Comments of the

World Shipping Council

Submitted to the

Bureau of Ocean Energy Management

U.S. Department of the Interior

In the matter of

Atlantic Wind Lease Sale 3 (ATLW3) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Maryland – Proposed Sale Notice

Docket Number: BOEM-2013-0002

February 18, 2014
The World Shipping Council (WSC) is a non-profit trade association that represents over twenty-nine liner shipping 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 the Proposed Sale Notice published on December 18, 2013 (78 Fed. Reg. 76643), which invites public comment on the proposed sale of commercial leases for the construction of wind energy projects on the Outer Continental Shelf (OCS) off the coast of Maryland.

Wind energy projects must not be sited in areas of high-density commercial vessel traffic or risk the safe navigation of vessels carrying America’s waterborne commerce. 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 Proposed Sale Notice on the OCS offshore Maryland:

1. **Revised Lease Area Still Poses Unacceptable Navigational Safety Risks**

In our 2011 comments to BOEM on its Request for Interest to develop wind farms off the coast of Maryland, we noted, among other things, that BOEM’s proposed lease area contemplated the placement of wind farms on top of established high-density maritime traffic lanes or in approach areas where vessels vector into or out of these lanes. WSC recommended that OCS blocks, which sit on or near the approaches to a commercial shipping channel delineated by a traffic separation scheme (TSS), be excluded from the Maryland wind farm lease area and from any other lease areas under development.

The U.S. Coast Guard’s Automated Identification System (AIS) based vessel traffic and navigational safety analysis, also known as a “Red-Yellow-Green” analysis, of Maryland’s proposed lease area recommended that 22 full or partial OCS blocks be designated “RED”, meaning they should be excluded from development because they pose unacceptable navigational safety risks.

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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](http://www.worldshipping.org).

2 Copies of WSC’s comments to BOEM on the MD wind farm lease area and on other proposed lease areas may be found at [www.worldshipping.org/public-statements/regulatory-comments](http://www.worldshipping.org/public-statements/regulatory-comments).
In response, BOEM partially addressed the navigational safety risks identified by the Coast Guard and the shipping industry by designating as “no development areas” the OCS blocks that would be covered if the Delaware Bay TSS lanes were extended through the proposed lease area. While BOEM’s revisions to the lease area addressed some of the identified navigational safety issues, they failed to address the risks posed to deep-draft commercial vessels that navigate due south after exiting the TSS or that approach the TSS from the south on a due north heading (and then turn to the northwest to enter the TSS) and to the coastal tug and barge traffic that operates inshore of the deep-draft commercial vessel traffic.

On April 17, 2013, the Coast Guard Fifth District Commander sent a letter to BOEM objecting to BOEM’s revised lease area configuration off the coast of Maryland. The letter noted that “the configuration does not account for the high rate of navigation conflicts in the current WEA design” and “the impacts that would result from displacing traffic from existing routes has further solidified the concerns that the Maryland WEA, as currently proposed, will result in unacceptable increases in risk to navigational safety” (italics and underline added).

The letter explained that the navigational safety risks posed by BOEM’s revised lease area would be increased over what the Coast Guard proposed because it would eliminate the “alongshore” tug and barge route forcing those slow moving vessels further offshore where they would face increased sea states and have to operate in high volume deep-draft vessel traffic routes. BOEM’s revised area would also force tug and barge traffic destined for ports north of Delaware Bay to cross the Delaware Bay TSS at a shallow, rather than a right (i.e. 90 degree) angle, increasing the risk of collision with the faster, deep-draft vessels operating in the TSS.

The Coast Guard letter also contained an analysis of two alternatives, Alternative Routing Scenario 1 and Alternative Routing Scenario 2, both of which would meet BOEM’s and Maryland’s objectives of having two utility scale projects of 350-400 MW. The Coast Guard analysis concluded that Alternative 1 would provide the best alternative to reduce navigational safety risks and reduce the likelihood of additional OCS blocks being removed later in the lease area development process while providing enough area to support two lease zones for utility scale projects. Alternative 1 would provide a direct North/South route between the eastern edge of the wind energy area, provide sufficient width to the east for vessel traffic, and would enable tug and barge traffic heading for points north to cross the Delaware Bay TSS at a right angle.

