.3 of this part. | 2 | The SFWF is consistent with this policy. The SFWF is located outside Rhode Island state waters and the Renewable Energy Zone designated by the Council. The SFWF has been sited to avoid areas designated for preservation and avoid, to the extent possible, areas of particular concern. When avoidance is not possible, protection measures will be employed to avoid or minimize impact to any areas of particular concern. | The SFEC is consistent with this policy. The SFEC is located outside Rhode Island state waters and the Renewable Energy Zone designated by the Council. The SFEC has been sited to avoid areas designated for preservation and avoid, to the extent possible, areas of particular concern. When avoidance is not possible, protection measures will be employed to avoid or minimize impact to any areas of particular concern. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| 11.10.1(C) | C) Offshore Developments shall not have a significant adverse impact on the natural resources or existing human uses of the Rhode Island coastal zone, as described in the Ocean SAMP. Where the Council determines that impacts on the natural resources or human uses of the Rhode Island coastal zone through the pre-construction, construction, operation, or decommissioning phases of a project constitute significant adverse effects, the Council shall, through its permitting and enforcement authorities in state waters and through any subsequent CZMA federal consistency reviews, require that the applicant modify the proposal to avoid and/or mitigate the impacts or the Council shall deny the proposal. | 3 | The SFWF is consistent with this policy. The SFWF will not have significant adverse impact on the natural resources or human uses of the RI Ocean SAMP study area. It is expected that current activities will be able to continue post construction. | The SFEC is consistent with this policy. The SFEC will not have significant adverse impact on the natural resources or human uses of the RI Ocean SAMP study area. It is expected that current activities will be able to continue post construction. | Section 1.3.4, Coastal Zone Management Act Consistency; Section 4.3, Biological Resources; Section 4.6, Socioeconomic Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix A, Coastal Zone Management Federal Consistency Statements |

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| 11.10.1(D) | D) Any assent holder of an approved Offshore Development shall: | 4 | The SFWF is consistent with this policy. The SFWF was designed in a way that will ensure safety and not cause undue harm to natural resources. DWSF has identified environmental protection measures to minimize potential impacts to natural resources from construction of the SFWF. | The SFEC is consistent with this policy. Th SFEC was designed in a way that will ensure safety and will not cause undue harm to natural resources. DWSF has identified environmental protection measures to minimize potential impacts to natural resources from construction of the SFEC. | Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; Section 4.2, Physical Resources; Section 4.3, Biological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix D, Oil Spill Response Plan; and Appendix E, Safety Management System |
| 11.10.1(D)(1) | 1. Design the project and conduct all activities in a manner that ensures safety and shall not cause undue harm or damage to natural resources, including their physical, chemical, and biological components to the extent practicable; and take measures to prevent unauthorized discharge of pollutants including marine trash and debris into the offshore environment. | i. | | | |
| 11.10.1(D)(2) | 2. Submit requests, applications, plans, notices, modifications, and supplemental information to the Council as required; | ii. | | | |
| 11.10.1(D)(3) | 3. Follow up, in writing, any oral request or notification made by the Council, within 3 business days; | iii. | | | |
| 11.10.1(D)(4) | 4. Comply with the terms, conditions, and provisions of all reports and notices submitted to the Council, and of all plans, revisions, and other Council approvals, as provided in Section 11.10.5 of this part; | iv. | | | |
| 11.10.1(D)(5) | 5. Make all applicable payments on time; | v. | | | |
| 11.10.1(D)(6) | 6. Conduct all activities authorized by the permit in a manner consistent with the provisions of this document, the Rhode Island Coastal Resources Management Program (Subchapter 00 Part 1 of this Chapter), and all relevant federal and state statutes, regulations and policies; | vi. | | | |
| 11.10.1(D)(7) | 7. Compile, retain, and make available to the Council within the time specified by the Council any information related to the site assessment, design, and operations of a project; and | vii. | | | |
| 11.10.1(D)(8) | 8. Respond to requests from the Council in a timeframe specified by the Council. | viii. | | | |
| 11.10.1(E) | E) Any Large-Scale Offshore Development, as defined in section 11.3(F), shall require a meeting between the Fisherman's Advisory Board (FAB), the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, construction schedules, alternative locations, project minimization and identification of high fishing activity or habitat edges. For any state permit process for a Large-Scale Offshore Development this meeting shall occur prior to submission of the state permit application. The Council cannot require a pre-application meeting for federal permit applications, but the Council strongly encourages applicants for any Large-Scale Offshore Development, as defined in Section 11.3(F) in federal waters to meet with the FAB and the Council staff prior to the submission of a federal application, lease, license, or authorization. However, for federal permit applicants, a meeting with the FAB shall be necessary data and information required for federal consistency reviews for purposes of starting the CZMA 6-month review period for federal license or permit activities under 15 C.F.R. part 930, subpart D, and OCS Plans under 15 C.F.R. part 930, subpart E, pursuant to 15 C.F.R. § 930.58(a)(2). Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project. | 5 | The SFWF is consistent with this policy. A FAB and HAB meeting was held on August 27, 2018 to discuss potential fisheries-related impacts from the SFWF. | The SFEC is consistent with this policy. A FAB and HAB meeting was held on August 27, 2018 to discuss potential fisheries-related impacts from the SFEC. | Section 1.3.4, Coastal Zone Management Act Consistency; Section 1.4, Agency and Stakeholder Outreach; Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix A, Coastal Zone Management Federal Consistency Statements |
| 11.10.1(F) | F) The Council shall prohibit any other uses or activities that would result in significant long-term negative impacts Rhode Island's commercial or recreational fisheries. Long-term impacts are defined as those that affect more than one or two seasons. | 6 | The SFWF is consistent with this policy. There are no expected significant long-term negative impacts to Rhode Island's commercial or recreational fisheries from the SFWF. | The SFEC is consistent with this policy. There are no expected significant long-term negative impacts to Rhode Island's commercial or recreational fisheries from the SFEC. | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.1(G) | G) The Council shall require that the potential adverse impacts of Offshore Developments and other uses on commercial or recreational fisheries be evaluated, considered, and mitigated as described in Section 11.10.1(H) of this part. | 7 | The SFWF is consistent with this policy. DWSF has conducted an assessment of commercial and recreational fisheries within the region, which encompasses the SFWF. The SFWF is not expected to have major long term impacts on commercial or recreational fisheries. Environmental protection measures have been identified to mitigate any potential impacts from the SFWF. | The SFEC is consistent with this policy. DWSF has conducted an assessment of commercial and recreational fisheries which encompasses the SFEC. The SFEC is not expected to have major long term impacts on commercial or recreational fisheries. Environmental protection measures have been identified to mitigate any potential impacts from the SFWF. | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.1(H) | H) For the purposes of Fisheries Policies and Standards as summarized in Chapter 5, Commercial and Recreational Fisheries, sections 5.5.1-5.3.2, mitigation is defined as a process to make whole those fisheries user groups that are adversely affected by proposals to be undertaken, or undertaken projects, in the Ocean SAMP area. Mitigation measures shall be consistent with the purposes of duly adopted fisheries management plans, programs, strategies and regulations of the agencies and regulatory bodies with jurisdiction over fisheries in the Ocean SAMP area, including but not limited to those set forth above in 11.9.4(B) of this part. Mitigation shall not be designed or implemented in a manner that substantially diminishes the effectiveness of duly adopted fisheries management programs. Mitigation measures may include, but are not limited to, compensation, effort reduction, habitat preservation, restoration and construction, marketing, and infrastructure improvements. Where there are potential impacts associated with proposed projects, the need for mitigation shall be presumed. Negotiation of mitigation agreements shall be a necessary condition of any approval or permit of a project by the Council. Mitigation shall be negotiated between the Council staff, the FAB, the project developer, and approved by the Council. The reasonable costs associated with the negotiation, which may include data collection and analysis, technical and financial analysis, and legal costs, shall be borne by the applicant. The applicant shall establish and maintain either an escrow account to cover said costs of this negotiation or such other mechanism as set forth in the permit or approval condition pertaining to mitigation. This policy shall apply to all Large-Scale Offshore Developments, underwater cables, and other projects as determined by the Council. | 8 | The SFWF is consistent with this policy. Environmental Protection Measures have been identified to mitigate any potential impacts from the SFWF. The SFWF Fisheries Communication Plan summaries the outreach conducted and includes a Fishing Gear Conflict Prevention and Compensation Plan that identifies measures to Prevent gear loss, as well as a claim procedure. in the event that gear loss is caused by SFWF activities. | The SFEC is consistent with this policy. Environmental Protection Measures have been identified to mitigate any potential impacts from the SFEC. The SFWF Fisheries Outreach and Communication Plan summaries the outreach conducted and includes a Fishing Gear Conflict Prevention and Compensation Plan that identifies measures to Prevent gear loss, as well as a claim procedure in the event that gear loss is caused by SFEC activities. | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan. Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.1(I) | I) The Council recognizes that moraine edges, as illustrated in Figures 3 and 4 in section 11.10.2 of this part, are important to commercial and recreational fishermen. In addition to these mapped areas, the FAB may identify other edge areas that are important to fisheries within a proposed project location. The Council shall consider the potential adverse impacts of future activities or projects on these areas to Rhode Island's commercial and recreational fisheries. Where it is determined that there is a significant adverse impact, the Council will modify or deny activities that will impact these areas. In addition, the Council will require assent holders for Offshore Developments to employ micro-siting techniques in order to minimize the potential impacts of such projects on these edge areas. | 9 | The SFWF is consistent with this policy. The SFWF has been sited to avoid areas of particular concern, including moraine edges. When avoidance is not possible, protection measures will be employed to avoid to minimize impact to any moraine edges. | The SFEC is consistent with this policy. The SFEC has been sited to avoid areas of particular concern, including moraine edges. When avoidance is not possible, protection measures will be employed to avoid to minimize impact to any moraine edges. | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |

Appendix A-2. Coastal Zone Management Consistency Statements: Rhode Island
Deepwater Wind South Fork, LLC

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| 11.10.1(J) | J) The finfish, shellfish, and crustacean species that are targeted by commercial and recreational fishermen rely on appropriate habitat at all stages of their life cycles. While all fish habitat is important, spawning and nursery areas are especially important in providing shelter for these species during the most vulnerable stages of their life cycles. The Council shall protect sensitive habitat areas where they have been identified through the Site Assessment Plan or Construction and Operation Plan review processes for Offshore Developments as described in Section 11.10.5(C) of this part. | 10 | The SFWF is consistent with this policy. The SFWF is not expected to have negative effects on commercially and recreationally fished species and habitats. Siting of the SFWF was informed by site specific habitat assessments. Impacts to habitat are expected to be short-term and localized. Environmental protection measures have been identified to minimize the potential impacts. | The SFEC is consistent with this policy. The SFEC is not expected to have negative effects on commercially and recreationally fished species and habitats. Siting of the SFEC was informed by site specific habitat assessments. Impacts to habitat are expected to be short-term and localized. Environmental protection measures have been identified to minimize the potential impacts. | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.1(K) | K) Any Large-Scale Offshore Development, as defined in Section 11.10.1(A) of this part, shall require a meeting between the HAB, the applicant, and the Council staff to discuss potential marine resource and habitat-related issues such as, but not limited to, impacts to marine resource and habitats during construction and operation, project location, construction schedules, alternative locations, project minimization, measures to mitigate the potential impacts of proposed projects on habitats and marine resources, and the identification of important marine resource and habitat areas. For any state permit process for a Large-Scale Offshore Development, this meeting shall occur prior to submission of the state permit application. The Council cannot require a pre-application meeting for federal permit applications, but the Council strongly encourages applicants for any Large-Scale Offshore Development, as defined in Section 11.10.1(A) of this part, in federal waters to meet with the HAB and the Council staff prior to the submission of a federal application, lease, license, or authorization. However, for federal permit applicants, a meeting with the HAB shall be necessary data and information required for federal consistency reviews for purposes of starting the CZMA 6-month review period for federal license or permit activities under 15 C.F.R. part 930, subpart D, and OCS Plans under 15 C.F.R. part 930, subpart E, pursuant to 15 C.F.R. § 930.58 (a)(2). Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project. | 11 | The SFWF is consistent with this policy. A FAB and HAB meeting was held on August 27, 2018 to discuss potential fisheries-related impacts from the SFWF. | The SFEC is consistent with this policy. A FAB and HAB meeting was held on August 27, 2018 to discuss potential fisheries-related impacts from the SFEC. | Section 1.3.4, Coastal Zone Management Act Consistency; Section 1.4, Agency and Stakeholder Outreach; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix A, Coastal Zone Management Federal Consistency Statements |
| 11.10.1(L) | L) The potential impacts of a proposed project on cultural and historic resources will be evaluated in accordance with the National Historic Preservation Act and Antiquities Act, and the Rhode Island Historical Preservation Act and Antiquities Act as applicable. Depending on the project and the lead federal agency, the projects that may impact marine historical or archaeological resources identified through the joint agency review process shall require a Marine Archaeology Assessment that documents actual or potential impacts the completed project will have on submerged cultural and historic resources. | 12 | The SFWF is consistent with this policy. The identification of cultural and historic resources for the SFWF the evaluation of potential impacts have involved several meetings with agency and tribal representatives. Cultural resource studies include: <ul style="list-style-type: none">- Historic Resources Visual Analysis and Visual Impact Assessment;- Marine Archeological Resource Assessment | The SFEC is consistent with this policy. The identification of cultural and historic resources for the SFEC the evaluation of potential impacts have involved several meetings with agency and tribal representatives. Cultural resource studies include: <ul style="list-style-type: none">- Historic Resources Visual Analysis and Visual Impact Assessment;- Marine Archeological Resource Assessment | Section 4.4, Cultural Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix R, Marine Archaeological Report (Not for Public Distribution); Appendix V, Visual Impact Assessment Report - Offshore; and Appendix W, Visual Resources Assessment - Historic Resources |
| 11.10.1(M) | M) Guidelines for Marine Archaeology Assessment in the Ocean SAMP Area can be obtained through the RIHPHC in their document, "Performance Standards and Guidelines for Archaeological Projects: Standards for Archaeological Survey" (RIHPHC 2007), or the lead federal agency responsible for reviewing the proposed development. | 13 | The SFWF is consistent with this policy. BOEM is the lead federal agency for the SFWF and the Marine Archaeology Assessment was conducted in accordance with their guidelines. | The SFEC is consistent with this policy. BOEM is the lead federal agency for the SFEC and the Marine Archaeology Assessment was conducted in accordance with their guidelines. | Section 4.4, Cultural Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix R, Marine Archaeological Report (Not for Public Distribution) |
| 11.10.1(N) | N) The potential non-physical impacts of a proposed project on cultural and historic resources shall be evaluated in accordance with 36 CFR 800.5, <i>Assessment of Adverse Effects, (v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features</i> Depending on the project and the lead federal agency, the Ocean SAMP Interagency Working Group may require that a project undergo a Visual Impact Assessment that evaluates the visual impact a completed project will have on onshore cultural and historic resources. | 14 | The SFWF is consistent with this policy. A Visual Impact Assessment was conducted for the SFWF and surrounding areas that could be potentially affected. The project will be visible from certain vantage points during construction and operations. | The SFEC is consistent with this policy. During construction, the project will be visible from certain vantage points, but once in operation the SFEC will be buried and will not be visible from shore. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.1(O) | O) A Visual Impact Assessment may require the development of detailed visual simulations illustrating the completed project's visual relationship to onshore properties that are designated National Historic Landmarks, listed on the National Register of Historic Places, or determined to be eligible for listing on the National Register of Historic Places. Assessment of impacts to specific views from selected properties of interest may be required by relevant state and federal agencies to properly evaluate the impacts and determination of adverse effect of the project on onshore cultural or historical resources. | 15 | The SFWF is consistent with this policy. As a part of the Visual Impact Assessment, detailed visual simulations were completed to show the visual relationship with onshore properties. More information on the visual simulations can be found in sections 4.4.2 and 4.5.2. | The SFEC is consistent with this policy. The SFEC cable will be buried underground and not visible from onshore properties. | Section 4.1.9, Visible Structures; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix R, Marine Archaeological Report (Not for Public Distribution); and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.1(P) | P) A Visual Impact Assessment may require description and images illustrating the potential impacts of the proposed project. | 16 | The SFWF is consistent with this policy. As a part of the Visual Impact Assessment, potential impacts from the SFWF were evaluated | The SFEC is consistent with this policy. During construction, the project will be visible from certain vantage points, but once in operation the SFEC will be buried and will not be visible from shore. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.1(Q) | Q) Guidelines for Landscape and Visual Impact Assessment in the Ocean SAMP Area can be obtained through the lead federal agency responsible for reviewing the proposed development. | 17 | The SFWF is consistent with this policy. BOEM is the lead federal agency for the SFWF and the landscape and Visual Impact Assessment was conducted in accordance with their guidelines. | The SFEC is consistent with this policy. BOEM is the lead federal agency for the SFEC and the Marine Archaeology Assessment was conducted in accordance with their guidelines. | Section 4.1.9, Visible Structures; Section 4.5, Visual Resources; Section 4.6, Socioeconomic Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix V, Visual Impact Assessment Report for SFWF |

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| 11.10.2 Areas of Particular Concern | | 1160.2 | | | |
| 11.10.2(A) | A) Areas of Particular Concern (APCs) have been designated in state waters through the Ocean SAMP process with the goal of protecting areas that have high conservation value, cultural and historic value, or human use value from Large-Scale Offshore Development. These areas may be limited in their use by a particular regulatory agency (e.g. shipping lanes), or have inherent risk associated with them (e.g. unexploded ordnance locations), or have inherent natural value or value assigned by human interest (e.g. glacial moraines, historic shipwreck sites). Areas of Particular Concern have been designated by reviewing habitat data, cultural and historic features data, and human use data that has been developed and analyzed through the Ocean SAMP process. Currently designated Areas of Particular Concern are based on current knowledge and available datasets; additional Areas of Particular Concern may be identified by the Council in the future as new datasets are made available. Areas of Particular Concern may be elevated to Areas Designated for Preservation in the future if future studies show that Areas of Particular Concern cannot risk even low levels of Large-Scale Offshore Development within these areas. Areas of Particular Concern include: | 1 | The SFWF is consistent with this policy, as described below. | The SFEC is consistent with this policy, as described below. | Section 4.2.3, Geological Resources; Section 4.3, Biological Resources; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix H, Geophysical and Geotechnical Survey Reports Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix R, Marine Archaeological Report (Not for Public Distribution); and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.2(A)(1) | 1. Areas with unique or fragile physical features, or important natural habitats; | i. | The SFWF is consistent with this policy. Based on benthic and geophysical surveys, the SFWF was sited to avoid fragile physical features or important natural habitats. | The SFEC is consistent with this policy. Based on benthic and geophysical surveys, the SFEC was sited to avoid fragile physical features or important natural habitats. | Section 4.3.1, Coastal and Terrestrial Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.2(A)(2) | 2. Areas of high natural productivity; | ii. | The SFWF is consistent with this policy. Based on fisheries assessment, the SFWF was sited to avoid areas of high natural productivity. | The SFEC is consistent with this policy. Based on fisheries assessment, the SFWF was sited to avoid areas of high natural productivity. | Section 4.3, Biological Resources; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.2(A)(3) | 3. Areas with features of historical significance or cultural value; | iii. | The SFWF is consistent with this policy. Based on marine archaeological assessment, the SFWF was sited to avoid areas with features of historical significance or cultural value. Where avoidance is not possible, DWSF has identified environmental protection measures to minimize impacts on these resources, including an Unanticipated Discovery Plan. | The SFEC is consistent with this policy. Based on marine archaeological assessment, the SFEC was sited to avoid areas with features of historical significance or cultural value. Where avoidance is not possible, DWSF has identified environmental protection measures to minimize impacts on these resources, including an Unanticipated Discovery Plan. | Section 4.1.9, Visible Infrastructure; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix R, Marine Archaeological Report (Not for Public Distribution); and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.2(A)(4) | 4. Areas of substantial recreational value; | iv. | The SFWF is consistent with this policy. The SFWF is not located in an area that has substantial recreational value. | The SFEC is consistent with this policy. The SFEC is not located in an area that has substantial recreational value. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Management Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.2(A)(5) | 5. Areas important for navigation, transportation, military and other human uses; and | v | The SFWF is consistent with this policy. The SFWF was sited to avoid areas that are important to navigation, transportation, military and other uses. | The SFEC is consistent with this policy. The SFEC was sited to avoid areas that are important to navigation, transportation, military and other uses. | Section 4.6.6, Commercial Shipping; Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.2(A)(6) | 6. Areas of high fishing activity. | vi. | The SFWF is consistent with this policy. Based on fisheries assessment, the SFWF is not sited in an area of high fishing activity. | The SFEC is consistent with this policy. Based on fisheries assessment, the SFEC is not sited in an area of high fishing activity. | Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report; |
| 11.10.2(B) | B) The Council has designated the areas listed below in section 11.10.2(C) of this part in state waters as Areas of Particular Concern. All Large-scale, Small-scale, or other offshore development, or any portion of a proposed project, shall be presumptively excluded from APCs. This exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC. When evaluating a project proposal, the Council shall not consider cost as a factor when determining whether practicable alternatives exist. Applicants which successfully demonstrate that the presumptive exclusion does not apply to a proposed project because there are no practicable alternatives that are less damaging in areas outside of the APC must also demonstrate that all feasible efforts have been made to avoid damage to APC resources and values and that there will be no significant alteration of the APC resources or values. Applicants successfully demonstrating that the presumptive exclusion does not apply because the proposed project will not result in a significant alteration to the values and resources of the APC must also demonstrate that all feasible efforts have been made to avoid damage to the APC resources and values. The Council may require a successful applicant to provide a mitigation plan that protects the ecosystem. The Council will permit underwater cables, only in certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group. The maps listed below in section 11.10.2(C) of this part. depicting Areas of Particular Concern may be superseded by more detailed, site-specific maps created with finer resolution data. | 2 | The SFWF is consistent with this policy. The SFWF is located in federal waters, but within the RI Ocean SAMP study area, and was sited to avoid Areas of Particular Concern. When avoidance is not possible, protection measures will be employed to avoid or minimize impacts to Areas of Particular Concern. | The SFEC is consistent with this policy. The SFEC is located in federal waters, but within the RI Ocean SAMP study area, and was sited to avoid Areas of Particular Concern. When avoidance is not possible, protection measures will be employed to avoid or minimize impacts to Areas of Particular Concern. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 4.2.3, Geological Resources; Section 3.0, Project Description; and Appendix H, Geophysical and Geotechnical Survey Reports |

Appendix A-2. Coastal Zone Management Consistency Statements: Rhode Island
Deepwater Wind South Fork, LLC

SFWF - Rhode Island Ocean Special Area Management Plan (Ocean SAMP) Consistency Review - DRAFT

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|--|--|---------------|--|--|---|
| 11.10.2(C) | C) Areas of particular concern that have been identified in the Ocean SAMP area in state waters are described as follows. | 3 | The SFWF is consistent with this policy. | The SFEC is consistent with this policy. | Section 1.2, Project Purpose; and Section 1.3.1, Federal Permits, Approvals, and Consultations |
| 11.10.2(C)(1) | 1. Historic shipwrecks, archaeological or historical sites and their buffers as described in Chapter 4, Cultural and Historic Resources, section 440.1.1 through 440.1.4, are Areas of Particular Concern. For the latest list of these sites and their locations please refer to the Rhode Island State Historic Preservation and Heritage Commission. | i. | The SFWF is consistent with this policy. DWSF analyzed the shipwreck data provided by Rhode Island and there are none located within the SFWF area. | The SFEC is consistent with this policy. DWSF analyzed the shipwreck data provided by Rhode Island and there are none located along the SFEC route. | Section 4.4, Cultural Resources; Section 4.4.2, Marine Archaeological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix R, Marine Archaeological Report (Not for Public Distribution) |
| 11.10.2(C)(2) | 2. Offshore dive sites within the Ocean SAMP area, as shown in Figure 2 in Section 11.10.2 of this part are designated Areas of Particular Concern. The Council recognizes that offshore dive sites, most of which are shipwrecks, are valuable recreational and cultural ocean assets and are important to sustaining Rhode Island's recreation and tourism economy. | ii. | The SFWF is consistent with this policy. There are no offshore dive sites of significance in the SFWF area. | The SFEC is consistent with this policy. There are no offshore dive sites of significance in the SFEC area. | Section 4.6.4, Recreation and Tourism; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix X, Navigational Risk Assessment |
| 11.10.2(C)(3) | 3. Glacial moraines are important habitat areas for a diversity of fish and other marine plants and animals because of their relative structural permanence and structural complexity. Glacial moraines create a unique bottom topography that allows for habitat diversity and complexity, which allows for species diversity in these areas and creates environments that exhibit some of the highest biodiversity within the entire Ocean SAMP area. The Council also recognizes that because glacial moraines contain valuable habitats for fish and other marine life, they are also important to commercial and recreational fishermen. Accordingly, the Council shall designate glacial moraines as identified in Figure 3 and Figure 4 in section 11.10.2 of this part as Areas of Particular Concern. | iii. | The SFWF is consistent with this policy. The SFWF has been sited to avoid areas of particular concern. When avoidance is not possible, protection measures will be employed to avoid to minimize impact to glacial moraines. | The SFEC is consistent with this policy. The SFEC has been sited to avoid areas of particular concern. When avoidance is not possible, protection measures will be employed to avoid to minimize impact to glacial moraines. | Section 4.2.3, Geological Resources; Section 4.2.4, Physical Oceanography and Meteorology; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix H, Geophysical and Geotechnical Survey Reports |
| 11.10.2(C)(4) | 4. Navigation, Military, and Infrastructure areas including: designated shipping lanes, precautionary areas, recommended vessel routes, ferry routes, dredge disposal sites, military testing areas, unexploded ordnance, pilot boarding areas, anchorages, and a coastal buffer of 1 km as depicted in Figure 5 in section 11.10.2 of this part are designated as Areas of Particular Concern. The Council recognizes the importance of these areas to marine transportation, navigation and other activities in the Ocean SAMP area. | iv. | The SFWF is consistent with this policy. DWSF analyzed navigation, military, and infrastructure areas, and there are no precautionary areas, ferry routes, dredge disposal sites, military testing areas, unexploded ordnance, pilot boarding areas, anchorages, or coastal buffers located in the SFWF area. There may be designated shipping lanes or recommended vessel routes in the future. | The SFEC is consistent with this policy. DWSF analyzed navigation, military, and infrastructure areas, and there are no precautionary areas, ferry routes, dredge disposal sites, military testing areas, unexploded ordnance, pilot boarding areas, anchorages, or coastal buffers located in the SFEC area. There may be designated shipping lanes or recommended vessel routes in the future. | Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.2(C)(5) | 5. Areas of high fishing activity as identified during the pre-application process by the Fishermen's Advisory Board, as defined in section 11.3(E) of this part, may be designated by the Council as Areas of Particular Concern. | v. | The SFWF is consistent with this policy. The SFWF has been sited to avoid Areas of high fishing activity. The SFWF is not expected to have major long-term impacts on fishing it is expected that fishing will continue after the SFWF construction. | The SFEC is consistent with this policy. The SFEC has been sited to avoid Areas of high fishing activity. The SFEC is not expected to have major long-term impacts on fishing it is expected that fishing will continue after the SFEC construction. | Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.2(C)(6) | 6. Several heavily-used recreational boating and sailboat racing areas, as shown in Figure 6 in section 11.10.2 of this part, are designated as Areas of Particular Concern. The Council recognizes that organized recreational boating and sailboat racing activities are concentrated in these particular areas, which are therefore important to sustaining Rhode Island's recreation and tourism economy. | vi. | The SFWF is consistent with this policy. The SFWF is not located in a heavily-used recreational boating and sailboat racing areas as shown in Figure 6 of the RI SAMP. | The SFEC is consistent with this policy. The SFEC is not located in a heavily-used recreational boating and sailboat racing areas as shown in Figure 6 of the RI SAMP. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.2(C)(7) | 7. Naval Fleet Submarine Transit Lane, as described in Chapter 7, Marine Transportation, Navigation, and Infrastructure section 720.7, are designated as Areas of Particular Concern. | vii. | The SFWF is consistent with this policy. The SFWF is not located in a Naval Fleet Submarine Transit Lane. | The SFEC is consistent with this policy. The SFEC is not located in a Naval Fleet Submarine Transit Lane. | Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.2(C)(8) | 8. Other Areas of Particular Concern may be identified during the pre-application review by state and federal agencies as areas of importance. | viii. | The SFWF is consistent with this policy. DWSF recognizes that other Areas of Particular concern may be identified during the pre-application review. | The SFEC is consistent with this policy. DWSF recognizes that other Areas of Particular concern may be identified during the pre-application review. | Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.2(D) | D) Developers proposing projects for within the Renewable Energy Zone as described in section 11.10.1(B) of this part shall adhere to the requirements outlined in 11.10.2 of this part regarding Areas of Particular Concern in state waters, including any Areas of Particular Concern that overlap the Renewable Energy Zone (see Figure 7 in section 11.10.2 of this part). | 4 | This policy is not applicable because the SFWF is not located within Rhode Island State waters. | This policy is not applicable because the SFEC is not located within Rhode Island State waters. | Not applicable |
| 11.10.3 Prohibitions and Areas Designated for Preservations | | 1160.3 | | | |
| 11.10.3(A) | A) Areas Designated for Preservation are designated in the Ocean SAMP area in state waters for the purpose of preserving them for their ecological value. Areas Designated for Preservation were identified by reviewing habitat and other ecological data and findings that have resulted from the Ocean SAMP process. Areas Designated for Preservation are afforded additional protection than Areas of Particular Concern (see section 11.10.2 of this part) because of scientific evidence indicating that Large-Scale Offshore Development in these areas may result in significant habitat loss. The areas listed in Section 11.10.3 are designated as Areas Designated for Preservation. The Council shall prohibit any Large-Scale Offshore Development, mining and extraction of minerals, or other development that has been found to be in conflict with the intent and purpose of an Area Designated for Preservation. Underwater cables are exempt from this prohibition. Areas designated for preservation include: | 1 | This policy is not applicable because the SFWF is located in federal waters, outside state waters, and is therefore not located in any Areas Designated for Preservation. | This policy is not applicable because the SFEC is located in federal waters, outside state waters, and is therefore not located in any Areas Designated for Preservation. | Not applicable |
| 11.10.3(A)(1) | 1. Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in Figure 8 in section 11.10.2 of this part) is designated as an Area Designated for Preservation due to their ecological value and the significant role these foraging habitats play to avian species, and existing evidence suggesting the potential for permanent habitat loss as a result of offshore wind energy development. The current research regarding sea duck foraging areas indicates that this habitat is depth limited and generally contained within the 20 meter depth contour. It is likely there are discreet areas within this region that are prime feeding areas, however at present there is no long-term data set that will allow this determination. Thus, the entire area within the 20 meter contour is being protected as an Area Designated for Preservation until further research allows the Council and other agencies to make a more refined determination. | i. | This policy is not applicable because the SFWF is not located in any Areas Designated for Preservation or Ocean SAMP sea duck foraging habitat. | This policy is not applicable because the SFEC is not located in any Areas Designated for Preservation or Ocean SAMP sea duck foraging habitat. | Not applicable |
| 11.10.3(A)(2) | 2. The mining and extraction of minerals, including sand and gravel, from tidal waters and salt ponds is prohibited. This prohibition does not apply to dredging for navigation purposes, channel maintenance, habitat restoration, or beach replenishment for public purposes. | 2 | This policy is not applicable because the SFWF is an offshore wind farm facility, not a mining and extraction of minerals facility. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF with the SFEC - Onshore substation, not a mining and extraction of minerals facility. | Not applicable |

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|---|---|---------------|--|--|---|
| 11.10.3(A)(3) | 3. The Council shall prohibit any Offshore Development in areas identified as Critical Habitat under the Endangered Species Act. | 3 | The SFWF is consistent with this policy. The SFWF is not located within any critical habitat areas. | The SFEC is consistent with this policy. The SFEC is not located within any critical habitat areas. | Section 4.3, Biological Resources; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.3(A)(4) | 4. Dredged material disposal, as defined and regulated in Section 00-1.3.1(l) of this chapter, is further limited in the Ocean SAMP area by the prohibition of dredged material disposal in the following Areas of Particular Concern as defined in section 11.10.2 of this part: historic shipwrecks, archaeological, or historic sites; offshore dive sites; navigation, military, and infrastructure areas; and moraines. Beneficial reuse may be allowed in Areas Designated for Preservation, whereas all other dredged material disposal is prohibited in those areas. All disposal of dredged material will be conducted in accordance with the U.S. EPA and U.S. Army Corps of Engineers' manual, <i>Evaluation of Dredged Material Proposed for Ocean Disposal</i> . | 4 | This policy is not applicable because the SFWF is an offshore wind farm facility, not a dredging project. | This policy is not applicable because the SFEC is a buried export cable not a dredging project. | Not applicable |
| 11.10.4 Other Areas | | 1160.4 | | | |
| 11.10.4(A) | A) Large-scale projects or other development which is found to be a hazard to commercial navigation shall avoid areas of high intensity commercial marine traffic in state waters. Avoidance shall be the primary goal of these areas. Areas of High Intensity Commercial Marine Traffic are defined as having 50 or more vessel counts within a 1 km by 1 km grid, as in Figure 9 in Section 11.10.2 of this part. | 1 | The SFWF is consistent with this policy. The SFWF is not located in the areas of high traffic as described in Figure 9 of the SAMP. | The SFEC is consistent with this policy. The SFEC will be buried and therefore not a hazard to commercial navigation. | Section 4.6.8, Other Marine Uses; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.5 Application Requirements | | 1160.5 | | | |
| 11.10.5(A) | A) For the purposes of this document, the phrase "necessary data and information" shall refer to the necessary data and information required for federal consistency reviews for purposes of starting the Coastal Zone Management Act (CZMA) 6-month review period for federal license or permit activities under 15 C.F.R. part 930, subpart D, and OCS Plans under 15 C.F.R. part 930, subpart E, pursuant to 15 C.F.R. § 930.58(a)(2). Any necessary data and information shall be provided before the 6-month CZMA review period begins for a proposed project. It should be noted that other federal and state agencies may require other types of data or information as part of their review processes. | 1 | The SFWF is consistent with this policy. All necessary data and information will be provided to start the 6 month review period. | The SFEC is consistent with this policy. All necessary data and information will be provided to start the 6 month review period. | Section 1.3.4, Coastal Zone Management Act Consistency; Section 1.4, Agency and Stakeholder Outreach; and Appendix A, Coastal Zone Management Federal Consistency Statements |
| 11.10.5(B) | B) For the purposes of this document, the following terms shall be defined as: | 2 | | | |
| 11.10.5(B)(1) | 1. A Site Assessment Plan (SAP) is defined as a pre-application plan that describes the activities and studies the applicant plans to perform for the characterization of the project site. | i. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | Not Applicable |
| 11.10.5(B)(2) | 2. A Construction and Operations Plan (COP) is defined as a plan that describes the applicant's construction, operations, and conceptual decommissioning plans for a proposed facility, including the applicant's project easement area. | ii. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; and Section 3.0, Project Description |
| 11.10.5(B)(3) | 3. A Certified Verification Agent (CVA) is defined as an independent third-party agent that shall use good engineering judgment and practices in conducting an independent assessment of the design, fabrication and installation of the facility. The CVA shall have licensed and qualified Professional Engineers on staff | iii. | The CVA nomination was submitted with the COP and will be approved by BOEM. | The CVA nomination was submitted with the COP and will be approved by BOEM. | Section 1.5.3, Certified Verification Agency Nominations |
| 11.10.5(C) | C) Prior to construction, the following sections shall be considered necessary data and information and shall be required by the Council: | 3 | | | |
| 11.10.5(C)(1) | 1. Site Assessment Plan – A SAP is a pre-application plan that describes the activities and studies (e.g. installation of meteorological towers, meteorological buoys) the applicant plans to perform for the characterization of the project site. Within the Renewable Energy Zone, if an applicant applies within 2 years of CRMC's adoption of the Ocean Special Area Management Plan they may elect to combine the SAP and Construction and Operation Plan (COP) phase, but only within the renewable energy zone and only for 2 years after the adoption date. If an applicant elects to combine these two phases all requirements shall still be met. The SAP shall describe how the applicant shall conduct the resource assessment (e.g., meteorological and oceanographic data collection) or technology testing activities. The applicant shall receive the approval of the SAP by the Council. For projects within Type 4E waters (depicted in Figure 1 in section 11.10.1 of this part), pre-construction data requirements may incorporate data generated by the Ocean SAMP provided the data was collected within 2 years of the date of application, or where the Ocean SAMP data is determined to be current enough to meet the requirements of the Council in coordination with the Joint Agency Working Group. The applicant shall reference information and data discussed in the Ocean SAMP (including appendices and technical reports) in their SAP. | i. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(a) | a. The applicant's SAP shall include data from: | i. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(a)(1) | 1. Physical characterization surveys (e.g., geological and geophysical surveys or hazards surveys); and | 1 | | | |
| 11.10.5(C)(1)(a)(2) | 2. Baseline environmental surveys (e.g., biological or archaeological surveys). | 2 | | | |
| 11.10.5(C)(1)(b) | b. The SAP shall demonstrate that the applicant has planned and is prepared to conduct the proposed site assessment activities in a manner that conforms to the applicant's responsibilities listed above in section 11.10.1(E) of this part: | ii. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(b)(1) | 1. Conforms to all applicable laws, regulations; | 1 | | | |
| 11.10.5(C)(1)(b)(2) | 2. Is safe; | 2 | | | |
| 11.10.5(C)(1)(b)(3) | 3. Does not unreasonably interfere with other existing uses of the state waters. | 3 | | | |
| 11.10.5(C)(1)(b)(4) | 4. Does not cause undue harm or damage to natural resources; life (including human and wildlife); the marine, coastal, or human environment; or sites, structures, or direct harm to objects of historical or archaeological significance; | 4 | | | |
| 11.10.5(C)(1)(b)(5) | 5. Uses best available and safest technology; | 5 | | | |
| 11.10.5(C)(1)(b)(6) | 6. Uses best management practices; and | 6 | | | |
| 11.10.5(C)(1)(b)(7) | 7. Uses properly trained personnel. | 7 | | | |
| 11.10.5(C)(1) c) | c. The applicant shall also demonstrate that the site assessment activities shall collect the necessary data and information required for the applicant's COP, as described below in section 11.10.5(C)(2) of this part. | iii. | | | |
| 11.10.5(C)(1)(d) | d. The applicant's SAP shall include the information described in Table 1, as applicable. | iv. | | | |

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|---|--|--------------------|--|--|--|
| Table 1 | Table 1: Contents of a site assessment plan | Table 11.1 | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(d)(1) | (1) Contact Information. The name, address, e-mail address, and phone number of an authorized representative. | (1) | | | |
| 11.10.5(C)(1)(d)(2) | (2) The site assessment or technology testing concept. A discussion of the objectives; description of the proposed activities, including the technology to be used; and proposed schedule from start to completion. | (2) | | | |
| 11.10.5(C)(1)(d)(4) | (4) Stipulations and compliance. A description of the measures the applicant took, or shall take, to satisfy the conditions of any permit stipulations related to the applicant's proposed activities. | (4) | | | |
| 11.10.5(C)(1)(d)(5) | (5) A location. The surface location and water depth for all proposed and existing structures, facilities, and appurtenances located both offshore and onshore. | (5) | | | |
| 11.10.5(C)(1)(d)(6) | (6) General structural and project design, fabrication, and installation. Information for each type of facility associated with the applicant's project. | (6) | | | |
| 11.10.5(C)(1)(d)(7) | (7) Deployment activities. A description of the safety, prevention, and environmental protection features or measures that the applicant will use. | (7) | | | |
| 11.10.5(C)(1)(d)(8) | (8) The applicant's proposed measures for avoiding, minimizing, reducing, eliminating, and monitoring environmental impacts. A description of the measures the applicant shall take to avoid or minimize adverse effects and any potential incidental take, before the applicant conducts activities on the project site, and how the applicant shall mitigate environmental impacts from proposed activities, including a description of the measures to be used. | (8) | | | |
| 11.10.5(C)(1)(d)(9) | (9) Reference information. Any document or published sources that the applicant information and data discussed in the Ocean SAMP (including appendices and technical reports), other plans referenced in the Ocean SAMP, and other plans previously submitted by the applicant or that are otherwise readily available to the Council. | (9) | | | |
| 11.10.5(C)(1)(d)(10) | (10) Decommissioning and site clearance procedures. A discussion of methodologies. | (10) | | | |
| 11.10.5(C)(1)(d)(11) | (11) Air quality information. Information required for the Clean Air Act (42 U.S.C. 7409) and implementing regulations. | (11) | | | |
| 11.10.5(C)(1)(d)(12) | (12) A listing of all Federal, State, and local authorizations or approvals required to conduct site assessment activities on the project site. A statement indicating whether such authorization or approval has been applied | (12) | | | |
| 11.10.5(C)(1)(d)(13) | (13) A list of agencies or persons with whom the applicant has communicated, or will communicate, regarding potential impacts associated with the proposed activities. Contact information and issues discussed. | (13) | | | |
| 11.10.5(C)(1)(d)(14) | (14) Financial assurance information. Statements attesting that the activities and facilities proposed in the applicant's SAP are or shall be covered by an appropriate performance bond or other Council approved | (14) | | | |
| 11.10.5(C)(1)(d)(15) | (15) Other information. Additional information as requested by the Council in coordination with the Joint Agency Working Group. | (15) | | | |
| 11.10.5(C)(1)(e) | e. The applicant's SAP shall provide the results of geophysical and geological surveys, hazards surveys, archaeological surveys (as required by the Council in coordination with the Joint Agency Working Group), and biological surveys outlined in Table 2 (with the supporting data) in the applicant's SAP: | v. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| Table 2 | Table 2: Necessary data and information to be provided in the site assessment plan | Table 11.2 | | | |
| 11.10.5(C)(1)(e)(1) | (1) Geotechnical. | (1) | | | |
| 11.10.5(C)(1)(e)(2) | (2) Shallow hazards. | (2) | | | |
| 11.10.5(C)(1)(e)(3) | (3) Archaeological resources. | (3) | | | |
| 11.10.5(C)(1)(e)(4) | (4) Geological survey. | (4) | | | |
| 11.10.5(C)(1)(e)(5) | (5) Biological survey. | (5) | | | |
| 11.10.5(C)(1)(e)(6) | (6) Fish and Fisheries Survey | (6) | | | |
| 11.10.5(C)(1)(f) | f. The applicant shall submit a SAP that describes those resources, conditions, and activities listed in Table 3 that could be affected by the applicant's proposed activities, or that could affect the activities proposed in the applicant's SAP, including but not limited to: | vi. | | | |
| Table 3 | Table 3: Resource data and uses that shall be described in the site assessment plan | Table 11.13 | | | |
| 11.10.5(C)(1)(f)(1) | (1) Hazard information. | (1) | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(f)(2) | (2) Water quality | (2) | | | |
| 11.10.5(C)(1)(f)(3) | (3) Biological resources. | (3) | | | |
| 11.10.5(C)(1)(f)(4) | (4) Threatened or endangered species. | (4) | | | |
| 11.10.5(C)(1)(f)(5) | (5) Sensitive biological resources or habitats. | (5) | | | |
| 11.10.5(C)(1)(f)(6) | (6) Archaeological and visual resources. | (6) | | | |
| 11.10.5(C)(1)(f)(7) | (7) Social and economic resources. | (7) | | | |
| 11.10.5(C)(1)(f)(8) | (8) Fisheries Resources and Uses | (8) | | | |
| 11.10.5(C)(1)(f)(9) | (9) Coastal and marine uses. | (9) | | | |
| 11.10.5(C)(1)(g) | g. The Council shall review the applicant's SAP in conjunction with the Joint Agency Working Group to determine if it contains the information necessary to conduct technical and environmental reviews and shall notify the applicant if the SAP lacks any necessary information. | vii. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(h) | h. As appropriate, the Council shall coordinate and consult with relevant Federal and State agencies, and affected Indian tribes. | viii. | | | |
| 11.10.5(C)(1)(i) | i. Any Large-Scale Offshore Development, as defined above in section 11.10.1(A) of this part, shall require a pre-application meeting between the FAB, the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, construction schedules, alternative locations, and project minimization. During the pre-application meeting for a Large-Scale Offshore Development, the FAB can also <u>identify areas of high fishing activity or habitat edges to be considered during the review process</u> | ix. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(j) | j. During the review process, the Council may request additional information if it is determined that the information provided is not sufficient to complete the review and approval process. | x. | | | |
| 11.10.5(C)(1)(k) | k. Once the SAP is approved by the Council the applicant may begin conducting the activities approved in the SAP. | xi. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |

