



March 16, 2020

Rear Admiral Andrew Tionson
Commander
First Coast Guard District
408 Atlantic Avenue
Boston, MA 02110

Re: [USCG-2019-0131](#)

Draft Port Access Routes Study: Offshore Massachusetts and Rhode Island

Submitted via www.regulations.gov

Summary

The American Wind Energy Association¹ (AWEA) appreciates the opportunity to comment on the U.S. Coast Guard's (USCG or Coast Guard) *Draft Areas Offshore of Massachusetts and Rhode Island Port Access Route Study* (MARIPARS).²

AWEA recognizes the critical importance of safe navigation for all types of vessels and appreciates the USCG's engagement in the Bureau of Ocean Energy Management's (BOEM) permitting process for offshore wind energy facilities. The USCG's engagement has helped ensure navigation concerns are adequately considered and addressed.

AWEA appreciates the careful, detailed analysis the USCG has undertaken in the draft MARIPARS. AWEA supports the key recommendations in the draft report, including the recommendation that no additional routing measures are needed with a standard and uniform grid pattern with at least three lines of orientation and standard spacing. AWEA agrees the evidence demonstrates that this pattern, orientation and spacing safely accommodate vessel transits, traditional fishing operations and search and rescue operations. The report further recommends and AWEA supports: "(1) Lanes for vessel transit should be oriented in a northwest to southeast direction, 0.6 nautical mile (NM) to 0.8 NM wide. This width will allow vessels the ability to maneuver in accordance with the COLREGS while transiting through the MA/RI WEA.

¹ AWEA is a national trade association representing a broad range of entities with a common interest in encouraging the expansion and utilization of land-based and offshore wind energy resources in the United States. AWEA's more than 1,000 member companies include wind turbine manufacturers, component suppliers, project developers, project owners and operators, financiers, researchers, utilities, marketers, customers, and others.

² Draft report (January 22, 2020) available at: <https://www.regulations.gov/contentStreamer?documentId=USCG-2019-0131-0050&attachmentNumber=1&contentType=pdf>



(2) Lanes for commercial fishing vessels actively engaged in fishing should be oriented in an east to west direction, 1 NM wide, and (3) Lanes for USCG search and rescue operations should be oriented in a north to south and east to west direction, 1 NM wide. This will ensure two lines of orientation for USCG helicopters to conduct search and rescue operations.”

The recommendations in the report are robustly supported by the analysis and evidence in the draft MARIPARS along with other evidence included in the record, such as the November 2019 Joint Developer Comments and Supporting Analysis,³ and the May 2018 AWEA-RENEW comments and commissioned analysis⁴ referenced therein.

AWEA strongly urges the USCG to finalize the MARIPARS consistent with the draft report as soon as possible in order to help inform BOEM analysis and decisions on projects in these lease areas.

Fortunately, there is not a trade-off that needs to be made between navigation safety and offshore wind development. As the draft MARIPARS makes clear, an expanding offshore wind industry in the U.S. is entirely compatible with safe vessel navigation. The ability to balance these interests, without sacrificing either, has been widely demonstrated in other parts of the world already, especially in Europe.

The remainder of our comments provide additional feedback on: (1) the reasonable balance achieved by the USCG in the draft report, (2) the evidence in the record that supports the USCG recommendations, and (3) the potential radar issues and mitigations identified in the report. AWEA also urges that the recommendations on pattern, orientation and spacing in the draft MARIPARS not become default recommendations applied to all other offshore wind lease areas.

USCG appropriately balances reasonable uses of the waterways

The analysis and recommendations in the draft MARIPARS report are consistent with the USCG’s own direction to balance reasonable uses of the waterways and, therefore, merit finalization. As the USCG wrote in the final *Atlantic Coast Port Access Route Study*, “A primary purpose of this coordination is, to the extent practicable, to reconcile the need for safe access routes with other reasonable waterway uses such as construction and operation of renewable energy facilities and other uses of the Atlantic Ocean in the study area.”⁵

³ Joint Developer Proposal and Supporting Analysis (“Joint Developer proposal”) available at: <https://www.regulations.gov/contentStreamer?documentId=USCG-2019-0131-0046&contentType=pdf>

⁴ AWEA-RENEW comments available at: <https://www.regulations.gov/contentStreamer?documentId=USCG-2019-0131-0041&attachmentNumber=1&contentType=pdf>

⁵ *Atlantic Coast Port Access Route Study* (“ACPARS”). Final Report. U.S. Coast Guard ACPARS Working Group. February 24, 2016. Page 2. Available at: <https://www.regulations.gov/contentStreamer?documentId=USCG-2011-0351-0144&contentType=pdf>



The draft MARIPARS recommendations are also consistent with congressional support for multiple uses of the ocean,⁶ Administration support for energy dominance,⁷ and will help facilitate state policies in support of the deployment of offshore wind.⁸

USCG recommendations with respect to safe navigation

AWEA appreciates the careful, robust analysis the USCG conducted for the draft MARIPARS. The analysis is thorough, and the conclusions are supported by the evidence in the record. For example, as detailed extensively in the draft MARIPARS, the USCG considered and analyzed (1) vessel traffic routes, (2) vessel types and sizes, (3) vessel maneuverability (including emergency requirements and collision avoidance), (4) vessel density, (5) the potential need for course alterations and multiple options to safely transit, and (5) spacing needed to allow for passing, overtaking and avoiding other vessels.

The results of all these analytic efforts pointed to the same conclusion: a standard and uniform grid pattern with at least three lines of orientation and standard spacing is sufficient to protect safe vessel navigation and search and rescue.

