

### SouthCoast Wind Project (formerly Mayflower Wind Project)

## Alternatives: A & B

### **Alternative A: No Action Alternative**

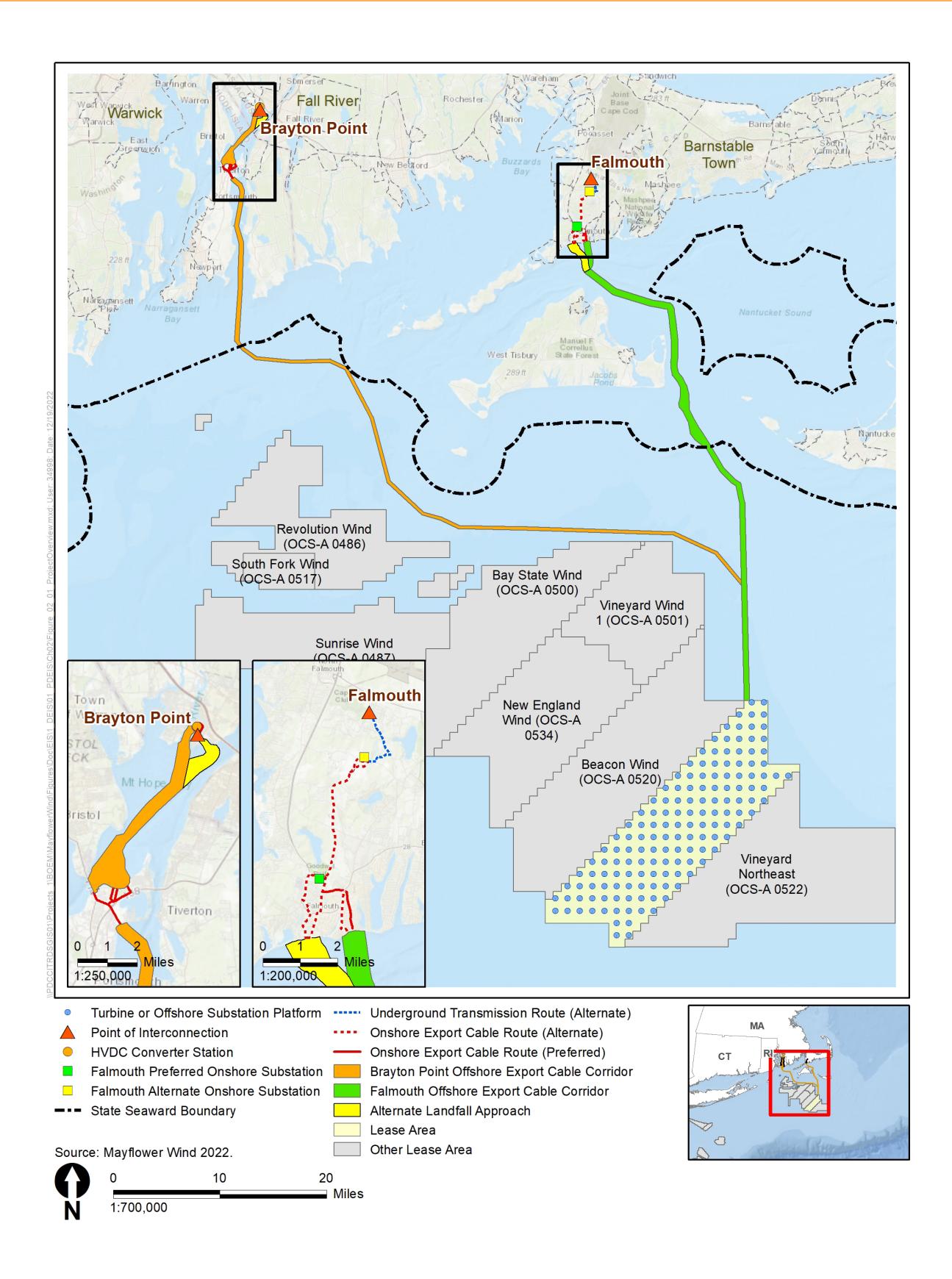
Under Alternative A, BOEM would not approve the Construction and Operations Plan (COP). Construction and installation, operations and maintenance, and conceptual decommissioning of the SouthCoast Wind Project would not occur, and no additional permits or authorizations for the Project would be required.