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|---|--|-------------------|---|---|---|
| 11.10.5(C)(1)(l) | I. Reporting requirements of the applicant under an approved SAP: | xii. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(l)(1) | 1. Following the approval of a SAP, the applicant shall notify the Council in writing within 30 days of completing installation activities of any temporary measuring devices approved by the Council. | 1 | | | |
| 11.10.5(C)(1)(l)(2) | 2. The applicant shall prepare and submit to the Council a report semi-annually. The first report shall be due 6 months after work on the SAP begins; subsequent reports shall be submitted every 6 month thereafter until the SAP period is complete. The report shall summarize the applicant's site assessment activities and the results of those activities. | 2 | | | |
| 11.10.5(C)(1)(l)(3) | 3. The Council reserves the right to require additional environmental and technical studies, if it is found there is a critical area lacking or missing information. | 3 | | | |
| 11.10.5(C)(1)(m) | m. The applicant shall seek the Council's approval before conducting any activities not described in the approved SAP, describing in detail the type of activities the applicant proposes to conduct and the rationale for these activities. The Council shall determine whether the activities proposed are authorized by the applicant's existing SAP or require a revision to the applicant's SAP. The Council may request additional information from the applicant, if necessary, to make this determination. | xiii. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(n) | n. The Council shall periodically review the activities conducted under an approved SAP. The frequency and extent of the review shall be based on the significance of any changes in available information and on onshore or offshore conditions affecting, or affected by, the activities conducted under the applicant's SAP. If the review indicates that the SAP should be revised to meet the requirements of this part, the Council shall require the applicant to submit the needed revisions. | xiv. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(o) | o. The applicant may keep approved facilities (such as meteorological towers) installed during the SAP period in place during the time that the Council reviews the applicant's COP for approval. Note: Structures in state waters shall require separate authorizations outside the SAP process. | xv. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(p) | p. The applicant is not required to initiate the decommissioning process for facilities that are authorized to remain in place under the applicant's approved COP. If, following the technical and environmental review of the applicant's submitted COP, the Council determines that such facilities may not remain in place the applicant shall initiate the decommissioning process. | xvi. | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(1)(q) | q. The Executive Director on behalf of the Council will be responsible for reviewing and approving study designs conducted as part of the necessary data and information contained in the SAP. The Executive Director shall seek the advice of the FAB and HAB in setting out the study designs to be completed in the SAP. The Executive Director shall also brief the Ocean SAMP Subcommittee on each study design as it is being considered. Any applicant that initiated, conducted and/or completed site assessment studies or surveying activities prior to the adoption of the policies set forth in the SAMP, shall demonstrate that the studies were done in accordance with the federal protocols for such studies or in the alternative, to the council's satisfaction that the completed studies were conducted with approval from the Executive Director and in accordance with Sections 11.10.5(A), 11.10.5 (C)(2), 11.10.5 (C)(3), and 11.10.5 (C)(4) of this Part. | N/A | The SAP for lease OCS-A-0486 was developed and approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | The SAP for lease OCS-A-0486 was approved by BOEM in October 2017. The CRMC issued concurrence for file # 2017-09-034 on September 8, 2017 | See CRMC concurrence issued for file # 2017-09-034 on September 8, 2017. |
| 11.10.5(C)(2) | 2. Construction and Operations Plan (COP) - The COP describes the applicant's construction, operations, and conceptual decommissioning plans for the proposed facility, including the applicant's project easement area. | ii. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. | Section 3.0, Project Description |
| 11.10.5(C)(2)(a) | a. The applicant's COP shall describe all planned facilities that the applicant shall construct and use for the applicant's project, including onshore and support facilities and all anticipated project easements. | a. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. | Section 3.0, Project Description |
| 11.10.5(C)(2)(b) | b. The applicant's COP shall describe all proposed activities including the applicant's proposed construction activities, commercial operations, and conceptual decommissioning plans for all planned facilities, including onshore and support facilities. | b. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. | Section 3.0, Project Description |
| 11.10.5(C)(2)(c) | c. The applicant shall receive the Council's approval of the COP before the applicant can begin any of the approved activities on the applicant's project site, lease or easement. | c. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; Section 3.0, Project Description; and Section 4.0, Site Characterization and Assessment of Potential Impacts |
| 11.10.5(C)(2)(d) | d. The COP shall demonstrate that the applicant has planned and is prepared to conduct the proposed activities in a manner that: | d. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. The COP demonstrates that DWSF has planned and prepared to conduct activities as described. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. The COP demonstrates DWSF has planned and prepared to conduct activities as described. | Section 4.0, Site Characterization and Assessment of Potential Impacts; and Appendix R, Marine Archaeological Report (Not for Public Distribution) |
| 11.10.5(C)(2)(d)(1) | 1. Conforms to all applicable laws, implementing regulations. | 1 | | | |
| 11.10.5(C)(2)(d)(2) | 2. Is safe; | 2 | | | |
| 11.10.5(C)(2)(d)(3) | 3. Does not unreasonably interfere with other uses of state waters; | 3 | | | |
| 11.10.5(C)(2)(d)(4) | 4. Does not cause undue harm or damage to natural resources; life(including human and wildlife); the marine, coastal, or human environment; or direct impact to sites, structures, or objects of historical or archaeological | 4 | | | |
| 11.10.5(C)(2)(d)(5) | 5. Uses best available and safest technology; | 5 | | | |
| 11.10.5(C)(2)(d)(6) | 6. Uses best management practices; and | 6 | | | |
| 11.10.5(C)(2)(d)(7) | 7. Uses properly trained personnel. | 7 | | | |
| 11.10.5(C)(2)(e) | e. The applicant's COP shall include the following project-specific information, as applicable. | e. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. All of this information is listed in the COP and can be found in the designated sections within the COP. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. All of this information is listed in the COP and can be found in the designated sections within the COP. | Executive Summary; and Section 1.1, Project Overview |
| Table 4 | Table 4: Contents of the construction and Operations Plan | Table 11.4 | | | |
| 11.10.5(C)(2)(e)(1) | (1) Contact Information | (1) | | | |
| 11.10.5(C)(2)(e)(2) | (2) Designation of operator, if applicable. | (2) | | | |
| 11.10.5(C)(2)(e)(3) | (3) The construction and operation concept | (3) | | | |
| 11.10.5(C)(2)(e)(4) | (4) A location. | (5) | | | |
| 11.10.5(C)(2)(e)(5) | (5) General structural and project design, fabrication, and installation. | (6) | | | |
| 11.10.5(C)(2)(e)(6) | (6) All cables and pipelines, including cables on project easements. | (7) | | | |
| | | | | | Executive Summary; and Section 1.6.1, Authorized Representative and Operator |
| | | | | | Section 1.2, Project Purpose; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| | | | | | Section 1.2, Project Purpose; Section 2.0, Project Siting and Route Selection; and Section 3.0, Project Description |
| | | | | | Section 3.0, Project Description |
| | | | | | Section 3.0, Project Description |

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| 11.10.5(C)(2)(e)(7) | (7) A description of the deployment activities. | (8) | | | Section 3.0, Project Description |
| 11.10.5(C)(2)(e)(8) | (8) A list of solid and liquid wastes generated. | (9) | | | Section 3.0, Project Description; Section 4.1.5, Discharges and Releases; Section 4.1.6, Trash and Debris; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures. |
| 11.10.5(C)(2)(e)(9) | (9) A list of chemical products used (if stored volume exceeds Environmental Protection (EPA) Reportable Quantities). | (10) | | | Section 3.0, Project Description |
| 11.10.5(C)(2)(e)(10) | (10) Decommissioning and site clearance procedures. | (12) | | | Section 3.0, Project Description |
| 11.10.5(C)(2)(e)(11) | (11) A list of all Federal, State, and local authorizations, approvals, or permits that are required to conduct the proposed activities, including commercial operations. | (13) | | | Section 1.3.1, Federal Permits, Approvals, and Consultations |
| 11.10.5(C)(2)(e)(12) | (12) The applicant's proposed measures for avoiding, minimizing, reducing, eliminating, and monitoring environmental impacts. | (14) | | | Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.5(C)(2)(e)(13) | (13) Information the applicant incorporates by reference. | (15) | | | Section 5.0, References |
| 11.10.5(C)(2)(e)(14) | (14) A list of agencies or persons with whom the applicant has communicated, or will communicate, regarding potential impacts associated with the proposed activities. | (16) | | | Section 1.4, Agency and Stakeholder Outreach |
| 11.10.5(C)(2)(e)(15) | (15) Reference. | (17) | | | Section 5.0, References |
| 11.10.5(C)(2)(e)(16) | (16) Financial assurance. | (18) | | | Section 1.6.2, Financial Assurance |
| 11.10.5(C)(2)(e)(17) | (17) CVA nominations | (19) | | | Section 1.6.3, Certified Verification Agency Nominations |
| 11.10.5(C)(2)(e)(18) | (18) Construction schedule. | (20) | | | Section 1.5, Tentative Schedule |
| 11.10.5(C)(2)(e)(19) | (19) Air quality information. | (21) | | | Section 4.1.8, Air Emissions; Section 4.2.1, Air Quality, and <u>Appendix L, Air Emissions Inventory</u> |
| 11.10.5(C)(2)(e)(20) | (20) Other information. | (22) | | | Not Applicable |
| 11.10.5(C)(2)(f) | f. The applicant's COP shall include the following information and surveys for the proposed site(s) of the applicant's facility or facilities: | f. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. The necessary data and information can be found in the designated sections within the COP. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. The necessary data and information can be found in the designated sections within the COP. | Section 4.2.3, Geological Resources; and Appendix H, Geophysical and Geotechnical Survey Reports |
| Table 5 | Table 5: Necessary data and information to be provided in the Construction and Operations Plan | Table 11.5 | | | |
| 11.10.5(C)(2)(f)(1) | (1) Shallow hazards. | (1) | | | |
| 11.10.5(C)(2)(f)(2) | (2) Geological survey relevant to the siting and design of the facility. | (2) | | | Section 4.2.3, Geological Resources; and Appendix H, Geophysical and Geotechnical Survey Reports |
| 11.10.5(C)(2)(f)(3) | (3) Biological Survey | (3) | | | Section 4.3, Biological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; and Appendix O, Essential Fish Habitat Report |
| 11.10.5(C)(2)(f)(4) | (4) Fish and Fisheries Survey | (4) | | | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; and Appendix Y Commercial and Recreational Fisheries Technical Report |
| 11.10.5(C)(2)(f)(5) | (5) Geotechnical survey. | (5) | | | Section 4.2.3, Geological Resources; and Appendix H, Geophysical and Geotechnical Survey Reports |
| 11.10.5(C)(2)(f)(6) | (6) Archaeological and Visual resources if required. | (6) | | | Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Appendix R, Marine Archaeological Report (Not for Public Distribution); and Appendix V, Visual Impact Assessment Report for SFWF |
| 11.10.5(C)(2)(f)(7) | (7) Overall site investigation. | (7) | | | Section 4.2.3, Geological Resources; and Appendix H, Geophysical and Geotechnical Survey Reports |
| 11.10.5(C)(2)(g) | g. The applicant's COP shall describe those resources, conditions, and activities listed in Table 6 that could be affected by the applicant's proposed activities, or that could affect the activities proposed in the applicant's COP, including: | g. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. The COP describes the resources, conditions and activities that could be affected by the SFWF. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. The COP describes the resources, conditions and activities that could be affected by the SFEC. | Section 4.2.3, Geological Resources; Section 4.2.4, Physical Oceanography and Meteorology; and Appendix H, Geophysical and Geotechnical Survey Reports |
| Table 6 | Table 6: Resources, conditions, and activities that shall be described in the Construction and Operations Plan | Table 11.6 | | | |
| 11.10.5(C)(2)(g)(1) | (1) Hazard information and sea level rise. | (1) | | | |
| 11.10.5(C)(2)(g)(2) | (2) Water quality and circulation | (2) | | | Section 4.2.2, Water Quality and Water Resources; and Appendix I, Sediment Survey and Sediment Transport Analysis Reports |

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|---|--|--------------|--|--|---|
| 11.10.5(C)(2)(g)(3) | (3) Biological resources. | (3) | | | Section 4.3, Biological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; and Appendix Q, Avian and Bat Reports |
| 11.10.5(C)(2)(g)(4) | (4) Threatened or endangered species. | (4) | | | Section 4.3, Biological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; and Appendix Q, Avian and Bat Reports |
| 11.10.5(C)(2)(g)(5) | (5) Sensitive biological resources or habitats. | (5) | | | Section 4.3, Biological Resources; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; Appendix Q, Avian and Bat Reports; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.5(C)(2)(g)(6) | (6) Fisheries Resources and Uses | (6) | | | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat, Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix P, Essential Fish Habitat Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.5(C)(2)(g)(6) | (6) Archaeological resources. | (6) | | | Section 4.4, Cultural Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix R, Marine Archaeological Report (Not for Public Distribution) and Appendix W, Historic Resources Visual Effect Analysis for SFWF |
| 11.10.5(C)(2)(g)(7) | (7) Social and economic resources. | (7) | | | Section 4.6, Socioeconomic Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.5(C)(2)(g)(8) | (8) Coastal and marine uses. | (8) | | | Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.6.8, Other Marine Uses; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.5(C)(2)(h) | h. The applicant shall submit an oil spill response plan per the Oil Pollution Act of 1990, 33 USC 2701 <i>et seq.</i> | h. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. An Oil Spill Response Plan was submitted with the COP. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. An Oil Spill Response Plan was submitted with the COP. | Section 4.6.3, Public Services; Appendix D, Oil Spill Response Plan; and Appendix E, Safety Management System |
| 11.10.5(C)(2)(i) | i. The applicant shall submit the applicant's Safety Management System, the contents of which are described below: | i. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. The Safety Management System was submitted with the COP. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. The Safety Management System was submitted with the COP. | Section 4.6.3, Public Services; Appendix D, Oil Spill Response Plan; Appendix E, Safety Management System; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.5(C)(2)(i)(1) | 1. How the applicant plans to ensure the safety of personnel or anyone on or near the facility; | 1. | | | |
| 11.10.5(C)(2)(i)(2) | 2. Remote monitoring, control and shut down capabilities; | 2. | | | |
| 11.10.5(C)(2)(i)(3) | 3. Emergency response procedures; | 3. | | | |
| 11.10.5(C)(2)(i)(4) | 4. Fire suppression equipment (if needed); | 4. | | | |
| 11.10.5(C)(2)(i)(5) | 5. How and when the safety management system shall be implemented and tested; and | 5. | | | |
| 11.10.5(C)(2)(i)(6) | 6. How the applicant shall ensure personnel who operate the facility are properly trained. | 6. | | | |
| 11.10.5(C)(2)(j) | j. The Council shall review the applicant's COP and the information provided to determine if it contains all the required information necessary to conduct the project's technical and environmental reviews. The Council shall notify the applicant if the applicant's COP lacks any necessary information. | j. | The COP for the SFWF was submitted to BOEM in July 2018 and is under review. DWSF understands that additional information may be requested and will provide it as requested. | The COP for the SFEC was submitted to BOEM in July 2018 and is under review. DWSF understands that additional information may be requested and will provide it as requested. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; Section 3.0, Project Description; and Section 4.0, Site Characterization and Assessment of Potential Impacts |
| 11.10.5(C)(2)(k) | k. As appropriate, the Council shall coordinate and consult with relevant Federal, State, and local agencies, the FAB and affected Indian tribes. | k. | | | |
| 11.10.5(C)(2)(l) | l. During the review process, the Council may request additional information if it is determined that the information provided is not sufficient to complete the review and approval process. If the applicant fails to provide the requested information, the Council may disapprove the applicant's COP. | l. | | | |
| 11.10.5(C)(2)(m) | m. Upon completion of the technical and environmental reviews and other reviews required, the Council may approve, disapprove, or approve with modifications the applicant's COP. | m. | | | |
| 11.10.5(C)(2)(n) | n. In the applicant's COP, the applicant may request development of the project area in phases. In support of the applicant's request, the applicant shall provide details as to what portions of the site shall be initially developed for commercial operations and what portions of the site shall be reserved for subsequent phased development. | n. | | | |
| 11.10.5(C)(2)(o) | o. If the application and COP is approved, prior to construction the applicant shall submit to the Council for approval the documents listed below: | o. | | | |

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|--|--|-------------------|---|---|-----------------------|
| 11.10.5(C)(2)(o)(1) | 1. Facility Design Report- The applicant's Facility Design Report provides specific details of the design of any facilities, including cables and pipelines, that are outlined in the applicant's approved SAP or COP. The applicant's Facility Design Report shall demonstrate that the applicant's design conforms to the applicant's responsibilities listed in Section 11.10.6 of this part. The applicant shall include the following items in the applicant's Facility Design Report: | 1. | The SFWF is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction. | The SFEC is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction. | Not Applicable |
| Table 7 | Table 7: Contents of the Facility Design Report | Table 11.7 | | | |
| 11.10.5(| (1) Cover letter. | (1) | | | |
| 11.10.5(| (2) Location. | (2) | | | |
| 11.10.5(| (3) Front, Side, and Plan View drawings. | (3) | | | |
| 11.10.5(| (4) Complete set of structural drawings. | (4) | | | |
| 11.10.5(| (5) Summary of environmental data used for design. | (5) | | | |
| 11.10.5(| (6) Summary of the engineering design data. | (6) | | | |
| 11.10.5(| (7) A complete set of design calculations. | (7) | | | |
| 11.10.5(| (8) Project-specific studies used in the facility design or installation. | (8) | | | |
| 11.10.5(| (9) Description of the loads imposed on the facility. | (9) | | | |
| 11.10.5(| (10) Geotechnical report. | (10) | | | |
| 11.10.5(C)(2)(o)(2) | 2. For any floating facility, the applicant's design shall meet the requirements of the U.S. Coast Guard for structural integrity and stability (e.g., verification of center of gravity). The design shall also consider | a. | | | |
| 11.10.5(C)(2)(o)(2)(AA) | AA. Foundations, foundation pilings and templates, and anchoring systems; and | i | | | |
| 11.10.5(C)(2)(o)(2)(BB) | BB. Mooring or tethering systems. | ii. | | | |
| 11.10.5(C)(2)(o)(3) | 3. The applicant is required to use a Certified Verified Agent (CVA). The Facility Design Report shall include two paper copies of the following certification statement: "The design of this structure has been certified by a Council approved CVA to be in accordance with accepted engineering practices and the approved SAP, or COP as appropriate. The certified design and as-built plans and specifications shall be on file at (given location)." | b. | The SFWF is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction and will be approved by the CVA. | The SFEC is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction and will be approved by the CVA. | Not Applicable |
| 11.10.5(C)(2)(o)(4) | 4. Fabrication and Installation Report- The applicant's Fabrication and Installation Report shall describe how the applicant's facilities shall be fabricated and installed in accordance with the design criteria identified in the Facility Design Report; the applicant's approved SAP or COP; and generally accepted industry standards and practices. The applicant's Fabrication and Installation Report shall demonstrate how the applicant's facilities shall be fabricated and installed in a manner that conforms to the applicant's responsibilities listed in Section 11.10.6 of this part. The applicant shall include the following items in the applicant's Fabrication and Installation Report: | 2 | The SFWF is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction. | The SFEC is consistent with this policy. FDR and FIR will be developed according to BOEM requirements and provided to BOEM prior to construction. | Not Applicable |
| Table 8: Contents of the Fabrication and Installation | Table 8: Contents of the Fabrication and Installation Report | Table 11.8 | | | |
| 11.10.5(| (1) Cover letter. | (1) | | | |
| 11.10.5(| (2) Schedule. | (2) | | | |
| 11.10.5(| (3) Fabrication information. | (3) | | | |
| 11.10.5(| (4) Installation process information. | (4) | | | |
| 11.10.5(| (5) Federal, State, and local permits (e.g., EPA, Army Corps of Engineers). | (5) | | | |
| 11.10.5(| (6) Environmental information. | (6) | | | |
| 11.10.5(| (7) Project easement. | (7) | | | |
| 11.10.5(C)(2)(o)(5) | 5. A CVA report shall include the following: a Fabrication and Installation Report which shall include four paper copies of the following certification statement: "The fabrication and installation of this structure has been certified by a Council approved CVA to be in accordance with accepted engineering practices and the approved SAP or COP as appropriate." | a. | | | |
| 11.10.5(C)(2)(p) | p. Based on the Council's environmental and technical reviews, if approved, the Council may specify terms and conditions to be incorporated into any approval the Council may issue. The applicant shall submit a certification of compliance annually (or another frequency as determined by the Council) with certain terms and conditions which may include: | p. | | | |
| 11.10.5(C)(2)(p)(1) | 1. Summary reports that show compliance with the terms and conditions which require certification; and | 1. | | | |
| 11.10.5(C)(2)(p)(2) | 2. A statement identifying and describing any mitigation measures and monitoring methods, and their effectiveness. If the applicant identified measures that were not effective, then the applicant shall make recommendations for new mitigation measures or monitoring methods. | 2. | | | |
| 11.10.5(C)(2)(q) | q. After the applicant's COP, Facility Design Report, and Fabrication and Installation Report is approved, and the Council has issued a permit and lease for the project site, construction shall begin by the date given in the construction schedule included as a part of the approved COP, unless the Council approves a deviation from the applicant's schedule. | q. | | | |
| 11.10.5(C)(2)(r) | r. The applicant shall seek approval from the Council in writing before conducting any activities not described in the applicant's approved COP. The application shall describe in detail the type of activities the applicant proposes to conduct. The Council shall determine whether the activities the applicant proposes are authorized by the applicant's existing COP or require a revision to the applicant's COP. The Council may request additional information from the applicant, if necessary, to make this determination. | r. | | | |
| 11.10.5(C)(2)(s) | s. The Council shall periodically review the activities conducted under an approved COP. The frequency and extent of the review shall be based on the significance of any changes in available information, and on onshore or offshore conditions affecting, or affected by, the activities conducted under the applicant's COP. If the review indicates that the COP should be revised, the Council may require the applicant to submit the needed revisions. | s. | | | |
| 11.10.5(C)(2)(t) | t. The applicant shall notify the Council, within 5 business days, any time the applicant ceases commercial operations, without an approved suspension, under the applicant's approved COP. If the applicant ceases commercial operations for an indefinite period which extends longer than 6 months, the Council may cancel the applicant's lease, and the applicant shall initiate the decommissioning process. | t. | | | |
| 11.10.5(C)(2)(u) | u. The applicant shall notify the Council in writing of the following events, within the time periods provided: | u. | | | |
| 11.10.5(C)(2)(u)(1) | 1. No later than 10 days after commencing activities associated with the placement of facilities on the lease area under a Fabrication and Installation Report | 1. | | | |
| 11.10.5(C)(2)(u)(2) | 2. No later than 10 days after completion of construction and installation activities under a Fabrication and Installation Report. | 2. | | | |
| 11.10.5(C)(2)(u)(3) | 3. At least 7 days before commencing commercial operations. | 3 | | | |

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| 11.10.5(C)(2)(v) | v. The applicant may commence commercial operations within 30 days after the CVA has submitted to the Council the final Fabrication and Installation Report. | v. | | | |
| 11.10.5(C)(2)(w) | w. The applicant shall submit a Project Modification and Repair Report to the Council, demonstrating that all major repairs and modifications to a project conform to accepted engineering practices. | w. | | | |
| 11.10.5(C)(2)(w)(1) | 1. A major repair is a corrective action involving structural members affecting the structural integrity of a portion of or all the facility. | 1 | | | |
| 11.10.5(C)(2)(w)(2) | 2. A major modification is an alteration involving structural members affecting the structural integrity of a portion of or all the facility. | 2 | | | |
| 11.10.5(C)(2)(w)(3) | 3. The report must also identify the location of all records pertaining to the major repairs or major modifications. | 3 | | | |
| 11.10.5(C)(2)(w)(4) | 4. The Council may require the applicant to use a CVA for project modifications and repairs. | 4 | | | |
| 11.10.6 Design, Fabrication and Installation Standards | | 1160.6 | The Project is consistent with this policy. The CVA nomination was submitted with the COP and will be approved by BOEM. | The SFEC is consistent with this policy. The CVA nomination as submitted with the COP and will be approved by BOEM. | Section 1.6.3, Certified Verification Agency Nominations Appendix C, Certified Verification Agency Nominations |
| 11.10.6(A) | A) Certified Verification Agent- The Certified Verification Agent (CVA) shall use good engineering judgment and practices in conducting an independent assessment of the design, fabrication and installation of the facility. The CVA shall certify in the Facility Design Report to the Council that the facility is designed to withstand the environmental and functional load conditions appropriate for the intended service life at the proposed location. The CVA is paid for by the applicant, but is approved and reports to the Council. | 1 | | | |
| 11.10.6(A)(1) | 1. The Applicant Shall use a CVA to review and certify the facility design report, the fabrication and installation report, and the project modifications and repairs report. The applicant shall use a CVA to | i. | | | |
| 11.10.6(A)(1)(a) | a. Ensure the applicant's facilities are designed, fabricated and installed in conformance with accepted engineering practices and the facility design report and fabrication and installation report | a. | | | |
| 11.10.6(A)(1)(b) | b. ensure that repairs and major modifications are completed in conformance with accepted engineering practices; and | b. | | | |
| 11.10.6(A)(1)(c) | c. Provide the Council immediate reports of all incidents that affect the design, fabrication, and installation of the project and its components. | c. | | | |
| 11.10.6(A)(2) | 2. Nominating a CVA for Council approval - the applicant shall nominate a CVA for the Council Approval. The Applicant shall specify whether the nomination is for the facility design report fabrication and installation report, modification and repair report, or for any combination of these. | ii. | | | |
| 11.10.6(A)(2)(a) | a. For each CVA that the applicant nominates, the applicant shall submit to the council a list of documents they shall forward to the CVA and a qualification statement that includes the following | a. | | | |
| 11.10.6(A)(2)(a)(1) | 1. Previous experience in third-party verification or experience in the design, fabrication, installation, or major modification of offshore energy facilities; | 1 | | | |
| 11.10.6(A)(2)(a)(2) | 2. Technical Capabilities of the individual or the primary staff for the specific project; | 2 | | | |
| 11.10.6(A)(2)(a)(3) | 3. Size and type of organization or corporation; | 3 | | | |
| 11.10.6(A)(2)(a)(4) | 4. In house availability of, or access to, appropriate technology (including computer programs, hardware, and testing materials and equipment); | 4 | | | |
| 11.10.6(A)(2)(a)(5) | 5.Ability to perform the CVA functions for the specific project considering current commitments | 5 | | | |
| 11.10.6(A)(2)(a)(6) | 6. Previous experience with the Council requirements and procedures, if any; and | 6 | | | |
| 11.10.6(A)(2)(a)(7) | 7. The level of work to be performed by the CVA | 7 | | | |
| 11.10.6(A)(3) | 3. Individuals or organizations acting as CVAs shall not function in any capacity that shall create a conflict of interest, or the appearance of a conflict of interest; | iii. | | | |
| 11.10.6(A)(4) | 4. The verification shall be conducted by or under the direct supervision of registered professional engineers | iv. | | | |
| 11.10.6(A)(5) | 5. The Council shall approve or disapprove the applicant's CVA prior to construction | v. | | | |
| 11.10.6(A)(6) | 6. The applicant shall nominate a new CVA for the Council approval if the previously approved CVA: | vi. | | | |
| 11.10.6(A)(6)(a) | a. Is no longer able to serve in a CVA capacity for the project; or | a. | | | |
| 11.10.6(A)(6)(b) | b. No longer meets the requirements for a CVA set forth in this subpart. | b. | | | |
| 11.10.6(A)(7) | 7. The CVA shall conduct an independent assessment of all proposed: | vii. | | | |
| 11.10.6(A)(7)(a) | a. Planning criteria; | a. | | | |
| 11.10.6(A)(7)(b) | b. Operational requirements; | b. | | | |
| 11.10.6(A)(7)(c) | c. Environmental loading data | c. | | | |
| 11.10.6(A)(7)(d) | d. Load determinations; | d | | | |
| 11.10.6(A)(7)(e) | e. Stress analyses; | e | | | |
| 11.10.6(A)(7)(f) | f. Material designations; | f | | | |
| 11.10.6(A)(7)(g) | g. Soil and foundation conditions; | g | | | |
| 11.10.6(A)(7)(h) | h. Safety factors; and | h | | | |
| 11.10.6(A)(7)(i) | i. Other pertinent parameters of the proposed design. | i | | | |
| 11.10.6(A)(8) | 8. For any floating facility, the CVA shall ensure that any requirements of the U.S. Coast Guard for structural integrity and stability (eg., verification of center of gravity), have been met. The CVA shall also consider | viii. | | | |
| 11.10.6(A)(8)(a) | a. Foundations; | a. | | | |
| 11.10.6(A)(8)(b) | b. Foundation pilings and templates, and anchoring systems | b. | | | |
| 11.10.6(A)(9) | 9. The CVA shall do all of the following: | ix. | | | |
| 11.10.6(A)(9)(a) | a. Use good engineering judgment and proactive in conducting an independent assessment of the fabrication and installation activities; | a. | | | |
| 11.10.6(A)(9)(b) | b. Monitor the fabrication and installation of the facility; | b. | | | |
| 11.10.6(A)(9)(c) | c. Make periodic onsite inspections while fabrication is in progress and verify the items required by Section 11.10.6 (A)(11) of this Part; | c. | | | |
| 11.10.6(A)(9)(d) | d. Make periodic onsite inspections while installation is in progress and satisfy the requirements by Section 11.10.6 (A)(12) of this Part; and | d | | | |

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| 11.10.6(A)(9)(e) | e. Certify in a report that project components are fabricated and installed in accordance with accepted engineering practices; the applicant's approved COP or SAP; and the fabrication and installation report | e | | | |
| 11.10.6(A)(9)(e)(1) | (1) The report shall also identify the location of all records pertaining to fabrication and installation. | 1 | | | |
| 11.10.6(A)(9)(e)(2) | (2) The applicant may commence commercial operations or other approved activities 30 days after the council receives that certification report, unless the council notifies the applicant within that time period of its objections to the certification report | 2 | | | |
| 11.10.6(A)(10) | 10. The CVA shall monitor the fabrication and installation of the facility to ensure that it has been built and installed according to the facility design report and fabrication and installation report. | x. | | | |
| 11.10.6(A)(10)(a) | a. If the CVA finds that fabrication and installation procedures have been changed or design specifications have been modified, the CVA shall inform the applicant and the Council | a. | | | |
| 11.10.6(A)(11) | 11. The CVA shall make periodic onsite inspections while fabrication is in progress and shall certify the following items, as appropriate: | xi. | | | |
| 11.10.6(A)(11)(a) | a. Quality control by lessee (or grant holder) and builder; | a. | | | |
| 11.10.6(A)(11)(b) | b. Fabrication site facilities; | b. | | | |
| 11.10.6(A)(11)(c) | c. Material quality and identification methods; | c. | | | |
| 11.10.6(A)(11)(d) | d. Fabrication procedures specified in the fabrication and installation report, and adherence to such procedures; | d. | | | |
| 11.10.6(A)(11)(e) | e. Welder and welding procedure qualification and identification; | e. | | | |
| 11.10.6(A)(11)(f) | f. Adherence to structural tolerances specified; | f. | | | |
| 11.10.6(A)(11)(g) | g. nondestructive examination requirements and evaluation results of the specified examinations; | g. | | | |
| 11.10.6(A)(11)(h) | h. destructive testing requirements and results; | h. | | | |
| 11.10.6(A)(11)(i) | i. repair procedures; | i. | | | |
| 11.10.6(A)(11)(j) | j. installation of corrosion protection systems and splash zone protection; | j. | | | |
| 11.10.6(A)(11)(k) | k. Erection procedures to ensure that overstressing of structural members does not occur; | k. | | | |
| 11.10.6(A)(11)(l) | l. alignment procedures; | l. | | | |
| 11.10.6(A)(11)(m) | m. dimensional check of the overall structure, including any turrets, turret and hull interfaces, any mooring line and chain and riser tensioning line segments; and | m. | | | |
| 11.10.6(A)(11)(n) | n. status of quality control records at various stages of fabrication. | n. | | | |
| 11.10.6(A)(12) | 12. The CVA shall make periodic onsite inspections while installation is in progress and shall, as appropriate, verify, witness, survey, or check, the installation items required by this section. The CVA shall verify, as appropriate, all of the following: | xii. | | | |
| 11.10.6(A)(12)(a) | a. Load out and initial flotation procedures; | a. | | | |
| 11.10.6(A)(12)(b) | b. Towing operation procedures to the specified location, and review the towing records; | b. | | | |
| 11.10.6(A)(12)(c) | c. Launching and uprighting activities; | c. | | | |
| 11.10.6(A)(12)(d) | d. Submergence activities; | d. | | | |
| 11.10.6(A)(12)(e) | e. Pile or anchor installations; | e. | | | |
| 11.10.6(A)(12)(f) | f. Installation of mooring and tethering systems; | f. | | | |
| 11.10.6(A)(12)(g) | g. Transition pieces, support structures, and component installations; and | g. | | | |
| 11.10.6(A)(12)(h) | h. Installation at the approved location according to the facility design report and the fabrication and installation report. | h. | | | |
| 11.10.6(A)(13) | 13. For a fixed for floating facility, the CVA shall verify that proper procedures were used during the following: | xiii. | | | |
| 11.10.6(A)(13)(a) | a. The loadout of the transition pieces and support structures, piles, or structures, from each fabrication site; and | a. | | | |
| 11.10.6(A)(13)(b) | b. The actual installation of the facility or major modification and the related installation activities. | b. | | | |
| 11.10.6(A)(14) | 14. For a floating facility, the CVA shall verify that proper procedures were used during the following: | xiv. | | | |
| 11.10.6(A)(14)(a) | a. The loadout of the facility | a. | | | |
| 11.10.6(A)(14)(b) | b. The installation of foundation piling templates, and anchoring systems. | b. | | | |
| 11.10.6(A)(15) | 15. The CVA shall conduct an onsite survey of the facility after transportation to the approved location. | xv. | | | |
| 11.10.6(A)(16) | 16. The CVA shall spot check the equipment, procedures, and recordkeeping as necessary to determine compliance with the applicable documents incorporated by reference and the regulation under this part. | xvi. | | | |
| 11.10.6(A)(17) | 17. The CVA shall prepare and submit to the applicant and the Council all reports required by this subpart. The CVA shall also submit interim repots to the applicant and the council, as requested by the council. The CVA shall submit one electronic copy and four paper copies of each final report to the council. In each report, the CVA shall: | xvii. | | | |
| 11.10.6(A)(17)(a) | a. Give details of how, by whom, and when the CVA activities were conducted; | a. | | | |
| 11.10.6(A)(17)(b) | b. Describe the CVA's activities during the verification process; | b. | | | |
| 11.10.6(A)(17)(c) | c. Summarize the CVA's findings; and | c. | | | |
| 11.10.6(A)(17)(d) | d. Provide any additional comments that the CVA deems necessary. | d. | | | |
| 11.10.6(A)(18) | 18. Until the council releases the applicants financial assurance under Section 11.10.7(B) of this part, the applicant shall compile, retain, and make available to the council representatives all of the following | xviii. | | | |
| 11.10.6(A)(18)(a) | a. The as-built drawings; | a. | | | |
| 11.10.6(A)(18)(b) | b. The design assumptions and analyses; | b. | | | |
| 11.10.6(A)(18)(c) | c. A summary of the fabrication and installation examination records; | c. | | | |
| 11.10.6(A)(18)(d) | d. Results from the required inspections and assessments; | d. | | | |
| 11.10.6(A)(18)(e) | e. Records of repairs not covered in the inspection report submitted. | e. | | | |
| 11.10.6(A)(19) | 19. The applicant shall record and retain the original material test results of all primary structural materials during all stages of construction until the council releases the applicant's financial assurance under Section 11.10.7(B) of this part. Primary material is material that, should it fail, would lead to a significant reduction in facility safety, structural reliability, or operating capabilities. Items such as steel brackets, deck stiffener and secondary braces or beams would not generally be considered primary structural members (or materials). | xix. | | | |
| 11.10.6(A)(20) | 20. The Applicant shall provide the Council with the location of these records in the certification statement. | xx. | | | |
| 11.10.6(A)(21) | 21. The council may hire its own CVA agent to review the work of the applicants CVA. The applicant shall be responsible for the cost of the council's CVA. The council's CVA shall perform those duties as assigned by the council. | xxi. | | | |

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| 11.10.7 Pre-Construction Standards | | 1160.7 | | | |
| 11.10.7(A) | A) The Council may issue a permit for a period of up to 50 years to construct and operate an Offshore Development. A lease shall be issued at the start of the construction phase and payment shall commence at the end of the construction phase. Lease payments shall be due when the project becomes operational. Lease renewal shall be submitted 5 years before the end of the lease term. Council approval shall be required for any assignment or transfer of the permit or lease. This provision shall not apply to aquaculture permitting. Aquaculture permitting and leasing are governed by the provisions of the RI General Laws Chapter 20-10 and Section 00-1.3.1(K) of this Chapter. | 1 | The SFWF is in federal waters. A permit, lease, or assent from the Council is not required for the SFWF. | The SFEC is in federal waters and New York State waters. A permit, lease, or assent from the Council is not required for the SFEC. | Section 1.2, Project Purpose; Section 1.3.1, Federal Permits, Approvals, and Consultations; Section 2.0, Project Siting and Route Selection; Section 3.0, Project Description; and Section 4.0, Site Characterization and Assessment of Potential Impacts |
| 11.10.7(B) | B) Prior to construction, the assent holder shall post a Performance Bond sufficient to ensure removal of all structures at the end of the lease and restore the site. The Council shall review the bond amount initially and every 3 years thereafter to ensure the amount is sufficient. | 2 | | | Section 1.6.2, Financial Assurance |
| 11.10.7(C) | C) Prior to construction, the assent holder shall show compliance with all federal and state agency requirements, which may include but are not limited to the requirements of the following agencies: the Rhode Island Coastal Resources Management Council, the Rhode Island Department of Environmental Management, the Rhode Island Energy Facilities Siting Board, the Rhode Island Historical Preservation and Heritage Commission, U.S. Department of the Interior Bureau of Ocean Energy Management, Regulation and Enforcement, Army Corps of Engineers, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency. | 3 | | | Section 1.3.1, Federal Permits, Approvals, and Consultations; and Section 2.0, Project Siting and Route Selection |
| 11.10.7(D) | D) The Council shall consult with the U.S. Coast Guard, the U.S. Navy, marine pilots, the Fishermen's Advisory Board as defined in section 11.3 (E) of this part, fishermen's organizations, and recreational boating organizations when scheduling offshore marine construction or dredging activities. Where it is determined that there is a significant conflict with season-limited commercial or recreational fishing activities, recreational boating activities or scheduled events, or other navigation uses, the Council shall modify or deny activities to minimize conflict with these uses. | 4 | | | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.6.6, Commercial Shipping; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; Appendix X, Navigational Safety Risk Assessment Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.7(E) | E) The Council shall require the assent holder to provide for communication with commercial and recreational fishermen, mariners, and recreational boaters regarding offshore marine construction or dredging activities. Communication shall be facilitated through a project website and shall complement standard U.S. Coast Guard procedures such as Notices to Mariners for notifying mariners of obstructions to navigation. | 5 | | | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.6.6, Commercial Shipping; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; Appendix X, Navigational Safety Risk Assessment Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.7(F) | F) For all Large-Scale Offshore Developments, underwater cables, and other development projects as determined by the Council, the assent holder shall designate and fund a third-party fisheries liaison. The fisheries liaison must be knowledgeable about fisheries and shall facilitate direct communication between commercial and recreational fishermen and the project developer. Commercial and recreational fishermen shall have regular contact with and direct access to the fisheries liaison throughout all stages of an offshore development (pre-construction; construction; operation; and decommissioning). | 6 | | | Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.7(G) | G) Where possible, Offshore Developments should be designed in a configuration to minimize adverse impacts on other user groups, which include but are not limited to: recreational boaters and fishermen, commercial fishermen, commercial ship operators, or other vessel operators in the project area. Configurations which may minimize adverse impacts on vessel traffic include, but are not limited to, the incorporation of a traffic lane through a development to facilitate safe and direct navigation through, rather than around, an Offshore Development. | 7 | | | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.6.6, Commercial Shipping; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; Appendix X, Navigational Safety Risk Assessment Report; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.7(H) | H) Any assent holder of an approved Offshore Development shall work with the Council when designing the proposed facility to incorporate where possible mooring mechanisms to allow safe public use of the areas surrounding the installed turbine or other structure. | 8 | | | Section 4.6.8, Other Marine Uses; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.7(I) | I) The facility shall be designed in a manner that minimizes adverse impacts to navigation. As part of its application package, the project applicant shall submit a navigation risk assessment under the U.S. Coast Guard's Navigation and Vessel Inspection Circular 02-07, "Guidance on the Coast Guard's Roles and Responsibilities for Offshore Renewable Energy Installations." | 9 | | | Section 4.6.8, Other Marine Uses; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.7(J) | J) Applications for projects proposed to be sited in state waters pursuant to the Ocean SAMP shall not have a significant impact on marine transportation, navigation, and existing infrastructure. Where the Council, in consultation with the U.S. Coast Guard, the U.S. Navy, NOAA, the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement, the U.S. Army Corps of Engineers, marine pilots, the R.I. Port Safety and Security Forums, or other entities, as applicable, determines that such an impact on marine transportation, navigation, and existing infrastructure is unacceptable, the Council shall require that the applicant modify the proposal or the Council shall deny the proposal. For the purposes of Marine Transportation policies and standards as summarized in Ocean SAMP Chapter 7 impacts would be evaluated according to the same criteria used by the U.S. Coast Guard, as follows: these criteria shall not be construed to apply to any other Ocean SAMP chapters or policies. | 10 | | | Section 4.6.8, Other Marine Uses; and Appendix X, Navigational Safety Risk Assessment Report |
| 11.10.7(J)(1) | 1. Negligible: No measurable impacts. | i. | | | Section 4.1, Summary of Impact-producing Factors |
| 11.10.7(J)(2) | 2. Minor: Adverse impacts to the affected activity could be avoided with proper mitigation; or impacts would not disrupt the normal or routine functions of the affected activity or community; or once the impacting agent is eliminated, the affected activity will return to a condition with no measurable effects from the proposed action without any mitigation. | ii. | | | Section 4.1, Summary of Impact-producing Factors |
| 11.10.7(J)(3) | 3. Moderate: Impacts to the affected activity are unavoidable; and proper mitigation would reduce impacts substantially during the life of the proposed action; or the affected activity would have to adjust somewhat to account for disruptions due to impacts of the proposed action; or once the impacting agent is eliminated, the affected activity would return to a condition with no measurable effects from the proposed action if proper remedial action is taken. | iii. | | | Section 4.1, Summary of Impact-producing Factors |

