Comments of the

World Shipping Council

Submitted to the

Bureau of Ocean Energy Management
U.S. Department of the Interior

In the matters of

Commercial Leasing for Wind Power Development on the Outer Continental Shelf (OCS) Offshore New York – Call for Information and Nominations
(Docket Number: BOEM-2013-0087)

and

Commercial Wind Lease Issuance and Site Assessment on the Atlantic OCS Offshore New York
(Docket Number: BOEM-2014-0003)

July 14, 2014
The World Shipping Council (WSC) is a non-profit trade association that represents over twenty-nine liner shipping\(^1\) companies that carry over 95% of the United States’ international containerized trade. WSC’s member companies operate more than 5,000 ocean-going liner vessels -- mostly containerships -- of which approximately 1,500 vessels make more than 27,000 calls at ports in the United States each year.

The WSC files these comments to the Bureau of Ocean Energy Management (BOEM) in response to two actions published on May 28, 2014 relating to the siting of wind energy projects in the Atlantic Ocean off the coast of New York. These actions include a Call for Information and Nominations for Commercial Leases for Wind Power Development on the Outer Continental Shelf (OCS) Offshore New York (79 Fed. Reg. 30645) and a Notice of Intent to Prepare an Environmental Assessment (79 Fed. Reg. 30643).

The WSC has filed multiple comment submissions with BOEM regarding OCS wind energy development, all of which have articulated the critical need for wind energy projects to be sited a safe distance from areas of high-density commercial vessel traffic. Allowing the placement of wind farms too close to maritime traffic areas would risk the safe navigation of vessels carrying America’s waterborne commerce and could result in a massive environmental disaster. The environmental costs and damage of a single allision between a ship and a wind turbine, as well as the potential loss of life and property, could easily exceed any benefits of siting wind turbines in the area.

We respectfully offer the following comments to BOEM on the above-referenced actions:

1. **Adequate Buffer Zones are Needed Between the Proposed Wind Farm Lease Areas and the Existing Maritime Traffic Separation Lanes**

The proposed call area offshore New York is situated between the outbound (eastbound) Ambrose to Nantucket traffic lane and the inbound (northwest-bound) Hudson Canyon to Ambrose traffic lane. Traffic lanes are used to keep large, deep-draft, oceangoing commercial vessels separated to reduce the risk that an incoming vessel will collide with an outgoing vessel. While the space between the outbound Ambrose to Nantucket lane and inbound Hudson Canyon to Ambrose traffic lane is not a designated separation zone (which would be designated between the inbound and outbound lanes of the same traffic lane), this space provides an important function nonetheless; it is a safe area to which inbound or

\(^1\) 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](http://www.worldshipping.org).
outbound commercial vessels may divert if they encounter a problem that presents a risk to safely operating within the traffic lane. These open areas also provide areas of reduced traffic density where slower and/or smaller coastal vessels and tug and barge units often choose to operate.

The proposed wind farm energy area would almost completely occupy the space between these two very busy traffic lanes. To reduce the risk of collision between vessels maneuvering in or near the traffic lanes and, just as critically, to reduce the risk of allision between vessels operating in or near the traffic lanes and fixed wind turbines sited along the edge of the traffic lanes, appropriate buffer zones must be established from the edge of the maritime traffic route to the edge of the boundary of the wind farm lease area.

Buffer zones are essential to safe navigation because they provide an area 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 traffic route. Once they have diverted from the traffic lane, the vessel could then conduct an emergency anchoring or remain in position while it works to solve the problem that prevented it from continuing to operate in the traffic lane. Weather conditions can also force vessels to seek refuge from traffic lanes in a buffer zone.

Buffer zones, however, must be wide enough to prevent a diverting vessel from alliding with a wind turbine located on the opposite side of the buffer zone. 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 from 800 feet to more than 1,000 feet long 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 around the anchor and chain that has been released to secure the vessel to the ocean bottom.

The Coast Guard’s “Red-Yellow-Green” maritime traffic risk assessment methodology makes reference to the United Kingdom’s Maritime and Coast Guard Agency’s “Marine Guidance Note” (MGN) number 371\(^2\), 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 1 nautical mile (nm) would present a “high” to “very high” level of navigational safety risk, buffer zones between 1 and 2 nm in width would present a “medium” level of navigational safety risk, and that buffer zones greater than 2 nm would present a “low” level of navigational safety risk. Given the potential economic damage and costs that would result from an allision between a fixed wind turbine and an

Ocean-going commercial vessel, the objective should be to achieve a “low” navigational safety risk.

