Technical Analyses:
Results from Cables, Radar, and Wind Resource Analyses

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RENEWABLE ENERGY LEASING PROCESS IN THE NY BIGHT | September 17-20
Cables

Comments:

• Burying power cables at a sufficient depth to avoid interactions with fishing gear
• Separation from existing cables of 750 m
• Coordination with existing cable owners
Cables

Recommendations:

• No areas suggested for removal on the basis of cables, though less contested areas should be prioritized

• Maintain a separation between existing cable infrastructure and new renewable energy infrastructure

• Bury cables at an adequate target depth (1.5-2 m) to avoid interaction with fishing gear
Radar

Comments:

• Potential for marine radar scattering for vessels within wind turbine arrays

• Potential for impact on high frequency land-based ocean observing radars
Radar

Recommendations:

• After coordination with federal partners, no areas are recommended for removal on the basis of radars.

• Work in the later stages to implement mitigation techniques such as infill radars or mitigation algorithms.
Wind Resource and Wake Effect

**Findings:**

- The wind resource in the Bight is sufficient to support projects on a commercial scale.
- Distance between turbines needs to be approximately 10x the diameter of a turbine to ensure upwind turbines don’t rob downwind turbines of power.
- Most frequent wind flow is from the SW, followed by a less frequent though stronger wind flow from the WNW.
Wind Resource and Wake Effect

Recommendations:

• Adjacent facilities should not be leased in a direct N-S or E-W orientation

• Wind facilities of 800 MW will require an area of 80,000 acres
Vessel Navigation
in the New York Bight

Arianna Baker
Navigation Analyst

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Comments Received

Groups Captured:

- American Waterways Operators
- World Shipping Council
- Maritime Association for the Port of NY and NJ
- USCG
- Area Pilot and Towboat Associations
Comments Received

Main Points:

• Implementation of Atlantic Coast Port Access Route Study Marine Planning Guideline Buffers

• Including a navigation corridor from Delaware Bay to Montauk for Tug and Tow Vessels

• Maritime concerns are safety concerns
Tug & Tow Traffic
Deep Draft-Cargo Traffic
Deep Draft-Tanker Traffic
Deep Draft-Tanker Traffic
Recommended Areas

- New York Bight Call Area
- Primary Recommendation
- Secondary Recommendation
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