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| 11.10.7(J)(4) | 4. Major: Impacts to the affected activity are unavoidable; proper mitigation would reduce impacts somewhat during the life of the proposed action; the affected activity would experience unavoidable disruptions to a degree beyond what is normally acceptable; and once the impacting agent is eliminated, the affected activity may retain measurable effects of the proposed action indefinitely, even if remedial action is taken | iv. | The SFWF is in federal waters. An assent from the Council is not required for the SFWF. | The SFEC is in federal waters and New York State waters. An assent from the Council is not required for the SFEC. | Section 4.1, Summary of Impact-producing Factors |
| 11.10.7(K) | K) Prior to construction, the Applicant shall provide a letter from the U.S. Coast Guard showing it meets all applicable U.S. Coast Guard standards. | 11 | | | Section 1.3.1, Federal Permits, Approvals, and Consultations; and Section 1.4, Agency and Stakeholder Outreach |
| 11.10.8 Standards for Construction Activities | | 1160.8 | | | |
| 11.10.8(A) | A) The Assent Holder shall use the best available technology and techniques to minimize impacts to the natural resources and existing human uses in the project area. | 1 | | | Section 2.0, Project Siting and Route Selection; Section 3.0, Project Description; Section 3.2, South Fork Export Cable; and Section 4.7, Summary of Potential Impact and Proposed Environmental Protection Measures |
| 11.10.8(B) | B) The Council shall require the use of an environmental inspector to monitor construction activities. The environmental inspector shall be a private, third-party entity that is hired by the Assent Holder, but is approved and reports to the Council. The environmental inspector shall possess all appropriate qualifications as determined by the Council. This inspector service may be part of the CVA requirements. | 2 | | | Section 2.0, Project Siting and Route Selection; Section 3.0, Project Description; Section 3.2, South Fork Export Cable; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.8(C) | C) Installation techniques for all construction activities should be chosen to minimize sediment disturbance. Jet plowing and horizontal directional drilling in nearshore areas shall be required in the installation of underwater transmission cables. Other technologies may be used provided the applicant can demonstrate they are as effective, or more effective, than these techniques in minimizing sediment disturbance. | 3 | | | Section 3.0, Project Description; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix I, Sediment Survey and Sediment Transport Analysis Reports; and Appendix J, Sediment Transport Analyses |
| 11.10.8(D) | D) All construction activities shall comply with the policies and standards outlined in the Rhode Island Coastal Resources Management Program (RICRMP), as well as the regulations of other relevant state and federal agencies | 4 | | | Section 1.3, Regulatory Framework; Section 3.0, Project Description; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.8(E) | E) The applicant shall conduct all activities on the applicant's permit under this part in a manner that conforms with the applicant's responsibilities in section 11.10.1(E), and using | 5 | | | Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.8(E)(1) | 1. Trained personnel; and | i. | | | |
| 11.10.8(E)(2) | 2. Technologies, precautions, and techniques that shall not cause undue harm or damage to natural resources, including their physical, atmospheric, chemical and biological components | ii. | | | Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.8(F) | F) The Assent Holder shall be required to use the best available technology and techniques to mitigate any associated adverse impacts of offshore renewable energy development. | 6 | | | |
| 11.10.8(F)(1) | 1. As required, the applicant shall submit to the Council: | i. | | | |
| 11.10.8(F)(1)(a) | a. Measures designed to avoid or minimize adverse effects and any potential incidental take of endangered or threatened species as well as all marine mammals; | 1 | | | |
| 11.10.8(F)(1)(b) | b. Measures designed to avoid likely adverse modification or destruction of designated critical habitat of such endangered or threatened species; and | 2 | | | |
| 11.10.8(F)(1)(c) | c. The applicant's agreement to monitor for the incidental take of the species and adverse effects on the critical habitat, and provide the results of the monitoring to the Council as required; and | 3 | | | |
| 11.10.8(G) | G) If the Assent Holder, the Assent Holder's subcontractors, or any agent acting on the Assent Holder's behalf discovers a potential archaeological resource while conducting construction activities, or any other activity related to the Assent Holder's project, the applicant shall: | 7 | | | Section 4.4, Cultural Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix R, Marine Archaeological Report (Not for Public Distribution) |
| 11.10.8(G)(1) | 1. Immediately halt all seafloor disturbing activities within the area of the discovery; | i. | | | |
| 11.10.8(G)(2) | 2. Notify the Council of the discovery within 24 hours; and | ii. | | | |
| 11.10.8(G)(3) | 3. Keep the location of the discovery confidential and not take any action that may adversely affect the archaeological resource until the Council has made an evaluation and instructed the applicant on how to proceed | iii | | | |
| 11.10.8(G)(3)(a) | a. The Council may require the Assent Holder to conduct additional investigations to determine if the resource is eligible for listing in the National Register of Historic Places under 36 CFR 60.4. The Council shall do this if | 1 | | | |
| 11.10.8(G)(3)(a)(1) | 1. The site has been impacted by the Assent Holder's project activities; or | a. | | | |
| 11.10.8(G)(3)(a)(2) | 2. Impacts to the site or to the area of potential effect cannot be avoided. | b. | | | |
| 11.10.8(G)(3)(b) | b. If the Council incurs costs in protecting the resource, under section 110(g) of the NHPA, the Council may charge the applicant reasonable costs for carrying out preservation responsibilities | 2 | | | |
| 11.10.8(H) | H) Post construction, the Assent Holder shall provide a side scan sonar survey of the entire construction site to verify that there is no post construction debris left at the project site. These side-scan sonar survey results shall be filed with the Council within 90 days of the end of the construction period. The results of this side-scan survey shall be verified by a third-party reviewer, who shall be hired by the Assent Holder but who is pre-approved by and reports to the Council. | 8 | | | Section 3.0, Project Description |
| 11.10.8(I) | I) All pile-driving or drilling activities shall comply with any mandatory best management practices established by the Council in coordination with the Joint Agency Working Group and which are incorporated into the RICRMP. | 9 | | | Section 3.0, Project Description |
| 11.10.8(J) | J) The Council may require the Assent Holder to hire a CVA to perform periodic inspections of the structure(s) during the life of those structure(s). The CVA shall work for and be responsible to the council | 10 | | | Section 1.6.3, Certified Verification Agency Nominations |
| 11.10.9 Monitoring Requirements | | 1160.9 | | | |
| 11.10.9(A) | A) The Council in coordination with the Joint Agency Working Group, as described in section 11.9.7(J) shall determine requirements for monitoring prior to, during, and post construction. Specific monitoring requirements shall be determined on a project by- project basis and may include but are not limited to the monitoring of | 1 | The SFWF is consistent with this policy. DWSF is committed to conducting monitoring prior to, during, and post construction as required by the Council. DWSF will coordinate with the Council and other key stakeholders in the development of specific monitoring plans. | The SFEC is consistent with this policy. DWSF is committed to conducting monitoring prior to, during, and post construction as required by the Council. DWSF will coordinate with the Council and other key stakeholders in the development of specific monitoring plans. | Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 11.10.9(A)(1) | 1. Coastal processes and physical oceanography | i. | | | Section 4.2.4, Physical Oceanography and Meteorology; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix H, Geophysical and Geotechnical Survey Reports; and Appendix I, Sediment Survey and Sediment Transport Analysis Report |
| 11.10.9(A)(2) | 2. Underwater noise | ii. | | | Section 4.1.3, Noise; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix J, Acoustic Assessment Reports |

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| 11.10.9(A)(3) | 3. Benthic ecology | iii. | | | Section 4.3.2, Benthic and Shellfish Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; and Appendix O, Essential Fish Habitat Report |
| 11.10.9(A)(4) | 4. Avian species | iv. | | | Section 4.3.6, Avian Species; Section 4.3.7, Bat Species Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Q, Avian and Bat Reports |
| 11.10.9(A)(5) | 5. Marine mammals | v. | | | Section 4.3.4, Marine Mammals; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports |
| 11.10.9(A)(6) | 6. Sea turtles | vi. | | | Section 4.3.5, Sea Turtles; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports |
| 11.10.9(A)(7) | 7. Fish and fish habitat | vii. | | | Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; and Appendix O, Essential Fish Habitat Report |
| 11.10.9(A)(8) | 8. Commercial and recreational fishing | viii. | | | Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(A)(9) | 9. Recreation and tourism | ix. | | | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(A)(10) | 10. Marine transportation, navigation and existing infrastructure | x. | | | Section 4.6.7, Coastal Land Use and Infrastructure; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(A)(11) | 11. Cultural and historic resources | xi. | | | Section 4.4, Cultural Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; and Appendix R, Marine Archaeological Report (Not for Public Distribution) |
| 11.10.9(B) | B) The Council shall require where appropriate that project developers perform systematic observations of recreational boating intensity at the project area at least three times: pre-construction; during construction; and post-construction. Observations may be made while conducting other field work or aerial surveys and may include either visual surveys or analysis of aerial photography or video photography. The Council shall require where appropriate that observations capture both weekdays and weekends and reflect high-activity periods including the July 4th holiday weekend and the week in June when Block Island Race Week takes place. The quantitative results of such observations, including raw boat counts and average number of vessels per day, will be provided to the Council. | 2 | The SFWF is consistent with this policy. If appropriate, DWSF will develop plans for observations of boat intensity. Based on coordination with the Council, monitoring will occur prior to, during, and post construction. | The SFEC is consistent with this policy. If appropriate, DWSF will develop plans for observations of boat intensity. Based on coordination with the Council, monitoring will occur prior to, during, and post construction. | Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.6.8, Other Marine Uses; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix B, Fisheries Communication Plan; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(C) | C) The items listed below shall be required for all Offshore Developments: | 3 | The SFWF is consistent with this policy. DWSF has developed a draft plan to assess commercial and recreational targeted species during all four seasons of the year pre-construction, during construction and during operation. See supplemental submission dated November 13, 2018. | The SFEC is consistent with this policy. DWSF conducted a desktop assessment of commercially and recreationally targeted species. DWSF is currently developing a plan to further assess targeted species pre-construction and during construction and operations. | Section 4.3, Biological Resources; Section 4.3.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(C)(1) | 1. A biological assessment of commercially and recreationally targeted species shall be required within the project area for all Offshore Developments. This assessment shall assess the relative abundance, distribution, and different life stages of these species at all four seasons of the year. This assessment shall comprise a series of surveys, employing survey equipment and methods that are appropriate for sampling finfish, shellfish, and crustacean species at the project's proposed location. Such an assessment shall be performed at least four times: pre-construction (to assess baseline conditions); during construction; and at two different intervals during operation (i.e. 1 year after construction and then postconstruction). At each time this assessment must capture all four seasons of the year. This assessment may include evaluation of survey data collected through an existing survey program, if data are available for the proposed site. The Council will not require this assessment for proposed projects within the Renewable Energy Zone that are proposed within 2 years of the adoption of the Ocean SAMP. | i. | | | |

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| 11.10.9(C)(2) | 2. An assessment of commercial and recreational fisheries effort, landings, and landings value shall be required for all proposed Offshore Developments. Assessment shall focus on the proposed project area and alternatives. This assessment shall evaluate commercial and recreational fishing effort, landings, and landings value at three different stages: preconstruction (to assess baseline conditions); during construction; and during operation. At each stage, all four seasons of the year must be evaluated. Assessment may use existing fisheries monitoring data but shall be supplemented by interviews with commercial and recreational fishermen. Assessment shall address whether fishing effort, landings, and landings value has changed in comparison to baseline conditions. The Council will not require this assessment for proposed projects within the Renewable Energy Zone that are proposed within 2 years of the adoption of the Ocean SAMP . | ii. | The SFWF is consistent with this policy. DWSF conducted a pre-construction assessment of commercial and recreational fisheries activity for the SFWF area. DWSF will develop a plan to continue to assess commercial and recreational fishing activity. | The SFEC is consistent with this policy. DWSF conducted a pre-construction assessment of commercial and recreational fisheries activity for the SFWF area. DWSF will develop a plan to continue to assess commercial and recreational fishing activity. | Section 4.3.3, Finfish and Essential Fish Habitat; Section 4.6.4, Recreation and Tourism; Section 4.6.5, Commercial and Recreational Fishing; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; and Appendix Y, Commercial and Recreational Fisheries Technical Report |
| 11.10.9(D) | D) The Council in coordination with the Joint Agency Working Group may also require facility and infrastructure monitoring requirements, that may include but are not limited to: | 4 | The SFWF is consistent with this policy. A CVA has been nominated to verify design and installation of the SFWF via the Facility Design Report and Fabrication and Installation Report. | The SFEC is consistent with this policy. A CVA has been nominated to verify design and installation of the SFEC via the Facility Design Report and Fabrication and Installation Report. | Section 3.0, Project Description; Section 3.1.5, Operations and Maintenance; Section 3.2.5, Operations and Maintenance |
| 11.10.9(D)(1) | 1. Post construction monitoring including regular visual inspection of inner array cables and the primary export cable to ensure proper burial, foundation and substructure inspection | i. | | | |

Appendix A-3

Appendix A-3. Coastal Zone Management Consistency Statements: Massachusetts
Deepwater Wind South Fork, LLC

SFWF - Massachusetts Office of Coastal Zone Management Program Federal Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|---|---|--|---|--|
| Massachusetts Coastal Program Policies | | | | |
| <i>Coastal Hazards</i> | | | | |
| 1 | Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean. | The South Fork Wind Farm (SFWF) complies with this policy to the extent applicable. The SFWF is a wind power facility located within the North Lease (Lease Area Outer Continental Shelf [OCS]-A 0486 [Lease Area]) that will preserve and protect the beneficial functions provided by lands under the ocean; therefore, the SFWF is consistent with this policy. | The South Fork Export Cable (SFEC) complies with this policy to the extent applicable. No direct impacts to coastal landforms will be anticipated to occur from routine construction or operation activities because the SFEC is not located in Massachusetts coastal waters. Further, the SFEC has been designed to use construction techniques to avoid or minimize environmental impacts to the greatest extent practicable. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.2.2, Water Quality and Water Resources; Section 4.3.1 Coastal Habitat; and Section 4.7 Summary of Potential Impacts and Proposed Environmental Protection Measures |
| 2 | Ensure that construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Flood or erosion control projects must demonstrate no significant adverse effects on the project site or adjacent or downcoast areas. | The SFWF complies with this policy to the extent applicable. The construction associated with the SFWF foundation placement, the offshore substation, and the inter-array SFWF, an offshore wind facility, located approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 miles (56.3 km, 30.4 nm) east of Montauk Point, New York, will not interfere with natural coastal processes, will not cause and increase in erosion, and will not result in adverse impacts to water quality, physical processes, and marine productivity. | The SFEC complies with this policy to the extent applicable. Indirect impacts, such as wake-induced erosion and sediment transport, may occur from routine construction activities that require increased vessel traffic in Massachusetts coastal waters between the South Fork Wind Farm (SFWF) and the construction staging area. However, given the volume and nature of the existing vessel traffic in these areas, a temporary and negligible increase of wake-induced erosion and sediment transport could occur, if any. A Construction Contingency Plan and a stormwater pollution prevention plan (SWPPP) will be developed as part of the Project Environmental Management and Construction Plan (EM&CP). | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.2.2, Water Quality and Water Resources Section 4.2.3, Geological Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix H, Geophysical and Geotechnical Survey Reports; and Appendix I, Sediment Survey and Sediment Transport Analysis Report |
| 3 | Ensure that state and federally funded public works projects proposed for location within the coastal zone will: | These policies are not applicable because the SFWF is an offshore wind energy facility that is outside the Massachusetts coastal zone. | These policies are not applicable, the SFEC will not be located within the Massachusetts coastal zone. | Not applicable |
| | Not exacerbate existing hazards or damage natural buffers or other natural resources. | | | |
| | Be reasonably safe from flood and erosion-related damage. | | | |
| | Not promote growth and development in hazard-prone or buffer areas, especially in velocity zone and Areas of Critical Environmental Concern. | | | |
| | Not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with Coastal Barrier Resource/Improvement Acts. | | | |
| 4 | Prioritize acquisition of hazardous coastal areas that have high conservation and/or recreation values and relocation of structures out of coastal high-hazard areas, giving due consideration to the effects of coastal hazards at the location to the use and manageability of the area. | This policy is not applicable because the SFWF is an offshore wind facility that is outside the Massachusetts coastal zone. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF with the SFEC - Onshore substation on Long Island, New York. The SFEC does not occur in the Massachusetts coastal waters or marine areas. | Not applicable |
| <i>Energy</i> | | | | |
| 1 | For coastally dependent energy facilities, assess siting in alternative coastal locations. For non-coastally dependent energy facilities, assess siting in areas outside of the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites. | The SFWF complies with this policy to the extent applicable. Although, the SFWF will not be located within the Massachusetts coastal zone, the SFWF is an offshore wind energy facility located in the Lease Area to enable it to perform its obligations under the Power Purchase Agreement (PPA) by generating electricity from an offshore wind farm located in the Rhode Island-Massachusetts Wind Energy Area (RI-MA WEA) and transmitting the electricity to the South Fork Export Cable (SFEC) - Onshore Substation on Long Island, New York. The location of the SFWF will not interfere with natural coastal processes, will not cause and increase in erosion, and will not result in adverse impacts to water quality, physical processes, and marine productivity. | This policy is not applicable because the SFEC will not be located within the Massachusetts coastal zone. | Section 2.0, Project Siting and Future Activities; Section 3.0, Project Description; Section 4.1.2, Sediment Suspension and Deposition; Section 4.2.2, Water Quality and Water Resources Section 4.2.3, Geological Resources;; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix H, Geophysical and Geotechnical Survey Reports; and Appendix I, Sediment Survey and Sediment Transport Analysis Report |
| 2 | Encourage energy conservation and the use of renewable sources such as solar and wind power in order to assist in meeting the energy needs of the Commonwealth. | The SFWF complies with this policy to the extent applicable. Although, the SFWF will not be located within the Massachusetts coastal zone, the SFWF is an offshore wind energy facility located in Lease Area to enable it to perform its obligations under the PPA by generating electricity from an offshore wind farm located in the RI-MA WEA and transmitting the electricity to the SFEC - Onshore Substation located in the town of East Hampton on Long Island, New York. The SFWF will provide the Long Island Power Authority (LIPA) and the northeast transmission grid with a sustainable source of zero-carbon generation from renewable energy sources. | This policy is not applicable because the SFEC will not be located within the Massachusetts coastal zone. | Section 1.2, Project Purpose; Section 1.3, Regulatory Framework; Section 2.0, Project Siting and Future Activities; and Section 1.3.1, Federal Permits, Approvals, and Consultations |

Appendix A-3. Coastal Zone Management Consistency Statements: Massachusetts
Deepwater Wind South Fork, LLC

SFWF - Massachusetts Office of Coastal Zone Management Program Federal Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|-------------------|---|--|--|---|
| Growth Management | | | | |
| 1 | Encourage sustainable development that is consistent with state, regional, and local plans and support the quality and character of the community. | This policy is not applicable because the SFWF does not propose to encourage sustainable development that is consistent with state, regional, and local plans. | The SFEC complies with this policy to the extent applicable. The SFEC is part of the SFWF offshore wind facility that could be characterized as sustainable development that is consistent with state, regional, and local plans. | Section 1.2, Project Purpose; and Section 2.0, Project Siting and Future Activities |
| 2 | Ensure that state and federally funded infrastructure projects in the coastal zone primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers. | This policy is not applicable because the SFWF is an offshore wind facility and is not a state- or federally funded infrastructure project in the coastal zone. | This policy is not applicable because the SFEC is not a state or federally funded infrastructure SFEC in the Massachusetts coastal zone. | Not applicable |
| 3 | Encourage the revitalization and enhancement of existing development centers in the coastal zone through technical assistance and financial support for residential, commercial, and industrial development. | This policy is not applicable because the SFWF is an offshore wind facility. | This policy is not applicable because the SFEC does not occur in the Massachusetts coastal zone; therefore, this policy does not apply. | Not applicable |
| Habitat | | | | |
| 1 | Protect coastal, estuarine, and marine habitats - including salt marshes, shellfish beds, submerged aquatic vegetation, dunes, beaches, barrier beaches, banks, salt ponds, eelgrass beds, tidal flats, rocky shore, bays, sounds, and other ocean habitats - and coastal freshwater streams, ponds, and wetlands to preserved critical wildlife habitat and other important functions and services including nutrient and sediment attenuation, wave and storm damage protection, and landform movement and processes. | The SFWF complies with this policy to the extent applicable because it has been designed to use construction techniques to avoid or minimize environmental impacts to the greatest extent practicable. A Construction Contingency Plan and a stormwater pollution prevention plan (SWPPP) will be developed as part of the Project Environmental Management and Construction Plan (EM&CP). | The SFEC complies with this policy to the extent applicable because the SFEC has been designed to use construction techniques to avoid or minimize environmental impacts to the greatest extent practicable. | Section 4.2.2, Water Quality and Water Resources; Section 4.3.1, Biological Resources; Section 4.3.1, Coastal and Terrestrial Habitat; Section 3.4.2, Benthic and Shellfish Resources; Section 4.3.3, Finfish and Essential Fish Habitat Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix N, Benthic Resources Survey Report; Appendix O, Essential Fish Habitat Report; Appendix P, Marine Mammal, Sea Turtle, and Sturgeon Reports; and Appendix Q, Avian and Bat Reports |
| 2 | Advance the restoration of degraded or former habitats in coastal and marine areas. | This policy is not applicable because the SFWF does not occur in or plan to advance the restoration of degraded or former habitats in the Massachusetts coastal or marine areas; if the port of New Bedford is selected for the SFWF staging area, the staging area is anticipated to be located within an existing port/facility. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF with the SFEC - Onshore substation on Long Island, New York. The SFEC does not occur in the Massachusetts coastal waters or marine areas. | Not applicable |
| Ocean Resources | | | | |
| 1 | Support the development of sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes. Ensure that the review process regulating aquaculture facility sites (and access routes to those areas) protects significant ecological resources (salt marshes, dunes, beaches, barrier beaches, and salt ponds) and minimizes adverse effects on the coastal and marine environment and other water-dependent uses. | This policy is not applicable because the SFWF is an offshore wind facility which does not involve aquaculture. | This policy is not applicable because the SFEC is a buried export cable that does not involve aquaculture. | Not applicable |
| 2 | Except where such activity is prohibited by the Ocean Sanctuaries Act, the Massachusetts Ocean Management Plan, or other applicable provision of law, the extraction of oil, natural gas, or marine minerals (other than sand and gravel) in or affecting the coastal zone must protect marine resources, marine water quality, fisheries, and navigational, recreational and other uses. | Tthis policy is not applicable because the SFWF does not propose the extraction of oil, natural gas, or marine minerals. | This policy is not applicable the SFEC is a buried export cable that does not propose the extraction of oil, natural gas, or marine minerals. | Not applicable |
| 3 | Accommodate offshore sand and gravel extraction needs in areas and in ways that will not adversely affect marine resources, navigation, or shoreline areas because of alteration of wave direction and dynamics. Extraction of sand and gravel, when and where permitted, will be primarily for the purpose of beach nourishment or shoreline stabilization. | This policy is not applicable because the SFWF does not propose the extraction of sand and gravel. | This policy is not applicable because the SFEC is a buried export cable and does not propose the extraction of sand and gravel. | Not applicable |
| Ports and Harbors | | | | |
| 1 | Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity, and public health and take full advantage of opportunities for beneficial re-use. | This policy is not applicable because the SFWF does not propose dredging or disposal of dredged material in the Massachusetts coastal zone. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF with the SFEC - Onshore substation on Long Island, New York, and will not require dredging or dredged material disposal within Massachusetts coastal waters. | Not applicable |
| 2 | Obtain the widest possible public benefit from channel dredging and ensure that Designated Port Areas and developed harbors are given highest priority in the allocation of resources. | This policy is not applicable because the SFWF does not propose channel dredging in the Massachusetts coastal zone. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF located within the Lease Area Outer Continental Shelf (OCS)-A 0486 (the North Lease) with the SFEC - Onshore substation on Long Island, New York. The SFEC does not involve channel dredging in Massachusetts coastal waters or in a Designated Port Area (DPA). | Not applicable |

Appendix A-3. Coastal Zone Management Consistency Statements: Massachusetts

Deepwater Wind South Fork, LLC

SFWF - Massachusetts Office of Coastal Zone Management Program Federal Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|-----------------|---|---|---|---|
| 3 | Preserve and enhance the capacity of Designated Port Areas to accommodate water-dependent industrial uses and prevent the exclusion of such uses from tidelands and any other DPA lands over which an EEA agency exerts control by virtue of ownership or other legal authority. | This policy is not applicable because the SFWF does not propose impact the capacity of Designated Port Areas (DPA) in Massachusetts to accommodate water-dependent industrial uses in Massachusetts waters. | This policy is not applicable because the SFEC does not directly include any DPA lands or include any expansion of water-dependent industrial uses in designated ports and developed harbors, redevelopment of urban waterfronts, and expansion of visual access within Massachusetts coastal zone. | Not applicable |
| 4 | For development on tidelands and other coastal waterways, preserve and enhance the immediate waterfront for vessel-related activities that require sufficient space and suitable facilities along the water's edge for operational purposes. | This policy is not applicable because the SFWF is an offshore wind facility and development on tidelands or other coastal waterways is not proposed for development within Massachusetts coastal waters. | This policy is not applicable because the SFEC does not include development on tidelands or other coastal waterways within Massachusetts coastal waters. | Not applicable |
| 5 | Encourage, through technical and financial assistance, expansion of water-dependent uses in Designated Port Areas and developed harbors, re-development of urban waterfronts, and expansion of physical and visual access. | This policy is not applicable because the SFWF is an offshore wind facility and does not include redevelopment in deteriorated waterfront areas. | This policy is not applicable because the SFEC does not directly include any DPA lands or include any expansion of water-dependent industrial uses in designated ports and developed harbors, redevelopment of urban waterfronts, and expansion of visual access. | Not applicable |
| Protected Areas | | | | |
| 1 | Preserve, restore, and enhance coastal Areas of Critical Environmental Concern, which are complexes of natural and cultural resources of regional or statewide significance. | This policy is not applicable because the SFWF is an offshore wind facility and will not affect state-designated Areas of Critical Environmental Concern. | This policy is not applicable because the SFEC is a buried export cable that will interconnect the SFWF with the SFEC - Onshore substation on Long Island, New York. The SFEC does not occur within the Massachusetts coastal zone or within a state-designated Area of Critical Environmental Concern. | Not applicable |
| 2 | Protect state designated scenic rivers in the coastal zone. | This policy is not applicable because the SFWF is an offshore wind facility and will not affect scenic rivers in the coastal zone. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone and will not affect scenic rivers in the coastal zone. | Not applicable |
| 3 | Ensure that proposed developments in or near designated or registered historic places respect the preservation intent of the designation and that potential adverse effects are minimized. | The SFWF complies with this policy to the extent applicable. The SFWF will not directly impact historic resources because the SFWF is not located in Massachusetts coastal waters. Impacts to onshore historic places will be limited and temporary in nature and will consist predominately of vessel traffic in Massachusetts coastal waters. Visual impacts to onshore historic resources from meteorological structures and from construction vessels will also be expected to be negligible. | The SFEC complies with this policy to the extent applicable. The SFEC will not directly impact historic resources because the SFEC is not located in Massachusetts coastal waters. Impacts to onshore historic places will be limited and temporary in nature and will consist predominately of vessel traffic in Massachusetts coastal waters. Visual impacts to onshore historic resources from meteorological structures and from construction vessels will also be expected to be negligible. | Section 4.1.9, Visible Structures; Section 4.4, Cultural Resources; Section 4.5, Visual Resources; Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures; Appendix R, Marine Archaeological Report; and Appendix V, Visual Impact Assessment Report for SFWF |
| Public Access | | | | |
| 1 | Ensure that development (both water-dependent or nonwater-dependent) of coastal sites subject to state waterways regulation will promote general public use and enjoyment of the water's edge, to an extent commensurate with the Commonwealth's interests in flowed and filled tidelands under the Public Trust Doctrine. | This policy is not applicable because the SFWF is an offshore facility that does not occur in state waterways. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone or affect public access; therefore, this policy does not apply. | Not applicable |
| 2 | Improve public access to existing coastal recreation facilities and alleviate auto traffic and parking problems through improvements in public transportation and trail links (land- or water-based) to other nearby facilities. Increase capacity of existing recreation areas by facilitating multiple use and by improving management, maintenance, and public support facilities. Ensure that the adverse impacts of developments proposed near existing public access and recreation sites are minimized. | This policy is not applicable because the SFWF is an offshore facility and does not occur in the Massachusetts coastal zone. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone or affect public access near recreational facilities. | Not applicable |
| 3 | Expand existing recreation facilities and acquire and develop new public areas for coastal recreational activities, giving highest priority to regions of high need or limited site availability. Provide technical assistance to developers of both public and private recreation facilities and sites that increase public access to the shoreline to ensure that both transportation access and the recreation facilities are compatible with social and environmental characteristics of surrounding communities. | This policy is not applicable because the SFWF is an offshore facility and does not occur in the Massachusetts coastal zone. | This policy is not applicable because the SFEC is a buried export cable that will does not occur within the Massachusetts coastal zone. | Not applicable |
| Water Quality | | | | |
| 1 | Ensure that point-source discharges and withdrawals in or affecting the coastal zone do not compromise water quality standards and protected designated uses and other interests. | This policy is not applicable because the SFWF is an offshore wind facility that will not produce point-source discharges or withdrawals. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone and will not produce point-source discharges or withdrawals into or affecting the coastal zone. | Not applicable |
| 2 | Ensure the implementation of nonpoint source pollution controls to promote the attainment of water quality standards and protect designated uses and other interests. | The SFWF complies with this policy to the extent applicable because it has been designed to use construction techniques to avoid or minimize environmental impacts, such as nonpoint source discharges of pollutants into coastal waters, to the greatest extent practicable into coastal waters. A Construction Contingency Plan and a SWPPP will be developed as part of the Project EM&CP. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone and will not produce nonpoint source pollution. | Section 4.2.2, Water Quality and Water Resources; and Section 4.7, Summary of Potential Impacts and Proposed Environmental Protection Measures |

Appendix A-3. Coastal Zone Management Consistency Statements: Massachusetts
Deepwater Wind South Fork, LLC

SFWF - Massachusetts Office of Coastal Zone Management Program Federal Consistency Review

| Policy # | Policy/Requirement | Response to Policy for SFWF | Response to Policy for SFEC | COP Section Reference |
|----------|---|--|--|-----------------------|
| 3 | Ensure that subsurface waste discharges conform to applicable standards, including the siting, construction, and maintenance requirements for on-site wastewater disposal systems, water quality standards, established Total Maximum Daily Load limits, and prohibitions on facilities in high-hazard areas. | This policy is not applicable because the SFWF is an offshore facility that will not produce subsurface waste discharges that will require an onsite wastewater disposal system. | This policy is not applicable because the SFEC is a buried export cable that does not occur within the Massachusetts coastal zone and will not produce subsurface waste discharges that will require an onsite wastewater disposal system. | Not applicable |



THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

OFFICE OF COASTAL ZONE MANAGEMENT

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(617) 626-1200 FAX: (617) 626-1240

November 19, 2018

Deepwater Wind South Fork Wind Project
C/o Aileen Kenney
Senior Vice President, Development
South Fork Wind Farm
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the Deepwater Wind South Fork Wind Farm and South Fork Export Cable Project – Bureau of Ocean Energy Management (BOEM) Action.

Dear Ms. Kenney:

The Massachusetts Office of Coastal Zone Management (CZM) received your consistency certification on November 19, 2018. CZM also obtained a copy of the Construction and Operations Plan on October 24, 2018 upon which this review will be conducted. South Fork Wind Farm (SFWF) includes up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. The purpose of this letter is to provide you with public notice, scheduling, and other procedural requirements pursuant to National Oceanic and Atmospheric Administration's (NOAA) Coastal Zone Management Act (CZMA) regulations (15 CFR 923 *et seq.*), NOAA's Federal Consistency Regulations (15 CFR 930 *et seq.*), and CZM's Coastal Zone Management Program regulations (301 CMR 20 *et seq.*).

CZM will publish a notice that this proposed project is undergoing federal consistency review in the next edition of the *Environmental Monitor*, November 21, 2018. The publication date of that issue of the *Monitor* will commence a 21-day public comment period. Enclosed please find a copy of the schedule that we will follow during our review. CZM must issue our consistency decision within six months of commencement of our review, and we will make every effort to ensure our review is as expeditious as possible. If, after three months, we have been unable to complete our review, we will

CHARLES D. BAKER GOVERNOR KARYN E. POLITO LIEUTENANT GOVERNOR MATTHEW A. BEATON SECRETARY BRUCE K. CARLISLE DIRECTOR

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notify you of outstanding issues or information needed to complete the review. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews. CZM looks forward to reviewing subsequent filings under NEPA. If necessary, we will contact you in five months to determine whether our review will be completed within the six-month review period, or whether a stay of the review period is recommended.

Note: It is the responsibility of the project proponent to publish a public notice of the federal consistency review by non-electronic means (e.g. local newspaper) concurrently with the public notice published in the *Environmental Monitor*.

Pursuant to the CZMA and NOAA's regulations, a federal agency cannot authorize that any work commence under the federal permit unless the federal permitting agency receives a consistency concurrence letter from CZM for the proposed project, or, if CZM objects and the project proponent appeals CZM's objection to the U.S. Secretary of Commerce and the Secretary overrides CZM's objection.

Communications regarding CZM's federal consistency review of the proposed project should be directed to Bob Boeri, at Robert.Boeri@state.ma.us or (617) 626-1050, who will be leading the federal consistency review of this project for CZM.

Sincerely,



Robert L. Boeri
Project Review Coordinator

RLB/pb
Enclosure

cc: Barbara Newman, Chief
Regulatory Branch, NED, US Army Corps of Engineers
Eileen Feeney, John Logan, and Kathryn Ford
MA DMF
Dave Janik,
CZM South Coast Regional Coordinator

CZM Federal Consistency Review Schedule
for an Activity Requiring Federal License or Permit*

Review Steps

- | | | |
|-----|---|-------------------|
| 1. | <i>Document Receipt</i> | |
| (a) | Received consistency certification and necessary data and information on | November 19, 2018 |
| (b) | Received copy of Construction and Operations Plan on | November 19, 2018 |
| (c) | CZM federal consistency review will begin on | November 19, 2018 |
| 2. | <i>Public Notice</i> | |
| (a) | Notice of the initiation of this federal consistency review will appear in the next edition of the MEPA <i>Monitor</i> which will appear on or about | November 21, 2018 |
| (b) | Publication in the <i>Monitor</i> begins a 21 day public comment period which will close on or about | December 12, 2018 |
| 3. | Applicant and federal permitting agency will be notified of review status and the basis for any further delay within 3 months of the commencement of review. Last date for review status notification is | February 21, 2019 |
| 4. | CZM will contact applicant after 5 months to determine whether all networked state agency reviews will be concluded within the review period or whether the review period should be stayed; this will occur no later than | April 21, 2019 |
| 5. | CZM must issue its consistency decision within 6 months of commencement of our review. The review period closes and a consistency decision will be issued no later than | May 21, 2019 |

* 301 CMR 20.04, 15 CFR 930.50 - 930.66



THE COMMONWEALTH OF MASSACHUSETTS

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February 21, 2019

Deepwater Wind South Fork Wind Project
C/o Aileen Kenney
Senior Vice President, Development
South Fork Wind Farm
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the Deepwater Wind South Fork
Wind Farm and South Fork Export Cable Project – Bureau of Ocean Energy
Management (BOEM) Action.

Dear Ms. Kenney:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM looks forward to reviewing subsequent filings under NEPA for consistency with state enforceable policies. If we do not receive the NEPA documentation before April 21, 2019, CZM will contact you regarding a stay in the federal consistency review period, pursuant to NOAA's CZMA federal consistency regulations at 15 CFR 930.60(b).

CHARLIE BAKER GOVERNOR **KARYN E. POLITO** LIEUTENANT GOVERNOR **MATTHEW A. BEATON** SECRETARY

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Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

Communications regarding CZM's federal consistency review of the proposed project should be directed to Bob Boeri, at Robert.Boeri@state.ma.us or (617) 626-1050, who will be leading the federal consistency review of this project for CZM.

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

cc: Barbara Newman, Chief
Regulatory Branch, NED, US Army Corps of Engineers
Eileen Feeney, John Logan, and Kathryn Ford
MA DMF
Todd Callaghan, Coastal and Marine Scientist,
MA CZM
Mary Boatman, NEPA Coordinator,
BOEM



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April 18, 2019

South Fork
C/o Aileen Kenney
Senior Vice President, Development
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind Farm and
South Fork Export Cable Project – Bureau of Ocean Energy Management
(BOEM) Action.

Dear Ms. Kenney:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has been informed that SF is in the process of updating the Construction and Operations Plan (COP) for the SFWF and SFEC. The update to the COP and the resulting Draft



Environmental Impact Statement (DIES) will include information that is necessary to inform CZM's federal consistency review.

As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. In order for CZM to review the additional material to be submitted as addendums to the COP and information to be provided in the DEIS to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose a stay of the review, for six months, beginning on April 18, 2019, with CZM's review re-starting on October 18, 2019, and completed by November 21, 2019. If the coordinated review is completed earlier than October 18, 2019, CZM may contact you to amend the end date of the stay to allow for an earlier determination. In the event that the review has not been completed within the review schedule noted above, CZM may contact you to propose an additional stay with dates to be determined. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

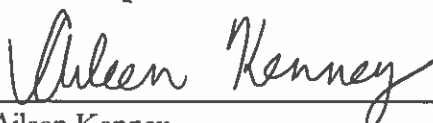
If you have questions about the federal consistency review process, please contact me at the above address or (617) 626-1050.

Sincerely,

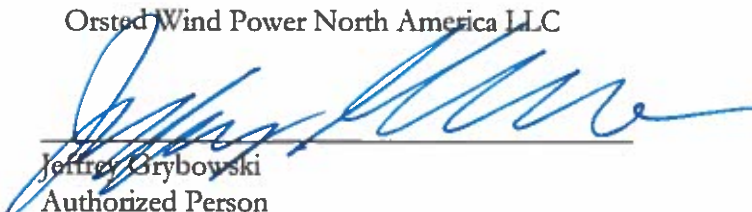
Robert Boeri
Acting Assistant Director

RLB/pb
CZM #18265

Agreed to by Applicant


Aileen Kenney
Authorized Person
Orsted Wind Power North America LLC

And


Jeffrey Grybowski
Authorized Person
Orsted Wind Power North America LLC

cc: Barbara Newman, Chief
Regulatory Branch, NED, US Army Corps of Engineers
Lealdon Langley, Director
Wetlands and Wastewater Program, MA DEP
Ben Lynch, Program Chief,
Waterways Regulation, Massachusetts DEP
Derek Standish, Environmental Engineer,
Wetlands Program, Massachusetts DEP
Jim Mahala, Section Chief
Southeast Regional Office, MassDEP
Eileen Feeney, John Logan, and Kathryn Ford
MA DMF
Steve McKenna,
CZM Cape Cod Regional Coordinator
Todd Callaghan, Coastal and Marine Scientist,
MA CZM
Mary Boatman, NEPA Coordinator,
BOEM



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EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

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October 18, 2019

Deepwater Wind South Fork Wind Project
C/o Melanie Gearon
Manager, Permitting and Environmental Affairs
South Fork Wind Farm
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the Deepwater Wind South Fork
Wind Farm and South Fork Export Cable Project – Bureau of Ocean Energy
Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has been informed that DWSF revised the Construction and Operations Plan (COP) in May 2019 for the SFWF and SFEC. The update to the COP and the resulting Draft Environmental Impact Statement (DEIS) will include information that is necessary to inform CZM's federal consistency review.

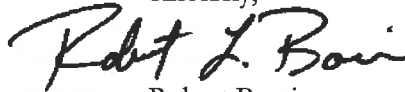


As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to a stay of the review period ending November 21, 2019. In order for CZM to review the additional material to be submitted as addendums to the COP and information to be provided in the DEIS to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose a stay of the review, for six months, beginning on October 19, 2019, with CZM's review re-starting on April 19, 2020, and completed by May 25, 2020. If the coordinated review is completed earlier than April 19, 2020, CZM may contact you to amend the end date of the stay to allow for an earlier determination. In the event that the review has not been completed within the review schedule noted above, CZM may contact you to propose an additional stay with dates to be determined. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or (617) 626-1050.