We note that BOEM has stated in written responses to industry comments that it recognizes that the U.S. Coast Guard is the “subject matter expert on navigational safety and maritime issues”. We therefore question BOEM’s decision not to reduce the size of the revised lease
area pursuant to the Coast Guard’s navigational safety analysis and recommendation before publishing this Proposed Sale Notice. BOEM states in the Notice that it decided not to reduce the wind energy area because it will receive additional data and analysis that will better inform a decision regarding site-specific restrictions. We note that the Coast Guard -- the navigational safety and maritime subject matter expert -- felt that it had enough data and analysis in April 2013 to make a specific recommendation to BOEM that the current revised wind energy area poses unacceptable levels of risk and should be modified as described in Alternative 1. The Coast Guard did not recommend that a decision on the Maryland wind energy area be deferred until further data analysis would be available. We also note that the Coast Guard’s recommendations are consistent with the WSC’s past recommendations, the recommendations of the Delaware Bay Mariner’s Advisory Committee, and the recommendations of other shipping industry groups that have expertise on the waters off the coast of Maryland.

The WSC and its member companies agree with the analysis and recommendation in the Coast Guard letter and recommend that BOEM modify the revised lease area consistent with Alternative Routing Scenario 1.

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

The revised wind energy area in the Proposed Sale Notice contains OCS blocks that the Coast Guard and shipping industry have for many years recommended be excluded from further development by BOEM for navigational safety reasons. Safety of navigation exclusion decisions should be applied to proposed lease areas 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.

The need for clarity at this stage in the process is reinforced by the September 4, 2013, letter submitted to BOEM by the Business Network for Maryland Offshore Wind (BizMDOSW). That letter’s discussion of when navigational conflicts should be addressed illustrates the confusion that could arise if the issue is not addressed now. On the one hand, BizMDOSW on page 3 of its letter urges that navigational conflicts be addressed during the full EIS process that will accompany the review of the concept of operations plan (COP) that must be submitted before any permanent production structures are built. On the other hand, the letter at page 4 suggests that the offshore wind energy industry is making business viability determinations based on the current size of the Maryland Wind Energy Area (WEA). On page 4 of its letter, BizMDOSW states that:

“The business community has been basing its forward projections upon the published MD WEA dimensions. BOEM created a process through its stakeholder task force meetings and should not depart from the process and agreed benchmarks. The business community is already moving forward based on the published size of MD’s WEA.”

This statement must be read in conjunction with BizMDOSW’s statement on the same page that “[t]hrough a long series of compromises, Maryland has already seen the size of the WEA reduced to the smallest of any WEA, barely enough to reach the state’s renewable goals of Phase I deployment of up to 1,000 MW of offshore wind energy.” To the extent that BizMDOSW is suggesting that any further reductions in the size of the MD WEA (whether because of navigational conflicts or for other reasons) could make commercial development unattractive, that situation argues for resolving navigational conflicts now, before further investments are made. Having that certainty would appear to benefit all stakeholders.

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 (e.g. TSSs) or the approaches to such lanes;

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 nautical safety risks, has been completed and contains a favorable determination for lease development.

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

Appropriate buffer zones from the edge of a maritime traffic route (i.e., TSSs and undesignated high-density routes, such as those near the proposed wind energy area) to the edge of the boundary of a wind farm lease area are essential to safe navigation. Buffer zones 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 and conduct an emergency anchoring. 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” methodology makes reference to the United Kingdom’s Maritime and Coast Guard Agency’s “Marine Guidance Note” (MGN) number 371\(^3\), 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 oceangoing 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

\[3\] 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)
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 would provide sufficient 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.

4. Conclusion

The WSC appreciates the opportunity to provide comments to BOEM on this Proposed Sale Notice. 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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