Comments of the 

World Shipping Council 

Submitted to the 

Bureau of Ocean Energy Management 

In the matter of 

Potential Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore New York, Request for Interest 

(Docket No. BOEM-2012-0083) 

March 5, 2013
The World Shipping Council (WSC) is a non-profit trade association that represents over twenty-nine liner shipping companies that carry approximately 90% of U.S. international containerized trade. WSC files these comments with the Bureau of Ocean Energy Management (BOEM) in response to the Federal Register Notice published on January 4, 2013 (78 Fed. Reg. 760), which invites public comment on the proposed wind energy lease area located on the Outer Continental Shelf (OCS) off the coast of Long Island, New York.

WSC has filed previous comments to BOEM on the leasing process for wind farms on the OCS. Those comments will not be restated here and may be found in BOEM docket numbers BOEM-2010-0077, BOEM-2010-0063, BOEM-2010-0038, BOEM-2011-0005, and BOEM-2012-0090 and on the WSC website at http://www.worldshipping.org/public-statements/regulatory-comments/united-states.

While WSC appreciates the desire to develop renewable energy sources, such as wind power, on the Atlantic OCS, wind energy projects should not be sited in or near commercial shipping corridors or risk the safe navigation of vessels carrying America’s waterborne commerce.

We offer the following comments on the proposed lease area off the coast off New York.

1. **Adequate Buffer Zones Are Needed Between Commercial Vessels and Wind Farm Lease Areas**

The proposed lease area sits between two Traffic Separation Schemes (TSS) used by deep draft oceangoing and coastal commercial vessels transiting into and out of the Port of New York and New Jersey. Specifically, the proposed lease area parallels the outbound lane of the Ambrose to Nantucket TSS for approximately 26 nautical miles and parallels the inbound lane of the Hudson Canyon to Ambrose TSS for approximately 23 nautical miles. The TSSs off the coast of New York are among the busiest maritime traffic lanes in the United States and are used each year by more than 4,800 oceangoing vessels that call at the Port of New York and New Jersey.

While we have no objection to positioning wind farms in offshore locations where they will pose little to no risk to commercial vessels transporting U.S. waterborne commerce, the proposed lease area would position fixed wind turbines just one nautical mile from the edge of the aforementioned TSSs. Because of the size and maneuvering characteristics of modern oceangoing ships and the inherently hazardous nature of ocean transportation, one nautical mile is not a sufficient buffer zone between such vessels and fixed objects such as wind turbines.

Appropriate buffer zones from the edge of a maritime traffic route (including traffic separation schemes as well as undesignated high-density routes) to the edge of the boundary

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1 Liner vessels operate on fixed schedules among pre-determined ports. The Council’s member lines operate containerships, roll-on/roll-off, and car carrier vessels. A list of the Council’s members may be found at www.worldshipping.org.
of a wind farm lease area are essential to the safe navigation of vessels. Buffer zones provide areas of open water to which transiting ships can divert if the ship loses power, loses steering, or suffers some other engineering casualty that forces the vessel to quickly depart the maritime route and conduct an emergency anchoring. Buffer zones may also provide temporary refuge for a ship during periods of reduced visibility, bad weather or if the ship encounters problems with its navigation systems.

The size and limited maneuverability of oceangoing commercial ships provide some indication of how wide buffer zones should be. For example, containerships that call at U.S. ports often range in length from 800 feet to more than 1,000 feet and require many lengths of the ship to come to a complete stop or to alter course. Once at anchor, such ships have the potential to swing in a wide circle (called a “swing circle”) around the anchor and chain that has been released to secure the vessel to the ocean bottom. Depending on the depth of the water, among other factors, it would not be uncommon for the diameter of a vessel’s “swing circle” to be three or four times the length of the ship. If anchored in a one nautical mile buffer zone, the swing circle of a 1,000 foot long ship could place the vessel dangerously close to both the edge of the wind farm (where the vessel could allide with a turbine) and to the edge of the TSS (where the vessel could collide with a ship operating within the TSS).