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

Deepwater Wind South Fork, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon
Authorized Person

And



Francis Slingsby
Authorized Person

cc: Barbara Newman, Chief
Regulatory Branch, NED, US Army Corps of Engineers
Lealdon Langley, Director
Wetlands and Wastewater Program, MA DEP
Stephanie Moura, Program Chief,
Waterways Regulation, Massachusetts DEP
Derek Standish, Environmental Engineer,
Wetlands Program, Massachusetts DEP
Jim Mahala, Chief, Wetlands & Waterways Program
Southeast Regional Office, MassDEP
Eileen Feeney, John Logan, and Kathryn Ford
MA DMF
Steve McKenna,
CZM Cape Cod Regional Coordinator
Todd Callaghan, Coastal and Marine Scientist,
MA CZM
Mary Boatman, NEPA Coordinator,
BOEM



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

April 16, 2020

Deepwater Wind South Fork Wind Project
C/o Melanie Gearon
Manager, Permitting and Environmental Affairs
South Fork Wind Farm
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the Deepwater Wind South Fork
Wind Farm and South Fork Export Cable Project – Bureau of Ocean Energy
Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) for the SFWF and SFEC. Many of these updates relate to the additional survey work DWSF is conducting to characterize and analyze the expanded SFWF work area. The update to the COP and the resulting Draft Environmental Impact Statement (DEIS) will include information that is necessary to inform CZM's federal consistency review. CZM is requesting additional time to review the updated COP and for the submission and subsequent review of the DEIS



As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019 and May 25, 2020. In order for CZM to review the additional material submitted as addendums to the COP and information to be provided in the DEIS to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose a stay of the review, for five months, beginning on April 19, 2020 with CZM's review re-starting on September 19, 2020, and completed by October 25, 2020. CZM will issue its consistency determination on or before October 25, 2020 unless Deepwater Wind South Fork and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or (617) 626-1050.

Sincerely,



Robert Boeri
Project Review Coordinator

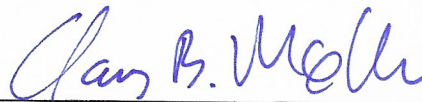
RLB/pb
CZM #18265

Deepwater Wind South Fork, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon
Authorized Person

And



Claus Bolje Moller
Authorized Person

cc: Barbara Newman, Chief
Regulatory Branch, NED, US Army Corps of Engineers
Lealdon Langley, Director
Wetlands and Wastewater Program, MA DEP
Stephanie Moura, Program Chief,
Waterways Regulation, Massachusetts DEP
Derek Standish, Environmental Engineer,
Wetlands Program, Massachusetts DEP
Jim Mahala, Chief, Wetlands & Waterways Program
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Todd Callaghan, Coastal and Marine Scientist,
MA CZM
Mary Boatman, NEPA Coordinator,
BOEM



THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

OFFICE OF COASTAL ZONE MANAGEMENT

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(617) 626-1200 FAX: (617) 626-1240

September 10, 2020

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project– Bureau of Ocean Energy Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) for the SFWF and SFEC. Many of these updates relate to the additional survey work SFW is conducting to characterize and analyze the expanded SFWF work area. The update to the COP and the resulting Draft Environmental Impact Statement (DEIS) will include information that is necessary to inform CZM's federal consistency review. CZM is requesting additional time to review the updated COP and for the submission and subsequent review of the DEIS.



As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, and October 25, 2020. In order for CZM to review the additional material submitted as addendums to the COP and information to be provided in the DEIS to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose a stay of the review, for six months, beginning on September 19, 2020 with CZM's review re-starting on March 19, 2021, and completed by April 25, 2021. CZM will issue its consistency determination on or before April 25, 2021 unless SFW and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or Robert.boeri@mass.gov.

Sincerely,

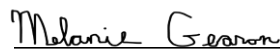


Robert Boeri

Project Review Coordinator

RLB/pb
CZM #18265

South Fork Wind, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon

Authorized Person



And

Robert Mastria

Authorized Person

cc: Taylor Bell, NED, US Army Corps of Engineers
Christine Jacek, NED, US Army Corps of Engineers
Lealdon Langley, MA DEP
Stephanie Moura, MA DEP
Derek Standish, MA DEP
Millie Garcia-Serrano, MA DEP
Dave Hill, MA DEP
Daniel Gilmore, MA DEP
Eileen Feeney, MA DMF
John Logan, MA DMF
Kathryn Ford, MA DMF
Steve McKenna, CZM Cape Cod Regional Coordinator
Todd Callaghan, CZM Coastal and Marine Scientist
Mary Boatman, BOEM



THE COMMONWEALTH OF MASSACHUSETTS

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OFFICE OF COASTAL ZONE MANAGEMENT

251 Causeway Street, Suite 800, Boston, MA 02114-2136

(617) 626-1200 FAX: (617) 626-1240

March 18, 2021

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project– Bureau of Ocean Energy Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) and Draft Environmental Impact Statement (DEIS) for the SFWF and SFEC. The update to the COP, in particular and information relating to the economic impact of the proposed project on Massachusetts fisheries are necessary to inform CZM's review and to complete the determination of the proposed project's consistency with enforceable program policies of the Massachusetts coastal management program.

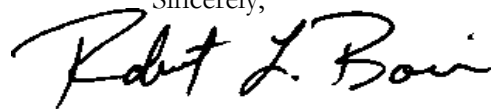


As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, October 25, 2020, and April 25, 2021. In order for CZM to review the additional material submitted to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose an additional stay of the review, for one month, beginning on March 19, 2021 with CZM's review re-starting on April 19, 2021, and completed by May 25, 2021. CZM will issue its consistency determination on or before May 25, 2021 unless SFW and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or Robert.boeri@mass.gov.

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

South Fork Wind, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon
Authorized Person

And

Robert Mastria
Authorized Person

cc: Lisa Grudzinski, NED, US Army Corps of Engineers
Robert Vietri, NED, US Army Corps of Engineers,
Christine Jacek, NED, US Army Corps of Engineers
Stephanie Moura, MA DEP
Millie Garcia-Serrano, MA DEP
Dave Hill, MA DEP
Daniel Gilmore, MA DEP
Eileen Feeney, MA DMF
John Logan, MA DMF
Kathryn Ford, MA DMF
Steve McKenna, CZM Cape Cod Regional Coordinator
Todd Callaghan, CZM Coastal and Marine Scientist
Mary Boatman, BOEM



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OFFICE OF COASTAL ZONE MANAGEMENT

251 Causeway Street, Suite 800, Boston, MA 02114-2136

(617) 626-1200 FAX: (617) 626-1240

May 7, 2021

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project– Bureau of Ocean Energy Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) and Draft Environmental Impact Statement (DEIS) for the SFWF and SFEC. As transmitted to South Fork Wind on May 6, 2021, CZM will also need the requested additional information on our Ports and Harbors enforceable policies necessary to complete this review prior to the expiration of the stay period.



As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, October 25, 2020, April 25, 2021, and May 25, 2021. In order for CZM to review the additional material submitted as addendums to the COP, the DEIS, and information describing the economic assessment of potential project impacts to the Commonwealth's fishing industry to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose an additional stay of the review, for 16 days, beginning on May 6, 2021 with CZM's review re-starting on May 25, 2021, and completed by June 10, 2021. CZM will issue its consistency determination on or before June 10, 2021 unless SFW and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or Robert.boeri@mass.gov

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

South Fork Wind, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon
Authorized Person



Robert Mastria
Authorized Person

cc: Taylor Bell, NED, US Army Corps of Engineers
Christine Jacek, NED, US Army Corps of Engineers
Stephanie Moura, MA DEP
Millie Garcia-Serrano, MA DEP
Dave Hill, MA DEP
Daniel Gilmore, MA DEP
Eileen Feeney, MA DMF
John Logan, MA DMF
Kathryn Ford, MA DMF
Steve McKenna, CZM Cape Cod Regional Coordinator
Todd Callaghan, CZM Coastal and Marine Scientist
Mary Boatman, BOEM





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(617) 626-1200 FAX: (617) 626-1240

May 6, 2021

South Fork Wind LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs
South Fork Wind Farm
50 Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the Deepwater Wind South Fork Wind Farm and South Fork Export Cable Project – Bureau of Ocean Energy Management (BOEM) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0486 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. The SFWF also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily have been issued no later than May 21, 2019. CZM and South Fork Wind previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, October 25, 2020, April 25, 2021, and May 25, 2021.

In our review of the necessary data and information submitted for the federal consistency review of the proposed wind energy project, we have concluded that additional information is necessary to complete the determination of the proposed project's consistency with enforceable program policies of the Massachusetts coastal management program. Listed below is the applicable enforceable policy, with an excerpt of the relevant policy elements from the *Massachusetts Office of Coastal Zone Management Policy Guide* (Policy Guide) and the supplemental information requested.

Ports and Harbor Policy #4

Ports and harbors hold important state, regional, and national significance because they possess critical characteristics necessary for the successful operation of the Massachusetts maritime industry including access to deep navigation channels, flat lands appropriate for industrial uses, connections to utilities and road/rail networks, and developed shorelines



characterize which facilitate the transfer of goods from ship to shore. The enforceable Ports and Harbors Policies (#1 - 4) specifically relate to the dredging and disposal of dredged material, public benefit priorities for channel dredging, Designated Port Area management, and *the protection of water-dependent uses*.

Ports and Harbors Policy #4 states the need to preserve and enhance waterways for water dependent uses and vessel-related activities. However, the policy recognizes that protection of waterways and the water dependent uses operating within them is challenging given limited resources and the constant demand for redevelopment that may not be compatible with existing water dependent uses. The policy addresses this challenge by providing opportunities for protection by appropriately siting new uses so they do not interfere with existing operating water dependent uses. Additionally, the policy states that where existing water dependent uses are disrupted as a result of new water dependent uses at an off-site location within the proximate vicinity of the project site, adequate mitigation shall be provided.

The proposed South Fork Wind project will be constructed in areas of state and federal waters where Massachusetts commercial fishing is known to occur as evidenced by information and data provided through the state and federal review processes and corroborated by fisheries agencies and the Massachusetts commercial fishing industry. Massachusetts commercial fishing activity currently operating in the project area will be disrupted by the proposed project because fishing activity will be precluded in parts of the project area during construction, the abundance or availability of fish may be temporarily displaced during construction, fishing activities may be potentially restricted after construction, and landings may be affected.

Information requested

For CZM to determine the consistency of the project with the enforceable program policies of the Massachusetts coastal management program, South Fork Wind should provide an assessment of the potential economic impact of the project on the water dependent uses of Massachusetts, specifically addressing the potential economic exposure of the Massachusetts commercial fishing industry. The assessment should consider potential changes in fishing across ports, gear type, and fish species as a result of the project. In addition to the assessment of economic impacts, South Fork Wind should develop and provide a mitigation package to the Massachusetts commercial fishing industry to offset disruption, changes, or loss in fishing resulting from the project. The assessment of economic exposure and the mitigation package should incorporate data and input provided by Bureau of Ocean Energy Management (BOEM), the National Oceanic and Atmospheric Administration (NOAA), the MA Division of Marine Fisheries, MA CZM, the Massachusetts fishing industry, and other data sources, as applicable.

If you have questions about the federal consistency review process, please contact me at the above address or robert.boeri@mass.gov.

Sincerely,

A handwritten signature in black ink that reads "Robert L. Boeri". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Robert Boeri
Project Review Coordinator



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

June 2, 2021

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs 50
Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project– Bureau of Ocean Energy Management (BOEM) Action, U.S. Army Corps of Engineers (USACE) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct up to 15 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) and Draft Environmental Impact Statement (DEIS) for the SFWF and SFEC. As transmitted to South Fork Wind on May 6, 2021, CZM will also need the requested additional information on our Ports and Harbors enforceable policies necessary to complete this review prior to the expiration of the stay period.



As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, October 25, 2020, April 25, 2021, May 25, 2021, and June 10, 2021. In order for CZM to review the additional material submitted as addendums to the COP, the DEIS, and information describing the economic assessment of potential project impacts to the Commonwealth's fishing industry to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose an additional stay of the review, for 21 days, beginning on June 2, 2021 with CZM's review re-starting on June 15, 2021, and completed by July 1, 2021. CZM will issue its consistency determination on or before July 1, 2021 unless SFW and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or Robert.boeri@mass.gov

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

South Fork Wind, LLC
By its agent, Orsted Wind Power North America LLC



Melanie Gearon
Authorized Person

Robert Mastria
Authorized Person

cc: Taylor Bell, NED, US Army Corps of Engineers
Christine Jacek, NED, US Army Corps of Engineers
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Steve McKenna, CZM Cape Cod Regional Coordinator
Todd Callaghan, CZM Coastal and Marine Scientist
Mary Boatman, BOEM



THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

OFFICE OF COASTAL ZONE MANAGEMENT

251 Causeway Street, Suite 800, Boston, MA 02114-2136

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June 28, 2021

South Fork Wind, LLC
c/o Melanie Gearon
Manager, Permitting and Environmental Affairs 50
Exchange Terrace
Providence, RI 02903

Re: CZM Federal Consistency Review of the South Fork Wind, LLC (f/k/a Deepwater Wind South Fork, LLC) ("SFW") Wind Farm and South Fork Export Cable Project—Bureau of Ocean Energy Management (BOEM) Action, U.S. Army Corps of Engineers (USACE) Action.

Dear Ms. Gearon:

The Massachusetts Office of Coastal Zone Management (CZM) is currently reviewing the proposed project to construct 12 wind turbine generators (WTGs, turbines) with a nameplate capacity of 6 to 12 megawatts (MW) per turbine, submarine cables between the WTGs (inter-array cables), and an offshore substation (OSS), all of which will be located within federal waters on the Outer Continental Shelf (OCS), specifically in BOEM Renewable Energy Lease Area OCS-A 0517 (Lease Area), approximately 19 miles (30.6 kilometers [km], 16.6 nautical miles [nm]) southeast of Block Island, Rhode Island, and 35 mi (56.3 km, 30.4 nm) east of Montauk Point, New York. SFW also includes an O&M facility that will be located onshore at either Montauk in East Hampton, New York or Quonset Point in North Kingstown, Rhode Island. The South Fork Export Cable (SFEC), an alternating current (AC) electric cable, will connect the SFWF to the existing mainland electric grid in East Hampton, New York. The SFEC includes both offshore and onshore segments. The submarine segment of the export cable is proposed to be buried beneath the seabed within federal waters on the OCS from the OSS to the boundary of New York State territorial waters. CZM received your completed federal consistency certification package on November 19, 2018 and a consistency determination would ordinarily be issued no later than May 21, 2019.

CZM's federal consistency review is ongoing. As a networked program, the authorities and expertise of other state agencies are integrated and coordinated in CZM's review of projects to ensure compliance with the policies of our approved coastal program. Because consistency with CZM's enforceable policies cannot be achieved without compliance with their underlying state authorities, CZM will generally not issue a consistency decision until our networked agencies have completed their reviews of license, permit, and certificate applications identified as necessary data and information. CZM has received the updated Construction and Operations Plan (COP) and Draft Environmental Impact Statement (DEIS) for the SFWF and SFEC. CZM has also received the additional information requested from South Fork Wind in a letter dated May 6, 2021, on the Ports and Harbors enforceable policies.



As discussed, the Coastal Zone Management Act Federal Consistency Regulations at 15 CFR 930.60(b) allow for a stay in the six-month review period, if mutually agreed upon by both the applicant and the state agency. The rules also hold that the stay shall only be for a defined period, and the agreement must state the specific date on which the stay will end. CZM and the proponent previously agreed to stays of the review period ending November 21, 2019, May 25, 2020, October 25, 2020, April 25, 2021, May 25, 2021, June 10, 2021, and July 1, 2021. In order for CZM to review the additional material submitted as addendums to the COP, the DEIS, and information describing the economic assessment of potential project impacts to the Commonwealth's fishing industry to ensure that the proposed activity is consistent with the CZM's enforceable policies, we propose an additional stay of the review, for 14 days, beginning on June 28, 2021, with CZM's review re-starting on July 12, 2021, and completed by July 15, 2021. CZM will issue its consistency determination on or before July 15, 2021, unless SFW and CZM mutually agree in writing to another later date. Please indicate your agreement to this schedule by signing below and returning this letter to my attention.

Pursuant to applicable provisions of NOAA's Federal Consistency Regulations at 15 CFR 930.63, CZM may object to the consistency certification if any application for a specified state permit is denied, or if the applicant has failed to provide copies of final decisions on all applications identified as necessary data and information. CZM may stipulate conditions as may be necessary to achieve consistency with enforceable policies pursuant to provisions of NOAA's Federal Consistency Regulations (15 CFR 930.4, and 930.62). In the event an applicable plan, project proposal, or application is not modified accordingly, such conditional concurrence shall be treated as an objection to a federal consistency certification.

If you have questions about the federal consistency review process, please contact me at the above address or Robert.boeri@mass.gov

Sincerely,



Robert Boeri
Project Review Coordinator

RLB/pb
CZM #18265

South Fork Wind, LLC



Melanie Gearon
Authorized Person

Robert Mastria
Authorized Person

cc: Taylor Bell, NED, US Army Corps of Engineers
Christine Jacek, NED, US Army Corps of Engineers
Stephanie Moura, MA DEP
Millie Garcia-Serrano, MA DEP
Dave Hill, MA DEP
Daniel Gilmore, MA DEP
Dan McKiernan, MA DMF
John Logan, MA DMF
Steve McKenna, CZM Cape Cod Regional Coordinator
Todd Callaghan, CZM Coastal and Marine Scientist
Mary Boatman, BOEM

May 26, 2021

Lisa Berry Engler
CZM Director
Massachusetts Office of Coastal Zone Management
251 Causeway Street, Suite 800
Boston, MA 02114-2138

RE: South Fork Wind Comprehensive Mitigation Proposal

Dear Ms. Engler:

South Fork Wind, LLC ("SFW") respectfully submits this compensatory mitigation proposal to the Office of Coastal Zone Management ("CZM") for the federal consistency review of SFW's proposed offshore wind farm (the "Project" or "SFW Project") at CZM's request to meet its enforceable policies. SFW voluntarily submitted to this consistency review process in Massachusetts.

1. Description of SFW

SFW is a 50/50 partnership between Ørsted and Eversource.¹ The Project is the smallest of the Ørsted /Eversource proposed windfarms in the Rhode Island/Massachusetts Wind Energy Area. The current proposed Project will include 12 wind turbine generators ("WTG") with a capacity of 11 megawatts per turbine, submarine cables between the WTGs ("inter-array cables") and an offshore substation, all of which will be located in federal waters on the Outer Continental Shelf approximately 19 miles southeast of Block Island, Massachusetts, and 35 miles east of Montauk Point, New York. The SFW Project also will include one alternating current electric export cable that will connect the wind farm to an existing mainland grid in New York.

2. SFW Modified the Project to Avoid and/or Mitigate Impacts to Fisheries

According to CZM, the enforceable policies of the Massachusetts Coastal Zone Management Program (the "Program") refer to avoidance, minimization, and mitigation. SFW has taken significant steps to modify its Project to avoid and/or mitigate impacts to fisheries. This is because SFW prioritizes co-existence with the fishing community as an important step in developing a sustainable offshore wind industry. SFW believes that this focus on co-existence aligns with the spirit of the Program – avoid impacts first, and if full avoidance cannot be achieved, then mitigate.

The modifications that SFW has made to the Project over time to avoid impacts are substantial – from an economic standpoint and on the overall layout of the Project. Over the course of many

¹ Ørsted is a global leader in offshore wind, and Eversource is New England's largest energy company. Ørsted was recently ranked the most sustainable company in the world and will be the world's first major energy company to become carbon-neutral by 2025. Eversource has committed to becoming carbon neutral by 2030, faster than any utility in the United States.

meetings, SFW assessed and responded to feedback about, among other things, the layout of SFW. Incorporating this input, SFW invested significantly and committed to designing its layout in a 1 NM by 1 NM grid along both the east-west and north-south corridors that aligns across wind farms. This 1 NM by 1 NM proposal came originally from stakeholder feedback. Now it is a key component of SFW's layout to facilitate long-term use of the wind farm area by the fishing community. The grid layout and turbine spacing represent an important modification of the Project to avoid and/or mitigate potential impacts. This modification is also a significant concession by SFW and other Ørsted /Eversource Projects. The grid pattern constrains SFW's ability to design and install a layout that would otherwise optimize production from each WTG. The 1 NM by 1 NM spacing also limits the total number of wind turbines that can be constructed in the Ørsted /Eversource lease areas, and therefore, the total renewable energy and revenue that the wind farms can generate.

SFW also has implemented additional programs to avoid and/or mitigate potential interactions between SFW and the fishing communities. SFW developed a robust fisheries communication plan that incorporates input from the Massachusetts fishing community. The purpose of this communication plan is to give fishermen advance notice of where and when survey and construction activities will occur so as to minimize adverse interactions. SFW also employs fisheries liaisons to assist with these communication efforts. Every survey campaign uses fishing gear avoidance tactics such as onboard gear observers, avoidance training and/or the use of a scout vessel. Further, for those few instances in which gear loss occurs by accident, SFW has implemented a gear loss claim process. This first-in-the-industry gear loss claim process will compensate fishermen fairly in the event of lost or damaged gear.

3. SFW Provides Compensatory Mitigation to Impacted Fishermen

With its modifications, SFW has invested heavily in the Project to eliminate or minimize impacts to the fishing community. SFW recognizes, however, that the construction and decommissioning of SFW, in particular, will present some impacts that require mitigation.

a. Woods Hole Oceanographic Institution ("Woods Hole") Examined Economic Impacts to Fisheries from SFW Project

Because SFW recognized the need to evaluate fairly and on a quantitative basis the scope of financial mitigation, SFW engaged Woods Hole, which is one of the world's leading organizations dedicated to ocean research, to examine impacts to fisheries during the life of the Project and provide the economic value of such impacts.² Woods Hole's analysis brings a rigorous and data-driven focus to the question of impacts and economic value.

Woods Hole examined the level of existing fishing operations that intersect with SFW and its export cable route area to determine the landings and landed value attributable to the area occupied by SFW. Woods Hole obtained and used data provided by NOAA's National Marine Fisheries Service ("NMFS") covering a period of ten years, 2008-2018. The data uses modeled representations of federal Vessel Trip Report ("VTR") and clam logbook fishing trip data overlaid with Vessel Monitoring System ("VMS") data to produce accurate spatial allocation of landings from each fishing trip. Further, because not everyone in the federally permitted lobster or Jonah crab fisheries provides VTR data, Woods Hole applied an upward adjustment on the reported VTR data for these fisheries to account for these additional landings.

² The Woods Hole report was prepared by Di Jin, Ph.D., and Hauke L. Kite-Powell, Ph.D.

In addition, through a meeting hosted by Massachusetts Division of Marine Fisheries, Woods Hole met with about six charter fishing captains, who may fish in or near the SFW area, to obtain additional information on charter fishing trips to the area around and at South Fork. Based on the NOAA data and anecdotal charter captain information, Woods Hole arrived at baseline values that intersect with the SFW wind farm area and export cable routes.

Woods Hole then applied an economic model using IMPLAN model software and data to estimate the average total economic impact from commercial fishing activity in the SFW and export cable areas to Massachusetts.³ Based on this model, Woods Hole arrived at an output multiplier that reflects the linkages between economic activity in different sectors of the economy. For example, when landings increase in the commercial fishing sector, there is an associated increase in the seafood processing industry. Incorporating this multiplier allowed Woods Hole to capture indirect economic impacts attributable to commercial fishing activity.

Using these baseline values, Woods Hole developed and analyzed potential scenarios representing more extensive impacts and less extensive impacts to commercial fishing from the wind farm activities. These scenarios considered five categories of possible impacts: (1) impacts due to constrained access areas during construction; (2) impacts on fish stocks due to construction activities; (3) impacts on fishing in the wind farm area and export cable area during operations; (4) impacts due to constrained access areas during decommissioning; and (5) impacts on fish stocks due to decommissioning activities. The two scenarios incorporated conservative assumptions based on anticipated construction schedules and methods and the current state of research regarding the effects of offshore wind construction on fish and other marine species.

Woods Hole's report will serve as the basis for the compensatory framework that SFW has developed for mitigation. In addition, based on input from CZM during various meetings, SFW also is increasing its mitigation proposal to account for potential additional impacts during the first years of operation, which results in a total mitigation package of \$1,746,679.00 in 2022 dollars.

b. Navigational Enhancement and Training Program

SFW offers to provide a SFW created Massachusetts Navigational Enhancement and Training Program to provide training and experiential learning opportunities to those navigating within the Orsted/Eversource JV wind lease areas in the MA/RI WEA. The program furthers positive co-existence between offshore wind and the fishing community. Pursuant to the program, fishermen eligible for SFW's Commercial Fisheries Compensation Fund, described briefly below, will be eligible through a voucher program to receive pulse compression radar systems and AIS transceivers, if they do not already possess them. The Orsted/Eversource JV will pre-approve at least two Massachusetts marine electronics retailers to sell and install the electronic equipment. Thus, both Massachusetts fishermen and Massachusetts marine retailers will benefit from this program. This program is valued at about \$1,300,000 for More details on this Program are in Exhibit A attached hereto.

c. SFW Invests in the Development of a Comprehensive Compensatory Framework for Fishermen and Coastal Communities

³ IMPLAN is a highly effective and often used economic modeling platform that is based on the input-output economic model. The input-output analysis is a form of economic analysis based on the interdependencies between economic sectors.

Based on Woods Hole's assessment, SFW is engaging with experts from Industrial Economics Inc. to assist it in developing a fisheries mitigation framework that will compensate fishermen and support coastal communities. SFW will present to CZM a comprehensive compensatory program to alleviate the uncertainty on how compensatory mitigation will work in practice. SFW hopes that this framework will advance the mitigation process and show its dedication to working with CZM and the fishing community. SFW's mission was to achieve a fair and transparent process. SFW's proposed framework is divided into two components: a Commercial Fisheries Compensation Fund that will provide direct financial mitigation to Massachusetts fishermen operating in the SFW and export cable areas; and a Coastal Community Fund that will benefit the fishing industry and its communities through grants.

d. Conclusion

Using Woods Hole's assessment and the NOAA data and interviews upon which it is based, SFW is committed to providing a fair and equitable mitigation package that is comprised of two parts: 1) direct monetary mitigation in the Commercial Fisheries Compensation Fund; and 2) a Coastal Community Fund for coastal communities and related businesses. Implementation of this mitigation package is contingent on a successful negotiation process including:

- Concurrence from CZM with SFW's federal consistency certification on or before June 10, 2021. SFW understands from CZM that compensatory mitigation is the only issue remaining to show that SFW is consistent with the enforceable policies; and
- Receipt of all final federal, state and local permits and approvals.

SFW looks forward to working with CZM to achieve a successful mitigation package.

Sincerely,



Melanie Gearon, Permitting Manager
Authorized Person

Robert Mastria, Development Director
Authorized Person

Economic Impact of South Fork Wind on Massachusetts Fisheries

Hauke Kite-Powell and Di Jin
Marine Policy Center
Woods Hole Oceanographic Institution

10 June 2021

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List of Abbreviations

COP – Construction and Operations Plan

ECC – Export Cable Corridor

ECC WA – Export Cable Corridor Working Area

ECRA – Export Cable Route Area

NMFS – National Marine Fisheries Service

NOAA – National Oceanographic and Atmospheric Administration

RIDEM – Rhode Island Department of Environmental Management

SFW – South Fork Wind

VMS – Vessel Monitoring System

VTR – Vessel Trip Report

WLA – Wind Lease Area

Summary

Based on NOAA data from 2008 to 2018, and adjusting for underreporting of lobster and Jonah crab landings in the VTR data, and for some dockside sales of lobster and Jonah crab, we estimate the average annual value of commercial landings from the South Fork Wind Lease Area to be \$257,000 (2019\$). Of this, \$93,000 is landed in Massachusetts. Including indirect and induced effects, these landings generate average annual economic impacts of \$204,000 in Massachusetts.

We estimate the average annual value of commercial landings from the Beach Lane Export Cable Corridor to be \$132,000. Of this, \$34,000 is landed in Massachusetts. These landings generate estimated total annual economic impacts of \$74,000 in Massachusetts.

We estimate that a total (lump sum) of \$256,000 (2019\$) of commercial fisheries value landed in Massachusetts is potentially exposed to the South Fork Wind Farm development. This accounts for about 33% of the total potentially exposed commercial landed value from South Fork Wind. It includes about \$49,000 in direct landed value from forgone fishing during construction activities, \$128,000 from effects of construction activities on commercial stocks in and around the South Fork development area, \$64,000 from forgone fishing during the wind farm's operation, and \$15,000 in present value of landings from decommissioning. Including indirect and induced effects, the potentially affected commercial landings result in about \$564,000 in total (lump sum) present value economic impact in Massachusetts.

We estimate that the gross revenue from for-hire (charter) recreational fishing boats based in Massachusetts that can be attributed to fishing in the South Fork Wind Lease Area amounts to \$500,000 per year. We estimate conservatively that 50% of this is potentially exposed during construction and decommissioning activities at South Fork Wind. Including a multiplier to account for indirect and induced effects, we estimate a total (lump sum) of \$985,000 (2019\$) in economic impact to Massachusetts due to exposed charter fishing revenue.

There is considerable variability in the baseline data of landings and landed value from the South Fork Wind lease area and export cable corridor. Baseline future landings will vary due to natural and fisheries-related fluctuations in stocks and prices. There is also uncertainty about the impact of wind farm construction and operation on fish stocks and landings, and about the ways that fishers will adapt their fishing practices in response to wind farm development. We consider our combined estimate of \$1,549,000 in economic impact to Massachusetts from South Fork Wind development on commercial and charter fishing to be a conservative upper bound on likely actual impacts.

Introduction

This report estimates the level of pre-development fishing operations intersecting with, and landings and landed value from, the South Fork Wind Lease Area (WLA) and two alternative export cable routes (Fig. 1), and the potential impact of South Fork Wind Farm construction, operations, and decommissioning on the commercial and for-hire charter fishing industries of Massachusetts.

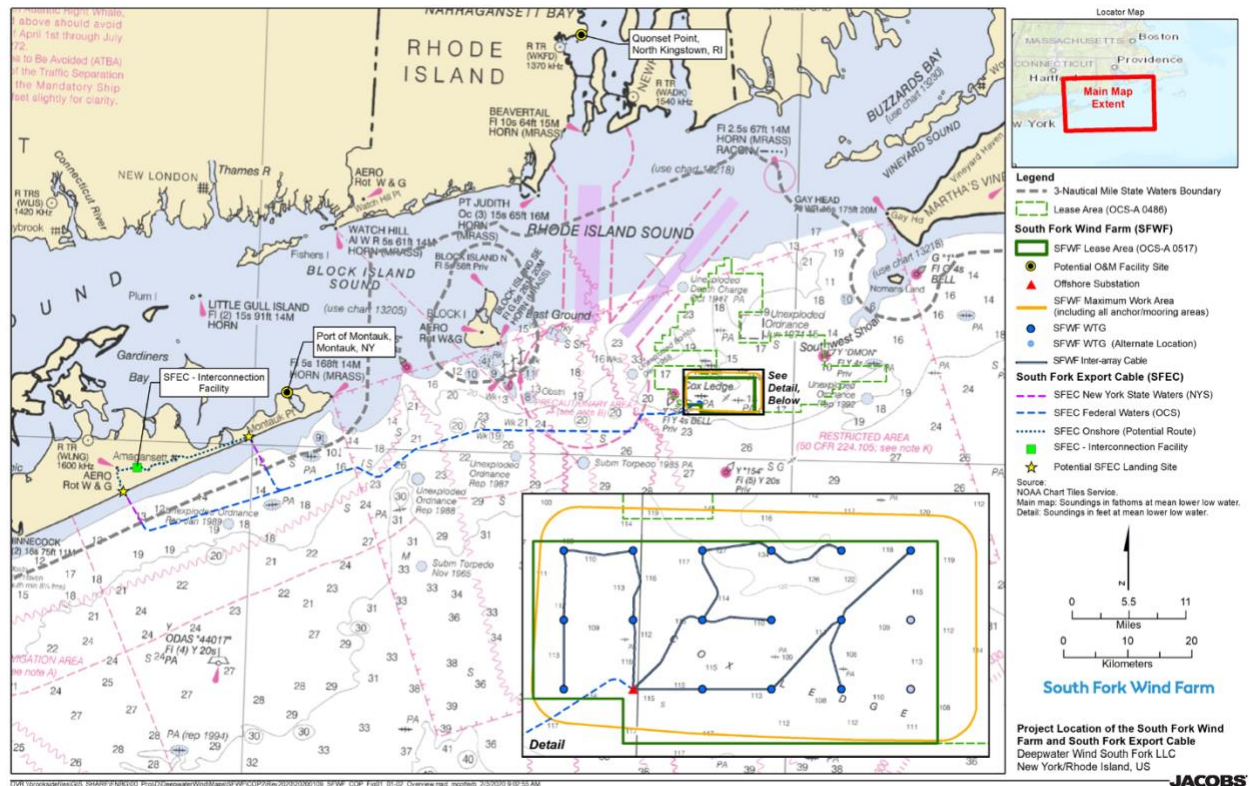


Figure 1. South Fork Wind Lease Area and export cable routes. Source: South Fork Wind Farm Construction and Operations Plan (Deepwater Wind South Fork 2020).

Two alternative export cable routes are under consideration: one that comes ashore at Beach Lane, and one that comes ashore at Hither Hills. To estimate commercial fish landings along the export cable routes, we define a 10km wide Export Cable Route Area (ECRA) extending 5km on either side of the cable route. The 10km wide ECRA has no physical significance in the context of the South Fork Wind Lease, and is defined only for the purpose of identifying fisheries landings data that reflect what may be landed from fishing along the export cable route. Only portions of a narrow, 180m wide strip (the Export Cable Corridor, ECC) immediately around the cable may be disturbed in the process of burying the export cable. A 1,600m wide Working Area (ECC WA) around the cable route defines the area where access may be constrained during construction.

Table 1 shows the approximate length and area of these features for each of the two export cable routes. In the sections that follow, fishery landings and values for the export cable routes are estimated and reported for the 180 m Export Cable Corridor.

Table 1. Export Cable Route Area parameters

| | Beach Lane | Hither Hills |
|--|------------|--------------|
| Length (km) | 99.53 | 80.42 |
| Area of 10km Export Cable Route Area (ECRA) (km ²) | 989 | 799 |
| Area of 180m Export Cable Corridor (km ²) | 18 | 15 |
| 180m Export Cable Corridor fraction of ECRA | 0.0182 | 0.0188 |
| Area of 1,600m Working Area (km ²) | 159 | 129 |
| 1,600m Working Area fraction of ECRA | 0.1610 | 0.1610 |

Methodology

Our approach to estimating the potential impact of the South Fork Wind Farm development on commercial fishing is to first estimate the annual landed weight and value of fish from the South Fork WLA and ECCs, and then to estimate the fraction of this annual value that may be exposed to wind farm construction, operation, and decommissioning. Our assessment method is consistent with the general framework described in the reports by Kirkpatrick *et al.*/BOEM (2017a and 2017b) on socio-economic impact of offshore wind energy development on commercial fisheries, and builds on the approach of Livermore (RIDEM 2017, 2018, and 2019), which develops high-end estimates of fishery impacts by including in baseline estimates the entire trip revenues from all trips that overlap with a wind lease area, regardless of how much fishing occurred inside or outside the area.

Separately, we estimate the gross revenue associated with for-hire charter boat fishing activity originating in Massachusetts, and the fraction of this revenue that may be exposed to South Fork Wind Farm development.

We estimate the annual commercial landings and landed value of fish from the South Fork WLA and ECCs using a new dataset provided by NOAA's National Marine Fisheries Service. This dataset uses modeled representations of federal Vessel Trip Report (VTR) and clam logbook fishing trip data to produce a more accurate spatial allocation of landings from each fishing trip (DePiper 2014; Benjamin *et al.* 2018). As we document below, there has been considerable variability in annual landings from these areas over the past decade; we use the average landings and landed value from 2008 to 2018 as indicative of what the areas may yield in the future.

We then estimate the fraction of this average annual value that may be at risk due to South Fork Wind Farm development, based on the nature and schedule of construction activities, operating plans, and decommissioning plans (Deepwater Wind South Fork 2020), and on information from the scientific literature on the effects of wind farm construction and operation on commercial fish stocks and landings.

The effect of offshore wind farm construction and operation on marine ecosystems, fish stocks and fish behavior, and fishery landings is an area of ongoing research. To date, almost all offshore wind farm development has taken place outside the US. The only wind farm off the coast of New England from which lessons might be drawn directly for South Fork is the Block Island Wind Farm, a five-turbine, 30 MW project about 4 miles from Block Island, RI.

Investigations of offshore wind farms outside the US have found both positive and negative impacts on marine biota, habitats, and ecological function. The impacts include the aggregation of finfish and other marine life via the creation of artificial reefs (Bergström *et al.* 2014; Langhamer 2012; Lindeboom *et al.* 2011; Wilhelmsson and Malm 2008) and disturbance of existing ecosystems (Bergström *et al.* 2014; Wilhelmsson *et al.* 2006). Bartley *et al.* (2019) have reported on monitoring of physical and chemical conditions in the benthic environment around Block Island Wind Farm turbine towers over the two years since the towers were installed; they found some changes in the benthos in the immediate tower foundation footprint at one out of three turbine towers they investigated, and found no changes beyond 30m from any of the towers studied.

In their 2018 study, ten Brink and Dalton interviewed commercial and recreational fishers active in the waters around the Block Island Wind Farm about the perceived effects of the farm on fish stocks and fishing activity. Respondents reported murky water, underwater noise, and vibration during construction, and a lower abundance of fish such as striped bass on the side of Block Island closest to the wind farm site during the construction time window. They also reported the presence of shellfish and finfish on and around the wind turbine towers, including an increase in the abundance of cod, within months of the conclusion of construction activities. The transient negative effect on mobile species within 5-10km of wind farm construction activities observed at Block Island is consistent with findings from Europe (Bergström *et al.* 2014; Vallejo *et al.* 2017).

Hooper *et al.* (2017) report on a survey of recreational fishers and wind farms in the United Kingdom. The authors found that most fishers in their survey either had fished near a wind farm or were interested in doing so, and concluded that most UK anglers were unlikely to change their behavior in response to wind farm development.

More recently, Dalton *et al.* (2020) reported on surveys of Rhode Island recreational boaters' preferences for boating in the vicinity of offshore wind farms. Although some survey respondents identified as fishers, the survey did not explicitly target boaters interested in fishing; the mean age of respondents was above 62 years, mean boat length in excess of 37 feet, and more than 43% of respondents owned sailboats. Overall, boaters expressed a preference for not boating near (within 100 ft) of an offshore wind turbine; but boaters who fish were less negatively impacted by boating near a turbine, and boaters who had visited the Block Island Wind Farm were more accepting of trips near turbine towers than other boaters.

Given the current state of knowledge about the effects of wind farm construction and operation on fish stocks and fishery landings, we consider five categories of possible impacts from the South Fork Wind Farm project on commercial fishing:

- Transient impacts due to constrained access to certain areas during construction
- Transient impacts on fish stocks in the vicinity of the WLA and ECRA due to construction activities
- Impacts to fishing in the WLA and ECRA during operations
- Transient impacts due to constrained access to certain areas during decommissioning
- Transient impacts on fish stocks in the vicinity of the WLA and ECRA due to decommissioning activities

We also consider transient impacts on the for-hire charter fishing industry due to constrained access to the WLA during construction and decommissioning. To the extent that for-hire charter fishing vessels from Massachusetts use the WLA, it is possible that their activities may be affected during construction and decommissioning, when access may be constrained. We consider it unlikely that the South Fork Wind Farm development will substantially change the personal recreational fishing activities of Massachusetts boaters.

Estimating the effect of wind farm development on fishing activity and landings is complicated by several sources of variability and uncertainty. There is considerable year-to-year fluctuation in the historical baseline commercial landings from the wind development areas; and future fishery landings from these areas are likely to differ from historical baselines due to climate change effects (Free *et al.* 2019; Oremus 2019). There is uncertainty about the extent and duration of effects of wind farm construction on fish stocks in the vicinity of the wind farm, and about the habitat and other effects (if any) of the wind farm over decades of operation. There is also limited information about the response of the commercial fishing industry and of for-hire charter fishing vessels to the altered “landscape” resulting from wind farm development. The current state of the science about wind farm effects on commercial fishing does not support a precise estimate of effects on fish stocks; and the future decisions of fishers are by their nature not precisely predictable, especially decades into the future, because they depend on personal assessments and decisions of individual fishers.

Acknowledging these sources of variability and uncertainty, we seek to develop a realistic, conservative estimate of the potential effect of South Fork Wind Farm development on fish stocks and on Massachusetts commercial landings, landed value, and charter boat revenue. We make conservative assumptions about fishing industry response, assuming that landings from an area where access is constrained during construction, operations, or decommissioning are simply forgone, and not compensated by landings from fishing elsewhere instead. Further, we estimate impact as the landed value (gross revenue) at risk, not the net income or profit. Landed value is, by definition, larger than net income or profit from fishing. For these reasons, we consider our impacts estimate to represent an upper bound on the likely net effects of the wind farm on the Massachusetts fishing industry.

Baseline commercial fishery landings and values, 2008-2018

Commercial Fisheries Data Description

The following data description is based on information provided by the National Marine Fisheries Service (NMFS) on March 20 and April 1, 2020.¹ NOAA has been collecting and improving the vessel trip report (VTR) data for decades. The data have been widely used for fisheries research, management, and economic impact assessments. The footprint of the SFW Lease Area is 13,700 acres (55 km²). To gauge landings value and quantity at this small spatial scale, NOAA has recently developed a procedure to produce high-resolution spatial information using a combination of VTR and fishery observer data. As described below, we follow the general approach developed by NOAA, which is the best approach at present, with a recognition that relevant data are not perfect. All estimates of fishery landings and values in this report are based on these NMFS data; and the data have not been amended, adjusted, or

¹ Our primary contact at NMFS was Benjamin Galuardi, a statistician at the NOAA Greater Atlantic Regional Fisheries Office. He has worked extensively on fishery data analyses in general and the VTR data in particular, and has authored or coauthored more than 30 publications on fisheries sciences and spatial statistics.

augmented in any way, with one exception: we make adjustments to the lobster and Jonah crab landed values to account for possible underreporting. This is described in detail in the section on Adjustment of Lobster and Jonah Crab Data below. The adjusted data appear only in Tables 10, 11, 12, and 13, and in our final estimates of impacts.