### **Alternative B: Proposed Action**

Under Alternative B, the construction and installation, operations and maintenance, and conceptual decommissioning of the Project on the Outer Continental Shelf (OCS) offshore of Massachusetts would occur within the range of design parameters outlined in the COP, subject to applicable mitigation measures. The Project would have a capacity of up to 2,400 megawatts and would consist of up to 147 wind turbine generators (WTGs) in the Lease Area, up to 5 offshore substation platforms (OSPs) and associated export cables. SouthCoast Wind would space WTGs in a 1-by-1nautical mile offset grid pattern (east-west-by-north-south-gridded layout). The Project would include two export cable corridors, one making landfall and interconnecting to the power grid in Falmouth, Massachusetts, and one making landfall and interconnecting to the power grid at Brayton Point, in Somerset, Massachusetts. The export cable corridor to Brayton Point would have an intermediate landfall on Aquidneck Island, Rhode Island.

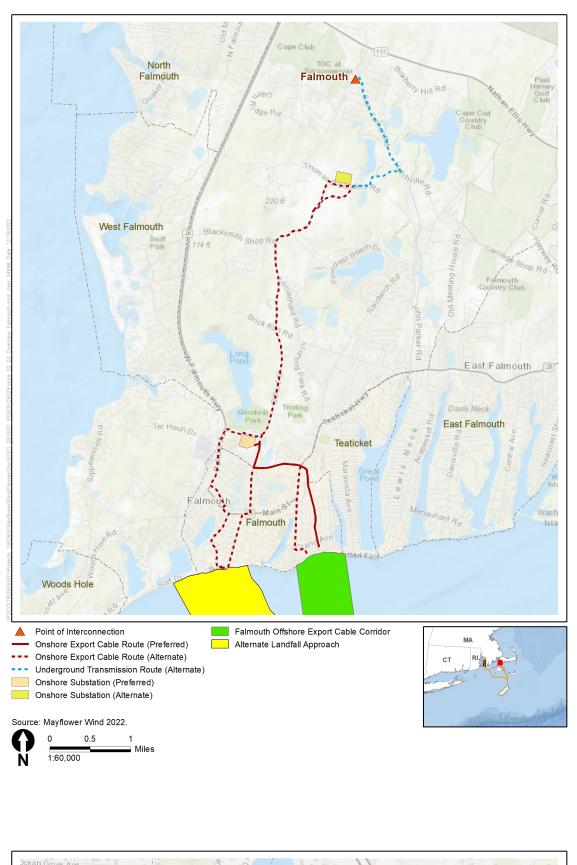


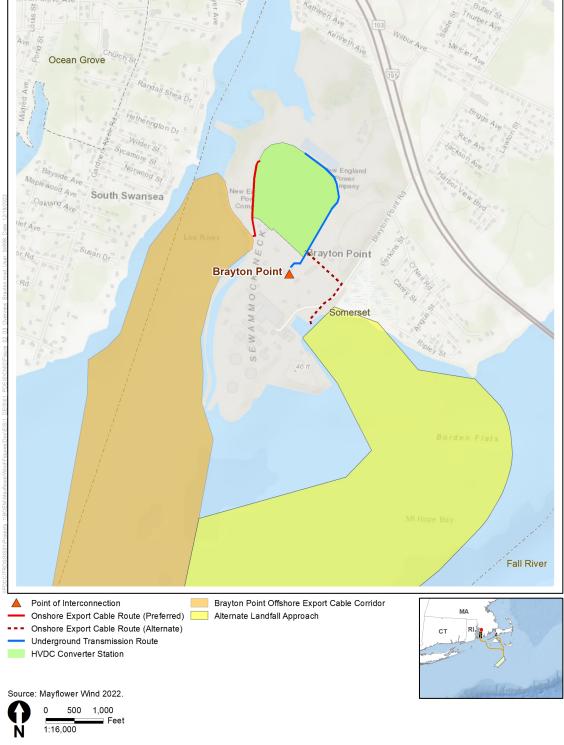






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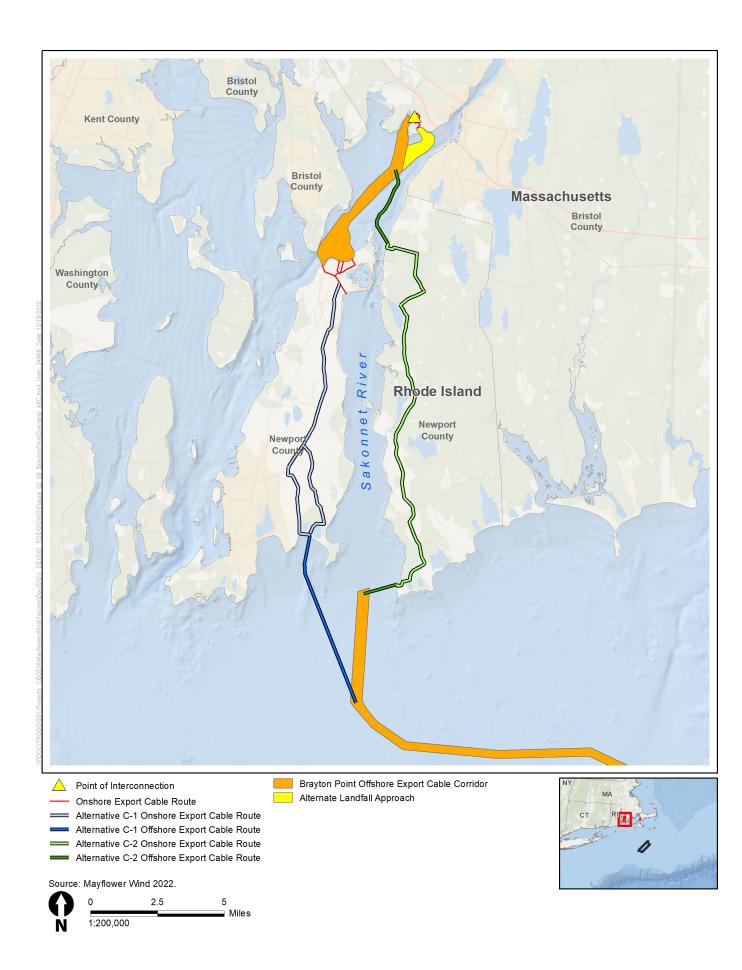






#### SouthCoast Wind Project (formerly Mayflower Wind Project)

# Alternatives: C, D, E, & F



## **Alternative C: Fisheries Habitat Impact Minimization**

Under Alternative C, the construction and installation, operations and maintenance, and conceptual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the COP, subject to applicable mitigation measures. However, the Project would include an onshore export cable route that would avoid placing the offshore export cable in the Sakonnet River to avoid impacts on fisheries habitats. Alternative C includes two possible onshore export cable routes.