WSC canvassed its 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. **The majority of vessel masters stated that 2 nautical miles should be the minimum buffer zone between commercial vessels and wind farm lease areas.** Vessel masters indicated that a 2 nm buffer would provide satisfactory maneuvering room to address the most likely contingencies -- loss of steering or propulsion -- and should provide space for the vessel to anchor in an emergency. Vessel masters also commented that buffer zones should generally increase in width as vessel operating speeds increase to allow for the additional space required for the vessel to slow down or maneuver. While liner vessels operating near to shore at speeds between 10 and 15 knots may require a 2 nm buffer zone, vessels operating offshore at speeds in excess of 20 knots may require a buffer zone of 3 nm or more.

2. **Adequate Buffer Zones are Needed to Facilitate Safe Vessel Movements to and from the Port Ambrose LNG Port**

As mentioned in the Call for Information and Nominations, development of the Port Ambrose Liquid Natural Gas (LNG) Port is being considered in a location that falls inside the proposed wind energy area. According to the proposed plans for this LNG port, incoming LNG carriers would transit northwest up the Hudson Canyon to Ambrose traffic lane, depart the lane to approach the LNG port, tether to the submerged buoy system at the LNG port, and remain there for a period of days while the vessel is laden with LNG. Fully laden vessels would then untether, transit northeast and enter the outbound Ambrose to Nantucket traffic lane. This means that vessels intending to the enter the LNG port will be slowing while in the inbound traffic lane (just as a car slows before taking an exit ramp off a highway) and vessels departing the LNG port will be speeding up to enter the outbound traffic lane. These vessel movements cannot be considered insignificant and will affect the flow of traffic and increase the risk of collision within these inbound and outbound lanes.

Adequate buffer zones of not less than 2 nm between the inbound and outbound traffic lanes and the wind energy areas would provide an area where the LNG vessels can slow down and speed up and safely turn to enter or depart the LNG port. These buffers zones would provide the same functions as “yield areas” do just before and after access and exit ramps on highways.
Adequate buffer zones of not less than 2 nm should also be established between the traffic lane that the LNG carriers will use to transit to and from the LNG port and the nearest edges of the wind farm lease area. This buffer distance should also be applied from the edge of the “swing circle” that will be created as a LNG carrier rotates around the submerged buoy system to which the vessel is tethered while loading LNG.

3. **Navigational Safety Exclusions Should Be Applied Earlier in the Lease Area Development Process**

Dealing with navigational safety issues at the beginning of the lease area development process would be more logical and would simplify and streamline the required environmental impact statement (EIS) process. An added benefit of this approach is that lease bidders would not waste their time submitting bids for lease areas that must later be excluded from further consideration due to navigational safety reasons.

In addition, incorporating navigational safety exclusions before soliciting statements of interest from the public is required by the National Environmental Policy Act (NEPA). Regulations promulgated by CEQ under NEPA require that: “*Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.*” 40 C.F.R. § 1501.2. The rationale behind that requirement applies here, because safety of navigation and protection of the ocean and coastal environment dictate that traffic lanes must remain free of fixed obstructions. The sooner that is made clear, the more efficient the rest of the wind energy area siting process will be.

We recommend that BOEM incorporate the following changes to its renewable energy lease area development process:

a) Adopt as a general policy that the agency will not invite interest in wind farm leases in areas that overlap with designated maritime traffic lanes, the approaches to such lanes, or a 2 nm buffer zone between these lanes and the edge of the lease area;

b) Apply Coast Guard safety of navigation exclusions to potential leases areas as soon as the Coast Guard provides such notifications to BOEM and before inviting further interest in the affected proposed lease areas;

c) Remind potential lease area bidders that construction of production facilities in a given lease area is not approved until the full EIS, which is required by NEPA to include an assessment of navigational safety risks, has been completed and contains a favorable determination for lease development.
4. **Conclusion**

The WSC appreciates the opportunity to provide comments to BOEM on these proposed actions. The siting of energy technologies on the OCS should not create risks to the safe transportation of America’s waterborne commerce. Sound marine spatial planning requires the application of appropriate navigational safety exclusions to proposed wind farm lease areas.

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