The data presented below summarize estimates of fisheries landings and values for fishing trips that intersected with the South Fork Wind Lease Area (WLA) and two alternative Export Cable Route Areas (ECRAs), Beach Lane and Hither Hills, from 2008 to 2018 (calendar years). Modeled representations of federal Vessel Trip Report (VTR) and clam logbook fishing trip data were queried for spatial overlap with the wind lease and cable route areas, and linked to dealer data for value and landings information. As detailed in DePiper (2014) and Benjamin *et al.* (2018), to improve the spatial resolution of VTR, a spatial distribution model was developed by combining vessel trip information from VTR with matching NOAA fishery observer data, including geocoordinates of detailed fishing locations. From this model, landings and value can be summarized for a specified geographic area according to (1) species, (2) gear type, (3) port of landing, and (4) state of landing.

In essence, the DePiper approach utilizes a spatial model to distribute the total landings for each commercial fishing trip over a circular area with its center located at the geocoordinate reported in the vessel trip report (VTR), following a distribution decreasing with the radius. The model was estimated using VTR data (for the centroid) and vessel observer data (for haul beginning and endpoints). DePiper (2014) reported that the observer data matched VTR records well (488,251 hauls in the observer data were matched to 27,358 VTR records, representing 87.5% of all hauls with either a beginning or end point of a haul recorded).

The primary purpose of the observer data collection is to monitor fishery bycatch. NOAA's Standardized Bycatch Reporting Methodology (SBRM) dictates what types of vessels (gear, species, area of operation, etc.), participating in various fisheries, should be sampled and at what rate. The numbers of sea days needed to achieve a 30% coefficient of variation ($CV = \text{standard deviation} / \text{mean}$) of total discards for each species group were derived for different SBRM fleets covering different gears, access areas, states, and mesh sizes (NEFSC 2013). For Massachusetts vessels, the observer program covered close to 20% of trips with trawl gear, around 5% of trips with dredge gear, and around 20% of trips with gillnet gear (Jin 2015).

Following the DePiper approach, the resulting high spatial resolution data were converted into raster maps. Use of this VTR raster model produces a more accurate estimate of the spatial distribution of landings than other approaches that rely entirely on the self-reported VTR/clam logbook locations, which associate all landings from the trip with a single point location. At 10 nautical mile resolution, the confidence intervals of the DePiper model estimates are around 90% for trips length of one to two days.

The only alternative to the DePiper approach is a model to distribute the total landings from a VTR report over the vessel's track using the vessel monitoring system (VMS) data. The main challenge for this approach is accurate identification of fishing and non-fishing segments of a trip. Muench *et al.* (2018) have shown that using vessel speed alone can lead to a severe misrepresentation of fishing locations. NOAA has adopted the DePiper approach as a standard procedure to generate spatial data; and we agree with NOAA that this is the best approach currently available. The main advantages of the DePiper approach are that (1) it is based on observations of actual fishing locations noted by observers at sea,

and (2) it provides a systematic and consistent way to meet the increasing demand for spatial fishing data for relatively small areas in the ocean, which is important for cross project comparison.

Landings associated with the Export Cable Corridors and Export Cable Route Working Areas are calculated by applying the factors in Table 1 to the landings estimated for the respective Export Cable Route Areas. This assumes that landings are distributed uniformly across the fished sections of the ECRAs.

In order to maintain the legally required data confidentiality, summaries by species, gear type, and landing location are presented individually. In addition, for records that did not meet the “rule of three” (three or more unique dealers and three or more unique permits), values are summarized in a category labeled “ALL OTHERS.” Note also:

- All landed values have been converted to 2019 dollars using the Producer Price Index for “unprocessed and prepared seafood.”
- Pounds are reported in Landed Pounds, unless otherwise noted.
- Data summarized here are from federal sources only.
- Because the South Fork WLA is in Federal waters, most lobsters caught in the area are included in the VTR data. However, federal lobster vessels that carry only lobster permits are not subject to the VTR requirement; and trips with no VTR are not reflected in the NMFS data summary. We make adjustments to reflect likely complete lobster landings in the assessment of fisheries values exposed to South Fork Wind Farm development. We describe these adjustments in the section on Adjustments to Lobster and Jonah Crab Data below.
- Other fisheries exist in state waters that may not be reflected in data from federal sources (e.g. whelk, bluefish).

We also obtained the average monthly number of trips intersecting with each area, for the period of 2014-2018.

Commercial Fishery Landings from Wind Energy and Export Cable Route Areas

Table 2 shows the average annual level and standard deviation of total values and landings associated with fishing in the South Fork Wind Lease Area and the Beach Lane and Hither Hills Export Cable Corridors from 2008 to 2018.

The average annual landings from the South Fork Wind Lease Area are about 362,000 lbs (standard deviation 146,000 lbs) with a value of about \$203,000 (standard deviation \$69,000). For a 95% confidence interval, the low-end value is \$64,000 and high-end \$341,000. Average annual landings from the Beach Lane Export Cable Corridor are about 200,000 lbs (standard deviation 85,000 lbs) with a value of \$124,000 (standard deviation \$30,000). Average annual landings from the Hither Hills Export Cable Corridor are 118,000 lbs (standard deviation 78,000 lbs) with a value of \$116,000 (standard deviation \$29,000).

Table 2. Average annual value and quantity of commercial fisheries landings by area

| Area | Mean | | Standard Deviation | |
|------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| South Fork WLA | 202,832 | 362,311 | 69,223 | 145,816 |
| Beach Lane ECC | 124,397 | 200,023 | 30,361 | 84,503 |
| Hither Hills ECC | 115,548 | 117,718 | 29,022 | 78,260 |

Table 3 shows the total landings and values, for each year from 2008 to 2018, associated with fishing in the South Fork Wind Lease Area and the two alternative Export Cable Corridors.

Table 4 summarizes the average annual landings and value of fisheries production from the South Fork Wind Lease Area and the two alternative Export Cable Corridors by the top five species or species groups. For example, Monkfish, scallops, and lobster are among the species generating the greatest value from the South Fork WLA during the 2008-2018 time period. Tables A1 through A3 in the Appendix provide the complete data on annual landings and value by species or species group for each of the three areas; and Table A4 shows the complete list of species, including those combined as ALL_OTHERS.

Note that surf clam and ocean quahog landings are reported by NMFS in the underlying data set as pounds of live weight (including shells), while all other species are reported as landed weight. (This does not affect dollar values reported.) Quahogs are listed as a distinct species, while surf clams are included in the “all other” category. An approximate conversion to landed weight is given by NMFS as:

- landed pound of ocean quahog = ocean quahog pounds / 8.24
- landed pounds of surf clam = surf clam pounds / 5.27

Table 3. Annual value and quantity of commercial fisheries landings by area.

| Area Year | South Fork WLA | | Beach Lane ECC | | Hither Hills ECC | |
|----------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| | Value (2019 \$) | Landings (lbs) | Value (2019 \$) | Landings (lbs) | Value (2019 \$) | Landings (lbs) |
| 2008 | 278,374 | 187,155 | 116,815 | 179,969 | 110,700 | 136,273 |
| 2009 | 310,079 | 482,873 | 114,070 | 359,701 | 104,090 | 306,773 |
| 2010 | 196,359 | 283,468 | 113,644 | 201,353 | 103,171 | 173,314 |
| 2011 | 195,637 | 283,137 | 140,900 | 167,003 | 134,107 | 136,711 |
| 2012 | 142,740 | 256,147 | 123,168 | 188,836 | 114,405 | 142,488 |
| 2013 | 220,479 | 671,485 | 174,381 | 353,831 | 160,655 | 340,176 |
| 2014 | 291,907 | 494,736 | 167,890 | 194,053 | 159,666 | 194,273 |
| 2015 | 180,783 | 340,395 | 112,269 | 146,062 | 103,187 | 135,669 |
| 2016 | 196,378 | 425,941 | 142,421 | 197,432 | 131,522 | 185,062 |
| 2017 | 127,913 | 358,979 | 88,650 | 106,608 | 79,925 | 101,857 |
| 2018 | 90,502 | 201,108 | 74,153 | 105,403 | 69,599 | 102,304 |

Both mobile (e.g., trawl and dredge) and fixed (e.g., pots and gillnet) gears are used in fishing operations. The trawl gear is primarily used for harvesting groundfish, dredge for scallops, and pots for lobster and crabs. The fixed gears are fished using trawls (a series of lobster pots attached to one line) with string lengths of 0.4–0.8 km (up to 1.829 km) or gillnets with typical string lengths of 0.2–3.0 km. The deployment of both mobile and fixed gears arguably could be affected by the construction of an offshore renewable energy facility (Hoagland et al. 2015). Tables 5a through 5c break out annual landings for each area by gear type. Pot fisheries and gillnets dominate landings from the three areas. The “ALL_OTHERS” category includes landings using purse seines, other seines, and weirs/traps, and others that fall under the “rule of three” exclusion.

Table 4. Average annual landings of major species by area, 2008-2018.

| Area/Species | Mean | | Standard Deviation | |
|-----------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| South Fork WLA | | | | |
| Monkfish | 34,977 | 20,692 | 23,762 | 14,032 |
| Scallops | 30,192 | 2,793 | 29,154 | 3,119 |
| Lobster, American | 28,355 | 5,240 | 13,191 | 2,366 |
| ALL_OTHERS | 18,855 | 187,018 | 13,083 | 120,799 |
| Skate Wings | 18,600 | 52,544 | 8,121 | 13,826 |
| Beach Lane | | | | |
| Scallops | 37,859 | 3,258 | 20,822 | 1,433 |
| Flounders | 17,814 | 6,030 | 5,951 | 2,146 |
| Monkfish | 12,911 | 7,380 | 4,126 | 1,601 |
| Squid/Loligo | 8,071 | 6,084 | 6,916 | 5,437 |
| Skate Wings | 7,340 | 30,148 | 1,712 | 10,751 |
| Hither Hills | | | | |
| Scallops | 34,549 | 2,964 | 18,922 | 1,286 |
| Flounders | 17,213 | 5,804 | 5,662 | 2,097 |
| Monkfish | 13,248 | 7,597 | 4,309 | 1,734 |
| Skate Wings | 7,477 | 30,867 | 1,793 | 10,779 |
| ALL_OTHERS | 6,705 | 72,040 | 6,807 | 70,494 |

Table 5a. Average annual landings in South Fork WLA by gear type.

| Gear | Mean | | Standard Deviation | |
|-------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Dredge | 30,149 | 2,844 | 29,339 | 3,169 |
| Gillnet – Other | 0 | 0 | 0 | 0 |
| Gillnet – Sink | 53,363 | 53,002 | 29,681 | 23,626 |
| Hand | 771 | 185 | 1,205 | 273 |
| Longline – Bottom | 0 | 0 | 0 | 0 |
| Pot | 45,156 | 11,530 | 25,254 | 4,296 |
| Trawl – Bottom | 47,692 | 74,279 | 13,333 | 22,331 |
| Trawl – Midwater | 4,054 | 31,563 | 4,831 | 35,993 |
| ALL_OTHERS | 21,647 | 188,908 | 12,289 | 119,635 |

Table 5b. Average annual landings in Beach Lane ECC by gear type.

| Gear | Mean | | Standard Deviation | |
|-------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Dredge | 40,925 | 39,674 | 19,852 | 70,720 |
| Gillnet – Other | 12 | 4 | 30 | 8 |
| Gillnet – Sink | 18,857 | 15,885 | 3,774 | 1,590 |
| Hand | 1,773 | 587 | 448 | 132 |
| Longline – Bottom | 35 | 12 | 117 | 41 |
| Pot | 6,002 | 1,950 | 1,509 | 270 |
| Trawl – Bottom | 47,081 | 60,378 | 12,793 | 12,909 |
| Trawl – Midwater | 2,589 | 18,391 | 2,794 | 17,479 |
| ALL_OTHERS | 7,121 | 63,141 | 6,513 | 68,839 |

Table 5c. Average annual landings in Hither Hills ECC by gear type.

| Gear | Mean | | Standard Deviation | |
|-------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Dredge | 35,288 | 11,999 | 19,137 | 29,853 |
| Gillnet – Other | 1 | 1 | 2 | 3 |
| Gillnet – Sink | 18,150 | 15,818 | 4,474 | 1,736 |
| Hand | 1,901 | 620 | 477 | 129 |
| Longline – Bottom | 37 | 13 | 121 | 43 |
| Pot | 6,170 | 1,982 | 1,577 | 288 |
| Trawl – Bottom | 43,946 | 58,980 | 10,553 | 11,128 |
| Trawl – Midwater | 2,248 | 15,832 | 2,188 | 13,092 |
| ALL_OTHERS | 7,808 | 72,473 | 7,001 | 70,518 |

Table 6 summarizes annual landings and landed value for the major ports receiving landings from the three areas. Point Judith and Little Compton (both in Rhode Island) and New Bedford in Massachusetts are among the most significant ports for landings from the South Fork Wind areas. Tables A5 through A7 in the Appendix show the complete data on average annual landings and landed value by port for Rhode Island and Massachusetts.

Tables 7a through 7c show average annual landings and landed value from the three areas by state where the catch is landed. Table 7d shows the combined landings and landed value for the WLA and the Beach Lane ECC. Rhode Island and Massachusetts together account for more than 95% of landings and landed value from the WLA. The “others” category includes landings in Maine, New Hampshire, Connecticut, New York, New Jersey, North Carolina, and Virginia, as well as data flagged by the “rule of three” exclusion.

Table 6. Average annual landings at major ports in Rhode Island and Massachusetts.

| Area/Port | Mean | | Standard Deviation | |
|--------------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| <i>South Fork WLA</i> | | | | |
| Point Judith | 64,725 | 52,038 | 24,334 | 16,965 |
| New Bedford | 45,567 | 209,868 | 16,031 | 140,394 |
| Little Compton | 28,868 | 29,251 | 18,743 | 17,442 |
| Newport | 18,775 | 29,359 | 12,570 | 15,028 |
| Westport | 11,177 | 4,547 | 7,096 | 3,227 |
| <i>Beach Lane ECC</i> | | | | |
| Point Judith | 38,297 | 39,333 | 9,483 | 5,871 |
| New Bedford | 30,139 | 103,189 | 16,657 | 73,712 |
| Newport | 4,605 | 6,490 | 1,571 | 2,169 |
| Westport | 285 | 109 | 217 | 65 |
| <i>Hither Hills ECC</i> | | | | |
| Point Judith | 38,325 | 39,966 | 9,073 | 5,605 |
| New Bedford | 25,662 | 83,521 | 16,479 | 70,818 |
| Newport | 4,655 | 6,671 | 1,510 | 2,234 |
| Westport | 284 | 108 | 217 | 64 |

Table 7a. Average annual landings in South Fork WLA by state.

| State | Mean | | Standard Deviation | |
|---------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Rhode Island | 117,844 | 127,340 | 51,181 | 50,572 |
| Massachusetts | 75,348 | 227,172 | 35,425 | 143,320 |
| Others | 9,640 | 7,799 | -- | -- |

Table 7b. Average annual landings in Beach Lane ECC by state.

| State | <i>Mean</i> | | <i>Standard Deviation</i> | |
|---------------|-------------------------|------------------------|---------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Rhode Island | 51,031 | 63,602 | 11,905 | 15,594 |
| Massachusetts | 31,907 | 107,438 | 17,132 | 76,120 |
| Others | 41,459 | 28,983 | -- | -- |

Table 7c. Average annual landings in Hither Hills ECC by state.

| State | <i>Mean</i> | | <i>Standard Deviation</i> | |
|---------------|-------------------------|------------------------|---------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Rhode Island | 51,300 | 64,859 | 11,730 | 16,195 |
| Massachusetts | 27,333 | 87,278 | 16,861 | 72,729 |
| Others | 36,915 | 25,581 | -- | -- |

Table 7d. Average annual landings in South Fork WLA and Beach Lane ECC by state.

| State | <i>Mean</i> | |
|---------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) |
| Rhode Island | 168,875 | 190,942 |
| Massachusetts | 107,255 | 334,610 |
| Others | 51,099 | 36,782 |

Landed value and trips by month

Table 8 and Figures 2 and 3 show the average monthly landings and values from the three areas. Table 9 reports the average monthly number of fishing trips that intersect each area.

Table 8. Average monthly value of landings, 2019\$, 2014-2018.

| Month | South Fork WLA | Beach Lane ECC | Hither Hills ECC |
|-------|----------------|----------------|------------------|
| Jan | 10,174 | 6,363 | 6,167 |
| Feb | 5,366 | 3,704 | 3,572 |
| Mar | 6,819 | 4,327 | 3,932 |
| Apr | 8,580 | 10,824 | 10,194 |
| May | 11,584 | 12,177 | 11,821 |
| Jun | 19,548 | 15,398 | 14,572 |
| Jul | 14,945 | 11,390 | 10,133 |
| Aug | 21,100 | 13,132 | 11,182 |
| Sep | 19,744 | 10,706 | 10,307 |
| Oct | 27,829 | 12,331 | 10,870 |
| Nov | 17,272 | 7,461 | 7,276 |
| Dec | 14,729 | 9,670 | 9,113 |



Figure 2. Average monthly value of landings, South Fork WLA, 2014-2018.

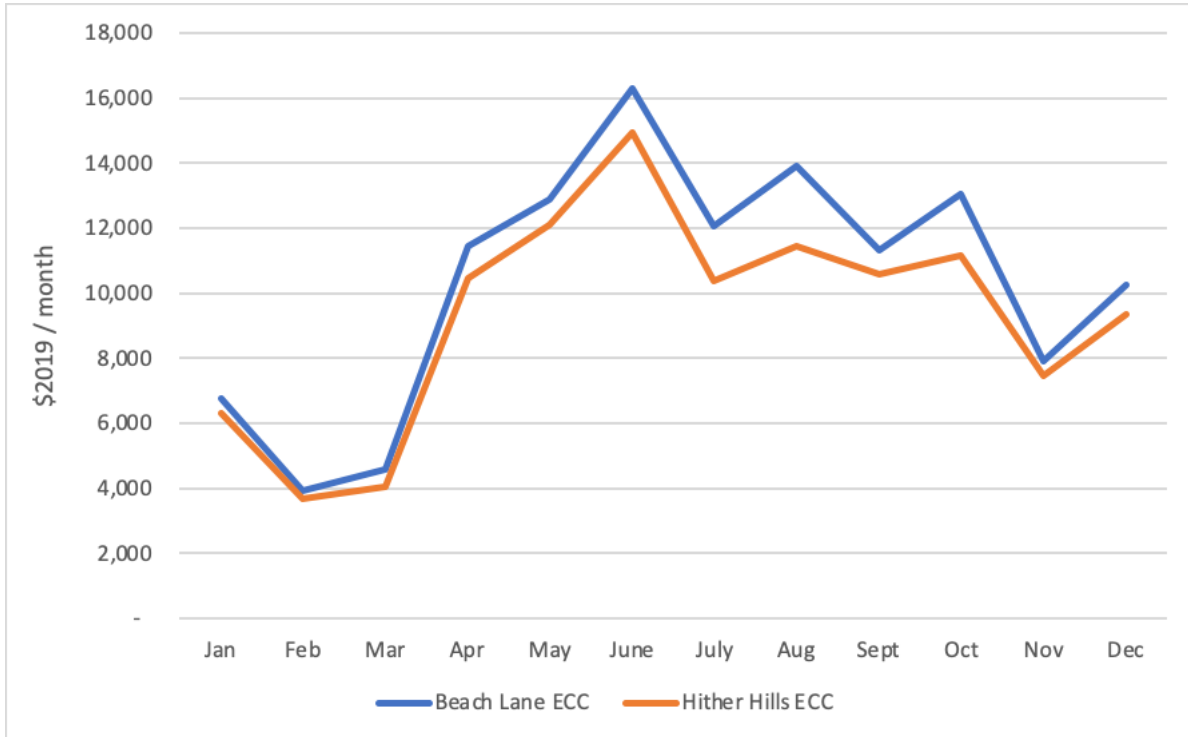


Figure 3. Average monthly value of landings, South Fork ECCs, 2014-2018.

Table 9. Average monthly number of fishing trips, 2014-2018.

| Month | South Fork WLA | Beach Lane ECRA | Hither Hills ECRA |
|-------|----------------|-----------------|-------------------|
| Jan | 220 | 443 | 432 |
| Feb | 115 | 231 | 226 |
| Mar | 101 | 201 | 198 |
| Apr | 155 | 433 | 383 |
| May | 279 | 1,234 | 1,109 |
| Jun | 402 | 1,415 | 1,320 |
| Jul | 494 | 1,633 | 1,554 |
| Aug | 509 | 1,583 | 1,530 |
| Sep | 430 | 1,424 | 1,344 |
| Oct | 322 | 1,252 | 1,171 |
| Nov | 259 | 1,011 | 945 |
| Dec | 262 | 777 | 734 |

Adjustment of lobster and Jonah crab data

As noted above, lobster vessels that carry only lobster permits are not subject to a VTR requirement. Trips without VTR are not reflected in the numbers shown in Tables 2 through 9 (cf. King 2019). To account for potentially unreported lobster and Jonah crab landings, we make adjustments to the landed value data as shown in Table 10. Data in the first three rows are based on VTR data, and are taken from Table 2 and Tables A1 through A3 in the Appendix. An earlier study by Industrial Economics (2015) indicates that active lobster vessels not subject to trip report requirements in Lobster Management Area 2 may account for as much as 57% of the total lobster fishing activity in that area. We assume conservatively that landings from 60% of the lobster vessels in the South Fork Wind Lease and export cable route areas could therefore be unreported, and that the VTR data represent 40% of the true lobster and Jonah crab revenues. We use this as an adjustment factor, and estimate the adjusted lobster and Jonah crab revenues at 2.5 times of those in the VTR data (rows 5 and 6 in Table 10). The adjusted total annual landed values are shown in row 7. This adjustment results in a 23% increase in the estimated total annual landed value over VTR data for the WLA, and a 5-6% increase for the ECCs.

Some fraction of lobster and Jonah crab landings are sold directly from boats at dockside, at a price above that reported in the dealer information on which the NOAA values above are based. Neither the fraction of landings sold in this way nor the price premium is known exactly. Based on information provided by a group of Rhode Island fishermen (pers. comm., 24 Nov. 2020), we estimate that a 15% premium on the landed value derived from NOAA data (Table 10) adequately captures this dockside sales effect for Rhode Island landings. Dockside sales are not a common practice in Massachusetts (Mass. DMF pers. comm. May 2021), so we do not apply this multiplier to Massachusetts landings.

Table 10. Adjustment of landed value for lobster and Jonah crab landings not captured in VTR data.

| Value (2019\$) | South Fork WLA | Beach Lane ECC | Hither Hills ECC |
|--|-----------------------|-----------------------|-------------------------|
| Avg. VTR total \$/year (Table 2) | 202,832 | 124,397 | 115,548 |
| Avg. VTR lobster \$/year (Tables A1-A3) | 28,355 | 3,862 | 3,990 |
| Avg. VTR Jonah crab \$/year (Tables A1-A3) | 2,844 | 518 | 508 |
| % of total captured by VTR | 40% | 40% | 40% |
| Adjusted lobster \$/year | 70,887 | 9,654 | 9,975 |
| Adjusted Jonah crab \$/year | 7,110 | 1,295 | 1,270 |
| Adjusted total \$/year | 249,630 | 130,966 | 122,295 |
| Adjusted increase over VTR total value | 23.1% | 5.3% | 5.8% |

Following suggestions by the Massachusetts Division of Marine Fisheries (DMF), we further validate the above estimation on the value of lobster landings. Specifically, we developed a separate estimation of MA lobster landings from the South Fork WLA using data provided to us by DMF staff. DMF compiles lobster landings data by statistical reporting area (SRA), and the data include both VTR and non-VTR landings. The complete lobster landings data for SRA 16 (NMFS Statistical Area 537) are shown in Table A8. The average annual value of lobster landings from SRA 16 is \$2,407,594. Using the footprint of NMFS Statistical Area 537 (22,380 km²) and the South Fork WLA (55 km²) to prorate the SRA 16 total value, the Massachusetts DMF lobster landings data produces an estimate of the annual average value of lobster

landings from the WLA of \$5,917 in 2019\$ ($\$2,407,594 \times 55/22,380$), This value is far smaller than the value estimated from NOAA data, and suggests that our above estimates of lobster landings are conservative.

Estimated indirect and induced economic impacts

Economic impact multipliers reflect the linkages between economic activity in different sectors of the economy. For example, when landings increase in the commercial fishing sector, there is an associated increase in the purchases of ice and other supplies in the region, and an increase in onshore transportation and processing of seafood. The resulting increases in economic activity in the commercial fishing supply and transportation and processing sectors are indirect effects of increased landings. In addition, because fishermen and workers in the supply, transportation, and processing industries earn greater income as a result of this increased activity, and spend some of that extra income on local goods and services, there is also an induced effect of greater spending in other sectors. The multipliers capture the combined effect of indirect and induced spending that results from higher commercial landings.

We have developed regional economic models for Rhode Island and Massachusetts using the IMPLAN model software (IMPLAN 2004) and data for 2018. IMPLAN software and data are commercial products widely used by researchers and management agencies to perform economic impact analyses for a user specified study region (IMPLAN 2004; Steinback and Thunberg 2006; Hoagland *et al.* 2015; UMass Dartmouth. 2018; Cape Cod Commission 2020). Based on these models, the upstream output multiplier for the commercial fishing industry in Rhode Island is 1.606; and the upstream output multiplier for the commercial fishing industry in Massachusetts is 1.775.

We have also taken into account downstream economic activity, such as seafood processing, that may take place at Massachusetts businesses as a result of Massachusetts commercial fisheries landings. This linkage is less direct than the upstream activities, because not all seafood landed in Massachusetts is processed in the state, and Massachusetts seafood processors may import more seafood from elsewhere for processing when Massachusetts landings fall short. Nonetheless, we add a downstream adjustment to the multiplier for Massachusetts landings, bringing the combined multiplier for these landings to 2.205 ($= 1.775 + 0.43$), to account for both upstream effects (0.775) and downstream effects to seafood processors (0.43, as reported in the Vineyard Wind analysis). We apply the combined upstream and downstream multiplier to all Massachusetts commercial landings, since we assume no dockside sales.

Using these multipliers, and including the lobster and Jonah crab adjustment described in the previous section, we estimate the average annual total economic impact from commercial fishing activity in the South Fork Wind Lease Area to be about \$282,000 in Rhode Island and \$204,000 in Massachusetts (Table 11). We also estimate the average annual total economic impact from commercial fishing activity in the Beach Lane Export Cable Corridor to be about \$106,000 in Rhode Island and \$74,000 in Massachusetts. These estimates are based on average annual landings value from 2008 to 2018, with lobster and Jonah crab landed value adjusted to account for boats not subject to VTR requirements.

Table 11. Estimated annual economic impact in Rhode Island and Massachusetts.

| Area | State | Average value of landings/year | | | Total impact/year |
|------------------|-------|--------------------------------|--------------------------------------|--------------------------------|----------------------|
| | | VTR data only | with lobster & Jonah crab adjustment | with dockside sales adjustment | with all adjustments |
| South Fork WLA | RI | 117,844 | 145,016 | 151,811 | 282,152 |
| Beach Lane ECC | RI | 51,031 | 53,726 | 54,370 | 105,967 |
| Hither Hills ECC | RI | 51,300 | 54,296 | 54,947 | 107,092 |
| South Fork WLA | MA | 75,348 | 92,722 | 92,722 | 204,452 |
| Beach Lane ECC | MA | 31,907 | 33,592 | 33,592 | 74,070 |
| Hither Hills ECC | MA | 27,333 | 28,929 | 28,929 | 63,788 |

Exposure of commercial fishery resources and fishing to wind farm development

In the following sections, we consider five categories of possible impacts from the South Fork Wind Farm project on commercial fishing:

- Transient impacts due to constrained access to certain areas during construction
- Transient impacts on fish stocks due to construction activities and noise
- Impacts to fishing in the WLA during operations
- Transient impacts due to constrained access to certain areas during decommissioning
- Transient impacts on fish stocks due to decommissioning activities

The assumptions and effects on fish stocks and fishing activity/landings are summarized in Table 12 for each category and project area. In the sections that follow Table 12, we describe how we arrived at the assumptions, with references in the text corresponding to the row codes (a), (b), (c), etc. in the table. The assumptions are based in part on information from the South Fork Wind Farm Construction and Operations Plan (Deepwater Wind South Fork 2020) and the South Fork Wind Farm Turbine Foundation and Cable Installation Underwater Acoustic Modeling report (Denes *et al.* (JASCO) 2018).

The estimates we present in the following sections are for all commercial fishing in the South Fork Wind project areas. We estimate the portion of this associated with the Massachusetts fishing sector further below.

Table 12. Assumptions for exposure of commercial fisheries to wind farm development.

| Categories of Potential Exposure | | | Assumptions/Effects |
|--------------------------------------|---------------------|--------------|---|
| Construction constrained access | WLA | | No fishing in 50% of area for 8 months (a) |
| | ECRA | 1.6km ECC WA | No fishing in 5% of area for 6 months (b) |
| | | 180m ECC | No fishing in 100% of area for 2 months (c) |
| Stock effects due to construction | WLA | | Lobster & crab reduced 10% for 1 year (d) Scallops reduced 10% for 4 years (e) 100% of finfish stocks leave area for 4 months (f) |
| | WLA + 5km perimeter | | 100% of finfish stocks leave area for 4 months (g) |
| | ECRA | 1.6km ECC WA | All landings reduced 10% for 1 year (h) |
| | | 180m ECC | Shellfish landings reduced 25% for 4 years (i) |
| Effects during operations | WLA | | Landings reduced by 5% from baseline (j) |
| | ECRA | 1.6km ECC WA | None |
| | | 180m ECC | None |
| Decommissioning constrained access | WLA | | No fishing in 50% of area for 8 months (k) |
| | ECRA | 1.6km ECC WA | No fishing in 5% of area for 2 months (l) |
| | | 180m ECC | No fishing in 100% of area for 2 months (m) |
| Stock effects due to decommissioning | WLA | | None beyond constrained access (n) |
| | ECRA | 1.6km ECC WA | All landings reduced 5% for 1 year (o) |
| | | 180m ECC | Shellfish landings reduced 12.5% for 4 years (p) |

(a), (b), (c) etc. refer to detailed explanations in the text that follows

Transient impacts from constrained access during construction

During wind farm construction activities, fishing may be temporarily constrained in parts of the WLA and along the export cable routes. For example, South Fork Wind anticipates a 500-yard-radius construction safety zone around tower locations during construction activities, and around any vessel installing cables. In practice, during these construction and cable-laying activities, some fishing that would have taken place in those areas is likely to shift to other nearby locations, replacing some of the forgone landings. If fishers prefer to fish within the construction areas, that is likely because these are thought to be more productive than alternatives. As an upper bound on impacts due to these temporary constraints, we estimate the full average value of landings linked to the affected areas.

The construction schedule (Deepwater Wind South Fork 2020) envisions construction activity in the WLA taking place during the months of May through December (eight months). Work along the ECC is scheduled to take place from November to May over two years, concentrated in two months in the first year and five months in the second. We use as a basis for our calculations the average annual values for each area (Table 2), allocated to the months of the year according to the distribution of values in Table 8. The results are shown in Table 13.

We assume conservatively that fishing is constrained in half of the South Fork WLA for eight months (Table 12, (a)), and in 5% of the 1.6km ECC Working Area for six months (Table 12 (b)), during construction activities. In addition, we assume that fishing is constrained within all of the 180m ECC immediately around the export cable for a period of two months (Table 12 (c)) as the cable is laid and then buried by a separate vessel.

The total value of landings associated with forgone fishing in those areas during construction using the Beach Lane ECC is estimated to be about \$154,000 using the Beach Lane ECC and \$150,000 using Hither Hills ECC. Table 13 shows the contribution of different areas to these totals.

Table 13. Estimated value of landings associated with access constraints during construction.

| Area | Estimated Value Exposure (2019\$) |
|---|--|
| South Fork WLA | 107,898 |
| Beach Lane ECC – 1.6km ECC Working Area | 29,327 |
| – 180m Export Cable Corridor | 16,398 |
| Hither Hills ECC – 1.6km ECC Working Area | 27,245 |
| – 180m Export Cable Corridor | 15,234 |

Transient impacts due to construction effects on stocks

Construction noise during drilling and pile driving, and disturbance of bottom sediments and rocks, is likely to have an impact on fish and shellfish stocks in and around the South Fork project areas. Mobile species may leave the area because of construction noise, and species that rely on seafloor habitat may be injured or displaced.

Our estimate of the effect of construction on stocks in and around the WLA is based on the most likely pile driving scenario for the South Fork Wind project: 11 m monopiles, each installed within 24 hours, using a 4,000 kJ hammer, and 10 dB of noise attenuation (Deepwater Wind South Fork 2020). South Fork Wind plans call for pile driving to be completed within a month; we assume conservatively that pile driving may extend over two months. We consider separately the likely effect of pile driving and turbine tower installation on shellfish (lobster, scallops, Jonah crab) and on finfish.

The closest approximation in the literature for a construction noise injury/mortality threshold for shellfish is the “mortality and potential mortal injury” 24-hour exposure threshold of 219 dB for “fish without swim bladders” (Popper *et al.* 2014; Denes *et al.* (JASCO) 2018). This level of exposure will extend no more than 160 m from tower locations (Denes *et al.* (JASCO) 2018, p. G-54, top row of Table G-9), a radius that covers about 2% of the WLA footprint. To be conservative, we increase the estimate of the effect by a factor of five, to 10% of the WLA footprint, and assume that 10% of the lobster, crab, and scallop populations within the WLA are adversely affected by pile driving noise during construction, and thus lost to fishing (Table 12 (d) and (e)). This assumption also accounts for any shellfish that may be buried and lost due to construction activities. We assume that lobster and crab will repopulate the portions of the WLA from which they are displaced within a year after pile driving ends, and that scallop stocks in those portions of the WLA will rebuild over the course of four years after pile driving ends.

We further assume conservatively that mobile species (finfish) will leave all areas in and around the WLA where pile driving noise exceeds 160 dB. There is no scientific evidence that the 150 dB threshold

sometimes cited for “temporary behavioral changes” (Cal Trans 2015) leads to substantive relocation of finfish; and even 160 dB is far below any documented injury threshold. The maximum range for pile driving noise in the South Fork setting is 4,840 m for 160 dB (Denes *et al.* (JASCO) 2018, p. G-52, row 4 of Table G-7). We therefore assume conservatively that all finfish leave the WLA and a 5 km buffer zone around the WLA for the duration of pile driving (two months) and return after a further two months (total of four months; Table 12 (f) and (g)). This is consistent with reported anecdotal observations by fishers around the Block Island Wind Farm (ten Brink and Dalton 2018), which suggest that the construction noise effect may extend 5-10km from its source, and that many finfish will return to the area within months of the end of construction. To estimate the value associated with this effect for South Fork Wind, we obtained data from NOAA on average annual landings from a region enclosed by a 5 km buffer around the South Fork WLA. (The value of landings reported by NOAA for this buffer area is similar, in per-unit-area terms, to that of the WLA itself.)

We also account for some double-counting between these stock effects and the assumption of no fishing in 50% of the WLA during construction activities. In the areas of the WLA where no fishing takes place during construction, the temporary dislocation of finfish is not relevant to landings. To be conservative, we do not adjust for double-counting of effects in the overlap between the 5km buffer around the WLA and the ECC.

Along the ECC, the greatest effects are likely to be due to habitat disruption along the immediate cable route; cable laying does not involve the same disturbance from drilling or pile driving as turbine tower installation. We therefore consider significant displacement of mobile species from the ECC and Working Area to be unlikely. The habitat disruptions that impact non-mobile benthic species are likely to extend on average no more than 5-10m on either side of the immediate cable route – at most 12% of the ECC and 2% of the ECC WA area. To be conservative, we model a 25% reduction in shellfish landings over four years from the 180m ECC (Table 12 (h)), and a 10% reduction in landings for all stocks for one year from the 1.6km ECC Working Area (Table 12 (i)).

We present the resulting estimates in Table 14. The number shown for the WLA is net of about \$25,467 in double counting overlap with the constrained access estimates. The results suggest that the total value of landings lost due to potential construction effects on stocks is about \$396,000 for the WLA and the Beach Lane ECC, and \$380,000 using the Hither Hills ECC.

Table 14. Estimated value of landings lost due to potential construction effects on stocks.

| Area | Estimated Value Exposure (2019\$) |
|--|--|
| South Fork WLA + 5km perimeter | 269,263 |
| Adjustment for overlap with constrained access | (25,344) |
| Beach Lane ECRA – 1.6km EEC Working Area | 117,308 |
| – 180m Export Cable Corridor | 27,357 |
| Hither Hills ECRA – 1.6km Working Area | 105,929 |
| – 180m Export Cable Corridor | 24,703 |
| WLA with Beach Lane ECC | 388,548 |
| WLA with Hither Hills ECC | 374,551 |

Impacts due to fishing constraints during operations

If fishing activity is constrained at certain locations within the wind farm area during the operating life of the project, it may be appropriate to treat these areas as lost to fishing during that time. For example, areas in the immediate vicinity of turbine towers may not be accessible to bottom trawl fishing once the wind farm is built. Fishers are likely to adapt to such constraints by shifting fishing effort slightly from previous locations or tracks. This sort of adaptation by the fishing industry is made easier by the regular one-by-one nautical mile east-west/north-south grid spacing for wind turbine towers that has been adopted for South Fork and other wind development projects (Deepwater Wind South Fork 2020). Because it is not possible to know exactly how the fishing industry will respond to this change in future years, or what the implications of that adaptation will be for catch and landings, we assume here that the landings from affected areas are simply not realized. This is a conservative assumption that likely overstates the actual loss of landings due to wind farm development.

Fishing activity constraints during wind farm operations apply only to the WLA; we do not expect any constraints along the ECC during operations. The footprint of the SFW Lease Area is 13,700 acres, of which permanent structures occupy 32.5 acres, or 0.24% of the total area. A 100m radius area around each of the turbine towers on a 1nm grid spacing accounts for less than 2% of the total WLA, suggesting that less than 5% of the WLA area may be lost to fishing. In fact, a significant portion of the sea floor in the WLA is classified as glacier moraine with large boulders, and the area has minimal trawling. Also, about one third of WLA landings are lobster and Jonah crab, which will seek out baited traps; lobster fishers are skilled at setting traps in the vicinity of rock outcroppings that present similar challenges to navigation as turbine towers. We thus assume conservatively that as much as 5% of total baseline landings from all stocks within the WLA may be lost to fishing during operations Table 12 (j)).

Since the South Fork Wind project will be operating for 30 years, we estimate the potential loss associated with these forgone landings by calculating the present value of 5% of baseline landings for a

30-year period. We use a 5% discount rate, which is the average of the rate usually applied in natural resource valuation (3%) and the rate usually applied by the US government for public investment and regulatory analyses (7%).

The resulting estimate of the total value of potential lost landings during project operations is \$200,835.

Transient impacts from constrained access and stock effects during decommissioning

After approximately 30 years of operations, South Fork Wind plans to decommission the project. This involves removing the turbine towers and foundations, and the cables including the export cable.

We estimate that the duration of decommissioning, and resulting access constraints in the WLA during decommissioning, will be similar to those experienced during construction of the wind farm (Table 12 (k)). Because relatively little noise is associated with decommissioning compared to construction, we do not model decommissioning stock effects in the WLA beyond the effects that overlap with access constraints (Table 12 (n)).

We expect that access constraints along the export cable route will be similar to those during cable laying operations, but likely for a shorter duration. We therefore model access constraints on 5% of the ECC WA and 100% of the ECC itself for a total of two months (Table 12 (l) and (m)). Because cable removal is less disruptive than burial, we model half of the stock effect for decommissioning as we do for cable installation (Table 12 (o) and (p)).

We then discount the value of affected landings from decommissioning to 2019\$ by applying a 5% discount rate over 31 years.

The resulting present value (2019\$) estimate of potential lost landings due to access constraint and stock effects during decommissioning is \$45,480.

Exposure of Massachusetts commercial fishing to wind farm development

The total landed value estimated above for the South Fork Wind project is about \$789,000 (2019\$), of which \$582,000 is associated with the WLA (plus 5km perimeter) and \$207,000 is associated with the ECC. Massachusetts landings account for 37% of total landings from the WLA and 26% of total landings from the ECC. The landed value of Massachusetts commercial landings potentially exposed by South Fork Wind Farm development is therefore about \$262,000. This includes about \$180,000 in forgone landings due to construction, \$67,000 during operations, and \$15,000 during decommissioning.

Applying the upstream and downstream multipliers as described above results in an estimate of \$284,000 of indirect and induced effects in Massachusetts, for a total impact of \$546,000.

Exposure of Massachusetts charter fishing to wind farm development

We also estimate impacts associated with Massachusetts-based charter fishing trips that may be exposed to construction and decommissioning activities at the South Fork WLA. The NOAA data on charter fishing in the South Fork Wind Lease Area² are based on charter vessel VTR data that are widely considered to be incomplete and not indicative of actual charter fishing activity. Because there are no comprehensive published data on the spatial distribution of charter fishing that would allow an accurate estimate of charter fishing activity and revenue in the South Fork Wind Lease Area, we rely on

² <https://www.fisheries.noaa.gov/resource/data/socioeconomic-impacts-atlantic-offshore-wind-development>

information provided by an online survey of Massachusetts charter fishing operators and a series of online conversations with charter fishing operators hosted by Massachusetts DMF staff in May and June of 2021, as well as a report on recreational fishing in the waters south of Martha's Vineyard and Nantucket produced for Vineyard Wind (Kneebone and Capizzano 2020).

In collaboration with charter boat industry members, Massachusetts DMF identified about 240 Massachusetts charter boat operators working in the waters south of Cape Cod; 21 of these completed the survey, which focused on total annual fishing activity in the region south of Cape Cod and in particular at Cox Ledge. The respondents provided data for 25 boats for the years 2018 to 2020. Collectively, these boats averaged 1,238 fishing trips per year in the waters south of Cape Cod (range: 1,137 to 1,320); and an average of 158 of these trips included fishing at Cox Ledge (range: 143 to 184).

We assume conservatively that the fishing activity reported by these 21 respondents is representative of non-respondents, and accounts for about 10% of total Massachusetts for-hire fishing south of Cape Cod. It is possible that this results in an overestimate, if respondents self-selected due to high levels of fishing in the area, while non-respondents are on average less active. Based on the DMF survey information, we estimate that 250 to 300 boats are active in the Massachusetts-based charter fishing industry on the waters sound of Cape Cod, and collectively conduct about 13,000 for-hire fishing trips per year in those waters. No data are available on the revenue associated specifically with these trips; we estimate that the average revenue per trip is about \$1,500 (generally more for head or party boats, and slightly less for charters), and that for-hire charter fishing south of Cape Cod therefore accounts for about \$20 million per year in revenue. Kirkpatrick et al. (2017) report average annual for-hire revenues for Massachusetts boats from 2007 to 2012 as about \$62.4 million, or about \$74 million in 2019\$. That suggests for-hire fishing south of Cape Cod accounts for roughly 30% of the Massachusetts total.