Further, the USCG recommendation is also consistent with other evidence in the record. For example, the Joint Developer Proposal and Supporting Analysis of a standard and uniform grid layout in the MA/RI lease areas of 1 NM distance between turbines in fixed east-to-west rows and north-to-south columns found that such a layout would provide 231 corridors available for mariners no matter where they cross into the lease areas. The corridor width in the E-W and N-S direction would be 1 NM. In the NW-SE and SW-NE directions the corridors would be 0.7 NM wide for the purpose of maintaining a constant heading, however the closest distance between any two turbines on either side of a vessel using a NW-SE or SW-NE corridor would be 1.4 NM.

Like the USCG analysis in the draft MARIPARS, the Joint Developer Proposal and Analysis considered vessel types and size, vessel density, the need to pass and overtake, and the ability to take emergency actions (including with fishing gear deployed) and found the 1x1 layout protective of navigation safety.⁹

⁶ In Section 388 of the Energy Policy Act of 2005 (42 USC 15801), Congress authorized the Secretary of Interior to grant leases, easements or rights-of-way for the purpose of supporting “production, transportation, or transmission of energy from sources other than oil and gas.”

⁷ President Trump Executive Order 13868, “Promoting Energy Independence and Economic Growth,” April 15, 2019. Available at: <https://www.govinfo.gov/content/pkg/FR-2019-04-15/pdf/2019-07656.pdf>

⁸ For example, Connecticut, Maryland, Massachusetts, New Jersey, New York, and Virginia have established targets to procure a total of 25,400 MW of offshore wind by at least 2035 and have selected over 6,000 MW of projects as of February 2020 to help meet these goals.

⁹ For example, the supporting analysis found, “The minimum 1.0 nm turbine separation is sufficient for all fishing activities including trawling, as even trawling vessels with gear fully deployed were estimated can change headings by 180° within a lateral distance of 0.7 nm.”

Providing for safe navigation is also consistent with the vast experience in Europe as summarized in the May 2018 AWEA-RENEW comments in the docket, where turbine spacing within wind farms has generally been even narrower than recommended in the draft MARIPARS.¹⁰

USCG recommendations should not become default recommendations outside the MARIPARS study area

AWEA cautions that the recommendations in the final MARIPARS report should not become default recommendations applied automatically to other offshore wind lease areas.

A November 19, 2019, press release accompanying the Joint Developers Proposal and Supporting Analysis said, “The proposal is the result of the distinct solution and response to specific challenges in New England and would not be applicable to offshore wind leases in other geographies where challenges are different.” AWEA agrees and the same applies to the USCG conclusions in MARIPARS.

Rather than a default approach, AWEA strongly recommends the USCG conduct similar, robust analyses focused on other specific regions or lease areas, to identify balanced, area-specific recommendations to ensure the recommendations contained in the final MARIPARS do not by default become precedent for other areas.

Potential marine radar issues and mitigation options are well-understood

The potential for and type of impacts wind turbines may have on marine radar are well-understood, as are available mitigations. In fact, the draft MARIPARS itself accurately summarizes these issues. And previous USCG analysis and real-world experience demonstrates that navigation remains safe within and in the vicinity of wind farms.

The draft MARIPARS correctly says that various factors play a role in potential marine radar impacts noting, “The potential for interference with marine radar is site specific and depends on many factors including, but not limited to, turbine size, array layouts, number of turbines, construction material(s), and the types of vessels impacted.”

Further, the draft MARIPARS accurately acknowledges potential impacts include radar clutter, radar saturation, and radar shadowing. It goes on to say that radar studies from the United Kingdom “have concluded that the location of radar antenna aboard vessels may contribute to the ability of radar to properly detect targets and may even cause false echoes. That is, radars that are off-center or obstructed by railings, antennas, masts and the like are more likely to detect objects falsely. Additionally, user radar proficiency spans a wide spectrum and may

¹⁰ AWEA-RENEW comments, page 8, “With respect to navigation within wind farms in Europe, wind turbine spacing varies between projects; but it has generally been on the order of 0.5 nm to 0.75 nm (1.0 to 1.5 kilometers).”



contribute to an ability to properly detect targets in order to safely navigate in and around the wind farm.” And the draft MARIPARS acknowledges, “The UK studies also show that additional mitigation measures, such as properly trained radar operators, properly adjusted equipment, marked wind turbines and the use of AIS, would allow for safe operation with minimal loss of radar detection.”

The draft MARIPARS discussion on radar issues is also consistent with the USCG’s own conclusions regarding the 130 turbine Cape Wind project.¹¹ Notably, with respect to Cape Wind, the maximum distance between the turbines was 0.54 NM, which is less the MARIPARS recommendations for minimum safe distance. Yet, even with this narrower turbine spacing, the USCG found the impacts to marine radar were manageable and vessels could safely navigate within the vicinity of the wind farm. The Coast Guard position in 2009 applies just as well in 2020: “Affected waterways users may need to adjust somewhat to account for navigating within, and in the vicinity of, the proposed wind farm. Nevertheless, vessels operating within or near the proposed wind farm should be able to do so safely even in restricted visibility.”

AWEA believes the appropriate place to consider potential marine radar issues and the relevant mitigation measures is in the project-specific navigation safety risk analyses. The draft MARIPARS consideration of radar issues is appropriate and the report should be finalized.

Conclusion

The draft MARIPARS is a sound report. The recommendations are supported by the evidence, and AWEA supports them. AWEA strongly urges the USCG to finalize the MARIPARS consistent with the draft report as expeditiously as possible.

Sincerely,

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¹¹ Available at: <https://www.boem.gov/sites/default/files/renewable-energy-program/Studies/USCGRADARfindingsandrecommendationsFINAL.pdf>