- Route
- Island Route

### **Alternative E: Foundation Structures**

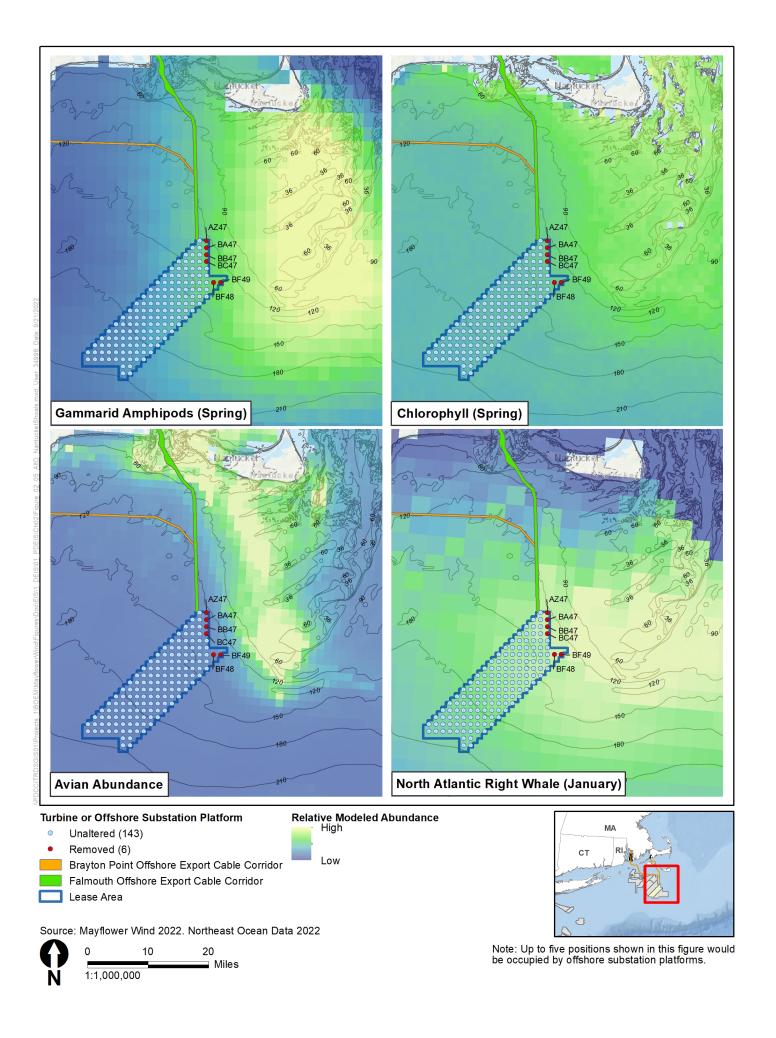
Under Alternative E, the construction and installation, operations and maintenance, and conceptual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the COP, which includes a range of foundation types (monopile, piled jacket, suction bucket, and gravity based), subject to applicable mitigation measures. This alternative includes three foundation options, which assume the maximum use of piled (monopile and piled) jacket), suction bucket, and gravity-based foundation structures to assess the extent of potential impacts from each foundation type.

- Alternative E-1: Piled Foundations (monopile and piled jacket) only
- Alternative E-2: Suction Bucket Foundations only
- Alternative E-3: Gravity-based Foundations only



• Alternative C-1: Aquidneck Island, Rhode Island

• Alternative C-2: Little Compton/Tiverton, Rhode



### **Alternative F: Muskeget Channel Cable Modification**

Under Alternative F, the construction and installation, operations and maintenance, and conceptual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the COP, subject to applicable mitigation measures. However, to minimize seabed disturbance in the Muskeget Channel, the Falmouth offshore export cable route would use ±525 kV high voltage direct current (HVDC) cables connected to an HVDC converter station, instead of high voltage alternating current (HVAC) cables connected to offshore substations, and would only use up to 3 offshore export cables, instead of up to 5 offshore export cables.





## **Alternative D: Nantucket Shoals**

Under Alternative D, the construction and installation, operations and maintenance, and conceptual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the COP, subject to applicable mitigation measures. However, up to six WTGs (AZ-47, BA-47, BB-47, BC-47, BC-48, and BF-49) would be eliminated in the northeastern portion of the Lease Area to reduce potential impacts on foraging habitat and potential displacement of wildlife from this habitat adjacent to Nantucket Shoals.