Trips that include Cox Ledge account for about 13% of all reported trips in the survey. More than 70% of survey respondents indicated that they sometimes fish Cox Ledge and other locations on a single trip, and that on those trips, they usually spend between half and three quarters of the trip at Cox Ledge. We therefore estimate that Cox Ledge accounts for 10% of all Massachusetts for-hire fishing south of Cape Cod. That percentage is roughly consistent with the fraction of fishing at Cox Ledge indicated by a 2020 assessment of recreational fishing in southern New England (Kneebone and Capizzano 2020). This leads to an estimate of \$2 million in for-hire fishing revenue per year associated with Cox Ledge.

Cox Ledge is an elevated area of the seafloor that extends about 25km east-west and 10km north-south at depths of 18 to 19 fathoms, with deeper water of 21 to 23 fathoms to the north, west, and south of the Ledge. The South Fork WLA is located within the 20-fathom contour, leaving the main contour features of Cox Ledge outside the WLA boundary and fully accessible to fishing. The South Fork WLA occupies a small portion of the 250km² footprint of Cox Ledge itself; and fishing at Cox Ledge takes place not only on the Ledge but also in the surrounding deeper water outside the WLA. Nonetheless, we adopt a conservative assumption that 25% of Cox Ledge for-hire fishing takes place within the South Fork WLA. This leads to an estimate of \$500,000 per year in Massachusetts-based for-hire fishing revenue associated with the South Fork Wind Lease Area.

As noted above, more than 70% of respondents in the DMF 2021 online survey indicate that they sometimes fish Cox Ledge and other locations on the same trip; and we expect most for-hire fishing that would have taken place at Cox Ledge during construction and decommissioning to shift to other locations rather than cancel trips altogether. Nonetheless, we assume conservatively that 50% of this

value is foregone in the construction and decommissioning years of the project. Although construction and decommissioning activities are expected to extend for only eight months, we assume that this effect extends to the full year.

Once construction is completed, given the 1nm spacing of the turbine towers, and the fact that there are only three east-west rows of turbine towers, boats can fish anywhere within the WLA with no more than one turbine tower between them and open water. Furthermore, the 20 fathom contour around Cox Ledge lies mainly outside the WLA footprint, leaving that important area fully accessible. We therefore expect that during the operations phase of the project, charter fishing boats will be able to operate in and near the WLA with minor adjustments to current practice. We therefore do not expect charter fishing revenue to be materially impacted during the operations phase of the project.

The present value of the two years of effects is about \$616,000. We apply a multiplier of 0.6 to estimate onshore effects of charter boat activity, based on a study by Steinback (1999), to arrive at a total impact from potential effects on Massachusetts charter fishing of \$985,000.

As noted above, we consider it unlikely that the South Fork Wind Farm development will substantially change the personal recreational fishing activities of Massachusetts boaters.

Table 15 summarizes the direct and total (including indirect and induced) impact values for Massachusetts. Including upstream and downstream multipliers, the total Massachusetts impact is \$564,000 for commercial fishing alone, and \$1,549,000 for commercial and for-hire charter fishing combined.

Table 15. Estimated Massachusetts fishing industries impacts from South Fork Wind development

| Categories of Potential Exposure | | MA Direct Landed Value/Revenue \$2019 |
|--|---------------------|---------------------------------------|
| Construction constrained access | WLA | \$38,000 |
| | ECRA | \$11,000 |
| Stock effects due to construction | WLA + 5km perimeter | \$89,000 |
| | ECRA | \$39,000 |
| Effects during operations | WLA | \$64,000 |
| | ECRA | --- |
| Decommissioning constrained access | WLA | \$10,000 |
| | ECRA | \$1,000 |
| Stock effects due to decommissioning | WLA | --- |
| | ECRA | \$4,000 |
| Subtotal MA commercial direct effects | | \$256,000 |
| For-hire charter fishing direct effects | | \$616,000 |
| Total MA direct effects | | \$872,000 |

| Categories of Potential Exposure | MA Total Impact with Multipliers \$2019 |
|---------------------------------------|---|
| Subtotal MA commercial fishing | \$564,000 |
| For-hire charter fishing | \$985,000 |
| Total MA | \$1,549,000 |

Conclusions

Based on NOAA data from 2008 to 2018, and adjusting for underreporting of lobster and Jonah crab landings in the VTR data, and for some dockside sales of lobster and Jonah crab, we estimate the average annual value of commercial landings from the South Fork Wind Lease Area to be \$257,000 (2019\$). Of this, \$93,000 is landed in Massachusetts. Including indirect and induced effects, these landings generate average annual economic impacts of \$204,000 in Massachusetts.

We estimate the average annual value of commercial landings from the Beach Lane Export Cable Corridor to be \$132,000. Of this, \$34,000 is landed in Massachusetts. These landings generate estimated total annual economic impacts of \$74,000 in Massachusetts.

We estimate that a total (lump sum) of \$256,000 (2019\$) of commercial fisheries value landed in Massachusetts is potentially exposed to the South Fork Wind Farm development. This accounts for about 33% of the total potentially exposed landed value from South Fork Wind. It includes about \$49,000 in direct landed value from forgone fishing during construction activities, \$128,000 from effects of construction activities on commercial stocks in and around the South Fork development area, \$64,000 from forgone landings during the wind farm's operation, and \$15,000 in present value of foregone landings due to decommissioning. Including indirect and induced effects, this represents a present value lump sum of \$546,000 (2019\$) in economic impact for Massachusetts.

In the context of overall commercial fishery landings in Massachusetts of more than \$500 million per year (NMFS 2020), the landings potentially affected by South Fork Wind represents about 0.01% of Massachusetts' total annual landings, with much of this impact concentrated in the early part of South Fork Wind's project life.

We estimate that annual gross revenue from for-hire (charter) recreational fishing activity in the South Fork Wind Lease Area involving boats based in Massachusetts is \$500,000 (2019\$). Assuming that 50% of this revenue is foregone during construction and decommissioning, and including a multiplier to account for indirect and induced effects, we estimate a total (lump sum) of \$985,000 (2019\$) in economic impact to Massachusetts due to exposed charter fishing revenue.

Including indirect and induced effects, the potentially affected commercial landings and charter fishing revenue together result in about \$1,549,000 in total (lump sum) present value economic impact in Massachusetts.

There is considerable variability in the baseline data of landings and landed value from the South Fork Wind areas. Baseline future landings will vary due to natural and fisheries-related fluctuations in stocks that are likely to be amplified by climate change effects. There is also uncertainty about the impact of wind farm construction and operation on fish stocks and landings, and about the ways that fishers will adapt their fishing practices in response to wind farm development. We consider our combined estimate of \$1,549,000 in economic impacts to Massachusetts from South Fork Wind development effects on commercial and recreational fishing to be a conservative upper bound on likely actual impacts.

References

- Bartley, M.L., P. English, J.W. King, and A.A. Khan; HDR. 2019. Benthic monitoring during wind turbine installation and operation at the Block Island Wind Farm, Rhode Island – Year 2. Final report to the US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS Study BOEM 2019-019.
- Benjamin, S., M.Y. Lee, and G. dePiper. 2018. Visualizing fishing data as rasters. NEFSC Ref Doc 18-12; 24 pp. <https://www.nefsc.noaa.gov/publications/crd/crd1812/>
- Bergström, L., L. Kautsky, T. Malm, R. Rosenberg, M. Wahlberg, N. Åstrand Capetillo, and D. Wilhelmsson. 2014. Effects of offshore wind farms on marine wildlife – a generalized impact assessment. *Environmental Research Letters* 9(3).
- California Department of Transportation. 2015. Technical guidance for assessment and mitigation of the hydroacoustic effects of pile driving on fish. Report #CTHWANP-RT-15-306.01.01.
- Cape Cod Commission. 2020. Economic Impact of Cape Cod Harbors. October. https://capecodcommission.org/resource-library/file?url=%2Fdept%2Fcommission%2Fteam%2FWebsite_Resources%2Feconomicdevelopment%2FHarborStudyReport_Final.pdf
- Dalton, T., M. Weir, A. Calianos, N. D'Aversa, and J. Livermore. 2020. Recreational boaters' preferences for boating trips associated with offshore wind farms in US waters. *Marine Policy* 122:103216. <https://doi.org/10.1016/j.marpol.2020.104216>
- Deepwater Wind South Fork, LLC. 2020. Construction and operations plan, 30 CFR Part 585, South Fork Wind Farm. Prepared by Jacobs Engineering; submitted to the Bureau of Ocean Energy Management, US Department of the Interior. <https://www.boem.gov/renewable-energy/state-activities/south-fork>
- Denes, S.L., D.G. Zeddies, and M.M. Weirathmueller. 2018. Turbine Foundation and Cable Installation at South Fork Wind Farm: Underwater Acoustic Modeling of Construction Noise. Document 01584, Version 4.0. Technical report by JASCO Applied Sciences for Jacobs Engineering Group Inc.
- DePiper, G.S. 2014. Statistically assessing the precision of self-reported VTR fishing locations. NOAA Technical Memorandum NMFS-NE-229. <https://repository.library.noaa.gov/view/noaa/4806>
- Free, C.M., J.T. Thorson, M.L. Pinsky, K.L. Oken, J. Wiedenmann, and O.P. Jensen. 2019. Impacts of historical warming on marine fisheries production. *Science* 363:979-983.
- Hoagland, P., T.M. Dalton, D. Jin and J.B. Dwyer. 2015. An approach for analyzing the spatial welfare and distributional effects of ocean wind power siting: the Rhode Island/Massachusetts Area of Mutual Interest. *Marine Policy* 58:51-59.
- Hooper, T., M. Ashley, and M. Austen. 2015. Perceptions of fishers and developers on the co-location of offshore wind farms and decapod fisheries in the UK. *Marine Policy* 61:16–22. <https://doi.org/10.1016/j.marpol.2015.06.031>
- Hooper, T., C. Hattam, and M. Austen. 2017. Recreational use of offshore wind farms: experiences and opinions of sea anglers in the UK. *Marine Policy* 78:55-60. <https://doi.org/10.1016/j.marpol.2017.01.013>

IMPLAN Group. 2004. IMPLAN Professional: Social Accounting and Impact Analysis Software. 3rd Edition. Huntersville, NC.

Industrial Economics. 2015. Atlantic Large Whale Take Reduction Plan: Introduction to NMFS' Co-Occurrence Model. Presentation at Annual Meeting of the Marine Mammal Commission. May 6. Industrial Economics, Inc., Cambridge, MA.

Jin, D. 2015. Statistical Analysis of Trip Cost Data Collected by The Northeast Observer Program. Project Report. December 4. Woods Hole Oceanographic Institution, Marine Policy Center, Woods Hole, MA.

King, D.M. 2019. Economic exposure of Rhode Island commercial fisheries to the Vineyard Wind Project. Report prepared for Vineyard Wind LLC by King and Associates, Inc. Plymouth, MA.

Kirkpatrick, A.J., S. Benjamin, G.S. DePiper, T. Murphy, S. Steinback, and C. Demarest. 2017a. Socio-economic impact of Outer Continental Shelf wind energy development on fisheries in the U.S. Atlantic. Volume I – Report Narrative. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, Washington, D.C. OCS Study BOEM 2017-012. 150 pp.

Kirkpatrick, A.J., S. Benjamin, G.S. DePiper, T. Murphy, S. Steinback, and C. Demarest. 2017b. Socio-economic impact of Outer Continental Shelf wind energy development on fisheries in the U.S. Atlantic. Volume II – Appendices. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, Washington, D.C. OCS Study BOEM 2017-012. 191 pp.

Kneebone, J. and C. Capizzano. 2020. A comprehensive assessment of baseline recreational fishing effort for highly migratory species in southern New England and the associated Wind Energy Area. Final report to Vineyard Wind LLC, May 4, 2020.

Langhamer, O. 2012. Artificial reef effect in relation to offshore renewable energy conversion: state of the art. *The Scientific World Journal*, 2012. <https://doi.org/10.1100/2012/386713>

Leung, D.Y.C. and Y. Yang. 2012. Wind energy development and its environmental impact: a review. *Renewable and Sustainable Energy Reviews* 16(1):1031–1039. <https://doi.org/10.1016/j.rser.2011.09.024>

Lindeboom, H.J., H.J. Kouwenhoven, M.J.N. Bergman, S. Bouma, S. Brasseur, R. Daan, R.C. Fijn, D. deHaan, S. Sirkse, R. van Hal, R. Hille Ris Lambers, R. ter Horstede, K.L. Krijgsveld, M. Leopold, and M. Scheidat. 2011. Short-term ecological effects of an offshore wind farm in the Dutch coastal zone; a compilation. *Environmental Research Letters* 6(3). <https://doi.org/10.1088/1748-9326/6/3/035101>

Lüdeke, J. 2017. Offshore wind energy: good practice in impact assessment, mitigation and compensation. *Journal of Environmental Assessment Policy and Management* 19(01):1750005. <https://doi.org/10.1142/S1464333217500053>

Maar, M., K. Bolding, J. Kjerulf, J.L.S. Hansen, and K. Timmermann. 2009. Local effects of blue mussels around turbine foundations in an ecosystem model of Nysted off-shore wind farm, Denmark. *Journal of Sea Research* 62(2–3):159–174.

Muench, A., G.S. DePiper and C. Demarest. 2018. On the precision of predicting fishing location using data from the vessel monitoring system (VMS). *Canadian Journal of Fisheries and Aquatic Sciences* 75(7):1036–1047. <https://cdnsciencepub.com/doi/10.1139/cjfas-2016-0446>

National Marine Fisheries Service (NMFS). 2020. Online landings database.

<https://foss.nmfs.noaa.gov/apexfoss/>

Northeast Fisheries Science Center (NEFSC) and Northeast Regional Office. 2013. Proposed 2013 Observer Sea Day Allocation. Prepared for Northeast Regional Coordinating Committee. June 27. NOAA Fisheries, 166 Water Street, Woods Hole, MA.

Oremus, K.L. 2019. Climate variability reduces employment in New England fisheries. PNAS 116(52):26444-26449. <https://doi.org/10.1073/pnas.1820154116>

Popper, A.N., A.D. Hawkins, R.R. Fay, D.A. Mann, S. Bartol, T.J. Carlson, S. Coombs, W.T. Ellison, R.L. Gentry, et al. 2014. Sound Exposure Guidelines for Fishes and Sea Turtles: A Technical Report prepared by ANSI-Accredited Standards Committee S3/SC1 and registered with ANSI. ASA S3/SC1.4 TR-2014. Springer Briefs in Oceanography. ASA Press and Springer. <https://doi.org/10.1007/978-3-319-06659-2>.

Rhode Island Department of Environmental Management (RIDEM). 2019. Rhode Island fishing value in the Vineyard Wind Construction and Operations Plan area. Rhode Island Department of Environmental Management Division of Marine Fisheries.

Rhode Island Department of Environmental Management (RIDEM). 2018. Spatiotemporal and economic analysis of Vessel Monitoring System data within the New York Bight call areas. Rhode Island Department of Environmental Management Division of Marine Fisheries.

Rhode Island Department of Environmental Management (RIDEM). 2017. Spatiotemporal and economic analysis of Vessel Monitoring System data within wind energy areas in the greater North Atlantic, Addendum I. Rhode Island Department of Environmental Management Division of Marine Fisheries.

Steinback, S.R. 1999. Regional Economic Impact Assessments of Recreational Fisheries: An Application of the IMPLAN Modeling System to Marine Party and Charter Boat Fishing in Maine. *North American Journal of Fisheries Management* 19:3, 724-736.

Scott R. Steinback, S.R. and E.M. Thunberg. 2006. Northeast Region Commercial Fishing Input-Output Model. NOAA Technical Memorandum NMFS-NE-188. Northeast Fisheries Science Center, Woods Hole, Massachusetts.

ten Brink, T.S., T. Dalton, and J. Livermore. 2018. Perceptions of commercial and recreational fishers on the potential ecological impacts of the Block Island Wind Farm (US), the first offshore wind farm in North America. *Frontiers of Marine Science* 5:439, doi: 10.3389/fmars.29187.00439

UMass Dartmouth. 2018. Navigating the Global Economy: A Comprehensive Analysis of the Massachusetts Maritime Economy. Public Policy Center.

https://www.mass.gov/files/documents/2018/01/24/Maritime_Economy.pdf

Vallejo, G.C., K. Grellier, E.J. Nelson, R.M. McGregor, S.J. Canning, F.M. Caryl, and N. McLean. 2017. Responses of two marine top predators to an offshore wind farm. *Ecology and Evolution*, (February), 8698–8708. <https://doi.org/10.1002/ece3.3389>

Wilber, D.H., D.A. Carey, and M. Griffin. 2018. Flatfish habitat use near North America's first offshore wind farm. *Journal of Sea Research* 139(November 2017):24–32.

<https://doi.org/10.1016/j.seares.2018.06.004>

Wilhelmsson, D., and T. Malm. 2008. Fouling assemblages on offshore wind power plants and adjacent substrata. *Estuarine, Coastal and Shelf Science* 79:459–466. <https://doi.org/10.1016/j.ecss.2008.04.020>

Wilhelmsson, D., T. Malm, and C.O. Marcus. 2006. The influence of offshore windpower on demersal fish. *ICES Journal of Marine Science* 63(63). <https://doi.org/10.1016/j.icesjms.2006.02.001>

Willsteed, E., A.B. Gill, S.N.R. Birchenough, S. Jude. 2017. Assessing the cumulative environmental effects of marine renewable energy developments: Establishing common ground. *Science of the Total Environment* 577(15 January 2017):19-32. <https://doi.org/10.1016/j.scitotenv.2016.10.152>

Appendix

Table A1. Average annual landings by species from the South Fork WLA, 2008-2018.

Note: lobster and Jonah crab data in this table have not been adjusted for landings not reported via VTR.

| Species | Mean | | Standard Deviation | |
|---|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| ALL_OTHERS | 18,855 | 187,018 | 13,083 | 120,799 |
| AMBERJACK, SPECIES NOT SPECIFIED | 0 | 0 | 0 | 0 |
| BLACK SEA BASS | 3,923 | 912 | 2,512 | 717 |
| BLUE RUNNER | 0 | 0 | 0 | 0 |
| BLUEFISH | 326 | 481 | 131 | 221 |
| BONITO | 88 | 24 | 238 | 61 |
| BUTTERFISH | 827 | 1,176 | 466 | 703 |
| COBIA | 0 | 0 | 0 | 0 |
| COD, MILT | 7,511 | 2,522 | 7,479 | 2,369 |
| CRAB, BLUE/BUSHEL | 2 | 2 | 5 | 6 |
| CRAB, HORSESHOE | 0 | 0 | 0 | 0 |
| CRAB, JONAH | 2,844 | 3,522 | 1,679 | 1,861 |
| CRAB, ROCK/BUSHEL | 309 | 486 | 210 | 319 |
| CRAB, SPECIES NOT SPECIFIED | 3 | 5 | 6 | 8 |
| CREVALLE | 0 | 0 | 0 | 0 |
| CROAKER, ATLANTIC | 8 | 18 | 13 | 28 |
| CUNNER | 83 | 30 | 117 | 45 |
| CUSK | 0 | 0 | 0 | 0 |
| DOGFISH, SMOOTH | 59 | 113 | 53 | 119 |
| DOGFISH, SPINY | 1,470 | 6,662 | 1,154 | 4,672 |
| DOLPHIN FISH / MAHI-MAHI | 0 | 0 | 0 | 0 |
| DRUM, BLACK | 0 | 0 | 0 | 0 |
| EEL, AMERICAN | 1 | 1 | 1 | 2 |
| EEL, CONGER | 18 | 31 | 16 | 30 |
| EEL, SPECIES NOT SPECIFIED | 3 | 3 | 3 | 2 |
| FLOUNDERS | 15,044 | 5,434 | 7,527 | 3,428 |
| HADDOCK ROE | 47 | 46 | 124 | 133 |
| HAKES | 6,917 | 12,073 | 3,094 | 6,709 |
| HALIBUT, ATLANTIC | 3 | 0 | 6 | 1 |
| HARVEST FISH | 0 | 0 | 0 | 0 |
| HERRING, ATLANTIC | 5,456 | 38,672 | 4,845 | 36,487 |
| HERRING, BLUE BACK | 0 | 0 | 0 | 0 |
| HERRING/SARDINES, SPECIES NOT SPECIFIED | 0 | 0 | 0 | 0 |
| JOHN DORY | 8 | 6 | 7 | 6 |
| LOBSTER, AMERICAN | 28,355 | 5,240 | 13,191 | 2,366 |
| MACKEREL, ATLANTIC | 1,226 | 6,435 | 2,801 | 17,681 |
| MACKEREL, CHUB | 1 | 1 | 3 | 3 |
| MACKEREL, KING | 0 | 0 | 0 | 0 |
| MACKEREL, SPANISH | 0 | 0 | 0 | 0 |
| MENHADEN | 1 | 2 | 2 | 7 |
| MONKFISH | 34,977 | 20,692 | 23,762 | 14,032 |
| MULLET | 0 | 0 | 1 | 1 |
| OCEAN POUT | 3 | 2 | 6 | 6 |

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| | | | | |
|---------------------------------|--------|--------|--------|--------|
| OTHER FINFISH | 0 | 0 | 0 | 0 |
| PERCH, WHITE | 0 | 0 | 0 | 0 |
| POLLOCK | 8 | 9 | 12 | 16 |
| PUFFER, NORTHERN | 0 | 0 | 0 | 0 |
| QUAHOGS/BUSHEL | 0 | 0 | 0 | 0 |
| RED PORGY | 0 | 0 | 0 | 0 |
| REDFISH / OCEAN PERCH | 0 | 0 | 0 | 0 |
| RIBBONFISH | 0 | 0 | 0 | 0 |
| SCALLOPS, BAY/SHELLS | 0 | 0 | 0 | 0 |
| SCALLOPS/BUSHEL | 30,192 | 2,793 | 29,154 | 3,119 |
| SCORPIONFISH | 0 | 0 | 1 | 1 |
| SCUP | 4,396 | 6,014 | 1,705 | 2,655 |
| SEA RAVEN | 14 | 9 | 16 | 10 |
| SEA ROBINS | 2 | 11 | 2 | 9 |
| SEATROUT, SPECIES NOT SPECIFIED | 1 | 1 | 1 | 2 |
| SHAD, AMERICAN | 0 | 0 | 0 | 0 |
| SHAD, HICKORY | 0 | 0 | 0 | 0 |
| SHARK, THRESHER | 1 | 1 | 3 | 2 |
| SHRIMP (MANTIS) | 0 | 0 | 0 | 0 |
| SHRIMP (PANDALID) | 0 | 0 | 0 | 0 |
| SKATE WINGS | 18,600 | 52,544 | 8,121 | 13,826 |
| SKATE WINGS, CLEARNOSE | 0 | 1 | 1 | 5 |
| SPOT | 0 | 0 | 0 | 1 |
| SQUID / ILLEX | 57 | 57 | 162 | 131 |
| SQUID / LOLIGO | 10,155 | 7,800 | 7,582 | 5,912 |
| STARGAZER, NORTHERN | 0 | 0 | 0 | 0 |
| STRIPED BASS | 351 | 74 | 427 | 80 |
| SWORDFISH | 0 | 0 | 0 | 0 |
| TAUTOG | 85 | 23 | 117 | 31 |
| TILEFISH, BLUELINE | 0 | 0 | 1 | 0 |
| TILEFISH, GOLDEN | 138 | 37 | 130 | 34 |
| TOADFISH, OYSTER | 0 | 0 | 0 | 0 |
| TRIGGERFISH | 1 | 1 | 2 | 2 |
| TRIGGERFISH, GRAY | 0 | 0 | 0 | 0 |
| TUNA, ALBACORE | 1 | 1 | 3 | 3 |
| TUNA, LITTLE | 17 | 32 | 47 | 91 |
| TUNA, SKIPJACK | 0 | 0 | 0 | 0 |
| WEAKFISH | 28 | 13 | 17 | 8 |
| WHELK, CHANNELED/BUSHEL | 10,310 | 1,212 | 26,250 | 3,075 |
| WHELK, KNOBBED/BUSHEL | 2 | 1 | 6 | 2 |
| WHELK, LIGHTNING | 0 | 0 | 0 | 0 |
| WHITING, KING / KINGFISH | 61 | 58 | 110 | 101 |
| WOLFFISH / OCEAN CATFISH | 0 | 0 | 0 | 0 |

Table A2. Average annual landings by species from the Beach Lane ECC, 2008-2018.

Note: lobster and Jonah crab data in this table have not been adjusted for landings not reported via VTR.

| Species | Mean | | Standard Deviation | |
|---|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| ALL_OTHERS | 6,065 | 62,703 | 6,785 | 69,003 |
| AMBERJACK, SPECIES NOT SPECIFIED | 0 | 0 | 1 | 1 |
| BLACK SEA BASS | 2,360 | 514 | 721 | 203 |
| BLUE RUNNER | 0 | 0 | 0 | 0 |
| BLUEFISH | 966 | 1,164 | 500 | 575 |
| BONITO | 50 | 20 | 45 | 18 |
| BUTTERFISH | 604 | 730 | 214 | 288 |
| COBIA | 1 | 0 | 2 | 1 |
| COD, MILT | 3,445 | 1,242 | 1,750 | 663 |
| CRAB, BLUE/BUSHEL | 19 | 15 | 34 | 29 |
| CRAB, HORSESHOE | 0 | 0 | 1 | 1 |
| CRAB, JONAH | 518 | 641 | 224 | 239 |
| CRAB, ROCK/BUSHEL | 45 | 72 | 36 | 56 |
| CRAB, SPECIES NOT SPECIFIED | 1 | 2 | 1 | 2 |
| CREVALLE | 0 | 0 | 0 | 0 |
| CROAKER, ATLANTIC | 2 | 3 | 4 | 5 |
| CUNNER | 180 | 33 | 201 | 31 |
| CUSK | - | - | - | - |
| DOGFISH, SMOOTH | 264 | 348 | 87 | 107 |
| DOGFISH, SPINY | 398 | 1,867 | 281 | 1,096 |
| DOLPHIN FISH / MAHI-MAHI | 0 | 0 | 0 | 0 |
| DRUM, BLACK | 0 | 0 | 0 | 0 |
| EEL, AMERICAN | 67 | 28 | 103 | 30 |
| EEL, CONGER | 73 | 77 | 64 | 67 |
| EEL, SPECIES NOT SPECIFIED | 12 | 29 | 10 | 45 |
| FLOUNDERS | 17,814 | 6,030 | 5,951 | 2,146 |
| HADDOCK ROE | 26 | 24 | 80 | 76 |
| HAKES | 2,669 | 4,317 | 1,341 | 2,222 |
| HALIBUT, ATLANTIC | 2 | 0 | 3 | 0 |
| HARVEST FISH | - | - | - | - |
| HERRING, ATLANTIC | 3,448 | 23,692 | 2,484 | 17,960 |
| HERRING, BLUE BACK | 1 | 3 | 1 | 3 |
| HERRING/SARDINES, SPECIES NOT SPECIFIED | 0 | 0 | 1 | 1 |
| JOHN DORY | 4 | 3 | 3 | 2 |
| LOBSTER, AMERICAN | 3,862 | 682 | 1,663 | 269 |
| MACKEREL, ATLANTIC | 764 | 3,120 | 1,236 | 5,184 |
| MACKEREL, CHUB | 1 | 1 | 3 | 2 |
| MACKEREL, KING | 0 | 0 | 0 | 0 |
| MACKEREL, SPANISH | 5 | 2 | 4 | 1 |
| MENHADEN | 5 | 36 | 5 | 44 |
| MONKFISH | 12,911 | 7,380 | 4,126 | 1,601 |
| MULLET | 1 | 2 | 2 | 3 |
| OCEAN POUT | 20 | 16 | 50 | 38 |
| OTHER FINFISH | 0 | 0 | 1 | 0 |
| PERCH, WHITE | 0 | 0 | 0 | 0 |
| POLLOCK | 3 | 3 | 3 | 3 |
| PUFFER, NORTHERN | 0 | 0 | 0 | 0 |
| QUAHOGS/BUSHEL | 3,278 | 36,378 | 6,453 | 71,190 |
| RED PORGY | 3 | 5 | 10 | 18 |
| REDFISH / OCEAN PERCH | 0 | 0 | 0 | 0 |
| RIBBONFISH | - | - | - | - |

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| | | | | |
|---------------------------------|--------|--------|--------|--------|
| SCALLOPS, BAY/SHELLS | 1 | 0 | 2 | 0 |
| SCALLOPS/BUSHEL | 37,859 | 3,258 | 20,822 | 1,433 |
| SCORPIONFISH | 1 | 1 | 2 | 2 |
| SCUP | 6,482 | 7,960 | 1,912 | 3,112 |
| SEA RAVEN | 8 | 6 | 8 | 7 |
| SEA ROBINS | 10 | 42 | 6 | 26 |
| SEATROUT, SPECIES NOT SPECIFIED | 2 | 8 | 5 | 10 |
| SHAD, AMERICAN | 1 | 1 | 1 | 1 |
| SHAD, HICKORY | 0 | 0 | 0 | 0 |
| SHARK, THRESHER | 4 | 4 | 11 | 10 |
| SHRIMP (MANTIS) | 4 | 1 | 10 | 2 |
| SHRIMP (PANDALID) | - | 0 | 0 | 0 |
| SKATE WINGS | 7,340 | 30,148 | 1,712 | 10,751 |
| SKATE WINGS, CLEARNOSE | 2 | 4 | 4 | 9 |
| SPOT | 18 | 23 | 38 | 49 |
| SQUID / ILLEX | 5 | 6 | 10 | 9 |
| SQUID / LOLIGO | 8,071 | 6,084 | 6,916 | 5,437 |
| STARGAZER, NORTHERN | - | 0 | 0 | 0 |
| STRIPED BASS | 2,984 | 697 | 633 | 161 |
| SWORDFISH | 0 | - | 0 | 0 |
| TAUTOG | 234 | 54 | 81 | 16 |
| TILEFISH, BLUELINE | 0 | 0 | 1 | 0 |
| TILEFISH, GOLDEN | 788 | 211 | 1,006 | 274 |
| TOADFISH, OYSTER | 0 | - | 0 | 0 |
| TRIGGERFISH | 21 | 11 | 14 | 7 |
| TRIGGERFISH, GRAY | 1 | 0 | 3 | 1 |
| TUNA, ALBACORE | 7 | 7 | 7 | 6 |
| TUNA, LITTLE | 31 | 35 | 19 | 25 |
| TUNA, SKIPJACK | 0 | 0 | 1 | 0 |
| WEAKFISH | 344 | 177 | 699 | 385 |
| WHELK, CHANNELED/BUSHEL | 170 | 34 | 193 | 51 |
| WHELK, KNOBBED/BUSHEL | 5 | 4 | 4 | 5 |
| WHELK, LIGHTNING | 0 | - | 0 | 0 |
| WHITING, KING / KINGFISH | 51 | 46 | 104 | 91 |
| WOLFFISH / OCEAN CATFISH | 0 | 0 | 1 | 0 |

Table A3. Average annual landings by species from the Hither Hills ECC, 2008-2018.

Note: lobster and Jonah crab data in this table have not been adjusted for landings not reported via VTR.

| Species | Mean | | Standard Deviation | |
|---|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| ALL_OTHERS | 6,705 | 72,040 | 6,807 | 70,494 |
| AMBERJACK, SPECIES NOT SPECIFIED | 0 | 0 | 1 | 1 |
| BLACK SEA BASS | 2,346 | 509 | 764 | 215 |
| BLUE RUNNER | 0 | 0 | 0 | 0 |
| BLUEFISH | 719 | 881 | 341 | 398 |
| BONITO | 18 | 7 | 12 | 6 |
| BUTTERFISH | 615 | 735 | 236 | 303 |
| COBIA | 0 | 0 | 0 | 0 |
| COD, MILT | 3,530 | 1,270 | 1,800 | 678 |
| CRAB, BLUE/BUSHEL | 18 | 13 | 34 | 28 |
| CRAB, HORSESHOE | 0 | 0 | 0 | 1 |
| CRAB, JONAH | 508 | 628 | 226 | 243 |
| CRAB, ROCK/BUSHEL | 47 | 75 | 44 | 69 |
| CRAB, SPECIES NOT SPECIFIED | 1 | 2 | 1 | 2 |
| CREVALLE | 0 | 0 | 0 | 1 |
| CROAKER, ATLANTIC | 2 | 3 | 3 | 4 |
| CUNNER | 181 | 33 | 205 | 32 |
| CUSK | - | - | - | - |
| DOGFISH, SMOOTH | 224 | 292 | 83 | 104 |
| DOGFISH, SPINY | 404 | 1,890 | 284 | 1,119 |
| DOLPHIN FISH / MAHI-MAHI | 0 | 0 | 0 | 0 |
| DRUM, BLACK | 0 | 0 | 0 | 0 |
| EEL, AMERICAN | 67 | 29 | 106 | 31 |
| EEL, CONGER | 76 | 81 | 66 | 70 |
| EEL, SPECIES NOT SPECIFIED | 12 | 30 | 10 | 47 |
| FLOUNDERS | 17,213 | 5,804 | 5,662 | 2,097 |
| HADDOCK ROE | 26 | 24 | 79 | 75 |
| HAKES | 2,698 | 4,376 | 1,336 | 2,217 |
| HALIBUT, ATLANTIC | 2 | 0 | 4 | 0 |
| HARVEST FISH | - | - | - | - |
| HERRING, ATLANTIC | 3,110 | 21,235 | 2,000 | 14,213 |
| HERRING, BLUE BACK | 1 | 1 | 1 | 2 |
| HERRING/SARDINES, SPECIES NOT SPECIFIED | 0 | 0 | 1 | 1 |
| JOHN DORY | 3 | 3 | 3 | 2 |
| LOBSTER, AMERICAN | 3,990 | 705 | 1,687 | 274 |
| MACKEREL, ATLANTIC | 753 | 3,106 | 1,226 | 5,182 |
| MACKEREL, CHUB | 2 | 1 | 4 | 3 |
| MACKEREL, KING | 0 | 0 | 0 | 0 |
| MACKEREL, SPANISH | 1 | 0 | 1 | 0 |
| MENHADEN | 3 | 22 | 3 | 25 |
| MONKFISH | 13,248 | 7,597 | 4,309 | 1,734 |
| MULLETS | 1 | 2 | 2 | 3 |
| OCEAN POUT | 21 | 16 | 51 | 39 |
| OTHER FINFISH | 0 | 0 | 0 | 0 |
| PERCH, WHITE | 0 | 0 | 0 | 0 |
| POLLOCK | 3 | 3 | 3 | 3 |
| PUFFER, NORTHERN | 0 | 0 | 0 | 0 |
| QUAHOGS/BUSHEL | 868 | 8,989 | 2,877 | 29,813 |
| RED PORGY | - | - | - | - |
| REDFISH / OCEAN PERCH | 0 | 0 | 0 | 0 |
| RIBBONFISH | - | - | - | - |

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| | | | | |
|---------------------------------|--------|--------|--------|--------|
| SCALLOPS,BAY/SHELLS | 0 | 0 | 1 | 0 |
| SCALLOPS/BUSHEL | 34,549 | 2,964 | 18,922 | 1,286 |
| SCORPIONFISH | 1 | 1 | 2 | 2 |
| SCUP | 6,622 | 8,162 | 2,071 | 3,296 |
| SEA RAVEN | 8 | 6 | 8 | 7 |
| SEA ROBINS | 10 | 44 | 7 | 28 |
| SEATROUT, SPECIES NOT SPECIFIED | 3 | 7 | 6 | 7 |
| SHAD, AMERICAN | 1 | 1 | 1 | 1 |
| SHAD, HICKORY | - | 0 | 0 | 0 |
| SHARK, THRESHER | 0 | 0 | 0 | 1 |
| SHRIMP (MANTIS) | 5 | 1 | 10 | 2 |
| SHRIMP (PANDALID) | - | 0 | 0 | 0 |
| SKATE WINGS | 7,477 | 30,867 | 1,793 | 10,779 |
| SKATE WINGS, CLEARNOSE | 2 | 5 | 4 | 9 |
| SPOT | 20 | 26 | 43 | 54 |
| SQUID / ILLEX | 5 | 5 | 10 | 8 |
| SQUID / LOLIGO | 5,774 | 4,273 | 4,704 | 3,728 |
| STARGAZER,NORTHERN | - | - | - | - |
| STRIPED BASS | 2,117 | 483 | 767 | 161 |
| SWORDFISH | - | - | - | - |
| TAUTOG | 254 | 60 | 76 | 18 |
| TILEFISH, BLUELINE | 0 | 0 | 0 | 0 |
| TILEFISH, GOLDEN | 802 | 215 | 1,030 | 281 |
| TOADFISH, OYSTER | 0 | - | 0 | 0 |
| TRIGGERFISH | 28 | 13 | 20 | 10 |
| TRIGGERFISH,GRAY | 3 | 1 | 10 | 3 |
| TUNA, ALBACORE | 9 | 9 | 9 | 11 |
| TUNA, LITTLE | 10 | 12 | 10 | 12 |
| TUNA, SKIPJACK | 0 | 0 | 1 | 1 |
| WEAKFISH | 124 | 55 | 108 | 49 |
| WHELK, CHANNELED/BUSHEL | 169 | 34 | 198 | 52 |
| WHELK, KNOBBED/BUSHEL | 5 | 4 | 5 | 6 |
| WHELK, LIGHTNING | 0 | 0 | 0 | 0 |
| WHITING, KING / KINGFISH | 50 | 45 | 109 | 96 |
| WOLFFISH / OCEAN CATFISH | 0 | 0 | 1 | 0 |

Table A4. Complete species list (including those in ALL_OTHERS).

| Species | Species |
|---|------------------------------------|
| ALEWIFE | OTHER FINFISH |
| AMBERJACK, SPECIES NOT SPECIFIED | PERCH, SAND |
| AMBERJACK, GREATER | PERCH, WHITE |
| ANCHOVY, BAY | POLLOCK |
| ARGENTINES, SPECIES NOT SPECIFIED | POMPANO, COMMON |
| ATLANTIC SALMON | PORGY, JOLTHEAD |
| BLACK BELLIED ROSEFISH | PUFFER, NORTHERN |
| BLACK SEA BASS | QUAHOGS/BUSHEL |
| BLUE RUNNER | RED PORGY |
| BLUEFISH | REDFISH / OCEAN PERCH |
| BONITO | RIBBONFISH |
| BULLHEADS | ROUGH SCAD |
| BUTTERFISH | SCALLOPS, BAY/SHELLS |
| CLAM, ARCTIC SURF | SCALLOPS/BUSHEL |
| CLAM, RAZOR | SCORPIONFISH |
| CLAM, SPECIES NOT SPECIFIED | SCUP / PORGY |
| CLAM, SURF/BUSHEL | SEA RAVEN |
| COBIA | SEA ROBINS |
| COD, MILT | SEA URCHINS |
| CRAB, BLUE/BUSHEL | SEATROUT, SPECIES NOT SPECIFIED |
| CRAB, CANCER | SHAD, AMERICAN |
| CRAB, GREEN/BUSHEL | SHAD, GIZZARD |
| CRAB, HERMIT | SHAD, HICKORY |
| CRAB, HORSESHOE | SHARK, ANGEL |
| CRAB, JONAH | SHARK, BLACKTIP |
| CRAB, LADY | SHARK, BLUE |
| CRAB, RED/BUSHEL | SHARK, MAKO, LONGFIN |
| CRAB, ROCK/BUSHEL | SHARK, MAKO, SHORTFIN |
| CRAB, SPECIES NOT SPECIFIED | SHARK, MAKO, SPECIES NOT SPECIFIED |
| CRAB, SPIDER | SHARK, NOT SPECIFIED |
| CREVALLE | SHARK, NURSE |
| CROAKER, ATLANTIC | SHARK, PORBEAGLE |
| CRUSTACEANS, SPECIES NOT SPECIFIED | SHARK, SANDBAR |
| CUNNER | SHARK, THRESHER |
| CUSK | SHARK, THRESHER, BIGEYE |
| CUTLASSFISH, ATLANTIC | SHARK, TIGER |
| DOGFISH, CHAIN | SHARK, WHITE |
| DOGFISH, SMOOTH | SHARK, WHITETIP |
| DOGFISH, SPECIES NOT SPECIFIED | SHEEPSHEAD |
| DOGFISH, SPINY | SHRIMP (MANTIS) |
| DOLPHIN FISH / MAHI-MAHI | SHRIMP (PANAEOID) |
| DRUM, BLACK | SHRIMP (PANDALID) |
| DRUM, SPECIES NOT SPECIFIED | SHRIMP, SPECIES NOT SPECIFIED |
| EEL, AMERICAN | SILVERSIDES, ATLANTIC |
| EEL, CONGER | SKATE WINGS |
| EEL, SPECIES NOT SPECIFIED | SKATE WINGS, CLEARNOSE |
| FLOUNDER, AMERICAN PLAICE /DAB | SNAIL, MOON |
| FLOUNDER, FOURSPOT | SNAPPER, OTHER |
| FLOUNDER, SAND-DAB / WINDOWPANE / BRILL | SNAPPER, RED |
| FLOUNDER, SOUTHERN | SNADEFISH |