The U.S. Coast Guard’s presentation at the April 12, 2012 BOEM-New York Renewable Energy Task Force meeting made reference to the United Kingdom Maritime and Coast Guard Agency’s “Marine Guidance Note” (MGN) number 371, which contains guidance on how wide buffer zones between wind turbines and maritime shipping routes should be. We note that the chart on page 13 of the MGN indicates that buffer zones less than one nautical mile would present a “high” to “very high” level of navigational safety risk, buffer zones between one and two nautical miles in width would present a “medium” level of navigational safety risk, and that buffer zones greater than two nautical miles would present a “low” level of navigational safety risk. Given the potential economic costs and environmental damage that would result from an allision between a fixed wind turbine and an oceangoing commercial vessel, the objective should be to achieve a “low” navigational safety risk.

In addition to the merits of the United Kingdom’s experience and guidance noted above, we canvassed our Member companies to obtain vessel masters’ views regarding liner vessel maneuvering characteristics and how wide buffer zones should be. The responses were provided from masters of large liner vessels that are up to 1,000 feet long and displace more than 100,000 tons fully loaded. These vessels make regularly scheduled calls at multiple U.S. ports during each voyage to the United States and frequently pass through the TSSs adjacent to the proposed lease area. The majority of vessel masters stated that two nautical miles should be the minimum buffer zone between commercial vessels and wind farm lease areas. Vessel masters indicated that a two nautical mile buffer would provide satisfactory maneuvering room to address the most likely contingencies -- loss of steering or propulsion -- and would provide sufficient space for the vessel to anchor in an emergency.

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2 A copy of MGN 371 may be obtained at: [http://www.emec.org.uk/download/mgn371.pdf](http://www.emec.org.uk/download/mgn371.pdf)
2. **Coast Guard Port Access Route Study Findings Must Be Applied to Proposed Lease Areas**

WSC has previously filed comments\(^3\) to BOEM noting the need for the Coast Guard to complete an Atlantic Coast Port Access Route Study (PARS) to evaluate existing vessel traffic flows and densities for vessels transiting along the coast and for vessels entering and leaving ports. According to the Coast Guard, the PARS will help identify where appropriate navigational safety exclusion areas should be applied, determine if any changes to existing navigation safety management measures are warranted, and quantify the sizes and locations of buffer zones between vessel traffic routes and wind farm lease areas.

On July 13, 2012, the Coast Guard published the Interim Atlantic Coast PARS Report (Docket No. USCG-2011-0351), which contains the agency’s interim findings regarding what impact the siting, construction and operation of wind energy facilities might have on existing near coastal users and to preserve the safety of navigation along the OCS. The Interim PARS Report contains, among other things, the following findings and recommendations:

- Recommends that BOEM address navigational safety risks up front rather than at the end of the wind farm lease area development process;
- Incorporates the Coast Guard’s risk assessment methodology into the PARS process; and
- Finds that the placement of fixed wind turbines on the OCS not only increases risk of allision between a vessel and a fixed object, but also increases the risk of collision between vessels and increases the risk of individual vessel groundings.

Incorporation of the findings and recommendations in the Interim Atlantic Coast PARS Report (and final report, when completed) into this proposed lease area is essential, because wind farm lease areas are being rapidly and simultaneously considered in OCS waters off multiple Atlantic states. The existence of proposed lease areas and the measures intended to resolve navigational safety issues created by those areas can, in turn, create navigational safety issues in other areas and for vessels transiting along the coast. In fact, the most significant impact of lease areas and related navigational safety management measures may not be on the interaction between vessels and wind turbine towers, but rather on the interactions among vessels.

We recommend that BOEM apply the Interim Atlantic Coast PARS Report’s findings and recommendations not only to the proposed wind farm lease area off the coast of New York, but also to all other Atlantic OCS wind farm development areas.

\(^3\) Those comments may be found in BOEMRE docket numbers BOEM-2011-0005, BOEM-2010-0077, BOEM-2010-0063, BOEM-2010-0038 and BOEM-2012-0090 on the WSC website at [http://www.worldshipping.org/public-statements/regulatory-comments/united-states](http://www.worldshipping.org/public-statements/regulatory-comments/united-states).
3. **Conclusion**

The World Shipping Council appreciates the opportunity to provide comments to BOEM on its proposed wind farm lease area off the coast of New York. The effort to site and deploy emerging, clean energy technologies on the OCS should not create risks to the safe transportation of America’s waterborne commerce.

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