Economic Impact of South Fork Wind on Massachusetts Fisheries

| | |
|---|--|
| FLOUNDER, SUMMER / FLUKE | SPOT |
| FLOUNDER, WINTER / BLACKBACK | SQUID / ILLEX |
| FLOUNDER, WITCH / GRAY SOLE | SQUID / LOLIGO |
| FLOUNDER, YELLOWTAIL | SQUID, SPECIES NOT SPECIFIED |
| FLOUNDER, NOT SPECIFIED | SQUIRRELFISH |
| GROUPE, OTHER | STARFISH |
| GROUPE, SNOWY | STARGAZER, NORTHERN |
| HADDOCK ROE | STING RAYS, SPECIES NOT SPECIFIED |
| HAKE, OFFSHORE | STRIPED BASS |
| HAKE, RED / LING | STURGEON, ATLANTIC |
| HAKE, SILVER / WHITING | SWORDFISH |
| HAKE, WHITE | TAUTOG |
| HAKE, SPOTTED | TILEFISH |
| HALIBUT, ATLANTIC | TILEFISH, BLUELINE |
| HARD QUAHOG | TILEFISH, GOLDEN |
| HARVEST FISH | TILEFISH, SAND |
| HERRING, ATLANTIC | TOADFISH, OYSTER |
| HERRING, BLUE BACK | TRIGGERFISH |
| HERRING, ATLANTIC THREAD | TRIGGERFISH, GRAY |
| HERRING/SARDINES, SPECIES NOT SPECIFIED | TUNA, ALBACORE |
| JACK, ALMACO | TUNA, BIG EYE |
| JOHN DORY | TUNA, BLUEFIN |
| LADYFISH | TUNA, LITTLE |
| LOBSTER, AMERICAN | TUNA, SKIPJACK |
| LUMPFISH | TUNA, SPECIES NOT SPECIFIED |
| MACKEREL, ATLANTIC | TUNA, YELLOWFIN |
| MACKEREL, CHUB | TURTLE, LEATHERBACK |
| MACKEREL, FRIGATE | WAHOO |
| MACKEREL, KING | WEAKFISH / SQUETEAGUE / GRAY SEA TROUT |
| MACKEREL, SPANISH | WEAKFISH, SPOTTED / SPOTTED SEA TROUT |
| MARLIN, BLUE | WHELK, CHANNELED/BUSHEL |
| MENHADEN | WHELK, KNOBBED/BUSHEL |
| MOLLUSKS, SPECIES NOT SPECIFIED | WHELK, LIGHTNING |
| MONK LIVERS | WHELK, WAVED |
| MULLETS | WHITING, KING / KINGFISH |
| NEEDLEFISH, ATLANTIC | WOLFFISH / OCEAN CATFISH |
| OCEAN POUT | |
| OCEAN SUNFISH / MOOLA | |
| OCTOPUS, SPECIES NOT SPECIFIED | |

Table A5. Average annual landings from South Fork WLA by port (RI and MA).

| Port | Mean | | Standard Deviation | |
|-----------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| BARNSTABLE | 5 | 2 | 15 | 7 |
| BOSTON | 19 | 16 | 64 | 54 |
| CHATHAM | 887 | 102 | 2,943 | 337 |
| CHILMARK | 817 | 148 | 1,283 | 224 |
| DAVISVILLE | 246 | 265 | 583 | 814 |
| FAIRHAVEN | 948 | 642 | 1,541 | 1,363 |
| FALL RIVER | 235 | 1,053 | 424 | 1,847 |
| GLOUCESTER | 107 | 637 | 217 | 1,458 |
| LITTLE COMPTON | 28,868 | 29,251 | 18,743 | 17,442 |
| MENEMSHA | 186 | 35 | 265 | 50 |
| NANTUCKET | 0 | 0 | 0 | 0 |
| NEW BEDFORD | 45,567 | 209,868 | 16,031 | 140,394 |
| NEW SHOREHAM | 46 | 19 | 48 | 30 |
| NEWPORT | 18,775 | 29,359 | 12,570 | 15,028 |
| NORTH KINGSTOWN | 0 | 0 | 0 | 0 |
| POINT JUDITH | 64,725 | 52,038 | 24,334 | 16,965 |
| SANDWICH | 2 | 3 | 8 | 11 |
| TIVERTON | 2,430 | 2,510 | 2,855 | 2,741 |
| WESTPORT | 11,177 | 4,547 | 7,096 | 3,227 |
| WOODS HOLE | 393 | 57 | 1,128 | 133 |

Table A6. Average annual landings from Beach Lane ECC by ports (RI and MA).

| Port | Mean | | Standard Deviation | |
|-----------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| BOSTON | 10 | 31 | 19 | 88 |
| CHATHAM | 12 | 4 | 27 | 10 |
| CHILMARK | 9 | 2 | 15 | 3 |
| DAVISVILLE | 450 | 199 | 1,263 | 628 |
| FAIRHAVEN | 548 | 269 | 1,101 | 610 |
| FALL RIVER | 180 | 992 | 198 | 1,340 |
| GLOUCESTER | 312 | 1,994 | 630 | 4,073 |
| LITTLE COMPTON | 2,675 | 2,732 | 1,782 | 1,580 |
| MENEMSHA | 2 | 0 | 5 | 1 |
| NANTUCKET | <1 | <1 | <1 | <1 |
| NEW BEDFORD | 30,139 | 103,189 | 16,657 | 73,712 |
| NEW SHOREHAM | 440 | 279 | 491 | 424 |
| NEWPORT | 4,605 | 6,490 | 1,571 | 2,169 |
| NORTH KINGSTOWN | 81 | 185 | 270 | 613 |
| POINT JUDITH | 38,297 | 39,333 | 9,483 | 5,871 |
| TIVERTON | 2,606 | 2,676 | 514 | 619 |
| WESTPORT | 285 | 109 | 217 | 65 |
| WOODS HOLE | 162 | 19 | 361 | 43 |

Table A7. Average annual landings from Hither Hills ECC by port (RI and MA).

| Port | <i>Mean</i> | | <i>Standard Deviation</i> | |
|-----------------|-------------------------|------------------------|---------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| BOSTON | 10 | 32 | 19 | 91 |
| CHATHAM | 12 | 4 | 28 | 10 |
| CHILMARK | 9 | 2 | 16 | 4 |
| DAVISVILLE | 451 | 185 | 1,270 | 585 |
| FAIRHAVEN | 516 | 287 | 1,046 | 672 |
| FALL RIVER | 178 | 967 | 189 | 1,259 |
| GLOUCESTER | 202 | 1,326 | 574 | 3,818 |
| LITTLE COMPTON | 2,763 | 2,822 | 1,841 | 1,632 |
| MENEMSHA | 2 | 0 | 5 | 1 |
| NANTUCKET | <1 | <1 | <1 | <1 |
| NEW BEDFORD | 25,662 | 83,521 | 16,479 | 70,818 |
| NEW SHOREHAM | 454 | 289 | 507 | 438 |
| NEWPORT | 4,655 | 6,671 | 1,510 | 2,234 |
| NORTH KINGSTOWN | 78 | 170 | 257 | 565 |
| POINT JUDITH | 38,325 | 39,966 | 9,073 | 5,605 |
| TIVERTON | 2,692 | 2,764 | 531 | 640 |
| WESTPORT | 284 | 108 | 217 | 64 |
| WOODS HOLE | 167 | 20 | 373 | 44 |

Table A8. MA Lobster Landings from DMF Statistical Reporting Area 16*, 2008-2018.

| Year | Landings** (lbs***) | Price**** 2019\$/lb | Value (2019\$) |
|-------------|------------------------|------------------------|-------------------|
| 2008 | 523,517 | 5.84 | 3,059,224 |
| 2009 | 776,875 | 5.03 | 3,911,255 |
| 2010 | 549,170 | 5.05 | 2,771,608 |
| 2011 | 307,330 | 4.83 | 1,484,713 |
| 2012 | 428,738 | 4.47 | 1,914,314 |
| 2013 | 468,539 | 4.50 | 2,110,582 |
| 2014 | 537,827 | 4.82 | 2,594,425 |
| 2015 | 468,326 | 5.15 | 2,412,253 |
| 2016 | 458,087 | 4.93 | 2,257,313 |
| 2017 | 413,085 | 5.08 | 2,097,357 |
| 2018 | 368,315 | 5.08 | 1,870,489 |
| Mean | 481,801 | | 2,407,594 |

Notes: * NMFS Statistical Area 537.

** Data from the Massachusetts Division of Marine Fisheries.

*** Live pounds.

**** MA average price in 2019 \$. Data from NOAA

(<https://www.fisheries.noaa.gov/national/sustainable-fisheries/commercial-fisheries-landings>).

Ørsted Offshore North America

**Marine Affairs Department Presentation to the
Massachusetts Fisheries Working Group**

Edward G. LeBlanc



March 2021

Project Updates

Sunrise Wind

Awarded

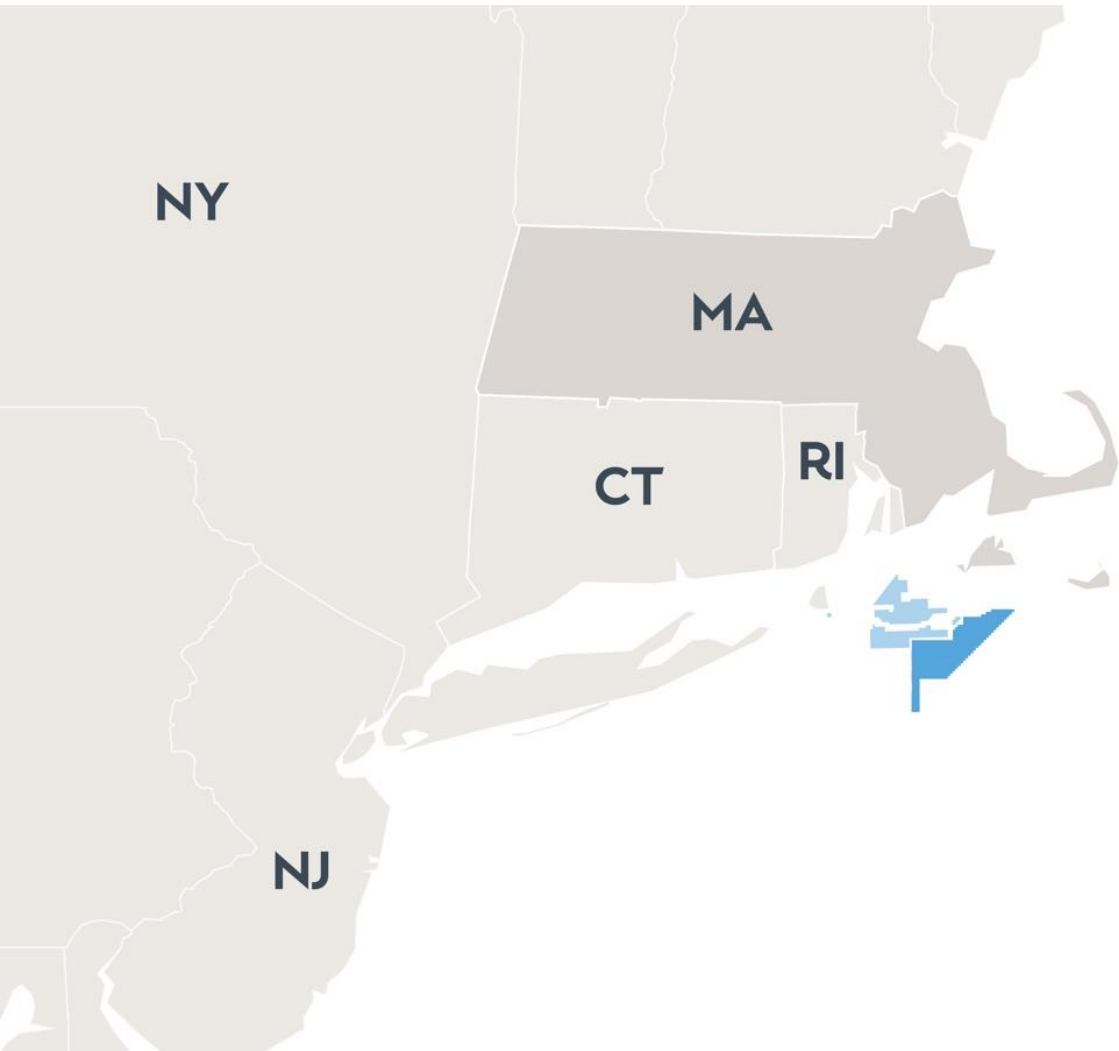


Project overview

- 50/50 JV with Eversource
- Approximately 880 MW
- 30 miles east of Montauk Point
- Will power over 500,000 homes
- The Sunrise Export Cable will deliver power to the Holbrook substation in the Town of Brookhaven
- Commercial operations expected as early as 2024

Bay State Wind

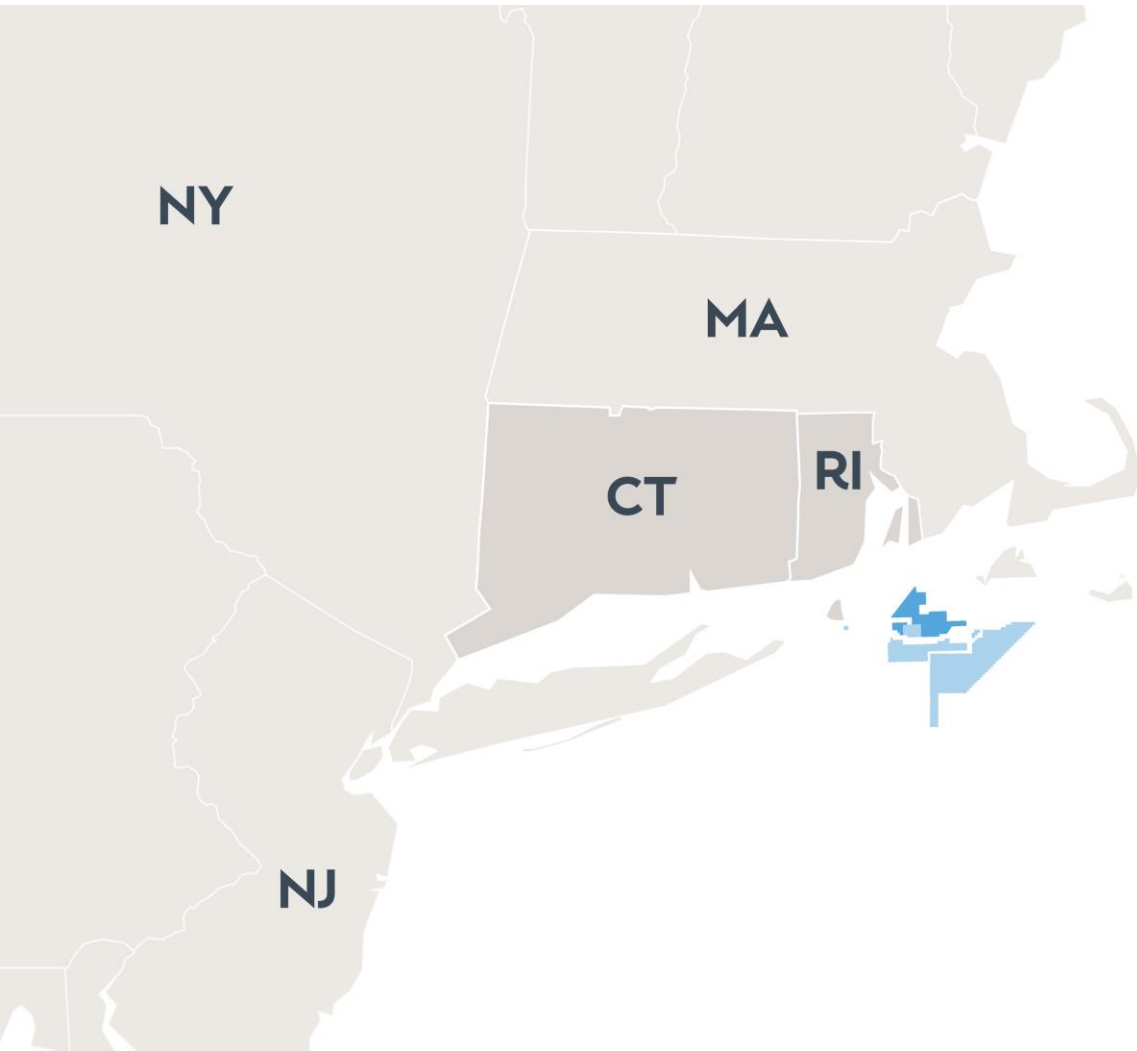
Under development



Project overview

- 50/50 JV with Eversource
- ~14 miles south of Martha's Vineyard
- 73,657 acres within Massachusetts Wind Energy Area Lease OCS-A 0500

Revolution Wind Awarded



Project overview

- 50/50 JV with Eversource
- Three power contracts to date
 - CT 200MW - awarded in 2018
 - RI 400MW – awarded in 2018
 - CT 104MW – awarded in 2019
- Will power over 350,000 CT and RI homes
- Construction expected to start as early as 2023

“Invaluable chance to test out multiple scenarios.”

“Very positive.”

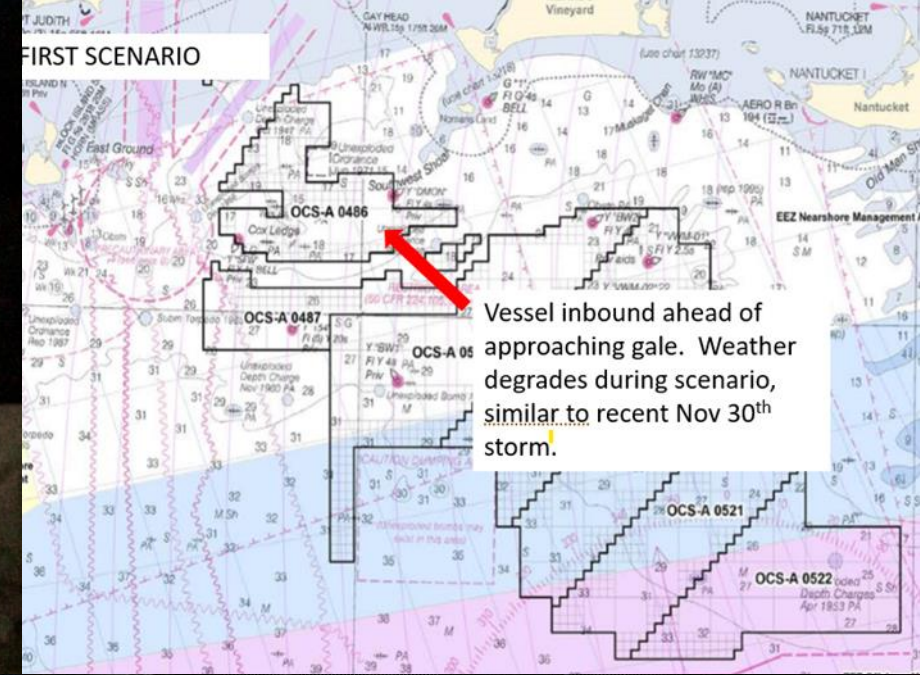
“Very helpful event.”

“I think I learned a bunch. It was positive.”

“With new/upgraded radar this will be manageable.”

“An important tool to disarm fear.”

**Revolution Wind
Full-Scale Simulator
U.S. Maritime Resource Center
Middletown, RI**



Conceptual Framework

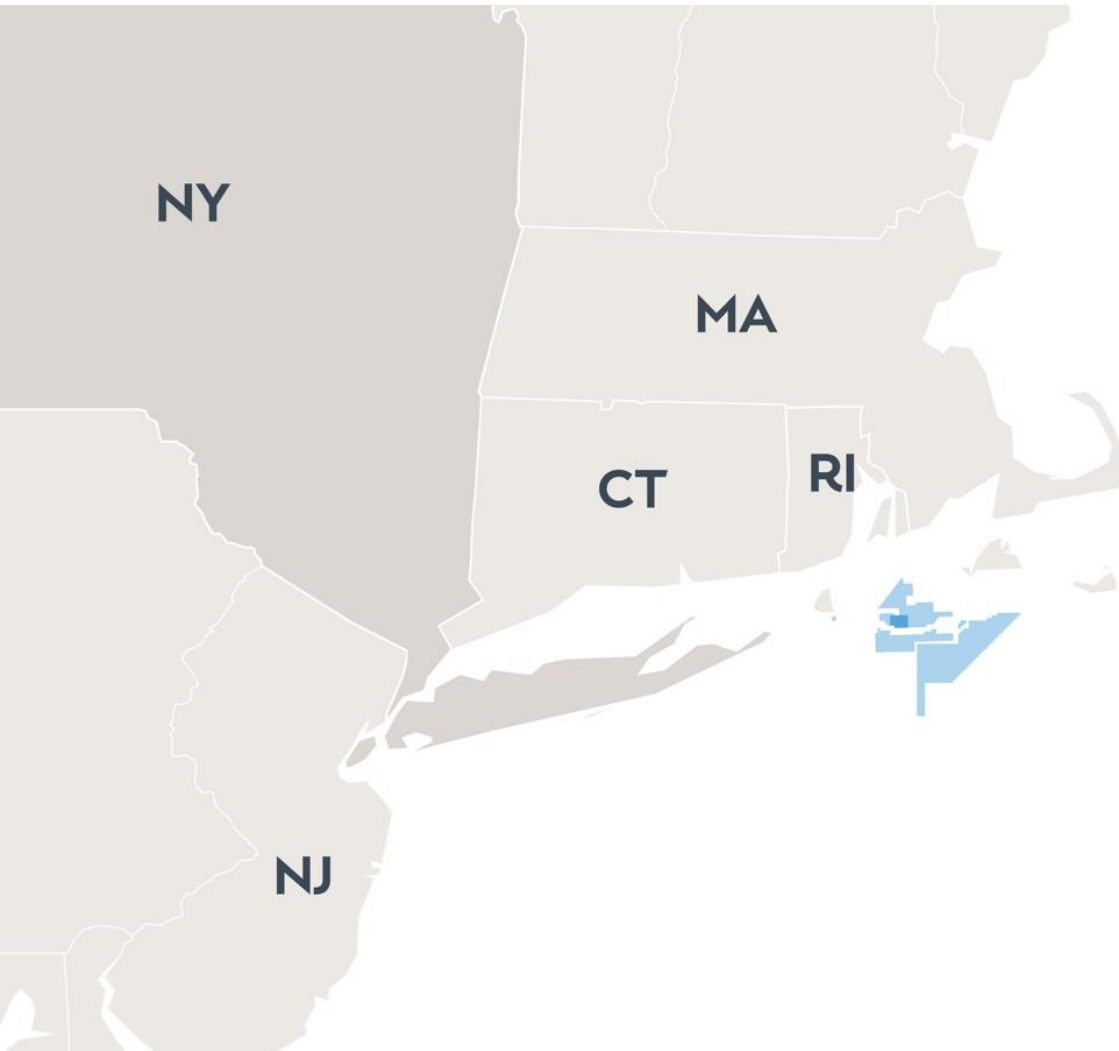
Navigational Enhancement and Training Program

Objectives:

- 1) Improve navigation equipment; and
- 2) provide training and experiential learning opportunities to those navigating the Orsted/Eversource lease areas.
- **Navigation Equipment**
 - Voucher or grants for improved navigation equipment.
- **Professional Training & Experiential Learning**
 - Provide opportunities to attend simulator training at USMRC in Middletown, RI, where attendees would have the opportunity to navigate a vessel through a windfarm and experience various scenarios such as night conditions, adverse weather, and vessel crossings.
 - Other professional training including but not limited to a captain's course, license upgrade, or rules of the road refresher.

South Fork Wind

Awarded



Project overview

- 50/50 JV with Eversource
- Approximately 132 MW
- 35 miles east of Montauk Point
- Will power 70,000 Long Island homes
- The South Fork Export Cable will deliver power to the substation located off Cove Hollow Rd in the Town of East Hampton
- Commercial operations expected 2023

Thank you

Edward G. LeBlanc

Marine Affairs Manager, Northeast

EDWLE@Orsted.com



03.31.2021

South Fork Wind

A Joint Venture of Ørsted and Eversource

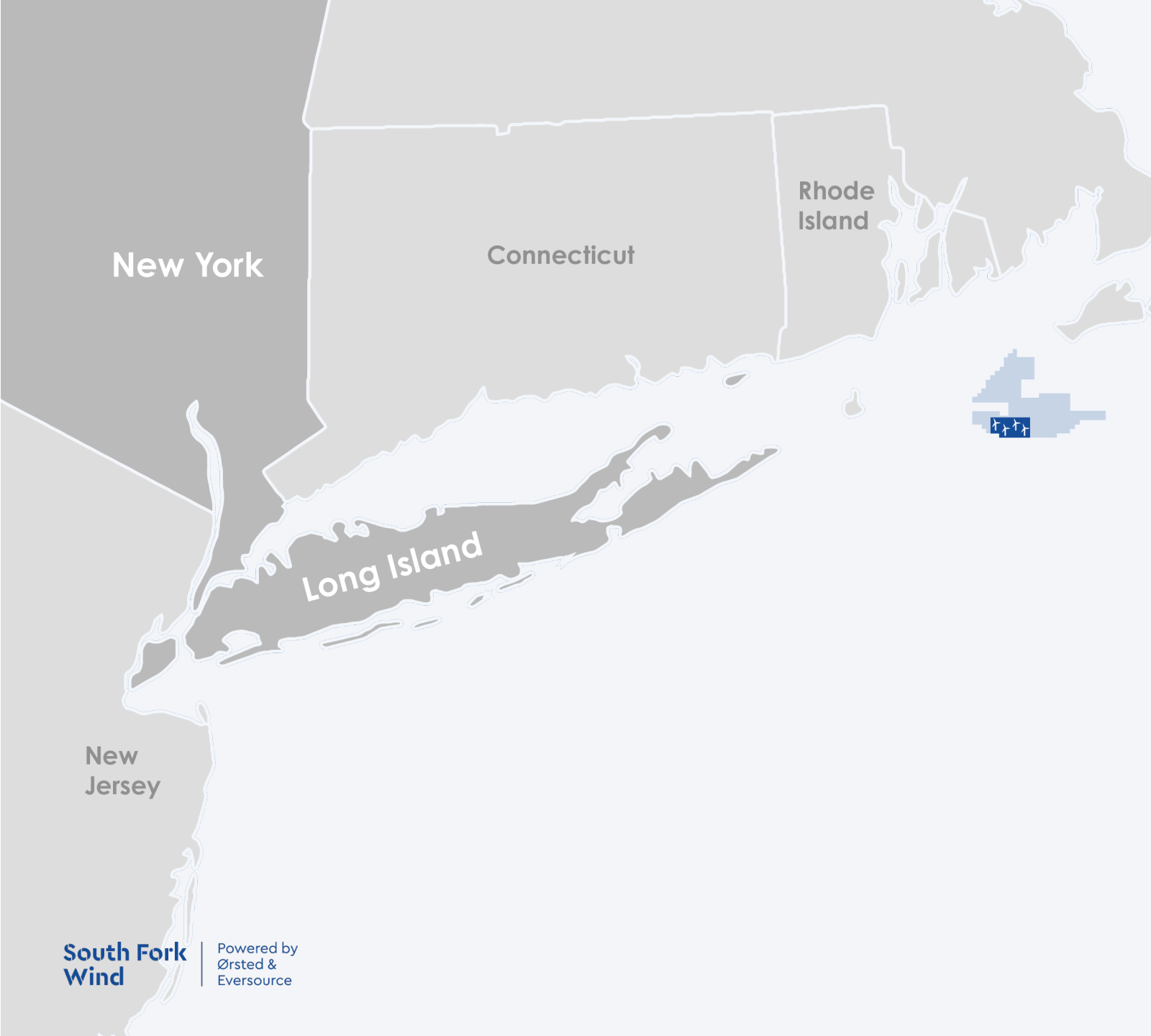
**South Fork
Wind**

Powered by
Ørsted &
Eversource

Massachusetts Fisheries Working Group
on Offshore Wind Energy

Agenda

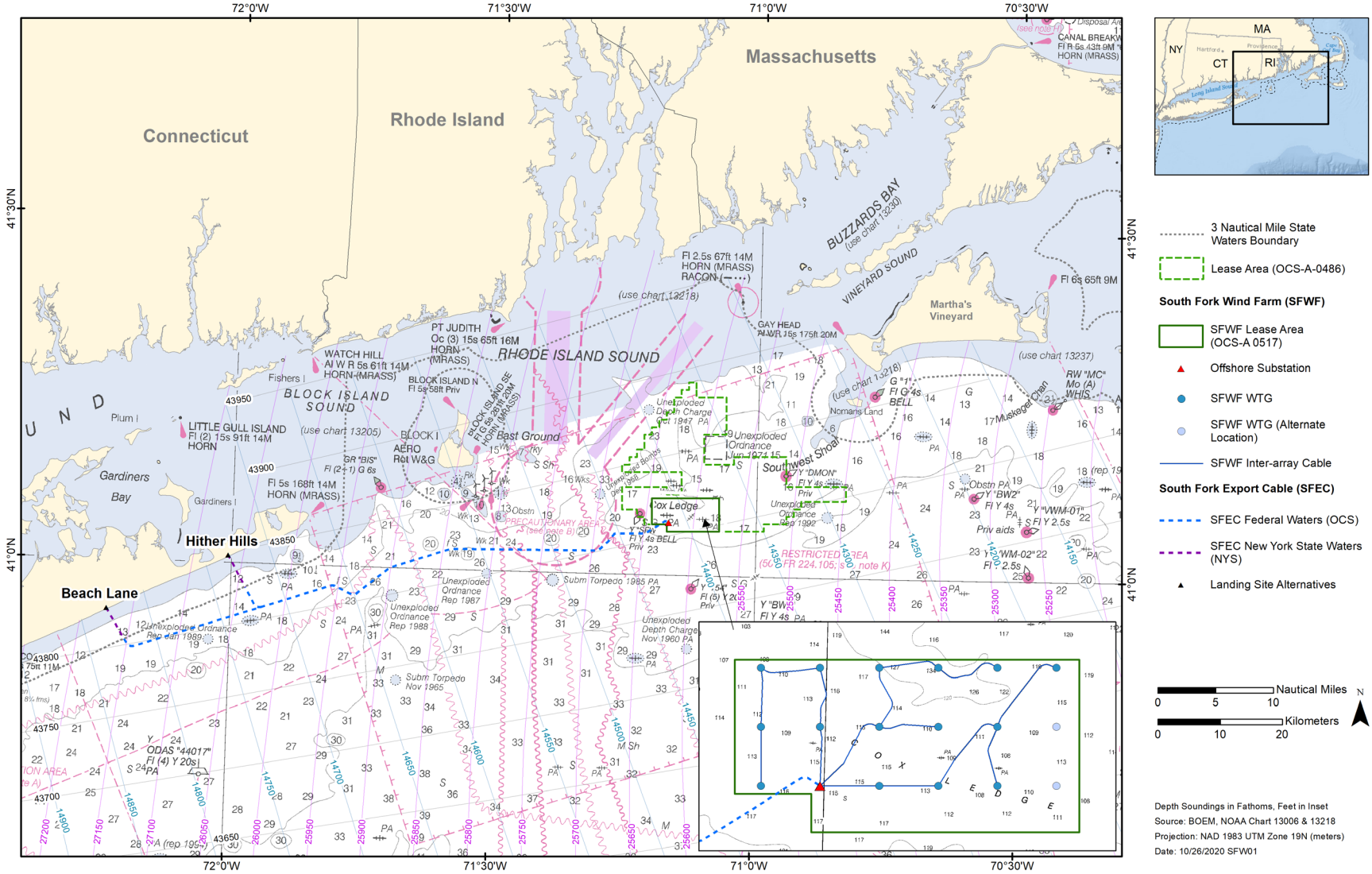
- 01 South Fork Wind Project Background
- 02 Woods Hole Oceanographic Institute
Fisheries Economic Impact Analysis
- 03 Questions and Comments



South Fork Wind

- Approximately 130 MW
- 35 miles east of Montauk Point
- Up to 15 Wind Turbine Generators (WTGs)
- One Offshore Substation (OSS)
- The South Fork Export Cable will interconnect to a substation located on the South Fork of Long Island

Project Location



| SFWF | Acres | % of Total |
|-----------------------------------|--------|------------|
| Lease OCS-A-0517 | 13,700 | 100.00% |
| Footprint of Permanent Structures | 32.5 | 0.24% |

COP Updates and Environmental Review

Construction and Operation Plan (COP)

- Originally Submitted: June 2018
- Update Submitted: May 2019
- Update Submitted: February 2020

Draft Environmental Impact Statement (DEIS) Issued in January 2021

Final Environmental Impact Statement (FEIS) Expected in August 2021

SFW has been engaged with the fishing community, including the MA FWG, since 2017.

This has resulted in several project modifications.

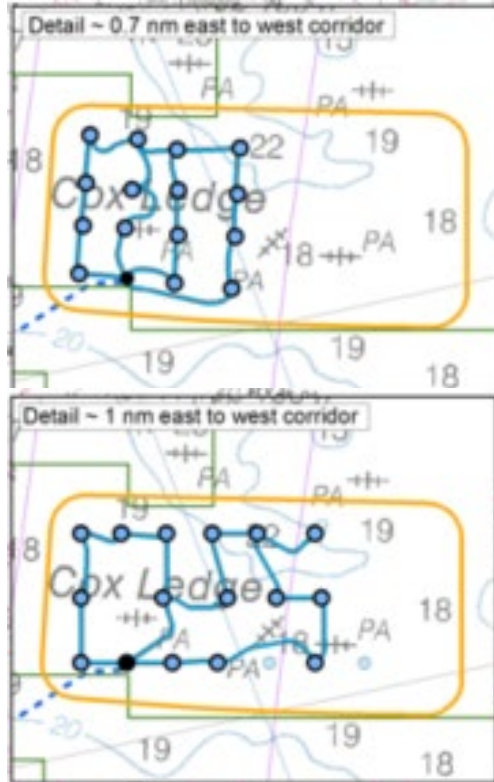
South Fork Wind's Commitments

Modifications:

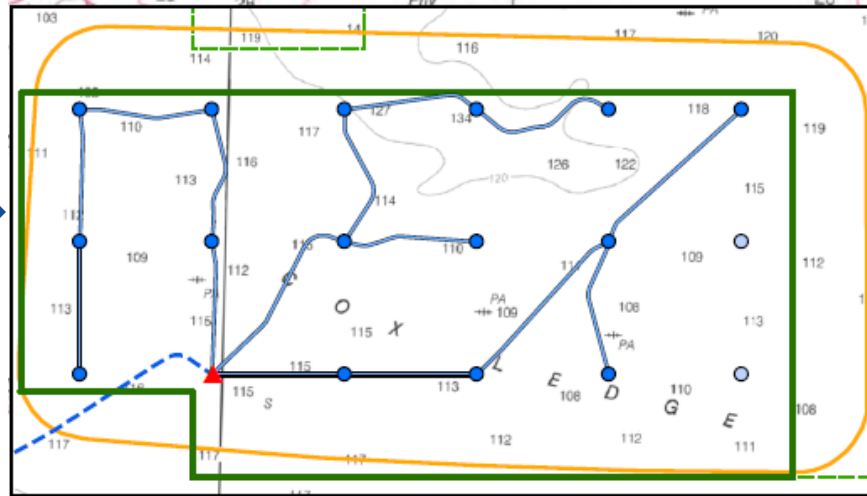
- Export cable route adjustments in response to input from mobile gear fishermen
- Sufficient cable burial
- Robust Fisheries Monitoring Plan focused on commercially and recreationally important species in the project area
- Extensive fisheries outreach plan during all phases of the project
- Increased communications during offshore surveys
- Fishing gear scout vessels
- Gear claim process updated to simplify process and compensate fishermen for business loss
- Automatic Identification System (AIS), enhanced cellular and VHF coverage on the structures
- Micrositing turbines to minimize impacts to sensitive benthic habitats
- Noise reduction systems during foundation pile driving
- **Turbine layout revised to 1 by 1 nautical mile grid**

Progression of South Fork Wind Turbine Layouts

Former Layouts



2020 Layout: 1 nautical mile by 1 nautical mile grid





South Fork Wind's Ongoing Commitments to the Fishing and Environmental Communities

We:



Promote the coexistence of the offshore wind industry with all stakeholders.



Focus on maintaining access and navigation in and around our wind farms for all ocean users.



Conduct scientific research collaboratively with the fishing and environmental communities.



Are accessible and available.

Marine Affairs

We have built the largest team in the industry that is focused on engagement with fishermen, navigational safety, and fisheries science.

- 1 x 1 nautical mile grid layout
- Navigational safety
- United States Maritime Resource Center (USMRC)
- Seasource
- South Fork Wind Fisheries Monitoring Plan
- Gear claim process updated to include business loss



Fisheries Impact Analysis

Woods Hole Oceanographic Institution

**South Fork
Wind**

Powered by
Ørsted &
Eversource

South Fork Wind Fisheries Impact Analysis – Massachusetts

Woods Hole Oceanographic Institution

- Quantitative and data-driven approach
- NOAA data on commercial landings for 2008-2018 for SFW Wind Lease Area, WLA +5km buffer, and Export Cable Route
 - Adjusted for lobster/Jonah crab unreported landings and dockside sales
- For-hire charter fishing revenue at WLA estimated from RIDEM/Kirkpatrick (2017) report
- Indirect and induced impacts in Massachusetts estimated via multipliers (I/O model)
- Exposure of fisheries values estimated based on likely impacts to fishing during
 1. Construction
 2. Operations
 3. Decommissioning

NOAA Data for Baseline Values

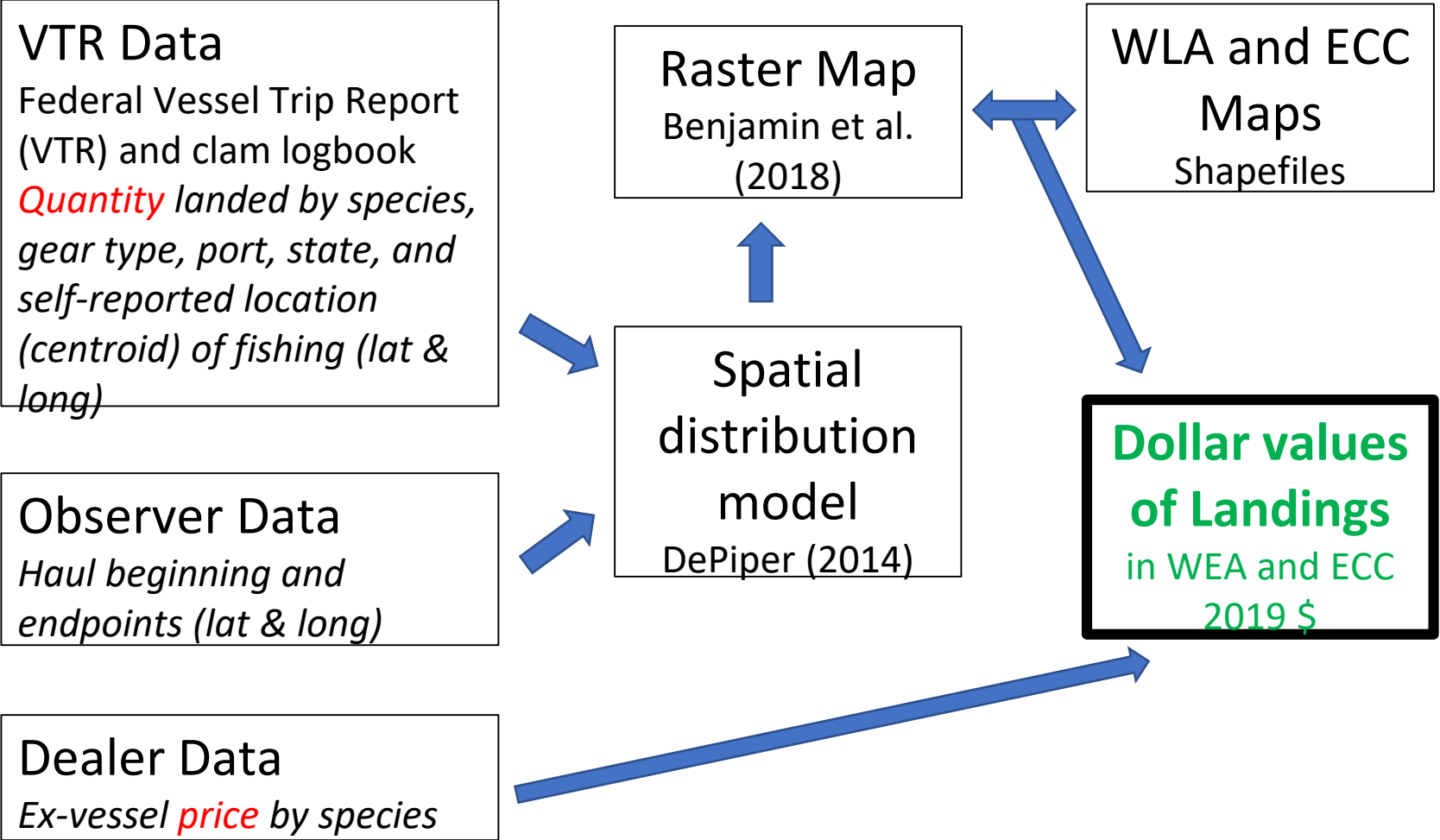
Description

- Average of 11 years of NOAA data (2008-2018) on commercial landings by weight and value from the Wind Lease Area (WLA) and two alternate Export Cable Route Corridors (ECRC)
- Updated NOAA dataset uses federal Vessel Trip Report (VTR) and clam logbook fishing trip data with observer data

Findings

- Major species: Monkfish, scallops, lobster, and flounder
- Major gear types: bottom trawls, gillnets, dredges, and pots

NOAA Commercial Fisheries Landings Data Process



Baseline NOAA Data

Table 4. Average annual landings of major species by area, 2008-2018.

| Area/Species | Mean | | Standard Deviation | |
|-----------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| South Fork WLA | | | | |
| Monkfish | 34,977 | 20,692 | 23,762 | 14,032 |
| Scallops | 30,192 | 2,793 | 29,154 | 3,119 |
| Lobster, American | 28,355 | 5,240 | 13,191 | 2,366 |
| ALL_OTHERS | 18,855 | 187,018 | 13,083 | 120,799 |
| Skate Wings | 18,600 | 52,544 | 8,121 | 13,826 |
| Beach Lane | | | | |
| Scallops | 37,859 | 3,258 | 20,822 | 1,433 |
| Flounders | 17,814 | 6,030 | 5,951 | 2,146 |
| Monkfish | 12,911 | 7,380 | 4,126 | 1,601 |
| Squid/Loligo | 8,071 | 6,084 | 6,916 | 5,437 |
| Skate Wings | 7,340 | 30,148 | 1,712 | 10,751 |

Table 5a. Average annual landings in South Fork WLA by gear type.

| Gear | Mean | | Standard Deviation | |
|-------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Dredge | 30,149 | 2,844 | 29,339 | 3,169 |
| Gillnet – Other | 0 | 0 | 0 | 0 |
| Gillnet – Sink | 53,363 | 53,002 | 29,681 | 23,626 |
| Hand | 771 | 185 | 1,205 | 273 |
| Longline – Bottom | 0 | 0 | 0 | 0 |
| Pot | 45,156 | 11,530 | 25,254 | 4,296 |
| Trawl – Bottom | 47,692 | 74,279 | 13,333 | 22,331 |
| Trawl – Midwater | 4,054 | 31,563 | 4,831 | 35,993 |
| ALL_OTHERS | 21,647 | 188,908 | 12,289 | 119,635 |

Table 5b. Average annual landings in Beach Lane ECC by gear type.

| Gear | Mean | | Standard Deviation | |
|-------------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| Dredge | 40,925 | 39,674 | 19,852 | 70,720 |
| Gillnet – Other | 12 | 4 | 30 | 8 |
| Gillnet – Sink | 18,857 | 15,885 | 3,774 | 1,590 |
| Hand | 1,773 | 587 | 448 | 132 |
| Longline – Bottom | 35 | 12 | 117 | 41 |
| Pot | 6,002 | 1,950 | 1,509 | 270 |
| Trawl – Bottom | 47,081 | 60,378 | 12,793 | 12,909 |
| Trawl – Midwater | 2,589 | 18,391 | 2,794 | 17,479 |
| ALL_OTHERS | 7,121 | 63,141 | 6,513 | 68,839 |

Baseline NOAA Data

Table A5. Average annual landings from South Fork WLA by port (RI and MA).

| Port | Mean | | Standard Deviation | |
|-----------------|-------------------------|------------------------|-------------------------|------------------------|
| | Value/year (2019 \$) | Landings/year (lbs) | Value/year (2019 \$) | Landings/year (lbs) |
| BARNSTABLE | 5 | 2 | 15 | 7 |
| BOSTON | 19 | 16 | 64 | 54 |
| CHATHAM | 887 | 102 | 2,943 | 337 |
| CHILMARK | 817 | 148 | 1,283 | 224 |
| DAVISVILLE | 246 | 265 | 583 | 814 |
| FAIRHAVEN | 948 | 642 | 1,541 | 1,363 |
| FALL RIVER | 235 | 1,053 | 424 | 1,847 |
| GLOUCESTER | 107 | 637 | 217 | 1,458 |
| LITTLE COMPTON | 28,868 | 29,251 | 18,743 | 17,442 |
| MENEMSHA | 186 | 35 | 265 | 50 |
| NANTUCKET | 0 | 0 | 0 | 0 |
| NEW BEDFORD | 45,567 | 209,868 | 16,031 | 140,394 |
| NEW SHOREHAM | 46 | 19 | 48 | 30 |
| NEWPORT | 18,775 | 29,359 | 12,570 | 15,028 |
| NORTH KINGSTOWN | 0 | 0 | 0 | 0 |
| POINT JUDITH | 64,725 | 52,038 | 24,334 | 16,965 |
| SANDWICH | 2 | 3 | 8 | 11 |
| TIVERTON | 2,430 | 2,510 | 2,855 | 2,741 |
| WESTPORT | 11,177 | 4,547 | 7,096 | 3,227 |
| WOODS HOLE | 393 | 57 | 1,128 | 133 |

Lobster and Jonah Crab & Dockside Sales Adjustments

Table 10. Adjustment of landed value for lobster and Jonah crab landings not captured in VTR data.

| Value (2019\$) | South Fork WLA | Beach Lane ECC |
|--|----------------|----------------|
| Avg. VTR total \$/year (Table 2) | 202,832 | 124,397 |
| Avg. VTR lobster \$/year (Tables A1-A3) | 28,335 | 3,862 |
| Avg. VTR Jonah crab \$/year (Tables A1-A3) | 2,844 | 518 |
| % of total captured by VTR | 40% | 40% |
| Adjusted lobster \$/year | 70,838 | 9,654 |
| Adjusted Jonah crab \$/year | 7,110 | 1,295 |
| Adjusted total \$/year | 249,600 | 130,966 |
| Adjusted increase over VTR total value | 23.1% | 5.3% |

Table 11. Estimated annual economic impact in Rhode Island and Massachusetts.

| Area | State | Average value of landings/year | | | Total impact/year |
|----------------|-------|--------------------------------|--------------------------------------|--------------------------------|----------------------|
| | | VTR data only | with lobster & Jonah crab adjustment | with dockside sales adjustment | with all adjustments |
| South Fork WLA | RI | 117,844 | 145,016 | 151,811 | 282,152 |
| Beach Lane ECC | RI | 51,031 | 53,726 | 54,370 | 105,967 |
| South Fork WLA | MA | 75,348 | 92,722 | 96,940 | 199,847 |
| Beach Lane ECC | MA | 31,907 | 33,592 | 33,948 | 73,469 |

Indirect and Induced Economic Impacts

- The NOAA landings data provides an estimate of fisheries value (i.e. direct impact)
- We have used a socio-economic model called IMPLAN to estimate indirect and induced economic impacts:
 1. Example of indirect economic impact: decrease in landings corresponds with decrease in businesses like commercial ice vendors or a seafood processor.
 2. Example of induced economic impact: decrease in landings corresponds with decreased income
- Multipliers for Massachusetts: For every dollar in landed value there is about 77 cents of indirect and induced economic impact “upstream” and 43 cents “downstream”
- Resulting estimates provide a comprehensive measure of impact, not just the direct impact of landed value

SFW's Total Average Economic Impact to Massachusetts (2019\$)

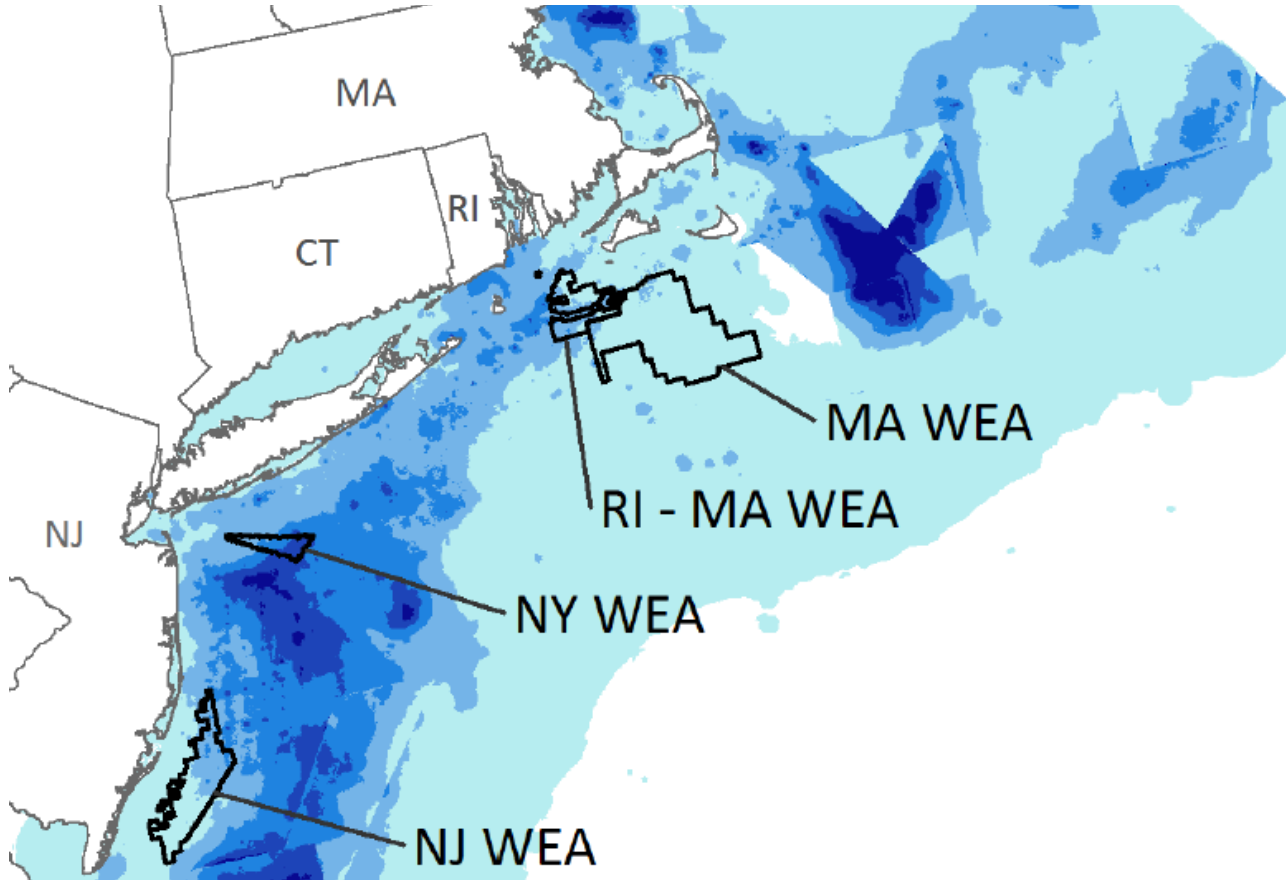
Average value of landings/year (with lobster & Jonah crab adjustment) x IMPLAN multiplier
=

Total average economic impact to Massachusetts from commercial fisheries

Massachusetts landings from SFW Lease Area and ECC: \$131,000/year

Massachusetts impact with multiplier: \$273,000/year

For-Hire Charter Fishing Data



Data on For-Hire Boat Gross Revenues Considered Exposed to Wind Energy Areas (WEAs)

MA total for-hire revenue,
average 2007-2012:
\$62.4m/year

Exposed to RI-MA WEA:
\$42,000/year

SFW portion, scaled to 2019\$:
\$4,500/year

Source: Kirkpatrick et al. 2017 Vols. I & II.

Wind Development Exposure Assumptions

Table 12. Assumptions for exposure of commercial fisheries to wind farm development.

| Categories of Potential Exposure | | | Assumptions/Effects |
|--------------------------------------|---------------------|--------------|---|
| Construction constrained access | WLA | | No fishing in 50% of area for 8 months (a) |
| | ECRA | 1.6km ECC WA | No fishing in 5% of area for 6 months (b) |
| | | 180m ECC | No fishing in 100% of area for 2 months (c) |
| Stock effects due to construction | WLA | | Lobster & crab reduced 10% for 1 year (d) Scallops reduced 10% for 4 years (e) 100% of finfish stocks leave area for 4 months (f) |
| | WLA + 5km perimeter | | 100% of finfish stocks leave area for 4 months (g) |
| | ECRA | 1.6km ECC WA | All landings reduced 10% for 1 year (h) |
| | | 180m ECC | Shellfish landings reduced 25% for 4 years (i) |
| Effects during operations | WLA | | Landings reduced by 5% from baseline (j) |
| | ECRA | 1.6km ECC WA | None |
| | | 180m ECC | None |
| Decommissioning constrained access | WLA | | No fishing in 50% of area for 8 months (k) |
| | ECRA | 1.6km ECC WA | No fishing in 5% of area for 2 months (l) |
| | | 180m ECC | No fishing in 100% of area for 2 months (m) |
| Stock effects due to decommissioning | WLA | | None beyond constrained access (n) |
| | ECRA | 1.6km ECC WA | All landings reduced 5% for 1 year (o) |
| | | 180m ECC | Shellfish landings reduced 12.5% for 4 years (p) |

(a), (b), (c) etc. refer to detailed explanations in the text that follows

Potential Exposure

| Categories of Potential Exposure | | MA Direct Landed Value/Revenue \$2019 |
|---|---------------------|---------------------------------------|
| Construction constrained access | WLA | \$43,000 |
| | ECRA | \$11,000 |
| Stock effects due to construction | WLA + 5km perimeter | \$87,000 |
| | ECRA | \$39,000 |
| Effects during operations | WLA | \$67,000 |
| | ECRA | --- |
| Decommissioning constrained access | WLA | \$9,000 |
| | ECRA | \$1,000 |
| Stock effects due to decommissioning | WLA | --- |
| | ECRA | \$4,000 |
| Subtotal MA commercial direct effects | | \$262,000 |
| For-hire charter fishing direct effects | | \$6,000 |
| Total MA direct effects | | \$268,000 |

| Categories of Potential Exposure | MA Total Impact with Multipliers \$2019 |
|----------------------------------|---|
| Subtotal MA commercial fishing | \$546,000 |
| For-hire charter fishing | \$9,000 |
| Total MA | \$555,000 |

Impacts for Selected MA Ports

| Port | 2018 Ex-Vessel Value (2019\$) | SFW 30-year Impacts (WLA&ECC) (2019\$) | |
|--------------|-------------------------------|--|-------|
| New Bedford | 435,942,741 | 75,706 | 0.02% |
| Gloucester | 53,821,103 | 419 | 0.00% |
| Chatham | 19,004,811 | 899 | 0.00% |
| Boston | 16,609,675 | 29 | 0.00% |
| Barnstable | 12,992,787 | 5 | 0.00% |
| Fairhaven | 8,509,515 | 1,496 | 0.02% |
| Provincetown | 7,840,614 | very small | ~0% |
| Wellfleet | 7,823,862 | 0 | 0.00% |
| Duxbury | 6,870,932 | very small | ~0% |
| Sandwich | 6,842,379 | 2 | 0.00% |
| Rockport | 6,719,439 | very small | ~0% |

Potential Impacts from SFW

Report goes further than previous reports to quantify potential impacts to commercial fisheries from offshore wind construction, operation, and decommissioning

Five categories of potential impacts assessed

- Constrained fishing access to certain areas during construction
- Impacts on fish stocks due to construction activities
- Impacts to fishing in the wind farm area during operations
- Constrained fishing access to certain areas during decommissioning
- Impacts on fish stocks due to decommissioning activities

This analysis produced these “lump sum” (\$2019) impact values for Massachusetts from

SFW (including multipliers) :

| | |
|--------------------|-----------|
| commercial fishing | \$546,000 |
| charter fishing | \$9,000 |

Questions & Comments?

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Thank you!



06.14.2021 Fisheries Impact Analysis Update

South Fork Wind

A Joint Venture of Ørsted and Eversource

**South Fork
Wind**

Powered by
Ørsted &
Eversource

Massachusetts Fisheries Working Group
on Offshore Wind Energy

Lobster Landing Checked Against MA DMF Data

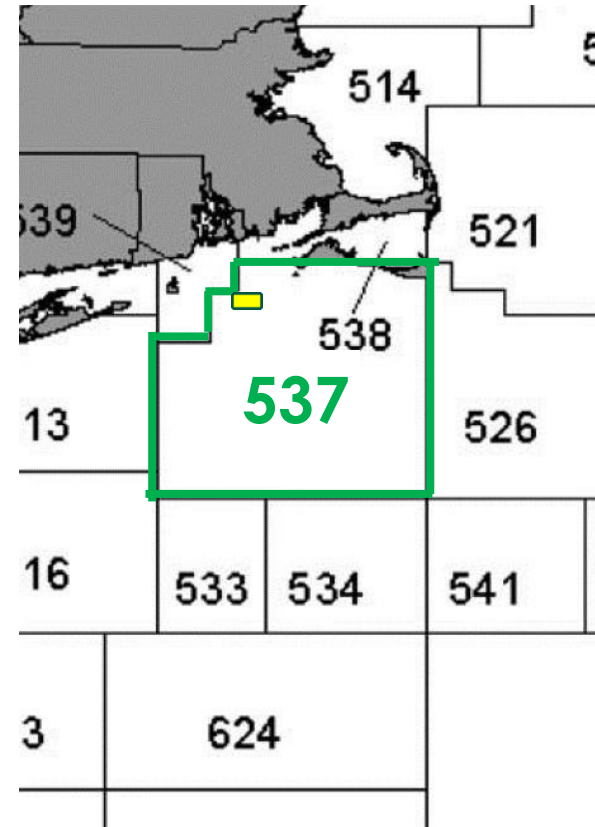
2008-2018 average lobster landings for
SRA 16 = \$2,407,594/year

Area of SRA 16 = 22,380 km²

Area of SFWLA = 55 km²

Lobster landings from the WLA =
 $\$2,407,594 \div 55 / 22,380 =$

\$5,917/year (in 2019\$)

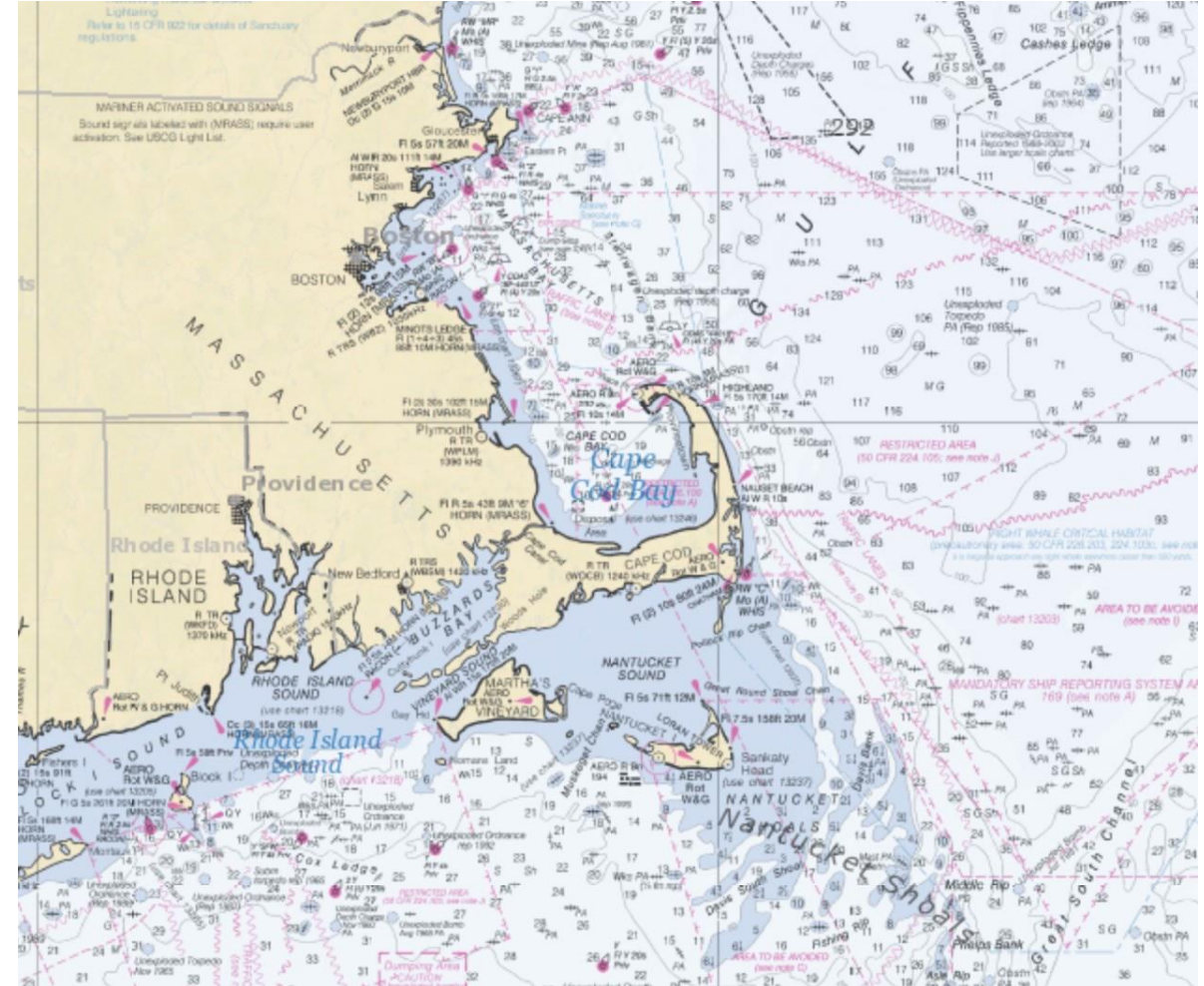


NMFS Statistical Area 537
Statistical Reporting Area (SRA) 16

For-Hire Charter Fishing: MA DMF Online Survey 6/21

Survey results:

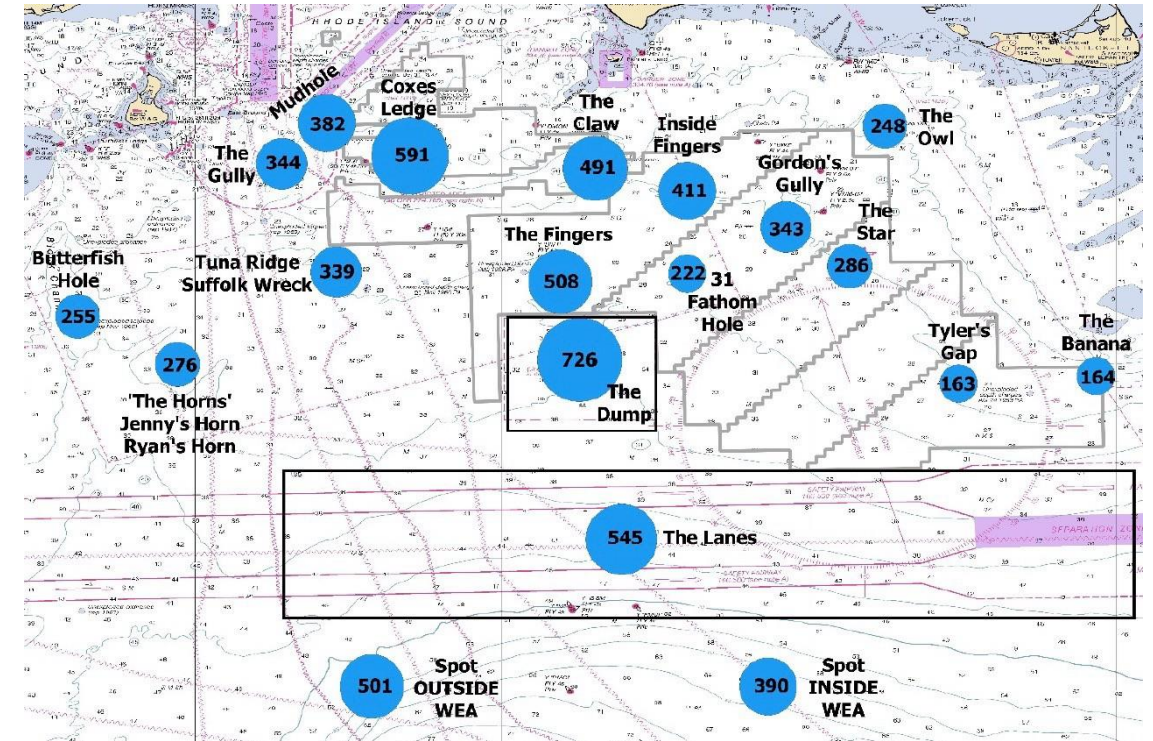
- 21 respondents (25 boats) from 240 email addresses
- 1,238 for-hire trips/year south of Cape Cod (average 2018-2020)
- 158 trips/year include fishing at Cox Ledge
- >70% of respondents sometimes fish Cox Ledge along with other locations on one trip
- On Cox Ledge multi-location trips, typically spend $\frac{1}{2}$ to $\frac{3}{4}$ of the time at Cox Ledge



For-Hire Charter Fishing: MA DMF Online Survey 6/21

Woods Hole team takeaway:

- Assume respondents represent 10% of total: 12,380 for-hire trips/year south of Cape Cod
- At \$1,500/trip average, that is about \$20 million/year in revenue (approx. 30% of Mass. total estimated from Kirkpatrick et al. 2017)
- Assuming 10% of this fishing is at Cox Ledge, that suggests \$2 million/year in for-hire charter revenue from Cox Ledge fishing (roughly consistent with Kneebone and Capizzano 2020)

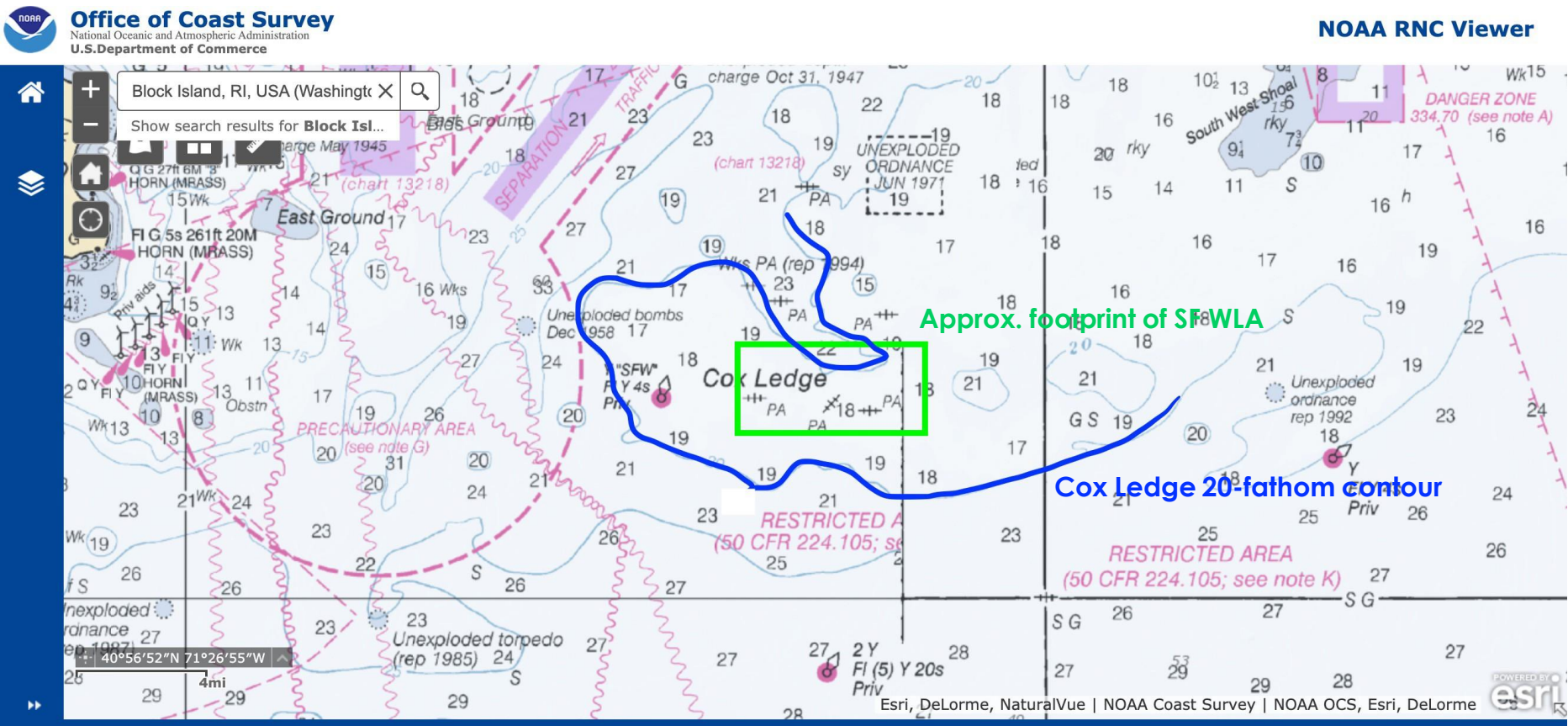


Source: Kneebone and Capizzano (2020)

For-Hire Charter Fishing: SF WLA Footprint Compared to Cox Ledge

SF WLA footprint likely encompasses no more than 20%

Assume 25%:
\$500,000/year revenue from Cox Ledge fishing



Potential Impact

| Categories of Potential Exposure | MA Total Impact with Multipliers \$2019 |
|----------------------------------|---|
| Subtotal MA commercial fishing | \$564,000 |
| For-hire charter fishing | \$985,000 |
| Total MA | \$1,549,000 |

| Categories of Potential Exposure | | MA Direct Landed Value/Revenue \$2019 |
|--|---------------------|---------------------------------------|
| Construction constrained access | WLA | \$38,000 |
| | ECRA | \$11,000 |
| Stock effects due to construction | WLA + 5km perimeter | \$89,000 |
| | ECRA | \$39,000 |
| Effects during operations | WLA | \$64,000 |
| | ECRA | --- |
| Decommissioning constrained access | WLA | \$10,000 |
| | ECRA | \$1,000 |
| Stock effects due to decommissioning | WLA | --- |
| | ECRA | \$4,000 |
| Subtotal MA commercial direct effects | | \$256,000 |
| For-hire charter fishing direct effects | | \$616,000 |
| Total MA direct effects | | \$872,000 |

South Fork Wind's Fisheries Mitigation Framework

Commercial and For-Hire Fisheries Compensation Fund

Objective: Direct financial mitigation to fishermen operating in project area.

Approach:

- Escrow independently managed
- Eligibility period will pre-qualify fishermen based on defined eligibility criteria
- Payments based on historical activity in the Project Area

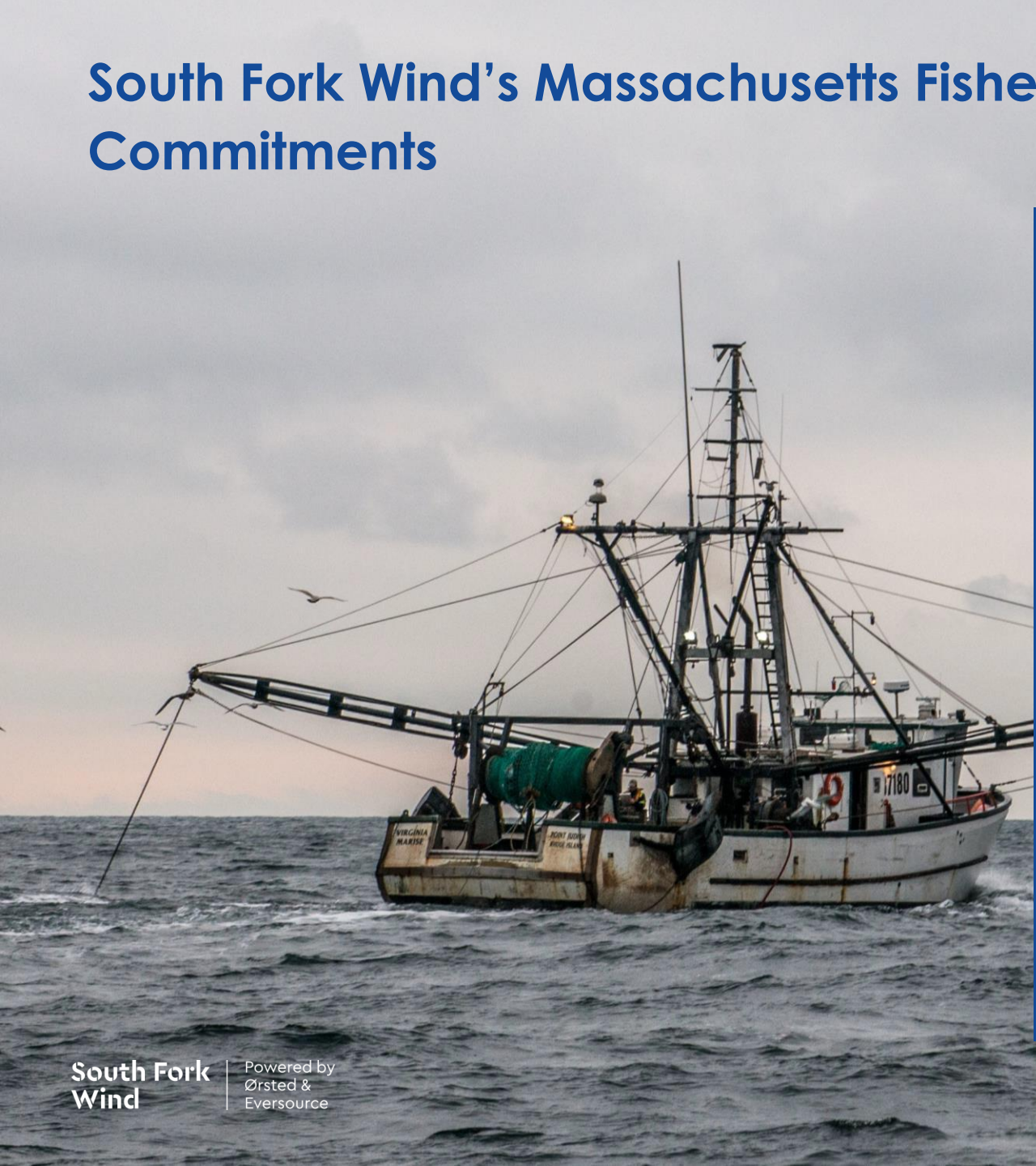
Coastal Community Fund

Objective: Benefit the fishing community and associated industries by offering grants in the response to proposals.

Approach:

- Trust fund independently managed
- Selection of project funding made by an independent council formed with fishermen's input.
- Navigational Enhancement and Training Program

South Fork Wind's Massachusetts Fisheries Mitigation and Financial Commitments



SFW Mitigation Package

Fisheries Compensation Fund

| | |
|-----------------------|-------------|
| Woods Hole Assessment | \$1,549,000 |
|-----------------------|-------------|

| | |
|-------------|-----------|
| Contingency | \$551,000 |
|-------------|-----------|

| | |
|-----------------|-----------|
| Community Fund* | \$500,000 |
|-----------------|-----------|

| | |
|--------------------|--------------------|
| Total Value | \$2,600,000 |
|--------------------|--------------------|

*The Community Fund will increase by \$1M when Revolution Wind and Sunrise Wind permits are received (2 x \$500,00). The community fund is inclusive of the Navigation and Training Program.

- 1 – Requirements for compensation:
- Massachusetts consistency concurrence on or before July 1st , 2021
 - SFW securing FID & all necessary requirements and approvals as described in COP including Local/State/Federal permits, authorizations, concurrences

Final/Comments and Responses on South Fork Wind CZM Mitigation Package

| From/Date | Comment |
|----------------|--|
| RODA | <ul style="list-style-type: none"> If the state’s intention is to use this presentation as the basis of an assessment of impact fees, it must do so transparently, publicly, and with fishermen’s involvement. |
| April 16, 2021 | <p><i>Respectfully, Woods Hole is not in the position to respond to this comment.</i></p> <ul style="list-style-type: none"> no methodology except the name of the model used, “IMPLAN,” so cannot be independently corroborated. <p><i>Using input-output (IO) analysis, we can compute multipliers for a specific industry (e.g., commercial fishing). The total economic contribution of an industry is the sum of direct, indirect, and induced effects. Development of an input-output model from primary data is a substantial undertaking. A number of ready-made regional input-output models have been developed to perform economic impact analyses. The best known is a software package for personal computers, IMPLAN (https://implan.com/).</i></p> <p><i>IMPLAN was initially developed for the US Forest Service. It is a modular input-output model that works down to the individual postal zip code level for most zip codes in the United States. The IMPLAN database consists of two major parts: (1) a national-level technology matrix and (2) estimates of sectoral activity for final demand, final payments, gross output, and employment for each zip code. This 546-sector (based on NAICS codes), gross-domestic-based model was derived from the Commerce Department's national input-output studies, the national income data, and related Federal economic surveys. In IMPLAN, national average technology coefficients are used to develop the direct coefficients for sectors at local levels. We used 2018 IMPLAN data for Massachusetts for our analysis.</i></p> <p><i>Note that a standard IO model (a demand-side model) described above is based on backward-linkage analysis (which describes the interconnection of a particular sector to those sectors from which it purchases inputs), and the multipliers are output multipliers. Each sector’s multiplier measures the total impact on the regional economy of a \$1.00 change in the final demand for that sector’s output. We have also taken into account downstream economic activity, such as seafood processing, that may take place at Massachusetts businesses as a result of Massachusetts commercial fisheries landings. We add a downstream adjustment to the multiplier.</i></p> <ul style="list-style-type: none"> The multiplier factor used is significantly lower than other commonly accepted and scientifically accepted calculations. <p><i>The above statement is incorrect. Note that multipliers are industry sector specific. The multiplier used in the study is consistent with those for fishery sector in the scientific literature.</i></p> <ul style="list-style-type: none"> The presentation’s “exposure assumptions” are not backed with any supporting information whatsoever and grossly undervalue fisheries impacts. |

Final/Comments and Responses on South Fork Wind CZM Mitigation Package

| | |
|---|--|
| | <i>Please refer to pages 20-28 of the June 10 2021 report.</i> |
| | <ul style="list-style-type: none"> The presentation references a larger report that was not publicized. The time period allotted for comment does not allow for an independent economic analysis. |
| | <i>Respectfully, Woods Hole is not in the position to respond to this comment.</i> |
| <p>Executive Director Massachusetts Lobstermen's Association</p> <p>April 15, 2021</p> | <ul style="list-style-type: none"> what was the multiplier used to calculate the total economic impact to the commercial fishing fleet - concerned that these numbers do not give a true representation of the entire fleet fishing in the South Fork project area. |
| | <i>The multiplier used to calculate the total economic impact is 2.205, which captures both upstream and downstream impacts.</i> |
| | <ul style="list-style-type: none"> The data used is not inclusive of the entire commercial lobster/crab fleet as not ALL commercial fishing vessels report with VTRs and or have VMS on their vessels. |
| | <i>The above statement is incorrect. We have made upward adjustments to the VTR data to account for lobster/crab landings that are not included in the VTR.</i> |
| | <ul style="list-style-type: none"> This process is long and we are now at the eleventh hour |
| | <i>Respectfully, Woods Hole is not in the position to respond to this comment.</i> |
| | <ul style="list-style-type: none"> we do not truly know what impacts will be down the road - The European habitat and fishery is not the same as ours. |
| | <i>Please refer to pages 6-8 of the 10 June 2021 report.</i> |
| | <ul style="list-style-type: none"> need to have a 5-10 year review for mitigation should the species not rebound in the wind farm. |
| <p>SBCBA President RFA, MA Chairman</p> <p>April 16, 2021</p> | <i>Respectfully, Woods Hole is not in the position to respond to this comment.</i> |
| | <i>Areas of Concern</i> |
| | <ul style="list-style-type: none"> Cox Ledge is historic prime fishing grounds for groundfish and pelagics that encompasses an area approximately 16 square miles ("sq miles") in size. recommend you double the area of concern to 32 square miles as a result of the lack of access (16 sq miles) and buffer zone required beyond the construction area. The noise and disturbance to the bottom and water column during construction will have a detrimental impact to the area within and adjacent to the proposed wind turbines |
| | <i>Cox Ledge is not synonymous with the South Fork Wind Farm and extends well beyond the project's lease area. Additionally, important fishing areas on Cox Ledge were removed from the Wind Energy Area (Smythe et al. 2016). Please also refer to page 22-24 of the 10 June 2021 report on the area affected by construction noise.</i> |
| | <ul style="list-style-type: none"> The wind turbines could change the spatial distribution and extent of select fish stocks resulting in detrimental impacts to shore side and near shore anglers where fish migrations no longer take place to the |

Final/Comments and Responses on South Fork Wind CZM Mitigation Package

| | |
|--|---|
| | <p>detriment of the recreational anglers, for hire fleet and entire green economy that relies on such.</p> <p><i>There is no evidence to support this. Please refer to page 5 and 6 of the 10 June 2021 report on the project's footprint and turbine spacing.</i></p> |
| | <ul style="list-style-type: none"> The wind turbines denied access to these prime fishing grounds or select fish stocks that are no longer present in these areas due to the construction and ongoing operation of the proposed wind turbines (cod, yellowfin tuna, bluefin tuna, white marlin, makos, threshers, etc). <p><i>There is no evidence to support an assumption that the turbine towers will deny access or that fish stocks will no longer be present after construction.</i></p> |
| | <ul style="list-style-type: none"> no longer be able to safely operate and drift within the wind turbine arrays when there are rough seas, fog and foul weather and as a result will avoid this area all together when groundfishing or targeting pelagics. <p><i>There is no evidence of fishers avoiding wind energy areas altogether. In our view, fishers will continue to fish near and within the WLA with minor adjustments.</i></p> |
| | <ul style="list-style-type: none"> artificial reef effect attracts select species of fish such as black sea bass. essential habitat and a cod spawning area and/or productive cod fishing grounds. similar unknown impacts to pelagics. <p><i>Studies from Europe and the Block Island Wind Farm have found that cod are attracted to turbine foundations, and that for many recreational fishers, wind farms enhance the fishing and boating experience. Please refer to page 7 of the 10 June 2021 report.</i></p> |
| | <ul style="list-style-type: none"> Upon completion of construction there will be ongoing safety issues associated with fishing within and adjacent to the arrays especially if nasty seas and weather arrive we will avoid these areas all together for safety reasons or lack of fish. <p><i>The U.S. Coast Guard conducted an extensive review of the Massachusetts/Rhode Island Wind Energy Area and concluded that the 1 nautical mile spacing proposed between turbine foundations was safe for navigation around, in the vicinity of, and through that area, including for conducting fishing operations.</i></p> |
| | <p><i>Detrimental Financial Impacts</i></p> <p>A compensation package of \$42,000 has been provided to date for the Massachusetts for hire fleet. The compensation package needs to be assessed over a 30 year period not during construction only (Years 1 & 2). As noted above detrimental impacts will be ongoing where we will avoid these areas all together due to lack of fish or issues with safety. \$42,000 over 30 years is \$1,400 per year that is not consistent with the use of this area by the Massachusetts recreational anglers and for hire fleet. A typical for hire trip to this area is \$1,500 plus gratuity (20%) this is indicative of how ridiculously low the \$1,400 per year</p> |

Final/Comments and Responses on South Fork Wind CZM Mitigation Package

| | |
|--|--|
| | <p><i>We have updated the charter fishing numbers based on meetings with charter captains and an online survey of charter operators conducted by Massachusetts DMF in May and June 2021. Please see pages 25-27 of the 10 June 2021 report for updated numbers on for-hire and charter fishing.</i></p> <ul style="list-style-type: none"> • compensation number is over a 30 year period. <p><i>Respectfully, Woods Hole is not in the position to respond to this comment.</i></p> |
| | <ul style="list-style-type: none"> • The state for hire fleet is not required to complete VTRs. A federally permitted for hire vessel that is required to complete eVTRs, reports the center point of where the vessel fished for the day. As a result the vessel may spend a portion of the day at Coxes Ledge, but the VTR does not reflect such. As a result to rely of VTRs to assess use of this area is flawed. The use of eVTRs is for fishery management purposes and not for the sighting of Wind Turbines, oil platforms, mining, etc. <p><i>We are fully aware of the limitation of VTR for for-hire fleet, and our estimation of the baseline economic data is not dependent on VTR.</i></p> |
| | <ul style="list-style-type: none"> • According to NOAAs For Hire, Private Boat and Shore Side Angler Data for Massachusetts the annual revenue for each user is as follows: <ul style="list-style-type: none"> ○ For Hire \$89,148,000 – if we assume 10% of the fleet fishes at Coxes Ledge - \$8,914,800 annually each year over a 30 year period. This needs to be adjusted based on the value over 30 years. ○ Private Boat \$100,605,000 – if we assume 10% of the fleet fishes at Coxes Ledge - \$10,0605,000 annually each year over a 30 year period. This needs to be adjusted based on the value over 30 years. • Shore Side Angler \$96,697,000 – assume 40% of the waterfront negatively impacted due to the wind turbines - \$38,678,800 annually over a 30 year period. This needs to be adjusted based on the value over 30 years. <p><i>We estimate the baseline economic value using data from the best possible sources on annual revenues, area of the SFWLA, geographical characteristics, and alternative location choices. We consider impacts over the entire project period (30 years).</i></p> |